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Contesting Expertise and Constructing Parental Epistemologies: Vaccine Hesitancy and Alternative Expertise in a Free-Vax Association in Italy

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INTRODUCTION

Vaccination is more than a biomedical intervention. It is a mode of governance that courses through schools, workplaces, clinics, and families, carrying expectations about citizenship, responsibility, and trust. In Italy, the shift from recommendation to obligation with Law 119/2017, followed by pandemic-era certification, made vaccination status visible and consequential in everyday life. An STS lens clarifies why. Scientific claims gain force not only from clinical evidence, but also from administrative routines — forms, checks, and deadlines — that organize belonging and exclusion (Jasanoff, 2005; Epstein, 1996). In this sense, vaccines are hybrid socio-technical objects whose authority is co-produced with legal and organizational orders. Parental hesitancy is therefore better read as situated reasoning rather than as a knowledge deficit (Bucchi & Neresini, 2006; Beck, 1992). Anchored at the intersection of the sociology of science and science communication, Science and Technology Studies (STS), and the sociology of health, this thesis studies vaccines as socio-technical policy objects and parental hesitancy as reasoning enacted in practice.

Public debate has often flattened “hesitancy” into error or misinformation. Yet research in sociology of health and STS shows that people evaluate risk and expertise through relational, experiential, and moral lenses; trust is rarely binary and lay/experiential knowledge routinely enters judgments about care (Wynne, 1992; Borkman, 1976; Leach & Fairhead, 2007). For many parents, decisions hinge on “this child, in this context,” integrating medical histories, pregnancy/childbirth experiences, and suspected or recognized Adverse Events Following Immunization (AEFI) with biomedical information and peer testimony (Goldenberg, 2016, 2021). These dynamics sit within wider shifts toward individualized parenting and particularistic risk reasoning, where moral

responsibility is enacted through vigilance and deliberation rather than passive compliance (Faircloth, 2014; Reich, 2016).

This thesis addresses a core mismatch between how hesitancy is governed and how parents actually reason and decide under uncertainty. Instruments that tightly couple vaccination status to access and visibility can produce social externalities — stigmatization, strained clinical relations, and, at times, institutional exit — especially among those already uncertain (Goffman, 1963; Link & Phelan, 2001, 2006). At the same time, scholarship has paid limited attention to the meso-level of associational life, where hesitancy is organized, stabilized, and revised (Hess, 2007; Hobson-West, 2007; Leach & Scoones, 2007).

To address this gap, the thesis is guided by four research questions: (1) *How do parents assemble decisions over time from experience, biography, and moral obligation?* (2) *Where do they locate credible knowledge, and what counts as expertise in practice?* (3) *In what ways do policy instruments and administrative routines reconfigure participation in schooling, work, and family life, and with what social consequences?* (4) *And how did the pandemic reshape these dynamics?* These questions outline the broader analytical problem that the thesis addresses and define its conceptual scope. Rather than being narrowly operational, they serve as framing coordinates that orient the inquiry toward the relational, processual, and institutional dimensions of vaccine hesitancy under mandate regimes. In Chapter 1, these questions are further specified and translated into empirically oriented research questions that guide data collection and qualitative analysis throughout the empirical chapters.

In line with this framing, this thesis addresses that mismatch by tracing how parents assemble vaccine-related decisions across time, biography, and social interaction, and by showing how these practices collide with, adapt to, or resist policy instruments. Through qualitative analysis of interviews, participant observation, and associational dynamics, it reconstructs the logics of reasoning and the institutional consequences of mandate regimes. This enables the integration of micro-level parental practices with meso-level associational

infrastructures and macro-level governance. Empirically, the thesis is grounded in a case study of the Autonomous Province of Trento (Italy) and the association Vaccinare Informati – advocating for the freedom of choice in the vaccination decisions. This setting is emblematic because it combines dense civic infrastructures, visible enforcement routines, and salient conflicts over documentation, access, and labelling. By focusing on this provincial context and its associational life, the study illuminates broader mechanisms that characterize vaccine hesitancy in mandate regimes.

The aim is not to contest mandates per se, but to examine their social consequences and to identify relational forms of governance that sustain participation under pluralism. This requires starting from how parents actually reason and act.

Accordingly, the thesis advances four main contributions. First, the thesis reframes vaccine-hesitant parents as reflexive agents/patients, specifying multilayered reflexivities — epistemic (auditing claims), moral (care and responsibility), relational (managing visibility), and civic (reading rules/rights). This connects parenting and moral-economy literatures with classic work on lay/experiential expertise, showing how “knowing this child” becomes a procedural ethic under mandates and controversy (Faircloth, 2014; Reich, 2016; Leach & Fairhead, 2007; Borkman, 1976; Wynne, 1992; Martin, 2008; Numerato et al., 2019).

Second, it advances a non-binary model of trust. Rather than a simple trust/distrust axis, parents practice conditional trust. They differentiate and reallocate credibility among clinicians, agencies, data sources, media, and associative forums as circumstances and evidence shift (Lewicki et al., 1998; Trench, 2025). Vigilance is treated as a normative practice rather than a pathology. Rather than seeing critical questioning as a symptom of distrust or conspiracy, the thesis interprets it as one of the possible ordinary and responsible responses to uncertainty. This approach builds on scholarship that frames vigilance as a form of civic engagement and moral responsibility, where parents seek to ensure that care decisions are proportionate, transparent, and attentive

to the particular child (Hendriks et al., 2016; Leach & Fairhead, 2007; Van de Walle & Six, 2014; Rowland et al., 2022).

Third, it reads vaccines as socio-technical policy objects whose authority is co-produced with legal and organizational orders. This perspective explains why controversies travel as much through administrative routines — labels, documentation checks, compliance timelines — as through evidence debates. It also explains why some families construct parallel pathways — such as alternative schooling, rights-based legal repertoires (for instance, appealing to constitutional protections, parental rights, or anti-discrimination claims) — when they feel unseen, misunderstood, or ridiculed (Bucchi & Neresini, 2006; Epstein, 1996; Goldenberg, 2021; Hess, 2007; Jasanoff, 2005; Mol, 2002; Zuolo, 2019).

Fourth, it offers an analytic toolkit to investigate and understand hesitancy across different contexts. This toolkit consists of three typologies — mapping parental orientations (e.g., selective accepters, hesitant delayers, refusers), trust orientations (e.g., conditional, differentiated, redistributed), and the vaccination practice (e.g., reassuring, habit, undisputable) — that make reasoning patterns empirically visible. Alongside these, the study produces a transferable codebook that can be adapted to diverse policy regimes while preserving comparability across settings. Together, these instruments turn an interpretive account into operational lenses that researchers, policymakers, and science communicators can apply in analyzing hesitancy, designing interventions, and fostering dialogue.

This positioning extends STS debates on co-production, boundary-work, and civic epistemologies into the granular routines of family life and associational organization. It also enriches sociology-of-health accounts of experiential knowledge and parenting moralities. A qualitative, interpretivist approach is adopted because the phenomenon at stake — i.e., how parents make sense of risk, vaccines, authority, and care under mandate regimes — is constituted by meanings and relationships best accessed *in situ*. The fieldwork is set in an emblematic provincial context in Trentino, analytically chosen to highlight how associational infrastructures and enforcement routines interact in everyday life.

The study's claims focus on mechanisms and patterned meanings rather than prevalence.

The central argument advanced here is that vaccine hesitancy under mandate regimes should not be understood as a deficit of knowledge or trust, but as a situated practice of reflexive reasoning and moral responsibility. By analyzing how parents assemble decisions, allocate credibility, and navigate institutional visibility, the thesis reconfigures existing knowledge in two ways: it shifts attention from individual psychology to relational, biographical, and associational dynamics; and it reframes mandates not only as instruments of compliance but also as social technologies that reshape participation in education, work, and civic life.

Anchored in the aims and disciplinary positioning outlined above, the thesis moves from theory and context, through methods and three empirical chapters, to general considerations that synthesize contributions and implications. *Chapter 1* builds the theoretical scaffold. It reviews routine immunization and mandate debates; synthesizes research on vaccine hesitancy (determinants, risk/uncertainty, parental epistemologies); examines vaccine-critical mobilization and social labelling; and situates the thesis within STS and the sociology of health via co-production, boundary-work, civic epistemologies, and the role of experiential knowledge. It closes by articulating the aims that guide the empirical chapters.

Chapter 2 reconstructs the Italian policy trajectory from recommendation to obligation and through pandemic regulation, profiles the national Free-Vax landscape and media framings (2016–2023), and introduces the Autonomous Province of Trento and Vaccinare Informati association as the case setting. The chapter clarifies why this territory is emblematic for studying hesitancy: a dense civic infrastructure, visible enforcement routines, and salient public conflicts around access, documentation, and labelling.

Chapter 3 presents the data and methodological framework. It explains the research design (participant observation and interviews), the coding architecture and thematic framework, and the trustworthiness strategy. The emphasis is on

transparency and traceability from data to claims, enabling later chapters to link findings to concrete textual and observational anchors.

Chapter 4 analyses the social consequences of mandates for non-compliant families. It shows how access rules and documentation checks reorder daily life (schooling, work, mobility), how families craft alternative pathways (e.g., schooling arrangements), how relational tensions and avoidance strategies emerge, and how media and institutional discourse feed labelling and stigma. The chapter closes on the role of Vaccinare Informati as a knowledge-and-care infrastructure that translates macro rules into actionable routines.

Chapter 5 examines decision-making under uncertainty. It traces how doubts are formed, how moral responsibility and the aspiration to be a “good parent” shape the process, how biographies and experiences (including suspected/recognized AEFI) anchor judgments, and how outcomes range from selective acceptance to refusal. It highlights how plural care practices run alongside biomedicine.

Chapter 6 explores science, expertise, and knowledge production in parental reasoning. It analyses how parents conceptualize vaccination, scrutinize experts, and integrate embodied knowledges with selected scientific sources. It also shows how parents articulate ideals of science — transparency, independence — against institutions perceived as compressed or politicized, and how mediated science and polarized discourse reconfigure trust.

The Final Considerations return to the guiding aims and synthesize the thesis’s core contributions. First, the analysis shows that mandates operate as social technologies. By making health status visible and actionable, they can reorder participation in schooling, work, and public space. This visibility also raises risks of stigma, alienation, and — when obligations are tightly coupled with access — radicalization. Second, the thesis characterizes vaccine-hesitant parents as reflexive actors rather than deficit actors. Their practices involve epistemic work (scrutinizing knowledge claims), moral work (enacting care and responsibility), relational work (managing visibility in social settings), and civic work (interpreting rules and rights). What grants legitimacy is not a single decision

outcome, but the quality of the process — time taken, openness to dialogue, and attention to the particular child. Third, the study recasts trust as conditional and differentiated. Parents do not simply “trust” or “distrust.” Instead, they redistribute credibility toward actors and forums that embody openness, independence, and dialogic care, while withdrawing it from those perceived as compressed or politicized. Finally, these insights translate into governing principles. They include minimizing visibility and safeguarding due process, strengthening pharmacovigilance that investigates rather than dismisses, enabling time-rich and biography-sensitive clinical encounters, and creating deliberative fora with real stakes. Such principles aim not to engineer compliance, but to repair strained relationships and sustain participation under conditions of pluralism.

CHAPTER 1

Parental vaccine hesitancy: The role of trust in science and alternative expertise¹

Introduction

This Chapter outlines the theoretical and conceptual framework of the thesis and provides the background necessary to understand the vaccine hesitancy phenomenon in its complexity. Particular attention is paid to parental vaccine hesitancy, which is here explored in connection with institutional trust, risk perception, the mobilization of experiential knowledge, and the production of alternative forms of expertise.

The Chapter is structured into five main sections. Section 1.1 discusses routine immunization programs and the implementation of mandatory vaccination policies in contemporary health systems. It examines how different countries have approached vaccination mandates — particularly for children — and the ethical tensions these raise between the protection of public health and the respect for individual autonomy. The debate around mandates is analyzed through the lenses of public health ethics and medical ethics, and recent developments during the COVID-19 pandemic are used to highlight the potential long-term consequences of restrictive vaccination strategies.

Section 1.2 introduces the vaccine hesitancy phenomenon, which is conceptualized not as a fixed behavioral refusal but as a dynamic psychological

¹ Parts of this Chapter were published as:

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state marked by uncertainty, ambivalence, and conflict. The main theoretical models proposed in the literature to explain vaccine-related behaviors are presented. Special attention is devoted to the affective and cognitive dimensions of vaccine hesitancy, including how people perceive and emotionally process uncertainty and risk in vaccine decision-making. Furthermore, there is a focus on parental vaccine hesitancy and the role of experiential knowledge in shaping health-related choices. Drawing on concepts such as individualist parenting, parental epistemologies, and reflexive decision-making, this section explores how parents mobilize personal experience, embodied knowledge, and lay expertise to navigate vaccine choices. It also discusses the parental demand for personalized vaccination schedules in contrast to standardized national immunization programs.

Section 1.3 examines the collective and political dimension of parental vaccine hesitancy by focusing on the emergence of vaccine-critical groups. These groups often include parents who are not opposed to vaccines per se, but who contest mandatory vaccination policies and the way dissent is managed. The section also addresses how vaccine skepticism is socially constructed and stigmatized through media and institutional narratives, reinforcing the dichotomy between “No-Vax” and “Pro-Vax” positions and obscuring the heterogeneity of hesitant attitudes.

Section 1.4 shifts the focus to the public understanding of science and the evolving relationship between citizens and scientific institutions. The discussion centers on trust in science and scientific experts, and on how vaccine-hesitant parents often question dominant biomedical narratives while constructing alternative knowledge claims. Building on literature from science and technology studies (STS), this section explores the erosion of the traditional expert–lay divide and the rise of reflexive and situated forms of trust and expertise.

Finally, Section 1.5 presents the research questions guiding the thesis. These questions translate the broader framework introduced in the thesis Introduction into empirically oriented points of inquiry. They aim to explore: (1) the diversity of vaccine-hesitant motivations and positions among organized parents;

(2) the role of experiential and affective factors in vaccine decision-making; (3) the emergence of narrative patterns in parental accounts; (4) the impact of the COVID-19 pandemic on parental attitudes; and (5) the ways in which vaccine-hesitant parents engage with scientific authority and alternative forms of knowledge.

1.1. Routine immunization programs and mandatory vaccination policies

Global health threats are rising worldwide and, as highlighted by the Global Health Summit 2021, the world has entered an “age of pandemics” (IPBES, 2020; The Lancet Planetary Health, 2021). While pandemics are unavoidable, the time between their occurrence may diminish, and their consequences may become more severe (Marani et al., 2021; Stockman et al., 2024). The onset of the COVID-19 pandemic has posed a global threat, also from a vaccine-related perspective. Especially during the initial months of the COVID-19 health emergency, the crisis resulted in a worldwide decline in diphtheria-tetanus-pertussis vaccination coverage (Chiappini et al., 2021) due to the suspension of immunization programs, which in the WHO European Region affected 22% of infants, and to parents' decisions to postpone vaccination.

Vaccines are technoscientific innovations that have been designed to prevent pathogen-specific infections, thereby reducing the hazards and risks of contracting vaccine-preventable diseases (Pardi et al., 2018). Vaccines have evolved significantly over the years, initially utilizing inactivated or attenuated pathogens, and later advancing to subunit vaccines that incorporate specific components of the pathogen to trigger an immune response. Traditional vaccines, such as those based on inactivated or attenuated viruses, have been fundamental in controlling diseases like measles and polio. However, a transformative leap in vaccine technology came with the development of mRNA

vaccines (Gote et al., 2023). This breakthrough technology enabled the rapid production of vaccines, exemplified by the swift development of anti-COVID-19 vaccines. Vaccines are technologies that have both a global and a more personal, local characteristic. They are “produced, distributed and monitored within systems that are equally globalized” (Leach & Fairhead, 2007, p. 2) to potentially reach a global population (with specific attention to children) and, at the same time, they reach into the private health sphere of individuals.

In recent years, several European countries have adopted revised vaccination strategies, introducing or increasing the number of mandatory vaccines for children and embracing different approaches to (non-)compliance (Odone et al., 2021). In addressing matters of vaccination policies and strategies, along with other public health issues, it is necessary to consider the delicate equilibrium between individual rights and the interests of the collective.

1.1.1. The balance between individual and collective health

Compulsory vaccination is a borderline case that lies between public health ethics and medical ethics (Swain et al., 2008; Zuolo, 2009). Medical ethics and public health ethics are two complementary subfields of bioethics that share some important principles but differ in their investigative focus. The former is concerned with the doctor-patient or doctor-caregiver-patient interaction, and the latter analyzes the influence of individuals' decisions at the community level (e.g., health practices designed to prevent epidemic diseases). In the case of medical ethics, the individual healthcare providers (generally the clinicians) are the primary actors vested with ethical responsibility, while within public health, the responsibility is typically undertaken by governmental organizations (Thomas et al., 2002). These institutions are responsible for implementing population-level interventions aimed at preventing or controlling disease transmission. Therefore, these agencies are ethically accountable for their policies and actions and must

continuously navigate the tension between protecting individual and collective rights.

The main guiding principles of medical ethics, as outlined by Beauchamp and Childress (2001), are autonomy (i.e., respecting individual decision-making for both patients and physicians), beneficence (i.e., providing benefits to the patients, balancing benefits against costs and risks), nonmaleficence (i.e., avoiding causing any harm to the patients), and justice (i.e., respecting patients' rights by providing an equal distribution of risks, benefits, and costs). Thus, medical ethics primarily emphasize the physician's duty to individual patients, offering only broad guidance regarding responsibilities to the wider community. In contrast, public health operates at the population level, often requiring interventions that may limit individual freedoms to protect public wellbeing, as it happened during the COVID-19 pandemic. Hence, as highlighted by Swain et al. (2008), these actions carry substantial ethical implications and demand a distinct ethical framework, emphasizing four core principles: interdependence (i.e., recognition of the mutual influence of individual and community health); community trust (i.e., trust built through transparency, cultural sensitivity, and inclusive decision-making); fundamentality (i.e., the focus on root causes of diseases and the social determinants of health); and justice (i.e., ensuring equitable access to the conditions necessary for good health, especially for vulnerable or marginalized populations).

Vaccine-related decisions can be regarded as ethical and interdependent due to their direct influence on others. The decision to be vaccinated and/or to vaccinate can protect the individual but can also contribute to protecting the community, especially those with fragile health. As highlighted by Giubilini (2019, p. 3), this "collective nature of the effort gives rise to a collective action problem and a tension between collective and individual responsibility". Different values, sometimes conflicting, are involved in the vaccine-related decisions taken at three different levels: individual, collective, and institutional. Recognizing these intersecting levels of responsibility highlights the importance of addressing

vaccination as both a personal choice and a matter of shared societal commitment.

The choice between a more “traditional” strategy focused on imposing a vaccination obligation and one focused on the recommendation of vaccines depends exclusively on how institutions have decided to manage vaccination dissent. The health policy decision to either tolerate or sanction individual dissent is thus situated within a complex framework and results in a multifaceted synthesis of epidemiological considerations, along with socio-cultural, economic, and political ones (Tomasi, 2017a). In this decision, the type of relationship established between institutions and citizens also plays a fundamental role. However, this decision implies a matter of justice as well as a matter of efficacy (Zuolo, 2009, p. 550):

“a strictly prescriptive strategy can be perceived as intrusive into individual freedom and parental responsibility [...] The content of a policy, i.e., a high immunization rate or the eradication of a contagious disease, can be achieved in different ways, consistent or inconsistent with the values actually at stake”.

In the context of childhood vaccinations (Tomasi, 2017a), the ethical configuration underlying vaccination policies is primarily framed as a balance between the need to safeguard public health and the rights of parents to make decisions concerning their children's health — an indirect form of self-determination — rather than as a tension between collective health and the individual health rights of the child. The contrast between compulsory vaccination on the one hand and parents' demands for freedom of choice and exemptions on the other is not based on divergent values: it stems from a different interpretation of the same value — i.e., a different perception of what guides and should guide individual and collective health practices (Zuolo, 2013). However, the assessment of the risk-benefit ratio of vaccines is neither easy nor obvious (see Section 1.2.3), precisely because of the preventive nature of this health intervention (Skrabanek, 1990).

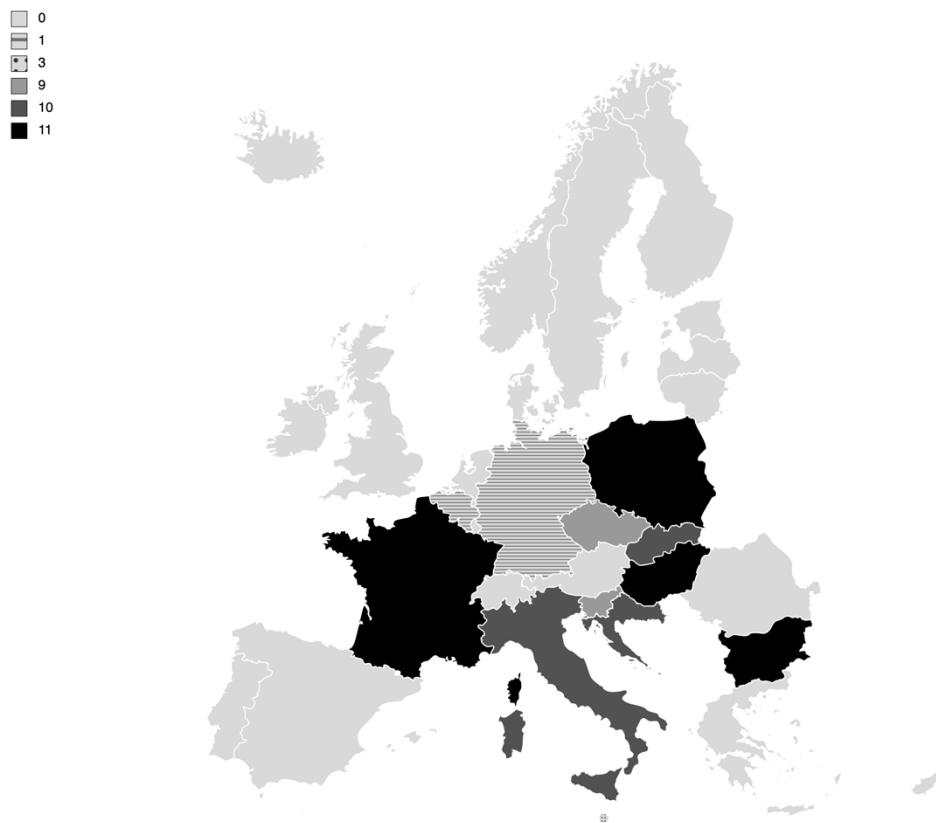
1.1.2. Vaccination mandates

One strategy governments can adopt to address declining vaccination rates is the implementation of mandatory vaccination policies, primarily focused on childhood immunization. National vaccination mandates can be defined as policies enacted by a national authority “that requires that eligible individuals, including all or some subgroup of those over whom the authority has jurisdiction, receive at least one vaccination” and that require citizens get vaccinated “based on the age of the individual, their status in school or enrollment in educational services, or their eligibility to access societal or governmental benefits” (Gravagna et al., 2020, p. 7866). These types of vaccination policies — and their penalties for non-compliance — vary significantly across countries. However, the implementation of vaccination mandates does not ensure a long-term increase in vaccine uptake rates and acceptance.

In most countries, the responsibility of vaccination lies with both government and parents: the former is required to provide access to vaccination services — especially for infants and children, often for free or at low cost — along with a national vaccination schedule; and the latter are required to vaccinate their children according to the national immunization program (Vanderslott & Marks, 2021). Revised vaccination strategies, adopting or strengthening childhood vaccination requirements, have been introduced in several countries. Between 2017 and 2020, vaccination mandates were implemented in Italy (Signorelli & Odone, 2019), France (J. K. Ward et al., 2018), and Germany (Montalti et al., 2020). Focusing on Europe, mandatory vaccination policies have been introduced in 12 (40%) European Economic Area countries (EEA)² (Odone et al., 2021), ranging from 1 to 11 vaccines required (Fig. 1).

² EU/EEA countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

Fig. 1 – Number of childhood mandatory vaccines in Europe (2020).

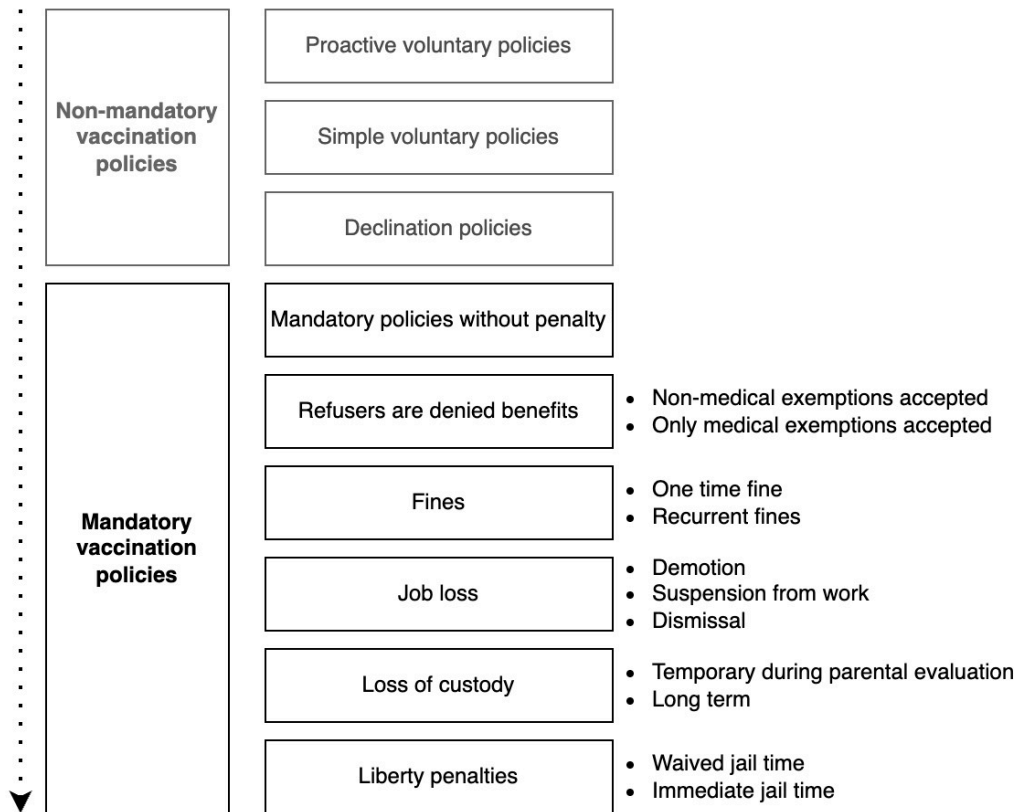


Source: Odone et al., 2021.

In their analysis of childhood vaccination mandates, Attwell and Navin (2019) expanded their previous work (Attwell, Navin, et al., 2018) by creating a taxonomy of vaccination mandates. Three main aspects should be considered according to the authors: the policy's scope — i.e., which vaccines are mandatory; the sanctions provided for non-compliance and their severity — i.e., the consequences for not getting vaccinated and/or vaccinated; and the degree of selectivity — i.e., how enforcement and exemptions are managed. Only by considering these three elements is it possible to assess the salience of the vaccination policies, namely, whether and to what extent vaccine mandates can effectively increase vaccination uptake. Accordingly, Odone et al. (2021) presented a spectrum of vaccination policies (Fig. 2), with particular attention to

vaccine mandates. These policies, whose effectiveness and acceptance rates vary depending on the socio-cultural context, range from more unrestricted approaches to non-compliance to more penalizing ones.

Fig. 2 – Vaccination policies spectrum.



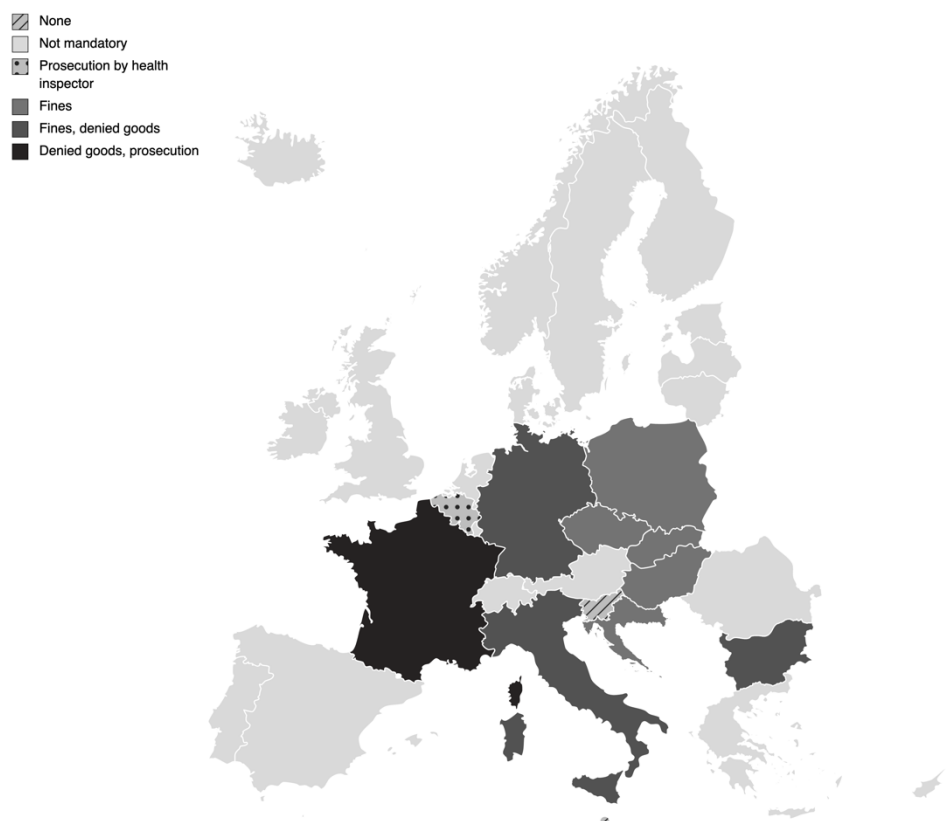
Source: Own elaboration based on Odone et al., 2021.

Among mandatory vaccination policies, three main types of sanctions for non-compliance have been introduced, with different combinations, by Western countries. The first is the denial of benefits — such as access to pre-school services and childcare economic aids — for children or adults who do not fulfill national vaccination requirements (Attwell & Navin, 2019). Access to these benefits can be reacquired by presenting solely medical exemptions — like in Italy and Australia — or, in some countries, also other types of conscientious

objection — based on religious, personal, or philosophical beliefs (MacDonald et al., 2018; Pierik, 2017). The second type is constituted by financial penalties — imposed only once or recurrent — whose entity varies depending on the number of missing vaccines based on the national vaccination schedule. In Europe, the economic fines range between 150 and 1,600 euros (Vaz et al., 2020). The third type of sanctions for non-compliance is job loss. Dismissal frequently constitutes the final step in a series of intermediate measures, which may include demotion and suspension from work. This penalty is mainly in force for specific occupational categories (e.g., healthcare workers) given the potential risk posed by vaccine-preventable diseases (VPDs) for them and/or for others. With the onset of the COVID-19 pandemic, this sanction was imposed on healthcare workers who refused to be vaccinated against COVID-19 (Shemtob et al., 2021) — and in Italy was also extended to other professional categories, including school personnel and police forces (see Section 2.2).

In Europe, most sanctions for non-compliant parents are financial penalties and access limitations to public services (Fig. 3). According to Odone et al. (2021), mandatory vaccination policies can be considered a “paternalistic approach” to manage public health. This type of policy can be useful in increasing vaccine uptake rates and reducing risks of VPDs outbreaks, especially during crises such as the COVID-19 pandemic (C. Lee & Robinson, 2016; Vanderslott & Marks, 2021).

Fig. 3 – Type of penalties for non-compliance with childhood vaccination mandates in Europe (2020).



Source: Odone et al., 2021.

Furthermore, as highlighted by Attwell and Hannah (2022, p. 8), vaccination mandates can help defuse “political pressure by appearing to punish noncompliance”. Nevertheless, several scholars underscored that there is poor evidence of the impact of these policies in maintaining high vaccination uptake in the long run, increasing confidence in vaccines, and addressing the causes of vaccination skepticism (Dubé et al., 2021; Greyson et al., 2019; MacDonald et al., 2018). Indeed, as Omer et al. (2019, p. 470) pointed out, “there is no simple linear relationship between the forcefulness of a policy and its impact on the rate of vaccination”. Indeed, suppose vaccination mandates are not adequately

supported by institutional efforts informed by a deep understanding of the characteristics and motivations of skeptical citizens. In that case, these mandates risk becoming a “counterproductive means of exclusion from points of contact, dialogue, integration, participation, and collective formation” (Tomasi, 2017b, p. 480). In addition, pushing people who harbor skepticism towards vaccines to undergo vaccination can lead to an increase in mistrust towards political and health institutions (Ward et al., 2022). Furthermore, as evidenced during the COVID-19 pandemic in Italy, the mandates introduced — along with the other restrictions to those unvaccinated (Section 2.2) — constituted compelling motivations for individuals to receive the vaccine but did not necessarily engender trust or acceptance in the vaccine itself (Fattorini & Balazka, 2025).³

Odone et al. (2021) suggest the adoption, from a long-term perspective, of “more flexible approaches” to vaccination compliance, focusing on the implementation of effective preventive care services and promoting adherence to preventive behaviors on a voluntary and informed basis. In their systematic review, Jarrett et al. (2015) also highlighted that dialogue-based and multicomponent strategies (including interventions with non-financial incentives) tended to perform better in increasing vaccination uptake than more restrictive approaches.

1.2. Vaccine hesitancy and its components

Vaccine hesitancy can be defined as “a delay in acceptance or refusal of vaccines despite availability of vaccination services” (MacDonald et al., 2015, p. 4163) and is a complex and country-specific phenomenon that can vary over time and depending on the specific vaccine. Given its widespread occurrence, vaccine hesitancy was recognized by the World Health Organization as one of the “ten threats to global health in 2019”.⁴ The COVID-19 pandemic and the introduction

³ The difference between vaccine uptake and vaccine acceptance is discussed in Section 2.1.

⁴ www.who.int/news-room/feature-stories/ten-threats-to-global-health-in-2019.

of new vaccines based on mRNA technology have clearly shown the global relevance of this phenomenon. Vaccine hesitancy should not be underestimated, and its containment, comprehensive understanding, and the implementation of effective communication will be fundamental for the success of future vaccination campaigns (Hudson & Montelpare, 2021).

1.2.1. The vaccine hesitancy phenomenon

The definition of vaccine hesitancy itself has been a subject of debate. Dubé et al. (2013) highlighted that despite the increasing use of the term in the literature, there were significant discrepancies regarding what precisely constitutes vaccine hesitancy. The concept of vaccine hesitancy has been widely used in the literature either to refer to a set of beliefs, attitudes, behaviors, or a combination of these three elements towards children and/or adults' vaccination (Gust et al., 2005; Opel et al., 2011; Peretti-Watel et al., 2015; Yaqub et al., 2014). In their systematic review, Bussink-Voorend et al. (2022) classified vaccine conceptualizations into three main groups: those presenting vaccine hesitancy as cognitions or affect (e.g., emotions regarding vaccination), behavior, or decision-making.

A widely recognized definition of vaccine hesitancy is provided by MacDonald et al. (2015, p. 4163), who describe it as “a delay in acceptance or refusal of vaccines despite availability of vaccination services” (p. 4163). This definition highlights the behavioral aspect of hesitancy, focusing on individuals' decisions to postpone or opt out of vaccination. Moreover, vaccine hesitancy is recognized as a multifaceted and country-specific phenomenon, varying across time and depending on the type of vaccine in question. A growing body of literature has critiqued this behavioral framework, arguing that it fails to capture the deeper, psychological complexities that underpin vaccine hesitancy. Peretti-Watel et al. (2015) suggest that vaccine hesitancy is best understood as a decision-making process. According to the authors, this decision-making process

can be influenced by several socio-contextual components, resulting in a plurality of behaviors.

Larson et al. (2022, p. 58) defined vaccine hesitancy as “a state of indecision and uncertainty about vaccination before a decision is made to act (or not act)”; Goldenberg (2021, p. 3) sees vaccine hesitancy as “an attitude of ambivalence regarding vaccines”, while vaccination refusal is conceptualized as a behavior. In this context, vaccine hesitancy is conceptualized as a psychological state of being conflicted or uncertain about the decision to vaccinate. This aligns with Shapiro et al.’s (2021, p. 40) definition of hesitancy as “a motivational state of being conflicted about, or opposed to, getting vaccinated” and refusal as the behavior of “declining to receive a vaccine when offered”. Adding to this psychological perspective, Bussink-Voorend et al. (2022, p. 1639) propose that vaccine hesitancy should be intended as a psychological construct defining “a psychological state of indecisiveness that people may experience when making a decision regarding vaccination”.

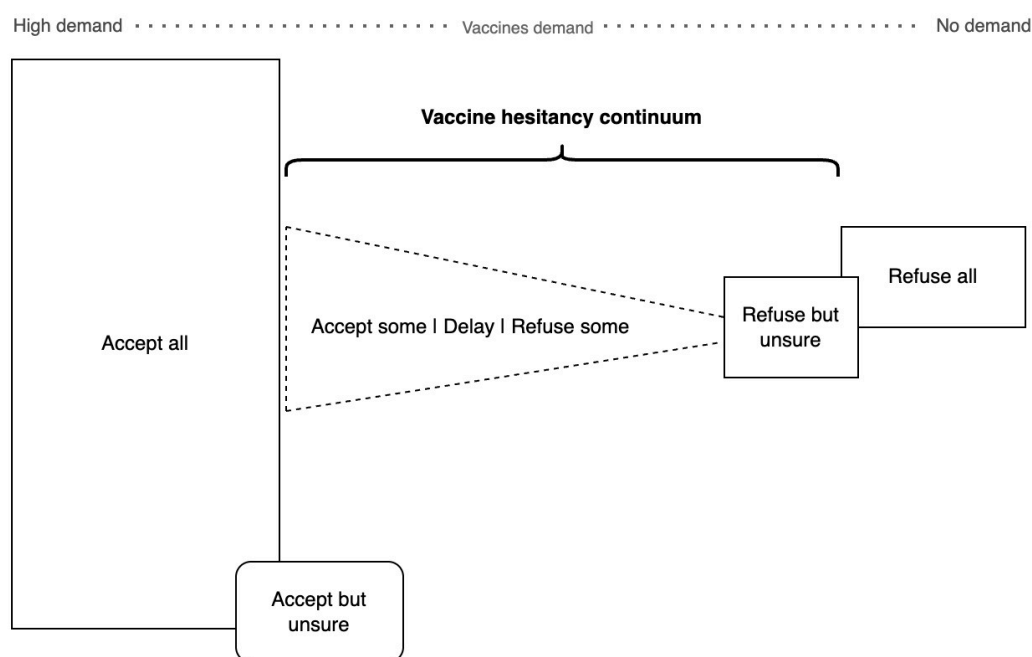
In this thesis, vaccine hesitancy is understood as a state of indecision or psychological ambivalence, rather than a fixed behavioral phenomenon. It is argued that vaccine hesitancy is a dynamic and evolving process shaped by internal psychological states — such as uncertainty, mistrust, and emotional conflict — as well as external factors like social influence and health policies. By framing hesitancy as a psychological state, this approach allows for a more nuanced analysis of vaccine-related behaviors, acknowledging that individuals may change their positions over time as attitudes shift.

Vaccine-hesitant individuals constitute a heterogeneous category, comprising people with varying degrees of hesitancy toward one or more vaccines, driven by diverse underlying motivations. Vaccine hesitancy should not be regarded as a “static state”; instead, vaccine decision-making should be considered a dynamic process influenced by several factors that might “sometimes prompt hesitancy and sometimes nudge a positive intention to vaccinate” (Larson, 2022, p. 1609). Vaccine-hesitant people can indeed decline vaccines, accept some of them, postpone the vaccination schedule, or reluctantly

accept them, and these positions might change over time. This positioning often translates into a request for an alternative and personalized vaccination schedule (Dempsey et al., 2011).

Even if vaccine-hesitant people are neither in favor nor against vaccination, this does not necessarily imply that they generally have a moderate attitude toward vaccination (Peretti-Watel et al., 2015). MacDonald et al. (2015) pointed out that vaccine hesitancy occurs on a continuum between high and no demand for vaccines (Fig. 4).

Fig. 4 – Vaccine attitudes continuum.



Source: MacDonald et al., 2015.

A low demand for vaccines should not be equated with vaccine hesitancy. While individuals or communities may fully accept vaccines, acceptance does not necessarily imply the existence of a demand. The vaccine hesitancy continuum presented by Macdonald et al. (2015) is a useful way to visualize vaccine-hesitant

positions. As suggested by Peretti-Watel et al. (2015) however, given the fact that vaccine hesitancy is vaccine-dependent, positioning people's vaccine-related attitudes on a continuum can be misleading — for instance, attitudes can be better represented using a continuum for each vaccine. Furthermore, it must be noted that vaccine acceptance and vaccine uptake should not be treated synonymously. Indeed, a high rate of vaccine uptake does not necessarily imply low levels of vaccine hesitancy (Dudley et al., 2020); hence, people can choose to be vaccinated and/or vaccinate their children despite being vaccine-hesitant. Given the fact that these concepts are not synonymous, Dubé et al. (2021) claim that levels of vaccine hesitancy and vaccine acceptance within a country cannot be estimated through vaccine uptake rates. Indeed, vaccine hesitancy is neither a necessary nor a sufficient cause for a person to refuse or postpone vaccination. Vaccine hesitancy involves internal conflict, uncertainty, and shifting attitudes that can persist even after individuals decide to vaccinate.

Vaccine hesitancy and vaccination behaviors should be distinguished. Hence, the rates of vaccine uptake cannot represent an indicator for analyzing the vaccine hesitancy phenomenon. An example of this distinction can be found in the research conducted by Ward et al. (2022) about the French health pass case during the COVID-19 pandemic: they illustrated that many vaccinated individuals reported feelings of regret and doubt post-vaccination, showing that hesitancy can continue after the vaccination decision is made. This also emerged in a recent study conducted by Fattorini and Balazka (2025) about vaccine hesitancy towards anti-COVID-19 vaccination in the Italian context. Drawing on a large-scale survey, the authors combined the binary measure of vaccine uptake with participants' subjective perception of autonomy in their vaccination decision, revealing that even among those vaccinated, attitudes varied significantly: 47.1% perceived their decision as free, 15.5% felt neither completely free nor coerced, and 24.6% felt pressured by external mandates or social constraints. This granular approach underscores that vaccine hesitancy is not synonymous with vaccine refusal but rather encompasses a spectrum of attitudes, including reluctant compliance. Descriptive data further show that among those who felt their decision was free, 58.8% received three doses and 32.4% proceeded to a

fourth dose; among neutral respondents, 63.6% reached three doses but only 11.2% continued to a fourth; and among those who felt obligated, 65.8% received three doses but only 6.3% proceeded to four. Importantly, stepwise multinomial logistic regression models (Fattorini & Balazka, 2025) reveal that, beyond these figures, individuals perceiving obligation or neutrality have significantly lower likelihood of sustained vaccination compared to those perceiving free choice. In other words, even when some hesitant individuals comply initially, their likelihood of continuing with booster doses diminishes over time. Notably, those with neutral perceptions align behaviorally more with the obligated group than with the free-choice group. These findings highlight the importance of considering not only whether individuals are vaccinated, but also how they experience and frame their vaccination decisions, as this shapes their future vaccine behaviors.

Far from being a minoritarian phenomenon, vaccine hesitancy constitutes a pressing social issue. Its relevance has been further accentuated by recent developments observed worldwide during COVID-19 vaccination campaigns. It has become increasingly clear that it is necessary to improve the understanding of the variety of positions fueling the vaccine-related debate. A failure to do so could lead to a deterioration of the relationship between institutions and vaccine-hesitant citizens, which would further compromise the effectiveness of vaccination campaigns and of vaccine-related communication strategies. As Attwell et al. (2021, pp. 470–471) pointed out regarding COVID-19 situation, governments “cannot afford to misunderstand their populations, nor their information sources, nor to blame them for their distrust in institutions and expertise.... Compulsion without significant persuasive appeals could risk people opting out altogether”. Furthermore, it is still necessary to assess whether the recent reduction in hesitancy towards anti-COVID-19 vaccines remains limited to the pandemic context or whether it will affect vaccine hesitancy in general (Harrison & Wu, 2020). Indeed, the decision to be vaccinated against COVID-19 and/or to vaccinate children during a health emergency does not necessarily imply that vaccine-hesitant citizens will embrace national vaccination schedules in the future. For this reason, as highlighted by Attwell et al. (2021), political

authorities must start investing in boosting confidence not only in COVID-19 vaccines, but also in childhood vaccines.

1.2.2. Main models of vaccine acceptance factors and determinants

Vaccine acceptance and refusal are context-dependent, and “local vaccination cultures” (Dubé et al., 2021) should thus be carefully analyzed when addressing the vaccine hesitancy phenomenon. Vaccine hesitancy is indeed a complex phenomenon, and vaccination decisions can be influenced by several factors.

A first attempt to identify vaccine acceptance determinants is the “3Cs” model. This model identifies three main factors that can lead to vaccine-hesitant attitudes: complacency, confidence, and convenience (MacDonald et al., 2015). The first category of the model is “complacency” about vaccination or a particular vaccine. Complacency occurs when there is a reduced perception of the risks related to vaccine-preventable diseases (VDPs) and when vaccination is considered an unnecessary preventive health tool. “Confidence” is the trust in vaccines safety and efficacy, in the health system that administers them, and in policymakers’ motivations in identifying the need for one or more vaccines. “Convenience” of vaccines is linked to several aspects, such as their actual physical availability, their affordability, as well as their geographical accessibility. Other convenience-related elements that can shape vaccination decisions are populations’ comprehension skills (linguistic and scientific-medical literacy), the quality of vaccination services (whether real or perceived), the way in which these services are provided in a specific socio-cultural context.

A further and more articulated model was presented by the SAGE working group (WHO, 2014). *Table 1* shows the matrix of vaccine hesitancy determinants.

Three main groups of factors can be identified (WHO, 2014). First, “contextual influences” emerge from historical, socio-cultural, political, institutional (health system), economic, and environmental factors; second, “individual or group influences” concern personal perceptions about vaccines and/or pressures arising from the broader social context (and social norms); the third group of influences — also identified as “organisational” determinants by Dubé et al. (2015) — include all those aspects that specifically characterize vaccines and vaccination practices.

Tab. 1 – Determinants of vaccine hesitancy.

Contextual influences
• Communication and media environment • Influential leaders, immunization program gatekeepers and anti- or pro-vaccination lobbies • Historical influences • Religion/culture/ gender/socio-economic • Politics/policies • Geographic barriers • Perception of the pharmaceutical industry
Individual and group influences
• Personal, family and/or community members’ experience with vaccination, including pain • Beliefs, attitudes about health and prevention • Knowledge/awareness • Health system and providers-trust and personal experience. • Risk/benefit (perceived, heuristic) • Immunisation as a social norm vs. not needed/harmful
Vaccine/ vaccination-specific issues
• Risk/ Benefit (epidemiological and scientific evidence) • Introduction of a new vaccine or new formulation or a new recommendation for an existing vaccine • Mode of administration • Design of vaccination program/Mode of delivery (e.g., routine program or mass vaccination campaign) • Reliability and/or source of supply of vaccine and/or vaccination equipment • Vaccination schedule • Costs • The strength of the recommendation and/or knowledge base and/or attitude of healthcare professionals

Source: WHO, 2014.

As Table 1 shows, concerns and doubts about vaccines' safety are only one of many factors that can lead to a vaccine-hesitant attitude. Other factors include media and institutional communication, the relationship between healthcare workers and parents (Bester, 2015), and the type of information that health professionals provide to them (Downs et al., 2008).

Another contribution to explaining vaccine hesitancy is the “5 As taxonomy” proposed by Thomson et al. (2016). Based on a narrative review, the authors identified five determinants of vaccine uptake: access, affordability, awareness, acceptance, and activation (Tab. 2). This taxonomy particularly highlights the element of “activation”, which involves the presence of nudges⁵ in the socio-cultural context that can contribute to enhancing vaccination uptake.

Tab. 2 – The 5As taxonomy.

<i>Root cause</i>	<i>Definition</i>
Access	The ability of individuals to be reached by, or to reach, recommended vaccines
Affordability	The ability of individuals to afford vaccination, both in terms of financial and non-financial costs (e.g., time)
Awareness	The degree to which individuals have knowledge of the need for, and availability of, recommended vaccines and their objective benefits and risks
Acceptance	The degree to which individuals accept, question, or refuse vaccination
Activation	The degree to which individuals are nudged towards vaccination uptake

Source: Thomson et al., 2016.

⁵ According to Thaler and Sunstein (2009, p. 6), “a nudge [...] is any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives”.

The 3Cs model (MacDonald et al., 2015) was extended by Betsch et al. (2015, p. 64) to account for the reasons why individuals reflect and may question vaccination. In their “4Cs” model the authors added to the other three components “calculation” — i.e., individuals’ engagement “in an extensive information search for pros and cons of vaccination”. In a recent work, Betsch et al. (2018) presented a measure of the “5Cs” psychological antecedents of vaccination. According to the authors, the main measures of vaccine hesitancy rarely go beyond confidence in vaccine safety and efficacy, even if other relevant components influence the vaccination decision process (Schmid et al., 2017). Thus, the 5Cs scale, which is grounded in the established theoretical models, is composed of five main components: complacency, constraints — a concept similar to 5As “access” and that substitutes the “convenience” factor of the previous models —, calculation, and collective responsibility — i.e., individuals’ willingness to protect the community through vaccination. So, two main changes were added to this scale: first, the authors decided to substitute “convenience” with “constraints” because the former does not adequately disentangle individuals’ responsibility of vaccination from social determinants of access; second, they introduced as an antecedent of vaccine hesitancy the degree of collective orientation — as opposed to individualist vaccine-related attitudes. *Tab. 3* shows the main components of vaccine acceptance presented by the three theoretical models and by the 5Cs measure.

Tab. 3 – The main models (and measure) explaining vaccine hesitancy.

<i>Models</i>			<i>Measure</i>
3Cs model	4Cs model	5As model	5Cs antecedents of vaccine acceptance
Confidence	Confidence	Acceptance	Confidence
Convenience	Convenience	Access	Constraints
Complacency	Complacency	Awareness	Complacency
	Calculation	Affordability	Calculation
		Activation	Collective responsibilities

These models and measure are the main conceptualizations of vaccine acceptance determinants in the literature. Each of these highlights a slightly different perspective from which the phenomenon of vaccine hesitancy can be analyzed. Nevertheless, they do not problematize or do not place enough emphasis on the role of experiential components (see Section 2.4) in fueling these hesitant attitudes. Moreover, the 5Cs' element of "collective responsibilities" seems to reproduce the division between those parents considered altruists — who vaccinate their children for the community benefit — and those labeled as egoists — who refuse or delay vaccination for their individual interests —, further amplifying the stigmatization of the vaccination dissent (see Section 3.2).

Besides the main determinants overmentioned, several researchers have focused on the specific role played by individual sociodemographic characteristics in leading to vaccine-hesitant positions. Particularly, they focused on individuals' educational level and on their socio-economic status (SES). Many authors (Gust et al., 2008; Kim et al., 2007; Sugerman et al., 2010) found that the refusal of one or more vaccines for personal reasons was more likely among parents with higher SES and tertiary education. Similarly, Blume (2006) found that parents who refused the measles, mumps, and rubella (MMR) vaccine were mainly highly educated and with a medium-high SES. However, the correlation between vaccination acceptance and SES can also depend on the vaccine under consideration (Bocquier et al., 2017) and it is context-dependent (Makarovs & Achterberg, 2017). Bertoncello et al. (2020) showed that parents' low education is a valid predictor of total refusal of vaccines — but not of vaccine hesitancy, while low SES is a determinant of hesitant attitudes. As highlighted by MacDonald et al. (2015), differently from health-social determinants, determinants of vaccine hesitancy are not unidirectional. Indeed, higher levels of education might be associated either with low levels of vaccine acceptance or high ones (Larson et al., 2014).

1.2.3. Uncertainty and risk perception

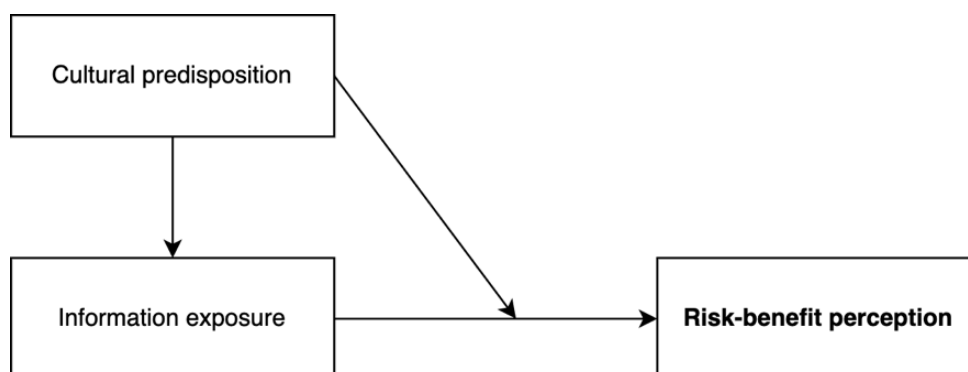
Contemporary societies are described as “risk societies” in which citizens mainly face risks produced by industry and science — i.e., “manufactured risks” —, and those risks can be particularly perceived by citizens with higher levels of education and higher socio-economic status (Beck, 1992). Vaccines, as technoscientific innovations, require the simultaneous management of their “technical” uncertainties and of uncertainties related to their purposes and implications (Bucchi & Neresini, 2006). Public opinion accepts “a certain degree of uncertainty in terms of potential risks and unintended consequences” (*Ibidem*, pp. 38–39) only if it judges the objectives to be acceptable as well as convincing. Uncertainty around vaccines is also due to their “hybrid” character in the public debate (Bucchi & Neresini, 2006). Indeed, as the COVID-19 pandemic has clearly shown, the technical-scientific, economic, political, and cultural aspects of vaccines often appear to be inseparable. An entanglement of fears for health, for the increasing centralization of power and economic resources in the hands of a few pharmaceutical companies, for the excessive medicalization, for vaccine adverse events (AEFI).⁶ Moreover, due to mass media’s communication strategies, the debate on vaccinations is often politically oriented rather than purely scientific (Bucchi, 2000). Despite vaccines being often portrayed as an incontrovertible and neutral public good, they are instead tied with politics, “with struggles over status, authority and value” (Leach & Fairhead, 2007, p. 2), and embedded in wider cultural narratives about parenting responsibility and moralized health choices (E. Lee et al., 2014).

Risk can be defined as the possibility of a future adverse condition (Joffe, 2003). Individuals’ perception of risk depends on how likely they think a certain event is to occur and how much they fear consequences. However, risk can also be a feeling (Slovic & Peters, 2006), i.e., an instinctive and intuitive reaction to a danger. Consequently, feelings about risk have a greater impact on individuals’

⁶ The WHO (2019: 2) defines an adverse event following immunization (AEFI) as “any untoward medical occurrence which follows immunization and which does not necessarily have a causal relationship with the use of the vaccine. The adverse event may be any unfavourable or unintended sign, an abnormal laboratory finding, a symptom or a disease”.

attitudes than knowledge about risk. In their work, Kahan et al. (2009), showed that people tend to adapt information based on their own predispositions and worldviews, polarizing even further when exposed to balanced information. Indeed, people tend to select and retain information more in line with their own personal, political, and cultural dispositions — i.e., the so-called “confirmation bias”. Figure 5 displays a simplified model of how opinions about a given technology or innovation — such as vaccines — are generated. A particular cultural predisposition influences not only the type and degree of exposure to information⁷, but also moderates the intensity with which information selected and assimilated leads to the development of perception of risks and benefits of a technology or innovation.

Fig. 5 – Relationships between cultural worldviews, information exposure, and risk–benefit perceptions.



Source: Kahan et al., 2009.

All information about vaccination, institutional and non-institutional — including personal experiences — is translated into subjective representations of risk (Pomery et al., 2009; Rhodes & Courneya, 2003). Individuals do not process information in a perfectly analytical and neutral way, thus generating

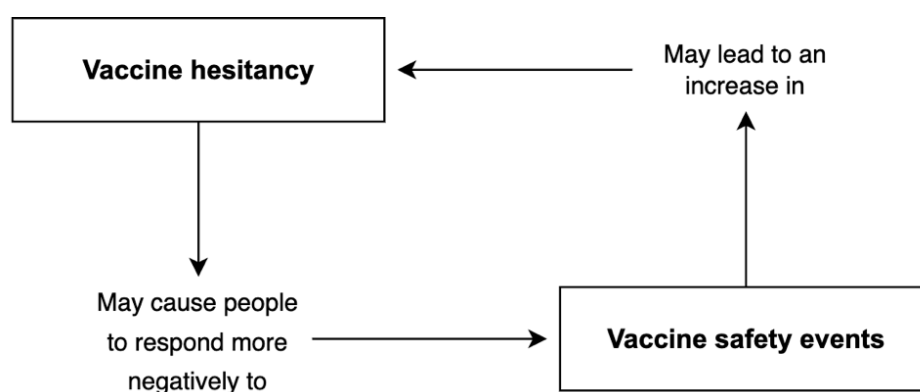
⁷ See also Blaisdell et al. (2016).

representations that do not include all the available information on a given issue. Personal decisions about vaccines are influenced by individual and cultural predispositions, the degree of general or health literacy (Sørensen et al., 2012), and the way information is transmitted. Decisions can also be oriented by the social amplification of risk. This phenomenon can occur in two stages (Kasperson et al., 1988): during the dissemination of risk' information, and in the subsequent response mechanisms by society. Scientists, the mass media, associations, and many other actors can amplify risk signals. Furthermore, the hybrid character of vaccines in the public debate influences a fundamental element that can lead to vaccine-hesitant attitudes: the perception of risk (Kahan, 2013; Slovic & Peters, 2006).

Several authors (Brewer et al., 2017; Caserotti et al., 2021; Floyd et al., 2000; Martinelli & Veltri, 2021) highlight the importance of considering cognitive characteristics and individuals' risk perception when studying vaccine hesitancy. Specifically, the role of the so-called “affect heuristics” — i.e., “representations of objects and events in people's minds [that] are tagged to varying degrees with affect” (Finucane et al., 2000, p. 3) — seems to be a relevant element when looking at vaccine-hesitant attitudes. Indeed, affective feelings — either positive or negative — can guide the evaluation of vaccine-related risks (Kahan, 2014). Thus, individuals “base their judgments of an activity or a technology not only on what they think about it but also on how they feel about it” (Slovic et al., 2005, p. 36). If their feelings towards vaccines are positive, people will probably judge vaccination benefits as exceeding risks; conversely, if individuals' feelings are negative, vaccination can be perceived as highly risky. However, several authors (Fischhoff, 2012; van der Bles et al., 2020) highlight that usually scientific experts — especially those advising public policy decisions (Moore & MacKenzie, 2020) — do not communicate publicly the uncertainty related to their findings. Indeed, the underlying assumption is that scientific experts need to provide solely certainties to the public to maintain authority and credibility. On the contrary, “this lack of transparency could potentially compromise important decisions people make based on scientific or statistical evidence” (van der Bles et al., 2020, p. 7672) — including vaccine-related decisions.

Both disease and vaccination can be associated with “risk”: people can perceive as more likely and/or serious either the negative consequences of a disease or the potential side effects of vaccines. Furthermore, individuals are more inclined to accept risks seen as occurring on a voluntary or natural basis, rather than risks perceived as human-made or imposed (Kelp et al., 2022; Noar & Austin, 2020; Tumpey et al., 2019). As highlighted by Ward et al. (2018), given that both vaccination and vaccine refusal are not exempt from risk, individual risk perceptions can significantly shape parental vaccine-related decisions. Fears for AEFI are among the most cited reasons either to refuse childhood vaccines (Facciola et al., 2019; McKee & Bohannon, 2016) or anti-COVID-19 vaccines (Markovitz & Russo, 2020; Salyer, 2020). As noted by the World Health Organisation (2014), the occurrence of serious adverse vaccine reactions can fuel and spread vaccine-hesitant attitudes. Vaccine hesitancy and vaccine safety concerns can indeed influence each other (*Fig. 6*), and safety concerns can lead to an increase in vaccine-hesitant attitudes. An example of this latter aspect is the recent case of the Oxford/AstraZeneca vaccine (Vogel & Kupferschmidt, 2021). After several AEFI reports and a confusing communication of vaccine-related decisions (Bucchi & Saracino, 2021), fear of side effects of this and other COVID-19 vaccines has increased not only levels of hesitancy among citizens but also among healthcare workers (Rief, 2021).

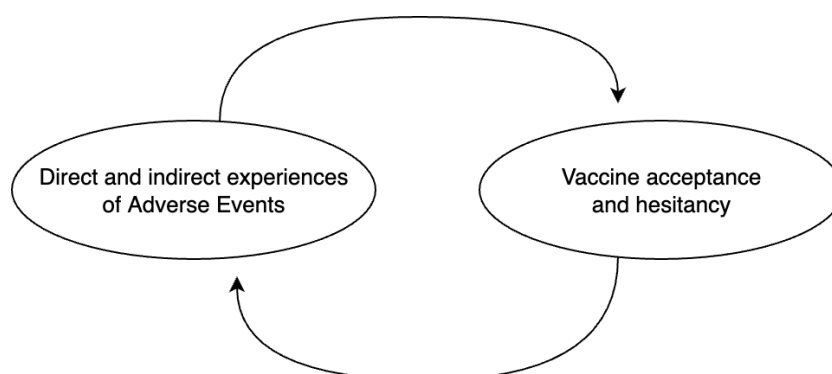
Fig. 6 – Dual relationship between vaccine hesitancy and vaccine safety events.



Source: WHO, 2017.

Recent work by Gauna et al. (2025) offers a significant contribution to understanding the complex relationship between the experience of adverse events following immunization and vaccine hesitancy. Their scoping review emphasizes that the direct or indirect experience of adverse events — whether witnessed personally or circulated through formal channels (such as news media) or informal ones (such as social media) — can substantially influence vaccine acceptance. At the same time, preexisting hesitancy may shape how individuals perceive and attribute post-vaccination symptoms. This bidirectional interplay (Fig. 7) complicates efforts to assess vaccine safety and raises critical questions about the extent to which citizens' interpretations of adverse events align with those of health professionals.

Fig. 7 – Causality between adverse events experiences and vaccine hesitancy.



Source: Gauna et al., 2025.

The authors also draw attention to an important research gap: while a large body of literature addresses public concerns about vaccine safety, fewer studies have focused on how adverse events are actually experienced and interpreted by individuals. Furthermore, their review shows that much of this emerging scholarship remains centered on COVID-19 vaccines, with insufficient exploration of other immunization contexts, such as childhood vaccination. These findings highlight broader issues in pharmacovigilance, particularly the underreporting of non-severe events and the risk of misattribution, which is

shaped by psychosocial dynamics, such as the nocebo effect — the experience of side effects influenced by negative expectations. As Gauna et al. (2025, p. 8) argue, improving vaccine communication and trust in political and health institutions requires not only addressing misinformation but also considering the “intimate nature of vaccine experiences”. This implies taking seriously the embodied and emotional dimensions of vaccine experiences — including discomfort, uncertainty, and fear.

As highlighted by Goldenberg (2016), however, political and health institutions have not been able to recognize that vaccine-hesitant parents address the vaccine safety issue from a different perspective. These parents indeed have an individualized perception of risk that “makes the presence of rare but serious adverse events a safety priority rather than, as health officials see it, a reasonable risk” (*Ibidem*, p. 564). From a moral point of view, parents are pushed to become more reflexive (see Section 4.2) about their own decision-making about vaccination, thus becoming “subjects of freedom” (Kaufman, 2010; Rose, 1999). These dynamics can be situated within broader sociological accounts of contemporary risk. Beck’s (1992) notion of the “risk society” helps frame how parents navigate manufactured risks associated with technoscientific developments, including vaccination. In such a context, risk becomes not only omnipresent but also increasingly individualized. Complementing this, work on risk and blame highlights how public perceptions of danger often become moralized, leading to processes of stigmatization and blame attribution (Douglas, 2005) — particularly evident in vaccine debates, where parental choices are frequently framed as moral failures or threats to collective health.

These considerations underscore the need to shift attention from abstract models of vaccine decision-making to the concrete, situated ways in which parents interpret vaccine-related experiences and make sense of their health choices. If the intimate and emotionally charged nature of vaccine experiences remains overlooked, a crucial component of vaccine hesitancy will be missed. The following section explores how parents engage with vaccination through forms of experiential knowledge, drawing on personal histories, embodied

perceptions, and individualized assessments of risk — all of which contribute to shaping what can be described as parental epistemologies.

1.2.4. Parental vaccine hesitancy: experiential knowledge and parental epistemologies

Parental vaccine hesitancy is “complex and multifaced” (Díaz Crescitelli et al., 2020, p. 43). As pointed out by Dubé et al. (2021, p. 177), the “state of ambivalence toward vaccination highlights legitimate doubts and concerns about vaccines”, highlighting vaccine-hesitant parents’ wish to discuss and engage with vaccine-related uncertainties (Kirkland, 2012; Leach & Fairhead, 2007). Political and health institutions, however, have not recognized that vaccine-hesitant parents address the vaccine safety issue from a different perspective, displaying individualized perception of risks that “makes the presence of rare but serious adverse events a safety priority rather than, as health officials see it, a reasonable risk” (Goldenberg, 2016, p. 564).

As highlighted by Reich (2016, p. 11), “we live in an age of personalization” in which “we see heightened efforts to personalize medical care to meet the desires and needs of the individual”. Thus, many parents engage in what the author defined as “individualist parenting”, i.e., involving a significant investment of time and energy in planning the best strategies to keep children healthy. This parental commitment results in increased attentiveness to children’s needs as well as demands for more personalized institutional responsiveness (Reich, 2016). The fact that vaccine safety has been demonstrated from a public health point of view is not considered sufficient evidence for parents who are concerned to know whether vaccines are safe for their own children (Goldenberg, 2021). Thus, vaccine-hesitant parents adopt a “particularistic” perspective of children’s health (Leach & Fairhead, 2007) that leads them to carefully evaluate the current or potential impact of vaccines on their children’s particular health condition. Consequently, in deciding whether to vaccinate their child and against which disease(s), such parents challenge “the homogeneity of the risk discourse by

individualizing risk in terms of their own children” (Brunson & Sobo, 2017, p. 43), considering their children’s specificities in terms of children’s or family’s medical histories, current health status, and children’s age. Furthermore, they evaluate the likelihood of their children getting a vaccine-preventable disease (VPD) and what the impact of the VPD would be. Vaccine-hesitant parents do not necessarily underestimate the potential negative consequences of VPDs. However, they think that vaccination is not the only tool for prevention and that institutions overestimate the risks of infections as well as vaccine efficacy (Blume, 2006; Rogers & Pilgrim, 1994). In this way, vaccine-hesitant parents often ask for an individualized vaccination schedule and refuse to vaccinate their children according to a national, one-size-fits-all immunization schedule (Dempsey et al., 2011; Klugar et al., 2021). As highlighted by Leach and Fairhead (2007, p. 51), this request can be considered part of a broader societal shift towards “more individuated [childcare] regimes adapted to the particularities of each child”.

Several authors (Callon, 1999; Davison et al., 1991; Epstein, 1995; Pols, 2014) have focused on the role of “lay knowledge” — the counterpart of the scientific or “expert” knowledge — in shaping and challenging scientific expertise, especially in health issues (see Section 4.2). As highlighted by Kitta and Goldberg (2017, p. 512), “the reasons why people form and maintain beliefs about health, illness, and/or vaccination are complex”. For instance, as seen in Section 2.1, the decision to vaccinate does not necessarily imply absence of vaccine-hesitant attitudes: “while non-vaccination or single vaccination requires a continued engagement to affirm the position taken, even parents who opt for MMR [vaccine] continue to learn and say they remain open despite having taken a decision that is irreversible” (Poltorak et al., 2005, p. 717). Parents indeed continuously reflect on the most relevant reasons — understood as the factors leading to vaccine-hesitant positions (U. Majid & Ahmad, 2020) — in their decision-making process. Moreover, vaccine-hesitant parents often “engage in a process of self-education to make informed decisions about their children’s health risks” (Cassam, 2021, p. 6). Indeed, they tend to consider trust in others — especially in political and health

institutions — to be passive, while parental decisions individually assessed are perceived as more responsible and empowering (Hobson-West, 2007).

Concerns and doubts about vaccine safety are only one of many factors that can lead to vaccine-hesitant attitudes. As highlighted in Section 2.2, the main models presenting factors connected to vaccine hesitancy do not problematize or place enough emphasis on the role of experiential components in leading to hesitant attitudes. Focusing on the experiential elements allows for a better accounting of relevant personal experiences that can lead to the formation of doubts about, or objections to, vaccination. Studying the complexity of vaccine-related attitudes moves beyond arguments based solely on the safety and efficacy of vaccines (Widdus & Larson, 2018). Indeed, in their research, Poltorak et al. (2005) have highlighted that mothers' engagement with the measles, mumps, and rubella (MMR) vaccine is particularly influenced by experiential factors such as personal histories, childbirth events, and levels of sharing other parents' concerns. Experiential factors construct parents' "experiential knowledge" (Borkman, 1976, p. 446), i.e., the "truth learned from personal experience with a phenomenon rather than truth acquired by discursive reasoning, observation, or reflection on information provided by others". Therefore, personal experiences, personal judgements, and feelings become of primary relevance in defining what is true. To further examine this phenomenon, van Zoonen (2012, p. 57) introduced the concept of "I-pistemology" — i.e., "the self as the origin of all truth". According to the author, especially in situations of high epistemological uncertainty in which it is not clear whom to trust and what is true, one of the strategies that people can adopt to cope with this insecurity is to turn themselves into "an alternative source of knowing and understanding" (*Ibidem*, p. 60). More recently, Crabu et al. (2023) looked at the health-related beliefs of concerned communities and how their claims were (partially or totally) refused by scientific authorities during the COVID-19 pandemic. The authors (*Ibidem*, p. 149) highlighted that the "refused styles of thought" are constituted by experiential expertise used "to reframe the body in a process of self-care, thus validating a corpus of refused knowledge through direct personal experience". By

applying demarcation strategies and narratives, “with respect to the prevalent biomedical paradigms”, the concerned communities acquire “experiential epistemic autonomy”. Experiential knowledge and expertise are thereby co-created, shared, and mobilized by concerned communities, thus producing alternative ways and meanings to manage public and individual health.

All these experiential components — such as risk perceptions (Section 1.2.3), parental narratives, and personal experiences — are arguably key elements in understanding vaccine hesitancy. According to Majid and Ahmad (2020, p. 1764), even if a limited number of reasons for vaccine hesitancy can be identified, each parents’ rationales — i.e., “the combination of reasons that encourage each parents’ vaccine decision” — are unique. Building on this, the authors propose the metaphor of a gear train to visualize how the different factors influencing vaccine hesitancy interact dynamically. Each gear represents a factor, such as prior experiences; ideas of natural living; mandatory vaccination policies; perceptions of other parents; healthcare interactions; trust or distrust in health system actors; and sources of information (and related challenges and preferences). Like in a mechanical system, when force is applied to one gear, all connected gears are set in motion, though at different speeds depending on their size and relevance. This metaphor emphasizes that while certain factors may be more prominent for some parents, they are always intertwined with others, creating unique, evolving rationales for each family. Notably, Majid and Ahmad (U. Majid & Ahmad, 2020) also include shared decision-making (SDM) as part of this system, conceptualizing it as an additional “gear” that interacts with the other factors. While SDM is often discussed as a healthcare practice or ethical principle (Hack et al., 2006; Weston, 2001), the authors see it as intertwined with parents’ hesitancy dynamics — shaping how they process information, negotiate trust, and make sense of their choices.⁸

In her study, Carrion (2018, p. 321) introduced the concept of “maternal epistemology” — i.e., the idea that only mothers know what is best for their children’s health —, a specific and alternative form of knowledge production

⁸ The concept of SDM is further discussed in Section 1.4.2.

based on the “social experience of motherhood”. The author pointed out that it is important for vaccine-hesitant mothers to make informed vaccine-related decisions based on their own research. In these decisions, vaccine-hesitant parents carefully take into consideration their children’s needs and make “independent decisions, based on their own knowledge and intuition” (Reich, 2016, p. 72). In this regard, research showed that parents who decided not to vaccinate their children are more used to making informed choices also in other domains (Evans et al., 2001; Poltorak et al., 2005; Sporton & Francis, 2001). However, this parental expertise should not be belittled: parents know their family history and health-related vulnerabilities, and both elements can play a relevant and “legitimate role in decision-making about vaccinations” (Cassam, 2021, p. 6).

The concept of maternal epistemology is here reconceptualized as “parental epistemologies” for two main reasons. First, the concept will be extended to fathers as well because the decision on whether to vaccinate a child is usually taken by both parents, each carrier of his/her own “experiential knowledge” (Borkman, 1976). Second, parental discourses regarding vaccination decisions are plural; thus, these cannot be all included in one type of narrative or “epistemology”. The focus on parental epistemologies is in line with the need to shift the “attention from official biomedical texts to the roles publics play in shaping biomedical and health discourses and practices” allowing scholars to “better map existing patterns of influence and identify places and strategies for rhetorical intervention in matters of public health and wellbeing” (Keränen, 2014, p. 105).

The individualized forms of knowledge production discussed above do not remain confined to the private sphere of parental decision-making. In many cases, vaccine-hesitant parents seek validation, support, and collective agency by connecting with others who share similar concerns and experiences. These interactions often give rise to organized forms of mobilization, including the creation of associations and advocacy networks that contest mandatory vaccination policies and dominant narratives about vaccine safety. The next section explores how such vaccine-critical groups emerge, how they construct collective frames of dissent, and how their positions are represented — and frequently stigmatized — within public discourse.

1.3. Mobilizing against vaccination policies: Vaccine critical groups and social labeling

An accurate analysis of the vaccine issue offers several suggestions for informing policies and institutional communication. Vaccination campaigns that support the introduction of a vaccination mandate are often based on the assumption that the only right public response to these communication strategies is that of compliance, with a loss of the variety of public responses (Manyweathers et al., 2020). Thus, those responses not fully compliance-oriented can be easily ignored or misinterpreted (Davis et al., 2015). Further, the media and other key actors in the vaccine-related issue — such as policymakers, scientists, and healthcare workers — have often contributed to fueling the vaccine hesitancy phenomenon by rejecting or deriding vaccine-hesitant people's concerns (Goldenberg, 2021; Ivani & Dutilh Novaes, 2022), defined as irrational and/or anti-scientific. These citizens have thus started to search for alternative guidance to vaccination decisions and part of them felt the need to network to find peer support and advocate for their positions.

1.3.1. Vaccine critical groups

The term “anti-vaccine movement” generally refers to “people who devote part of their time and resources to publicly voice their concerns regarding vaccines, actively trying to convince others to join the movement in the hope that changes will be made to vaccination policies” (Dubé et al., 2021, p. 178). This term has been criticized by several authors because of the assumption of an inherent rejection of vaccines — i.e., “anti-vaccine” — and suggested instead the term “vaccine critical activism” to better account for the heterogeneity of vaccine-related positions (Hobson-West, 2007; Johnston, 2004; Ward, 2016). In the vaccine hesitancy studies literature, only a few studies focus specifically on “Vaccine Critical Groups” (Hobson-West, 2007). This gap in the literature continues to exist today, especially regarding the study of Free-Vax parents — i.e., those who are not against vaccines per se (as No-Vaxxers), but against

vaccination obligations. Indeed, currently, the focus is mainly on No-Vaxxers on social media (Puri et al., 2020): despite being an important element in the vaccination debate, this approach allows for identifying only part of the vaccine hesitancy phenomenon, the more radical and/or explicit one. However, it neglects a whole grey area of parents who are doubtful about vaccines and vaccination obligations, who have felt the need to participate in associations, and who may nevertheless be open to vaccination.

In contemporary societies, there is an increasing focus on micro-contexts and micro-mobilization practices (Snow et al., 1986) based on common experiences, leading to “a perspective on citizenship centred on difference and identity” (Leach & Scoones, 2007, p. 13). According to Bastian (1998, pp. 11–12), forms “health consumer activism” can arise when people share “the same health condition or experience”, when they have a similar experience “of being harmed by a product”, when they have “a shared identity”, or when people “protest particular practices or developments on an ideological basis” — as, according to the author, vaccine critical groups. However, as highlighted by Blume (2006, p. 639), besides ideologies, when analyzing vaccine critical groups, it is important to consider also individual experiences similar to those of patients/caregivers organizations: “the experience of not having their concerns taken seriously, a sense of having been inadequately informed, the need for mutual support”. Castells (1997, p. 3) highlighted that “in a world of global flows of wealth, power, and images, the search for identity, collective or individual, ascribed or constructed, becomes the fundamental source of social meaning”. In these contexts, identification processes are contemporary active at different levels “both through immediate contexts of interaction and shared experience and through more historically sedimented forms of solidarity and group identity” (Leach & Scoones, 2007, p. 13).

As noted by Benford and Snow (2000), framing theories highlight the way in which mobilization is shaped by and includes the social construction of ideas and meaning, favoring the definition of a “problem” from a cognitive and moral point of view. In a society characterized by a plurality of interests, the struggles to advocate for a social or political agenda are not solely involved in mobilization

processes; they are also implicated in the establishment of the legitimacy of meanings and problem definitions. This dual dynamic is particularly evident in epistemic conflicts, where individuals and groups not only question the authority of institutional science by proposing alternative sources of credibility but also challenge mainstream scientific epistemologies in favor of alternative ones (Mede & Schäfer, 2020). Indeed, as noted by Giorgi and Eslén-Ziya (2025, p. 65), “epistemic conflicts can contribute to the formation of groups and communities that contest scientific consensus and the authority of scientific experts — in which processes emotions play a vital role”. Consequently, as in the case of vaccine critical groups, mobilization often gives rise to “protracted clashes between alternative framings which do not reach straightforward resolution” (Leach & Scoones, 2007, p. 12), and that tends to polarize the public debate.

This perspective is further developed by Hess (2007) in his analysis of how grassroots environmental actors engage in alternative innovation and knowledge dissent. Rather than simply opposing dominant scientific frameworks, vaccine-hesitant groups often participate in the creation of new epistemic models and health paradigms that challenge institutional norms. These include alternative understandings of immunity, individualized vaccination schedules, and personalized conceptions of bodily risk. Such forms of dissent are not just reactive but also proactive, aiming to reshape biomedical discourse and reconfigure the boundaries of legitimate expertise. For instance, vaccine-hesitant parents concerned about the alleged link between MMR vaccines (measles, mumps, and rubella) and autism tend to frame the problem from an individual vulnerability perspective — requiring further research on the topic —, while the scientific and institutional counter-mobilization frame it in terms of whether the MMR-vaccine link can be found at a populational level.

According to Jasanoff (2005, p. 6), “contemporary societies are constituted as knowledge societies” in which “important aspects of political behaviour and action cluster around the ways in which knowledge is generated, disputed, and used to underwrite collective decisions”. In this context, the concept of civic epistemologies — i.e., the culturally specific, historically shaped ways in which publics assess the credibility and legitimacy of knowledge claims — provides a

useful lens for analyzing how vaccine-critical communities evaluate and contest institutional expertise. Rather than operating in a vacuum, these groups rely on socially embedded standards of reasoning, evidence, and trustworthiness, which reflect broader cultural assumptions about authority, risk, and accountability. Thus, as in the case of vaccine critical groups, a fundamental element of these mobilization dynamics is constituted by knowledge contentions. Indeed, as highlighted by Epstein (1996, p. 6),

“increasingly, science is the resource called on to promote consensus, and experts are brought in to ‘settle’ political and social controversies. Yet this ‘scientization of politics’ simultaneously brings about a ‘politicization of science’... [and] political disputes tend to become technical disputes”.

The author highlighted that social movements can engage with science in four ways: by contesting scientific claims; by finding scientific experts that support their political stances to gain (scientific) authority for political claims; by rejecting the way in which scientific knowledge is produced and claiming their alternative expertise; by trying to “stake out some ground on the scientists’ own terrain” by challenging “not just the uses of science, not just the control over science, but sometimes even the very contents of science and the processes by which it is produced” (Epstein, 1996, pp. 12–13).

Thus, following the example, vaccine-hesitant parents do not only question the scientific claim about the non-correlation between MMR vaccine and autism, but also about vaccines given the presence of (allegedly) conflicts of interest. Vaccine-hesitant positions can be supported by part of scientists and these alliances can create forms of “expertification of lay activism” (Epstein, 1995). As highlighted by Leach and Scoones (2007, p. 19), these contests over knowledge seldom “conform to simple views of ‘science versus people’ or ‘experts versus indigenous/lay knowledge’”. Instead, new forms of expertise emerge — i.e., different from scientific expertise — and the boundaries between experts and non-experts are increasingly blurred (see Section 4.2).

As highlighted by Rogers and Pilgrim (1994, p. 44) “the emergence of new [vaccine critical] groups ... alongside the established smaller group of the organization for vaccine-damaged children is an indication that mass immunisation will come under increasing public scrutiny”. Conspiracism and radical denial of government intervention on citizens’ private health sphere are often the characteristics attributed to “the more political side of vaccine criticism” (Dubé et al., 2021, p. 180). The fact that contemporary vaccine-critical discourse sees pharmaceutical companies at the core of these conspiracy theories, has been alimanted by the increasingly central role played by private actors in the vaccine research and production since the mid of XX century (Blume, 2017). As highlighted by Conis (2015), since the mid of the XX century, the type of arguments of vaccine critical citizens have been shaped by the growth of environmental movements. Indeed, while the production of new vaccines has been accelerated by immunology’s progress and the development of chemical industries, concomitantly the environmentalists started to denounce the risks for health caused by the excessive use of several chemicals — included vaccines. This changed the focus of vaccine critical groups from “a supposed opposition between ‘natural’ and ‘artificial’ immunity” to critic of “the industrial nature of vaccines: how they are produced and tested as well as their unnatural contents” (Dubé et al., 2021, p. 179). Furthermore, according to Colgrove (2006), critics towards vaccination policies are often the result of broader concerns about the capacity of institutions to resist big corporations’ pressures and to regulate potential risks of manufactured products. Every tension between citizens and social actors involved in public health decision-making processes can affect vaccination, giving rise to a multiplicity of forms of vaccine politicization based on the socio-cultural context and on the type of vaccines considered (Holmberg et al., 2017). According to Dubé et al. (2021, p. 181), the introduction of vaccination mandate (Section 1.2) can push vaccine-hesitant parents to become vaccine-critical activists, dedicating “time and resources to convince as many people as possible and helping other parents avoid sanctions”.

As Ceva (2013, p. 71) pointed out, one of the priority challenges facing our democracy is the “reconciliation of minority instances of dissent”. Political and

health institutions (local and national) should maintain an open dialogue with these vaccine critical groups. Indeed, these associations can reach directly — through their members — or indirectly — through offering different types of support to vaccine-hesitant people — all those people who have doubts about vaccines and/or vaccination policies. According to Blume (2006, p. 640), what is contested by vaccine-hesitant citizens and vaccine critical groups “goes far beyond establishment of some objective measure of vaccine-risk, to the heart of modern citizenship and democratic politics”. Involving these vaccine critical groups in the institutional discussions is important to fully recognize, understand, and try to address doubts and concerns of vaccine-hesitant citizens. Involving citizens or the associations that represent them, regardless, for example, of their positions on the vaccine issue, could mitigate the social divisions currently exacerbated by the polarization of the vaccine debate. In this regard, Heyerdahl et al. (2022, p. 1) clearly stressed the importance of “giving voice to vaccine concerns in a constructive dialogue” to improve “individual and societal wellbeing and resilience”.

1.3.2. Social labeling: stigmatizing vaccination dissent

The main widespread misconception that has characterized public debate and media communication both before and after the onset of the COVID-19 pandemic is that vaccination skepticism is constituted by a homogenous front of people opposed to vaccines — negatively labeled as No-Vaxxers. The public debate about vaccines has thus been deeply polarized into two contrasting positions: No-Vaxxers against Pro-Vaxxers (those in favor of vaccines). Instead, vaccine hesitancy includes heterogeneous positions (Dubé et al., 2013) — such as those of people who are against vaccination obligations (Free-Vaxxers) — that cannot be simply reduced to (and addressed as) No-Vax attitudes.

Within the context of attitudes towards vaccines it is possible to identify at least three main positions: No-Vax, Free-Vax, and Pro-Vax. The latter category includes all those people who believe that vaccines are an indispensable and effective tool for the prevention of infectious disease, they therefore perceive as

positive and desirable the introduction of a vaccination obligation. No-Vaxxers instead, reject vaccines as an effective preventive health practice and, as a result, do not accept any legislative obligation in this regard. Differently from No-Vax positions, Free-Vaxxers are not opposed to vaccines *per se* but against the introduction of any vaccination obligation.

The concept of vaccine hesitancy inherently introduces a change in perspective, moving the debate away from a deeply dualistic — Pro-Vaxxers vs. No-Vaxxers — understanding of vaccine-related attitudes (Dubé et al., 2021). Still, this concept on its own is not sufficient to fully overcome the polarization of the public debate. Consequently, “No-Vax” has become an umbrella term that obscures heterogeneous positions that — as in the case of “Free-Vaxxers” — frequently clashes with its intended definition. The rhetoric presenting vaccine-hesitant attitudes as a compact No-Vax front of individualistic and ignorant people has amplified a polarized division during the COVID-19 pandemic, a polarization that undermines the effectiveness of institutional communication strategies. Narrative framings of vaccination in the public debate are highly polarized (Brunson & Sobo, 2017; Vanderslott et al., 2022). The polarization of the media and institutional debate on vaccines, where No-Vaxxers and Pro-Vaxxers appear as diametrically opposed, becomes inconsistent once vaccine attitudes are considered on a continuum (MacDonald et al., 2015).

Vaccination skepticism is not a homogeneous front constituted only by people opposed to vaccines — negatively labelled as “No-Vaxxers” (or “anti-vaxxers”). Instead, vaccine hesitancy is constituted by different “gradations of [vaccination] acceptance” (Streefland et al., 1999, p. 1709). This misconception is often fueled by the media and has caused an artificial polarization in the vaccine debate, splitting it into two opposing sides: No-Vaxxers at one end and those in favor of vaccines, positively labeled as “Pro-Vaxxers,” on the other. As highlighted by Vanderslott et al. (2022, p. 1), the term vaccine hesitancy “is not neutral and is used by policymakers and other healthcare actors to situate the problem of current and potential vaccine uptake in the public”. Public discourses about vaccines evoke an image and a narrative of vaccine-hesitant people as lacking those “knowledge, sentiments, and habits” of “modern citizens” (Leach &

Fairhead, 2007, p. 20). Indeed, in media and institutional communication, the No-Vax label is associated with ignorance, irrational, and anti-scientific attitudes, and it has become a stigmatizing label (Capurro et al., 2018; Court et al., 2021; Ward et al., 2019; Ward & Peretti-Watel, 2020). This negative stereotypization, reproduced across countries, is a counterproductive practice (Helps et al., 2019) that however, offers easier or more manageable explanations, reinforcing mainstream views about vaccination and orienting political perspectives (Vanderslott et al., 2022). Furthermore, even though the No-Vax label has been repeatedly challenged by researchers, this social labelling, its meaning, and its social implications for vaccine-hesitant families have not been deeply investigated yet (Ward et al., 2019; Wiley et al., 2021).

Especially during the COVID-19 pandemic, governments' strategies to promote anti-COVID-19 vaccination have been oriented to what Silverman and Wiley (2017) define as "denormalization of the vaccine refusal". People who decide not to vaccinate are transgressing "social expectations regarding contagion" (Wiley et al., 2021, p. 2) and can experience different forms of stigmatization — stigma can be defined as "an attribute that is deeply discrediting" (Goffman, 1963, p. 12). According to Link & Phelan (2001, 2006), stigma can be conceptualized as the result of five interdependent components. The first component is the distinction and labelling of individuals' differences; the second is the stereotyping process, in which labeled people are associated with negative and undesirable characteristics; the third is the separation between the labelled people and those who labelled them; the fourth component is the discrimination or status loss experienced by labelled individuals; and the fifth is the exercise of power — i.e., "relational ability to obtain desired ends against resistance from others" (Lucas et al., 2018, pp. 72–73) — against the labelled group. Moreover, Link and Phelan (2006) identify three main forms of discrimination that can be experienced — at different levels of intensity — by stigmatized people: direct (e.g., avoiding an individual because of his/her vaccination choices), structural (e.g., meeting in places where "No-Vaxxers" cannot access so that they are not able to participate), and discrimination due to a form of "modified labelling". In this latter case, negatively labelled people are conscious that they have been labelled

by others and “anticipate that they will be viewed by others as somehow deviant or defective, modifying their social behaviour as a result” (Wiley et al., 2021, p. 2). Language indeed is a “powerful tool in creating exclusion” (Helps et al., 2019, p. 10) because it can both reinforce judgements and foster people who share similar beliefs and behaviors — about health and parenting in this case — to ally (Attwell & Smith, 2017). Indeed, stigmatized individuals tend to form their own social networks – imposing on themselves “a kind of self-isolation” (Courtwright, 2013, p. 76) – and actively support their stigmatized group (Goffman, 1963). Furthermore, as highlighted by Heyerdahl et al. (2022, p. 1), when people’s vaccination decisions have become “a source of widespread tension and social division within and across communities globally” the phenomenon of “unspoken vaccine hesitancy” — i.e., not making explicit vaccine-related doubts and concerns — appears. The unspoken vaccine hesitancy cannot be underestimated, especially among healthcare workers. This phenomenon can be further accentuated by the polarization of the vaccine-related debate and the consequent dualistic division between vaccinated and unvaccinated people.

According to Adams et al. (2019), often global health programs — such as vaccination campaigns — rely on a language based on narrow problematizations in which social behaviors are understood only from an individual choice perspective and not as a result of broader systemic dynamics. In this context, the ignorant and individualistic public frame tends to hide “the political salience of vaccination anxieties as a form of contestation”, thus reinforcing “the marginalisation of communities identified as ‘resistant’” (Vanderslott et al., 2022, p. 2). The use of these narratives, especially by health institutions, enables governments to avoid taking responsibility for the vaccine issue and to ignore or deny a series of wider socio-political problems that the vaccine hesitancy phenomenon brought to light. However, explaining vaccine hesitancy solely in terms of “the media, ignorance and misinformation, class or predisposition” can lead to misleading and ineffective policies (Poltorak et al., 2005, p. 718). When referring to who does not want to vaccinate, media and institutions often fuel the idea that those people lack education, thus relying on — and reproducing — a “deficit (knowledge transmission) model” (Seethaler et al., 2019). As Simis et al.

(2016, p. 409), this deficit model “pinpoints public ignorance as the problem and proposes a single and straightforward solution, that is, eliminate ignorance through education”. Therefore, the main strategy proposed to reduce vaccine hesitancy is to provide them more vaccine-related information. However, as several authors already showed (Court et al., 2021a; Hobson-West, 2003; Kata, 2010; Kitta & Goldberg, 2017; Leask, 2011; Limoges, 1993), vaccination skepticism is not generally associated with a lack of information and implementing a vaccination campaign based on this assumption is likely to be ineffective. Moreover, especially during the COVID-19 pandemic, there was a widespread concern about the role played by the diffusion — mainly through social media — of inaccurate information in increasing vaccine-hesitant positions (PAHO, 2020; Zarocostas, 2020). Again, the underlying assumption is that of passive, uncritical, and often low-educated publics that can be easily misguided by “fake news” (Bucchi et al., 2022). Thus, institutions and many scientists have invested resources in debunking unreliable information. However, as Pertwee et al. (2022) pointed out in their recent research on the impact of exposure to misinformation, only focusing on the “information ecosystem” can hide the more relevant influence played by distrust in key actors involved in the vaccine issue.

Science and institutional communication strategies should adopt more effective approaches and avoid relying on the knowledge deficit model to address the vaccine hesitancy phenomenon. Even if information represents an important element in the vaccination decision-making process (Lieu et al., 2017), it is definitely insufficient to communicate to vaccine-hesitant citizens solely information about vaccine safety and efficacy (Dubé, Gagnon, et al., 2015). As highlighted by several authors, indeed, providing more vaccine-related information does not automatically result in increased trust in vaccines (Cataldi et al., 2016; Scherer et al., 2016) and might instead fuel vaccine skepticism (Nyhan & Reifler, 2015). It is similarly unproductive when political and health institutions approach the phenomenon as caused by either a general distrust in science (and scientists) or a general skepticism towards vaccination (Askvall et al., 2021; Bucchi et al., 2022; Peretti-Watel et al., 2015), and by accusing vaccine-hesitant parents of being anti-scientific (Gottlieb, 2016; J. K. Ward et al., 2019).

In this regard, it should be noted that trust in science has been high over the last decade in most of the European countries (Askvall et al., 2021; Lazarus et al., 2020).

As the previous section has shown, vaccine-critical mobilizations are frequently dismissed as irrational or anti-scientific, reinforcing a polarized understanding of the vaccine debate. However, this reductionist framing overlooks deeper tensions related to how scientific authority is constructed, challenged, and negotiated in contemporary societies. To better understand the roots of vaccine hesitancy, it is therefore necessary to examine how science and expertise are perceived by citizens, how trust in scientific institutions is formed or eroded, and how alternative knowledge claims are mobilized. The following section addresses these issues by exploring the evolving role of science in the public sphere and the dynamics of trust in experts.

1.4. Science and vaccines in the public debate

Today, skeptical citizens are often criticized “for failing to appreciate the primacy of scientific reasoning and the rightful authority of experts” (Goldenberg, 2021, p. 137) even if this approach fails to properly address distrust in scientific institutions, solidifying a dualistic vision — Pro-Vaxxers versus No-Vaxxers. Indeed, the vaccine issue is neither “a war with the publics” nor “a war over science” (Goldenberg, 2021, p. 136). Framing vaccine hesitancy as a fight against science and scientific expertise does not help to increase trust in vaccines; it reduces “the controversy to the status of vaccine science” (Goldenberg, 2021, p. 15). Rather, different types of expertise — not only technical — should be considered when analyzing the vaccination debate. Nevertheless, policymakers, healthcare practitioners, and scientists often see citizens as passive knowledge recipients rather than “exchange partners”, whose opinions and concerns deserve to be taken into account (Goldenberg, 2021; Ivani & Dutilh Novaes, 2022).

1.4.1. Trust in science and scientists

Societies are witnessing the phenomenon of “secularisation of the public image of science” (Bucchi & Neresini, 2006, p. 39) whereby, while recognizing the usefulness and importance of science, people no longer accord it a special, quasi-sacred status. Today science is perceived as both positive and “uncertain, sometimes irresponsible and above all bearer of particular interests” (*Ibidem*, p. 40). The vaccine issue has often seen two opposing actors: science and “experts” on the one hand, and citizens (“non-experts”) on the other. Especially in the vaccine issue, it is clearly perceived a clear separation between specialists and non-specialists, derived from the adoption of a technocratic approach to science. In contemporary societies, however, publics rarely accept technologies and innovations so uncritically. It means that people — both experts and non-experts — want to, and have the right to, open and probe what Latour (Latour, 1998) has referred to as “black boxes”. According to Callon (1999), the real core of the issue concerns the forced separation between science (specialists) and society (non-specialists). The concept of “expert”, what it is considered “expert knowledge”, is a convention that can change depending on the socio-cultural context. Thus, merely recognizing a role for expert knowledge does not oblige people to accept “the immaculate conception of expertise” (Turner, 2001, p. 146). As Shapin (2004, p. 46) pointed out, the contemporary problem “is not mistrust in scientists but, rather, a problem in deciding who the scientific experts really are” and, consequently, which expert can be trusted. Indeed, vaccine-hesitant parents raise several doubts regarding the scientific community, its components, and what it means “scientific”. Instead, according to vaccine-hesitant citizens, science should be based on doubt(s), continuous research, and plurality of positions, and “questions are posed about the particularity and partiality of ‘science’” (Leach & Fairhead, 2007, p. 24).

Trust plays a fundamental role in vaccination decisions and allaying fears about AEFI. Vaccine confidence can be influenced by trust in vaccine-related policies, in the products (i.e., vaccines and their components), the providers, and the infrastructure that supports such programmes (Goldenberg, 2021; Larson et

al., 2015; Pertwee et al., 2022). Vaccine confidence can also be influenced by trust in key actors — including scientific experts (Bucchi et al., 2022). The safety and efficacy of vaccines are additional elements that influence decisions on whether to be vaccinated and/or to vaccinate (Larson et al., 2018; Lazarus et al., 2020). Further, authors (Larson & Heymann, 2010; Stecula et al., 2020) highlighted that distrust in health experts can hinder the implementation of vaccination campaigns.

Shapin (2004) pointed out that the idea that technical expertise is a sufficient and adequate starting point to build citizens' trust poses three main issues: firstly, today we are not dealing with distrust in science and scientists, but instead with the identification of who the experts are; secondly, in the contemporary context experts' disagreement is embedded only in those instances where political choices regarding what to do are concerned, requiring our decision about which expert (or scientific institution) to trust; thirdly, technical expertise does not necessarily generate the positive and/or desired outcomes, so "the evaluation of expertise contains within it a moral evaluation. Who are the experts, whom we can trust, as such, to do good?" (*Ibidem*, p. 48). Following this reflection, when analyzing trust in science — as well as within science — we are dealing with the concept of epistemic trust (Goldenberg, 2021). To place epistemic trust in a person or in an institution means to trust him/her/it as a source of knowledge, and when there is this epistemic dependence on the trustee's goodwill the trustors can be deceived or damaged (Wilholt, 2013). Focusing on science, given this trustors' vulnerability, it is thus not straightforward to trust scientists when their actions and opinions have a direct impact on people's own health (Crease, 2004). Epistemic trust does not imply passive and uncritical acceptance of expertise but instead entails an active evaluative process (Hendriks et al., 2016). Such trust presupposes both credible indicators of trustworthiness of the source and a vigilant orientation aimed at protecting oneself from the risk of deception or misinformation (Resnik, 2011; Sperber et al., 2010). In this perspective, trust in experts emerges not from uncritical deference but from the interplay between receptivity to knowledge and an awareness of possible epistemic failures.

According to Hendriks et al. (2015), three main components are causally linked with trust in scientific experts: expertise (or competence), integrity (alignment with scientific standards), and benevolence (good intentions). Following this operationalization, other researchers (Besley et al., 2021) presented a fourth component, i.e., openness (experts' willingness to listen). Scientists can be considered as representatives of the scientific system (Giddens, 1990) and their epistemic trustworthiness influence trust in science. Thus, scientists “serve as access points at which citizens can get in contact with the system and build expectations that are reflected in their trust in science” (Wintterlin et al., 2022, p. 2). Indeed, trust in the — moral and epistemic — integrity of a scientist is not sufficient. People need to trust also in the integrity and benevolence of experts' institutions: “public trust in science demands socially responsible science that is transparent about the interests it serves and aware of its own histories of power and privilege” (Goldenberg, 2021, p. 125). Given that trust in science is a multidimensional concept (Achterberg et al., 2017), people can trust science — its methods and principles — but not its institutions (Bory et al., 2022; Huber et al., 2019) or their representatives.

Trust, indeed, is not a binary condition. Recent literature has questioned the widespread “trust-deficit” model that assumes publics either possess or lack trust in science (Trench, 2025). As Trench argues, this approach often draws on outdated assumptions about scientific literacy and reinforces a problematic deficit perspective, i.e., one that attributes mistrust to ignorance or irrationality on the part of citizens. Furthermore, shifting the attention to an inherently deficient public, this model tends to obscure the responsibilities of scientific institutions (Wynne, 2006; Yearley, 2000). Instead, trust in science should be understood as dynamic, situated, and contingent — subject to revision based on personal experience, issue-specific contexts, and evolving social relationships with scientific institutions.

In this broader context, trust is not merely present or absent, an on/off option, but takes differentiated forms (Trench, 2025). Drawing on Lewicki et al.'s (1998, p. 349) conceptualizations, Van De Walle and Six (2014) argued that trust and mistrust are distinct dispositions: trust is defined as “confident positive

expectations regarding another's conduct", while mistrust consists of "confident negative expectations regarding another's conduct". Crucially, they distinguish between mistrust and a lack of trust, which they characterize not as rejection or suspicion, but as a reflexive stance — a position of critical assessment based on reasoned judgment rather than reliance on a generalized trust. This form of reflexivity is not an indication of scientific illiteracy or hostility toward science, but rather a demand for transparency, integrity, and accountability. As Krouwel and Abts (2007) suggest, trust in institutions — including scientific ones — is not simply inherited or assumed; it is developed through reflexive processes in which citizens evaluate the trustworthiness of actors based on experience and contextual cues.

Building on this conceptual groundwork, Rowland et al. (2022) introduce the notion of "reflexive vigilance" — built upon the concept of vigilant citizens (Hendriks et al., 2016; Van De Walle & Six, 2014) — to describe citizens' engagement with scientific information that is neither passive nor hostile. Rather than expressing active distrust towards scientific information on climate change and vaccines, participants in their cross-country study often showed a cautious attentiveness to inconsistencies, potential bias, or political entanglements in the communication of science. This vigilance reflects a form of conditional trust — one that remains open but evaluative, and that may lead to selective mistrust without collapsing into cynicism. In this sense, citizens can withhold or calibrate trust based on perceived threats to objectivity or independence, especially when experts appear to act in ways misaligned with the public interest.

Trench (2025) further proposes a typology of trust dispositions, distinguishing between total trust (unquestioned deference), conditional trust (acceptance with scrutiny), selective mistrust (skepticism toward specific claims or actors), and determined distrust (systematic denial of science's legitimacy). This typology resonates with the analysis conducted by Jennings et al. (2021) about citizens' perceptions of COVID-19 and the measures adopted to contain its spread. Authors argued that trust, mistrust, and distrust should be understood as a "family" of attitudes rather than discrete categories. Similarly, Norris (2022) offers a refined spectrum that includes skeptical trust, credulous trust, skeptical

mistrust, and cynical mistrust, highlighting the evaluative dimensions of trust and the ways they relate to broader socio-political dynamics.

Taken together, these contributions call for a rethinking of what public trust in science entails. Mistrust should not automatically be equated with rejection or ignorance; it can signal ethical concern, experiential knowledge, or dissatisfaction with the institutional performance of science. As Wynne (2006) and Yearley (2000) argued early on, institutional science itself must be considered part of the problem when addressing public mistrust. Acknowledging this means moving beyond prescriptive calls to “restore trust” or appeals to “follow the science” — as it happened during the COVID-19 pandemic (Trench, 2025) — and instead confronting the conditions under which trust is warranted or withdrawn. Reflexive vigilance, then, emerges not as a threat to science but as a democratic resource: a mode of public engagement that insists on the epistemic and moral accountability of those who claim expertise.

As Hilgartner (2000) argued, drawing on Goffman’s (1959) dramaturgical metaphor, scientific advice in contemporary societies often functions as a form of public drama, in which knowledge claims are staged and mediated within institutional, political, and media frameworks. This dramatization was especially evident during public health crises such as the recent COVID-19 emergency. During the COVID-19 pandemic, for instance, government briefings, scientific controversies, and conflicting expert advice unfolded not only as scientific deliberations but also as performative spectacles (Prettner et al., 2021). For vaccine-hesitant parents, these staged performances may reinforce the perception that science is not neutral or transparent, but selectively presented to maintain legitimacy, manage public perception, or support pre-established policy agendas. In this context, skepticism toward official science emerges not from ignorance but from critical interpretations of how scientific authority is constructed and displayed.

In their decision about vaccination, parents take several of the so-called “leaps of faith” (Lewis & Weigert, 1985; Möllering, 2001) — i.e., the need to fill the informational gaps with a sort of “suspension” or removal of most uncertainties

(Brownlie & Howson, 2005). Whether parents take these leaps of trust depends on one side by the advice received from familiar relationships (e.g., relatives, peers, healthcare workers); on the other, by the perceived epistemic trustworthiness of scientific institutions (Goldenberg, 2021). Furthermore, as highlighted by Baier (1991), trust involves not only cognitive elements, but also affective and conative. Thus, decision-making processes about vaccination involve the cognitively, emotionally, and purposefully determination of trust. When dealing with scientific research that is aimed to impact (besides other fields) on public health in a practical way, scientific claims need to be accepted not only within the scientific community but also outside (Whyte & Crease, 2010; Wilholt, 2009). Alternative health-related epistemologies (Goldenberg, 2021) are adopted by vaccine-hesitant parents when deciding about their vaccine positions and decisions (Section 4.2).

The role of the government in the vaccines issue — that should be that of “a desired regulator of the industry and protector of citizens” (Numerato et al., 2019, p. 92) — is often perceived by vaccine-hesitant citizens as piloted by pharmaceutical industries. The issues raised cannot be labelled as conspiracist position: critics regarding unethical pharmaceutical companies’ practices — such as data obscuration and non-publication of negative results — as well as their influence on the medical and political sector have been raised also by several academics (Angell, 2005; Gøtzsche, 2013; Sismondo, 2018). Furthermore, according to Beck (1992), the increasing importance of the conflicts of interest issue is a feature that characterizes contemporary societies. The complex — and sometimes non-transparent — links between science, politics, and private organizations can increase the perception that scientists (as well as political and economic actors) are favoring their own interests at citizens’ expense (Goldenberg, 2021; Ivani & Dutilh Novaes, 2022). Instead of suppressing or discouraging a “healthy skepticism” towards pharmaceutical companies, rather “more ethical and regulatory oversight is needed to counter influence and lobbying. This is a public trust and safety issue that demands action” (Goldenberg, 2021, p. 135). Furthermore, the discourse regarding the strong presence of economic and political interests in guiding scientific research is part

of the broader scientific debate on “research integrity”.⁹ As Ampollini (2018) pointed out, there are a whole range of systemic pressures within the research sector that can play a key role in incentivizing or disincentivizing — directly or indirectly — misconducts: from “publish or perish” (pressures to publish scientific papers) to the reluctance of scientific journals to publish replicative studies or articles with negative results. In this context, people might distrust mainstream or official science and scientists in favor of alternative medical practices or information sources (Peretti-Watel et al., 2015).

1.4.2. Parental reflexivity and alternative knowledge production

In contemporary societies, individuals are exhorted to pay attention to threats and opportunities in their daily life, assess risks and benefits to ensure a secure future, and to be “entrepreneurs” of their own lives (Giddens, 1991). Health is specifically interested by this cultural push, particularly when “the rhetoric of self-empowerment conveyed by health promotion praises the enterprising and entrepreneurial individual who exercises control over his/her own behaviours and choices in order to maximize his/her life expectancy” (Peretti-Watel et al., 2014, p. 11). Crawford (1980) defined it as “healthism”. According to Rogers and Pilgrim (1994), the rise of vaccine hesitancy and of vaccine critical groups has been favored by the increasing success of alternative therapies, holism, and healthism.

As highlighted by several authors (Callon, 1999; Turner, 2001; Wynne, 1996), different types of expertise can be both facilitated and/or hampered depending on the context considered. This is especially true in the healthcare field, which has led to the rise of alternative forms of expertise, based on the experiences and interests of a plurality of stakeholders — including parents. As

⁹ Research Integrity refers to research characterized not only by the sharing of common working principles and by the presence of virtuous and positive ethical attitudes – on the part of those who conduct, evaluate and fund research – but also free of misconduct (such as plagiarism and falsification of data).

discussed in Section 1.3, the experiential and epistemological foundations of parental decision-making — including forms of parental epistemologies — shape how vaccine-hesitant parents construct and legitimize alternative forms of knowledge. In the medical field, scientific expertise is not only technically oriented knowledge but also socially constructed knowledge (Epstein, 1996; Kerr et al., 2007; Whelan, 2003). Indeed, according to Jasanoff (2004, p. 3):

“scientific knowledge, in particular, is not a transcendent mirror of reality. It both embeds and is embedded in social practices, identities, norms, conventions, discourses, instruments and institutions”.

Political decisions and policy strategies — such as those of vaccination campaigns and vaccination mandates — include several non-scientific factors. According to Goldenberg (2021, p. 137) indeed, calling for an evidence-based approach “is misleading in that respect”: scientific evidence is embedded in a plurality of sociocultural factors that affect both how people make decisions and how policies are designed.

Authors pointed out that when seeking for vaccine-related information, often vaccine-hesitant parents do not consult their children’s physician because they think that an open discussion on the issue it is not possible (Evans et al., 2001; Leach & Fairhead, 2007; Yaqub et al., 2014). Indeed, these parents think that doctors have to be aligned with the institutional and official line of supporting vaccination. In general, mainstream healthcare practitioner are the most trusted source for childhood vaccination information (Glanz et al., 2013; Paterson et al., 2016). Vaccine-hesitant parents, however, often have difficulties in openly discussing about vaccination with their general practitioner or pediatrician. Concordantly, many healthcare providers report difficulties in communicating with vaccine-hesitant parents, consultations that they perceive as unproductive (Wilson et al., 2020). Furthermore, the research conducted by Rogers and Pilgrim (1994) highlighted a potential reticence of healthcare providers to the idea of parents making their own research and informed choices (Section 2.4). As highlighted by Blume (2006, p. 637), “vaccination may be voluntary in theory, but that is not how most health professionals treat it in practice” and vaccine-hesitant

parents see the official vaccine-related information as designed to “induce conformity” and not to inform. As highlighted by Cairns et al. (2013, p. 1550), “declining trust in public health organizations’ undermines public perceptions regarding their legitimacy to lead public health strategy and policy”. Thus, for these parents both the attitudes of healthcare providers and most of the scientific literature available on vaccines are particularly dissatisfying.

Vaccine-hesitant parents prefer instead to search for a consultation with other professionals, such as complementary and alternative medicine (CAM) providers. Indeed, the vaccine-related information provided by CAM providers is often perceived as more trustworthy, useful, and understandable (Attwell et al., 2017; Deml et al., 2019). Nevertheless, the complex relation between vaccine hesitancy or refusal and preferences for CAM is currently still debated. According to Blume (2006, p. 636), the most relevant element can be a “general commitment to holistic ideas about health (and to natural child birth and breast feeding) and a stress on the importance of life style and environment for a child’s well-being”. Research found that specific lifestyle choices – such as the preferences for “natural” food – and the preference for non-mainstream health are often linked to the decision not to vaccinate (Attwell, Ward, et al., 2018; Attwell & Smith, 2017; Helps et al., 2018; P. R. Ward et al., 2017). Deeper concerns about medicine — besides other factors, like distrust in government and in pharmaceutical companies — can lead to vaccine-hesitant attitudes. Likewise, a lack of trust in biomedicine and in biomedical providers is a recognized driver of CAM use (Attwell, Ward, et al., 2018; P. R. Ward et al., 2017).

Building on these debates, Vuolanto et al. (2020) propose the concept of “everyday fringe medicine” (EFM) as a more nuanced framework for understanding lay engagement with non-mainstream health practices. EFM challenges the binary framing often embedded in terms like “CAM”, “natural”, or “alternative”, which, as several scholars have pointed out, tend to oversimplify the complex relationship between biomedicine and alternative therapies (Gale, 2014; Louhiala & Puustinen, 2012). Rather than positioning alternative medicine as an opposition to biomedicine, EFM focuses on how people engage with various forms of health knowledge in their everyday lives, incorporating a mix of scientific,

experiential, and moral considerations. EFM emphasizes the fluidity of health knowledge practices, illustrating how vaccine-hesitant parents do not necessarily reject scientific authority but rather negotiate and navigate between biomedical information, personal experiences, and the epistemic trust (discussed in the previous Section) they place in different sources. This approach highlights boundary work (Gieryn, 1999), a creative one (Vuolanto et al., 2020), in which laypeople are actively engaged in negotiating the boundaries between “expert” knowledge and “alternative” forms of health information. In this sense, EFM is useful for understanding vaccine hesitancy not simply as an act of defiance against science, but as a form of epistemic agency — i.e., the active process by which individuals draw from multiple sources of knowledge to shape their health decisions in ways that align with personal values and experiences. By shifting focus from institutional categories to everyday practices, EFM allows us to see how vaccine-hesitant parents’ reasoning is informed by situated epistemic practices — those shaped by personal trust networks, social interactions, and contextual factors beyond the reach of biomedical discourse.

This epistemic agency is mirrored not only in parents’ information-seeking practices but also in their expectations for how healthcare providers engage with them. The demand for autonomy and meaningful participation that many parents express resonates with broader developments in healthcare, where patients increasingly expect to be involved in decisions about their care (Chewning et al., 2012). This trend is captured in the model of shared decision-making (SDM), which emphasizes collaborative decision-making processes between patients and healthcare providers (Weston, 2001). While SDM has been shown to improve clinical outcomes in areas of medical uncertainty or where multiple treatment options are available (Hack et al., 2006; Hibbard & Greene, 2013), its application in the vaccination context raises specific tensions. Vaccination is typically framed by health and political institutions as a non-negotiable intervention, supported by robust evidence of safety and efficacy, leaving little room for preference-sensitive deliberation (Witteaman, 2015). Yet, as Majid and Ahmad (2020) argue, some vaccine-hesitant parents nonetheless expect elements of SDM, particularly open dialogue and transparent communication, when discussing vaccines. For these

parents, the desire is not necessarily to challenge scientific evidence, but to engage as active partners in decisions that affect their children's health, reflecting broader shifts toward relational and participatory healthcare practices.

According to Horlick-Jones (2004, p. 110), the current emphasis on risk undermines conventional definitions of expertise as “the nature of risk tends to undercut claims made about its authoritative understanding”. Different types of expertise are used in different contexts by different people (Wynne, 1996). This is true especially in the healthcare field, which has led to the rise of alternative forms of expertise, based on the experiences and interests of a plurality of stakeholders, such as patients, consumers, and organizations. Today, the division between “experts” and “non-experts” has been challenged alongside a critique of the deficit model in two main ways (Leach & Fairhead, 2007). First, people who refuse or ignore technical or scientific interventions tend to display different types of experiential expertise and knowledge (Borkman, 1976; see Section 1.3), rather than ignorance (Fischer, 2000). The significance of lay knowledge in shaping and challenging scientific expertise, particularly in health-related contexts, has been acknowledged by several scholars (Callon, 1999; Davison et al., 1991; Epstein, 1995; Pols, 2014).

Second, the ways in which people understand science, based on their experiential expertise and knowledge, include evaluations that go beyond scientific method and content, such as financial funding and control (Irwin & Wynne, 1996; Leach & Fairhead, 2007). These deficit model critiques clearly highlight the potential valuable contribution of what Collins and Evans (2002, p. 154) call “contributory expertise” — i.e., “enough expertise to contribute to the science of the field being analyzed”. In this regard, the concept of reflexivity becomes relevant, understood as “the general capacity of late modern actors to reflexively consider their own health in light of medical knowledge proliferated in late modern societies”, (Numerato et al., 2019, p. 85). Reflexive reasoning is thus included in citizens' decision-making processes about their own, or their children's, health (Giddens, 1991; Miah & Rich, 2008). Vaccine-hesitant parents are thus seen as “reflexive patients”, a concept that refers to “increasingly reflexive and decreasingly deferential citizens”, (Martin, 2008, p. 41). The

increased reflexivity allows citizens both to deal with uncertainties originating from the advancements of scientific knowledge and the problematization of scientific knowledge (Beck et al., 2003). However, as highlighted by Numerato et al. (2019), this latter aspect tends to create new uncertainties and ambiguities. In their work, the authors propose to extend the concept of the reflexive patients: the identification of several mutually related spheres — health, social, political, and economic layers — in which the debate about vaccines is declined — in line with the hybrid character of vaccines in the public debate (Bucchi & Neresini, 2006) — leads to what they call “multi-layered reflexivity”. This concept emphasizes “the capacity of social actors to reflect upon the processes of production, governance, distribution and, most importantly, a mediated interpretation of the role of vaccines”, (Numerato et al., 2019, p. 89). Given that these layers of reflexivity can be connected, prioritized, disjointed, and eliminated in a plurality of ways, the authors claim the existence of several “reflexive patients” who are “reflexive alongside different layers in a variety of manners” (*Ibidem*, p. 94). As noted by Kaufman (2010, p. 12), “parents reflexively practice and ponder an ethic of care and choice” based on their perception and evaluation of vaccine-related risks and according to their own criteria (Boholm, 2003; Gottlieb, 2016). Even if scientific expertise is requested, vaccine-hesitant parents do not blindly rely on it, thereby “living with the potential risk of vaccines and the anxiety of ever-partial knowledge”. According to the author, this is the freedom experienced by vaccine-hesitant parents “in an era of unfulfilled risk calculation and management” (*Ibidem*, p. 12).

Much of citizens’ understanding of vaccinations is based on epistemic trust (Section 4.1) and having no or low trust in experts and their institutions can lead to vaccine hesitancy (Goldenberg, 2021). Vaccine-hesitant people tend to have poor confidence in scientists and scientific institutions promoting vaccines’ safety and efficacy as part of a broader pro-health strategy. However, when scientific consensus over vaccines does not create trust, “vaccine hesitators and refusers are ridiculed for raising concerns, questioning expert testimony, and taking seriously minority dissenting opinion” (Goldenberg, 2021, p. 128). When vaccine-related concerns are not adequately addressed and answered by scientific

experts, vaccine-hesitant citizens search for alternative sources of information to try to deal with these uncertainties.

Taken together, the themes examined in this Chapter — from the implementation of mandates and the multifactorial nature of vaccine hesitancy, to the role of experiential knowledge, the dynamics of collective mobilization, and the contested relationship with scientific expertise — illustrate the need to move beyond linear models of vaccine acceptance. These reflections point to the need to deeply understand how vaccine-hesitant parents articulate their positions, justify their choices, and position themselves in relation to institutional knowledge and power. The following Section presents the research questions guiding this study.

1.5. Research questions

Building on the broader framing introduced in the Introduction, the following research questions translate the thesis's conceptual concerns into empirically oriented guides for qualitative inquiry. While the framing questions define the overall problem space — namely, the mismatch between vaccine governance and parental reasoning — these questions are designed to structure data collection and analysis by focusing on concrete practices, narratives, and interactions through which vaccine hesitancy is enacted and negotiated.

In doing so, the main aim of this research project is to contribute to improving the dialogue between political, health, and scientific institutions and vaccine-hesitant citizens, moving beyond a deeply polarized debate. Based on the literature and its identified gaps, five main research questions are addressed through a primarily qualitative approach. The first research question is intended to address the lack of studies on the less radical part of vaccine-critical groups (Hobson-West, 2007), deepening the understanding of organized vaccine-hesitant parents and identifying their vaccine-related positions:

RQ1. What range of vaccine-hesitant positions can be identified among organized Free-Vaxxers?

The second and third research questions focus on the role played by relevant personal experiences (Borkman, 1976; Poltorak et al., 2005) and parental knowledge in the formation of doubts about, or objections to, vaccination. Specifically, on how vaccine-hesitant parents create alternative epistemologies or narratives about vaccines, the characteristics of these narratives, and how these can concur in creating collective identities:

RQ2. Can experiential dimension and parental epistemologies account for the variety of personal trajectories of Free-Vax parents?

RQ3. Can distinctive discursive patterns and parental epistemologies be identified in vaccine-hesitant parents' narratives about vaccination?

As highlighted by Harrison and Wu (2020), it is currently unclear whether and to what extent the COVID-19 pandemic shaped vaccine-hesitant attitudes and motivations supporting them. The fourth research question precisely investigates the impact of the COVID-19 crisis on parental vaccine hesitancy:

RQ4. Have these vaccine-hesitant parents changed their attitudes towards vaccines since the onset of the COVID-19 pandemic? And if so, which factors have been more relevant?

Besides trust in the safety and efficacy of vaccines, trust in science and in scientific experts is among the main factors that can influence vaccine acceptance (Bucchi et al., 2022; Larson et al., 2018; Lazarus et al., 2020). Concordantly, the fifth research question is aimed at studying the perceptions of

organized vaccine-hesitant parents of the role played by scientists — and the broader scientific community — in the vaccination issue:

RQ5. What are the main elements that characterize the relationship of Free-Vax parents with science and scientific experts?

As described in Chapter 3, while all research questions are addressed within a unified qualitative design, RQ1 and RQ4 are primarily explored through Qualitative Content Analysis (QCA) to map frequencies, distributions, and co-occurrences, whereas RQ2, RQ3, and RQ5 are approached using Thematic Analysis (TA) to identify and interpret latent patterns in participants' accounts.

CHAPTER 2

From voluntarism to mandates: Institutional shifts and parental contestation in Italian vaccination policy¹⁰

Introduction

Italy was the first European country to introduce an increased number of mandatory vaccines in line with its official role as a leader in vaccine strategies worldwide – in accordance with the Global Health Security Agenda of 2014. When addressing vaccination policies and strategies, as well as other public health issues, a delicate balance between individual rights and collective interests should be considered. The choice between a more “traditional” strategy focused on imposing a vaccination obligation, contrasted with a strategy focused on the recommendation of vaccines, depends on how institutions have decided to manage vaccination dissent. In either case, both the communication strategies adopted, and the broader relationship established between institutions (be they health, political, or scientific) and citizens over time, play an important role.

¹⁰ Extracts of this Chapter have been published in:

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Fattorini, E., & Loner, E. (2025). Exploring Vaccination Narratives: An Analysis of the Vaccination Media Discourses in Italy Between 2016 and 2023. *Journalism and Media*, 6(2), 67. <https://doi.org/10.3390/journalmedia6020067>.

In recent years, several high-income countries have responded to stagnating or declining vaccination rates by tightening childhood immunization requirements. Italy was among the first in Europe to pursue this path, adopting a markedly more prescriptive approach in 2017. This policy turn represented a clear departure from the preceding trend toward voluntarism and regional flexibility, signaling a renewed central role for the State in enforcing public health priorities. However, this shift also intensified public contestation and created fertile ground for the consolidation of vaccine-critical mobilizations, particularly among parents and civil society groups.

This Chapter explores the evolution of the Italian legislative framework on vaccination, focusing on the shift from a decentralized and quasi-voluntary model to a re-centralized system based on obligations and sanctions. It also examines the regulatory responses adopted during the COVID-19 pandemic, which extended vaccine mandates beyond childhood and introduced unprecedented forms of institutional control. Finally, it presents the case study of Trentino, an autonomous Province that implemented particularly strict compliance measures for childhood vaccinations. Within this context, the Chapter focuses on Vaccinare Informati, one of the most enduring vaccine-critical associations in Trentino, whose activity on the territory offers a valuable lens through which to examine how local governance interacts with national strategies, and how these dynamics shape the emergence and trajectories of parental vaccine hesitancy.

2.1. From recommendation to obligation: The evolution of Italian vaccination policy

Health is among the fundamental rights of the individual and the community.¹¹ Individual rights and collective interests must therefore be carefully balanced (see Section 1.1.1). As Zuolo (2009) pointed out, the compulsory vaccination issue is a borderline case that lies between public health ethics – concerning the influences of individual decisions on the community — and bioethics — which focuses on the “doctor(–legal guardian)–patient” relationship. The choice to introduce mandatory vaccination or only recommended vaccination depends on how institutions have decided to manage dissent. As Zuolo (2013) points out, the contrast between compulsory vaccination on one side and parents’ demands for freedom of choice and exemptions on the other is not based on two divergent values: it stems from a different interpretation of the same value – i.e., a different perception of what individual and public health is and should be.

Since the 1960s, Italy has adopted several approaches to vaccination governance: childhood vaccines were mandatory until the 1990s, while between 1999 and 2016 the distinction between recommended and compulsory vaccinations was overcome (Signorelli, 2019). Italy adopted a “quasi-voluntary” vaccination policy in which sanctions for non-compliance were rarely imposed (Attwell et al., 2018) or considered as “low cost opportunities for refusers to ‘purchase’ non-compliance” (Attwell et al., 2021: 462). In 2001, after the modifications to Title V (part II) of the Italian Constitution, Regions found an increase in their autonomy in health policy, leading to a great legislative fragmentation of vaccination strategies in the country. Each Region has therefore adopted different vaccination strategies, and while vaccine-related legislative

¹¹ Article 32 of the Italian Constitution. The right of each individual to health, from which follows the principle of self-determination of individuals with regard to health treatment, is also enshrined in Article 2 (the Republic guarantees the fundamental rights of individual citizens and those who form associations), Article 3 (equal social dignity of individuals and the State’s commitment to remove barriers that limit their freedom), Article 13 (inviolability of personal freedom) and Article 31 (protection of specific categories of the population) of the Italian Constitution. The right to health and self-determination is also protected by the Convention on Human Rights and Biomedicine (4 April 1997).

fragmentation can be risky because it implies the adoption of different immunization strategies at local level – and as the Covid-19 pandemic has clearly shown infectious diseases do not respect regional or national borders – it has also allowed the experimentation of different approaches to vaccination. Particularly, in several Regions, there has been a change in the legislative vaccination approach: from obligation to recommendation. As Zuolo (2009: 541) pointed out, this reflected “a greater institutional sensitivity towards autonomous instances, but still dependent on the general immunization of the population”. One example is Veneto Regional Law no. 7 of 23 March 2007, which provided that all newborn vaccination requirements would be suspended indefinitely, thus making vaccination just recommended. However, already in 2006, the Piedmont Region¹² suspended all economic penalties for those who refused to comply with the vaccination requirement. Similarly, in 2012, the Autonomous Province of Trento also suspended administrative sanctions.¹³

This general trend toward decentralization and voluntary adherence was not only institutional but also legal and cultural. As Tomasi (2017b) argues, despite the formal persistence of mandatory vaccination laws for diseases such as diphtheria, tetanus, poliomyelitis, and hepatitis B, the Italian legal framework had progressively lost its coercive force. Beginning in the 1980s, penalties were first decriminalized (Law No. 689/1981), and later, indirect sanctions — such as school exclusion for unvaccinated children — were eliminated through Decree-Law No. 273/1994 and Presidential Decree No. 355/1999. The emphasis gradually shifted toward individual autonomy and informed consent, culminating in the 2005–2007 National Vaccination Plan, which explicitly promoted persuasion over legal imposition and opened the door for regional experimentation with suspension of vaccine mandates. In this evolving context, Italian jurisprudence also played a pivotal role, recognizing medical exemptions based on scientific evidence even in the absence of explicit legislative provisions. According to Tomasi (2017b), this trajectory reflected a broader rebalancing of

¹² Resolution of the Piedmont Regional Council no. 63-2598 of 10 April 2006, published in the Official Bulletin of the Piedmont Region no. 17 of 27 April 2006.

¹³ Resolution of the Trento Provincial Council no. 17 of 13 January 2012.

the relationship between public health and individual rights, progressively prioritizing ethical self-determination over formal legal obligation — until the turning point marked by the reintroduction of compulsory vaccination in 2017.

One of the strategies that governments can adopt to try to address declining vaccination rates has been the introduction or reinforcement of mandatory childhood vaccination policies. Since 2015, several high-income countries — including Italy, France, Australia, and Germany — have implemented increasingly coercive measures aimed at improving vaccine uptake (Attwell et al., 2021; J. K. Ward et al., 2018). Italy, in particular, became the first European country to expand the number of compulsory childhood vaccines. This marked a significant shift in the national strategy for vaccination compliance, which took shape in 2017. Specifically, in June and August 2017, the Italian government implemented an expanded array of mandatory vaccines for children under 16 with Decree-Law No. 73¹⁴ (the so-called “Lorenzin Decree”, named after the then-Minister of Health, Beatrice Lorenzin). Indeed, according to the 2014 Global Health Security Agenda, Italy was designated as a global leader in vaccination strategies,¹⁵ thus becoming the first European country to begin increasing the number of mandatory vaccines in 2017.

Decree Law No. 73/2017 underwent several amendments before being enacted into Law No. 119/2017.¹⁶ Five main changes were introduced compared to the original decree law. First, the number of mandatory vaccines decreased from twelve to ten, as the law made the anti-meningococcal B and anti-meningococcal C vaccines (previously mandatory under the decree law) recommended. Second, the amount of penalties imposed for noncompliance with vaccination obligations or omission of vaccine booster shots is reduced from a minimum of 100 euros to a maximum of 500 euros (while the decree provided for

¹⁴ Decree-Law No. 73 of 7 June 2017, published in the Official Gazette No. 130 of 7 June 2017.

¹⁵ Centers for Diseases Control and Prevention, Global Health Security Agenda Action Packages: https://archive.cdc.gov/www_cdc_gov/globalhealth/security/actionpackages/immunizationap.htm (accessed on 30 November 2024).

¹⁶ Law No. 119 of 31 July 2017, published in the Official Gazette No. 182 of 5 August 2017. This regulatory intervention is also part of a broader national – National Plan for Vaccine Prevention 2017-2019 – and international strategy – i.e., the Global Plan for Vaccination 2011-2020 and the European Vaccination Action Plan 2015-2020.

much larger fines ranging from 500 to 7,500 euros). According to the Ministry of Health Circular of 16 August 2017,¹⁷ these penalties can be imposed only once, regardless of the number of vaccinations omitted. Third, contrary to the text of the decree, the law excludes the procedure of suspending parental authority for parents who fail to comply with the national vaccination schedule. Fourth, according to the law, vaccinations can be postponed or not carried out if there is actual danger to the patient's health due to specific clinical conditions ascertained by a pediatrician or general practitioner. Fifth, according to the law, an exemption from compulsory immunization is provided if, after serological testing, immunization is certified because of naturally contracted disease.¹⁸ In such cases, the minor must fulfill the vaccination obligation with monovalent or recombined formulation vaccines that do not contain the antigens of the disease for which immunization already exists.

Each Local Health Authority (ASL) is responsible for assessing the health status of minors (0-16 years old), and in the case of non-compliance with the national vaccination schedule, parents are notified. The eventual awarding of a fine allows for the extinguishment of the vaccination requirement; however, it does not allow the child (0-6 years old) to attend pre-school educational services (whether public or private) not only for the 2018-2019 school year but also for subsequent school years. Consequently, school administrators are obligated to request the necessary documentation and information at the time of enrollment to verify compliance with vaccination obligations.

Thus, Decree No. 73/2017, enacted with modifications into Law No. 119/2017, increased the number of required vaccines for children aged 0 to 16

¹⁷ Ministry of Health Circular No. 0025233 of 16 August 2017: https://www.asgi.it/wp-content/uploads/2017/11/2017_Ministero_Salute_MNSA_8_.pdf.

¹⁸ This, according to the Ministry of Health Circular No. 0025233 of 16 August 2017, only applies to diseases that confer permanent immunity (i.e., measles, mumps, rubella, and varicella).

from four¹⁹ to ten²⁰ (Fig. 8), introducing two main penalties²¹ for families that fail to comply: the payment of an economic fine (up to 500 euros) and the exclusion of children who have not received or have received only some of their vaccinations from public and private nursery schools (*asilo nido*) or kindergartens (*asilo*).²² The government's measures and sanctions opened a public debate, polarizing public opinion and political actors (Casula & Toth, 2018).

Fig. 8 – Childhood mandatory and recommended vaccines in Italy.

Mandatory vaccines	
Before 2017	anti-diphtheria anti-tetanus anti-polio anti-hepatitis B
Added with the Law No. 119/2017	anti-measles anti-rubella anti-pertussis anti-mumps anti-varicella* anti- <i>Haemophilus influenzae</i> B
Recommended vaccines	
Free for children under 16 years of age	anti-meningococcal B anti-meningococcal C anti-pneumococcal anti-rotavirus anti-Covid-19**

* for those born from 01/01/2017 ** from 5 years of age, free for all

¹⁹ Mandatory vaccines from 1960's to 1990's: Anti-diphtheria, anti-tetanus, anti-polio, anti-hepatitis B.

²⁰ In addition to the previous mandatory vaccines, starting from 2017: anti-measles, anti-rubella, anti-pertussis, anti-mumps, anti-varicella, anti-*Haemophilus influenzae* B.

²¹ Arts. 1 and 3 of Decree-Law No. 73 of 7 June 2017, published in the Official Gazette No. 130 of 7 June 2017, converted into Law No. 119 of 31 July 2017, published in the Official Gazette No. 182 of 5 August 2017.

²² This also applies to private nursery schools and private kindergarten, if these organizations receive an economic aid from the State.

This Law faced strong opposition from families who did not want to fulfill these vaccination requirements; some felt the need to network, looking for support to advocate for their positions. Critics have mainly focused on the two penalties provided in this law — the exclusion from pre-school services and the payment of an economic fine. These legislative measures characterized the (re)introduction of the vaccination obligation and have made mandatory decisions that were previously left to the discretion of parents or legal guardians. Furthermore, the sanctions provided, as highlighted by Tomasi (2017a), seem to favor the collective interest over the individual one²³ at first, when excluding 0-6 years old non-compliant children from pre-school services; while individual interests seem to prevail once non-compliant children must enter mandatory education (6-16 years of age) after the payment of the economic sanction. As such, “the choice is open to assessments of reasonableness and fairness that go beyond a merely technical evaluation related to the efficacy of vaccines and the risks associated with them” (Tomasi, 2017a, p. 905).

Other critics have expressed concerns regarding the technical and scientific issues that have arisen from delays in implementing revision processes for vaccination mandates, which should be based on health-epidemiological data. These delays have hindered the adoption of an evidence-based approach, not allowing for the assessment of the proportionality of the measure to protect public health. Law 119/2017, indeed, includes a "review clause" (Art. 1-ter), which stipulates the possibility of terminating compulsory vaccination for one or more of the vaccinations listed in Paragraph 1-bis of Law 119/2017 (i.e., anti-mumps, anti-parotitis, anti-rubella, and anti-varicella). This termination may be implemented if data regarding vaccination coverage, the epidemiological situation, and any reported adverse effects are found to be moving in this direction.

Following the passage of the law and at intervals of three years, the Minister of Health is obligated to undertake a comprehensive evaluation of the accumulated data. This evaluation is to be conducted with the consultation of the

²³ For a discussion about the complex balance between collective and individual interests when dealing with public health, see Chapter 1, Section 1.1.1.

relevant technical-scientific bodies, namely the Consiglio Superiore di Sanità (Superior Health Council), the Istituto Superiore di Sanità (Higher Institute of Health), the AIFA (Italian Medicines Agency), the State-Regions Conference, and the parliamentary commissions. The purpose of this collaborative process is to inform the decision regarding the potential partial suspension of mandatory vaccination. In order to facilitate the evaluation and monitoring of vaccine program implementation, it is essential to collect pertinent data. This can be achieved by establishing a National Vaccination Registry²⁴ (Art. 4), which should encompass the various Immunization Registries at the regional level. In 2017, D'Ancona et al. (2018), noted an important dishomogeneity in the registries' implementation depending on the Region, both in terms of digitalization of the vaccination-related records and the software(s) used — thus highlighting relevant difficulties in achieving the creation of a National Vaccination Registry even two years after the implementation of vaccination mandates (D'Ancona et al., 2019). Its implementation has not yet been fulfilled. As noted by Vigezzi et al. (2024, p. 2), despite the relevance of the National Vaccination Registry from a national and international point of view, currently the rollout of the registry remains incomplete, both nationally and across regional systems, reflecting persistent “challenges in achieving uniform data collection and reporting standards”.

Even the Italian National Immunization Technical Advisory Group (NITAG), after being disbanded in 2018 and reappointed in late 2021, is facing challenges in fulfilling its WHO-mandated roles, including the monitoring of immunization programs, assessment of their impact, and the provision of evidence-based recommendations (Silenzi et al., 2023). One of its declared objectives is the completion of the national digital vaccination registry, which, however, remains only partially implemented and does not allow an evidence-based revision of Law No. 119/2017 (Fassari, 2020).²⁵ The latest National Vaccine Prevention Plan 2023–2025 once again includes the digitization and digitalization of regional

²⁴ Established on 17 September 2018 by decree of the Ministry of Health, published in the Official Gazette No. 257 of 5 November 2018.

²⁵ See also NITAG “*Recommendation on the assessment activity under Article 1-ter of Law No. 119 (*) of July 31, 2017, also known as the “Lorenzin Law on Compulsory Vaccination”*”: <https://www.quotidianosanita.it/allegati/allegato7198888.pdf>.

vaccination registries and the implementation of the National Vaccination Registry among its strategic goals.²⁶ Such persistent delays and infrastructural weaknesses risk undermining public confidence in the transparency and responsiveness of vaccination governance, and may contribute to broader uncertainties surrounding vaccination policies.

After the introduction of Law No. 119/2017 in Italy, other European countries followed Italy's example. For example, in December 2017, France increased the number of mandatory vaccines from 3 to 11 (Ward J. K. et al., 2018), and Germany introduced fines for parents who do not vaccinate children aged 0-6 against measles (Rezza, 2019). However, the introduction of vaccination mandates does not guarantee an increase in vaccine uptake rates (MacDonald et al., 2018), nor in vaccine acceptance (Shachar & Rubinstein Reiss, 2020). Indeed, as highlighted by Omer et al. (2019: 470), “there is no simple linear relationship between the forcefulness of a policy and its impact on the rate of vaccination”. In addition, vaccinating vaccine-hesitant people can lead to an increase in mistrust towards political and health institutions (Omer et al., 2019; Ward et al., 2022).

2.2. Regulating Vaccination in the Pandemic Context: The COVID-19 Policy Response

The onset of the COVID-19 pandemic in early 2020 significantly expanded the scope of public debates on vaccination, extending mandates to adults and further politicizing the issue. In the European landscape, Italy was the first country to be impacted by COVID-19 (Indolfi & Spaccarotella, 2020) and the first to adopt a package of non-pharmaceutical interventions — known as the “Italian Model” to

²⁶ <https://www.epicentro.iss.it/vaccini/piano-nazionale-vaccini-2023-2025>.

manage the spread of SARS-CoV-2 infection (Nicola, 2021) — to mitigate the virus (Flaxman et al., 2020).

Since late February 2020, Italy experienced a sharp and sustained rise in both infections and deaths, with the northern regions being particularly affected (Goniewicz et al., 2020). Consequently, in response to the health crisis, the Italian government, led by Prime Minister Giuseppe Conte (in charge until January 2021), proclaimed the first national lockdown on 9 March 2020, while on 26 April 2020, the containment strategy of the virus was intensified, extending further the non-pharmaceutical interventions. The anti-COVID-19 vaccination campaign started on 27 December 2020 (the so-called “Vaccine Day”) with the Pfizer–BioNTech vaccine. The campaign was authorized and in agreement with the European Union in all European countries.²⁷ The vaccine distribution in Italy started on 31 December 2020,²⁸ and, concomitantly, the Italian government began implementing specific legislative measures to ensure high vaccination coverage. This approach was adopted and further supported by Prime Minister Mario Draghi, who was in charge between February 2021 and October 2022. These measures formed part of a containment strategy supported by the majority of scientific experts, some of whom advised the government through a dedicated Technical-Scientific Committee (TSC) and national health institutions (Crabu et al., 2021).

Anti-COVID-19 vaccination became mandatory for specific work categories in Spring 2021. Indeed, in May 2021, the government approved Law No. 76,²⁹ the legislative implementation of Decree-Law No. 44,³⁰ introducing compulsory vaccination against COVID-19 for all healthcare workers in the public and private sectors.³¹ Furthermore, the law established three main work-related sanctions for non-compliance: demotion, suspension of salary, or dismissal. The initial decree

²⁷ See https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2466 (accessed on 2 December 2024).

²⁸ See <https://www.aifa.gov.it/en/-/aifa-pubblica-il-rapporto-vaccini-2020> (accessed on 2 December 2024).

²⁹ Law no. 76 of 28 May 2021, published in the Official Gazette no. 128 of 31 May 2021.

³⁰ Decree-Law no. 44 of 1 April 2021, published in the Official Gazette no. 79 of 1 April 2021.

³¹ “Health professionals and health care workers who carry out their activities in public and private health, social and health care facilities, pharmacies, para-pharmacies and professional offices” (Decree-law No. 44/2021, Art. 4).

and then the enactment of the law fueled protest movements that feared an extension of mandatory COVID-19 vaccination to other professional categories. In June 2021, the government then established and implemented regulatory measures concerning the “Green Pass” or “Green Certification”.³² This health certification could be obtained through vaccination, recovery from the virus, or a negative result of a molecular or antigenic test. Beginning in August 2021, the Green Pass was required to access several public activities, such as restaurants and public events, that would otherwise be inaccessible.³³ These restrictions, along with the anti-COVID-19 vaccine requirements and the government’s overarching strategies for containing the virus, were strongly contested by thousands of Italian citizens who participated in the “No Green Pass” demonstrations (Alfano et al., 2023; della Porta & Lavizzari, 2022). Among the most contested issues raised by the protesters were the introduction of the Green Pass — viewed as a form of institutional control and indirect coercion —, the restrictions on personal freedoms, and the anti-COVID-19 vaccination mandates. Before the advent of the pandemic, protests against childhood vaccination mandates were predominantly initiated by parents. However, in the subsequent pandemic context, these demonstrations also encompassed the adult population, who were also largely sustained by some political parties (Bertero & Seddone, 2021).

Between late 2021 and mid-2022, Italy adopted an especially stringent approach to enforcing compliance with vaccination mandates. In November 2021, as part of urgent measures for the containment of SARS-CoV-2 and support to socio-economic activities, the mandate of the anti-COVID-19 vaccination was extended to other professional categories with Decree-Law No. 172,³⁴ which introduces some modifications to Law No. 76/2021. Anti-COVID-19 vaccination was thus made mandatory for personnel of schools, police forces, public rescue, and penal institutions (Art. 2). The sanction for non-compliance —

³² Decree-Law No. 52 of 22 April 2021, published in the Official Gazette no. 96 of 22 April 2021; converted with amendments by the Law No. 87 of 17 June 2021, published in the Official Gazette no. 146 of 21 June 2021.

³³ Decree-Law No. 105 of 23 July 2021, published in the Official Gazette no. 175 of 23 July 2021.

³⁴ Decree-Law No. 172 of 26 November 2021, published in the Official Gazette no. 282 of 26 November 2021.

i.e., those who are not fully vaccinated against COVID-19 or do not submit the required documentation within 5 days of the invitation — was suspension (with job retention for up to 6 months) without salary until 15 June 2022.

Furthermore, due to the increase in infections of the SARS-CoV-2 Omicron variant, in early 2022, the government approved the decree-law No. 1/2022³⁵, which further extended the containment measures already provided by the Decree-Law No. 229/2021.³⁶ Particularly, Decree-Law No. 1/2022 established two main measures. The first measure was the mandatory COVID-19 vaccination for all individuals over the age of 50 — effective until 15 June 2022 — and for all university personnel (independently of age). Those who remained unvaccinated by 1 February 2022 faced a penalty of 100 euros. The second measure, introduced by Decree-Law No. 229/2021, was the requirement of the so-called “Super Green Pass” (Decree-Law No. 229/2021) — granted only upon completion of the vaccination cycle or recovery from COVID-19 — for all public and private sector workers between 15 February and 15 June 2022. Non-compliance was subject to economic sanctions ranging from 600 to 1,500 euros. This new certification could be obtained only by completing the vaccination cycle or recovering from COVID-19.

Children were also included in the government’s strategy to increase vaccination rates against COVID-19. Indeed, for those between 12 and 15 years of age, the vaccination campaign started in May 2021, while for those between 5 and 11 years of age, it started in mid-December 2021. In January 2022, AIFA (Italian Medicines Agency) approved the booster dose — i.e., the third dose of anti-COVID-19 vaccine — for the 12-15 age group.³⁷ Notwithstanding the absence of a mandatory requirement for anti-COVID-19 vaccines for children, the Green Pass was a prerequisite for access to public spaces (e.g., restaurants, libraries, gyms, and swimming pools) even for minors between 12 and 17 years of age.³⁸ Furthermore, according to Decree-Law No. 229/2021, starting from 10 January 2022, for all

³⁵ Decree-Law No. 1 of 7 January 2022, published in the Official Gazette no. 4 of 7 January 2022.

³⁶ Decree-Law No. 229 of 30 December 2021, published in the Official Gazette no. 309 of 30 December 2021.

³⁷ Press release no. 681, 5 January 2022.

³⁸ Decree-Law No. 105/2021.

students over 12 years of age, the “Super Green Pass” was required on public transport — but not on dedicated school buses for students in compulsory education (until February 10, 2022) and for access to school.³⁹ With few exceptions,⁴⁰ starting from 11 February 2022 (until 31 March 2022), all Italian students over 12 years of age were required to have the Green Pass to use school transport.

The Italian government officially ended the state of (health) emergency on 31 March 2022, and the mandatory COVID-19 vaccination—and the related sanctions for non-adherence — remained only for healthcare personnel until 1 November 2022.⁴¹

2.3. Vaccine hesitancy and the Free-Vax associative landscape in Italy

Eurobarometer data (2019) on attitudes towards vaccination provides a preliminary idea of the extent of the phenomenon. The agreement about the effectiveness of vaccines varies considerably depending on the country considered. Far from the EU average of 29%, in Italy, 48% totally or partially agree that vaccines are important only for children — the third highest percentage out of the 27 European countries included. This data highlights not only a difficulty in considering vaccines important beyond childhood but also a lack of effective institutional effort in implementing a life-course approach to vaccination (Tate et al., 2019). Moreover, 49% of European respondents totally agree with the statement that it is important for everybody to have routine vaccinations, but in

³⁹ Order of the Ministry of Health of 9 January 2022, published in the Official Gazette No. 6 of 10 January 2022.

⁴⁰ The province of Trento has implemented an exemption from the Green Pass requirement for school transportation for students aged 12 to 19, which remained in effect until March 31, 2022. The exemption is contingent upon the wearing of an FFP2 mask (Circular of the Autonomous Province of Trento no. 104661 of 10 February 2022).

⁴¹ Decree-Law No. 162 of 31 October 2022, published in the Official Gazette no. 255 of 31 October 2022.

Italy, only 32% of respondents totally agree. According to Eurobarometer, 25% of Italian citizens tend to or totally disagree on the importance of routine vaccination, and this value is among the highest levels of vaccine hesitancy registered in European countries, second only to France, which reaches 30%.

Data from the *Observe Science in Society Monitor*⁴² on anti-COVID-19 vaccine acceptance in Italy — consistent with international findings (Kreps et al., 2020; Lazarus et al., 2020) — indicate that by May 2021, 28% of respondents opposed vaccines in general, marking a 12 percentage point increase since January 2021 (Bucchi et al., 2022). Examining the reasons behind these vaccine-hesitant attitudes, the share of respondents reporting distrust in pharmaceutical companies rose from 11% in January to 17% in May 2021. Other, less frequently cited reasons for refusing vaccination in May 2021 included concerns over alarming news about anti-COVID-19 vaccines (4%) and the presence of serious illnesses or allergies (11%). As Bucchi (2021) pointed out, these attitudes do not rely on skepticism towards vaccination nor a widespread lack of trust in science (and scientists). Indeed, trust in science has been high over the last few years not only in Italy but also in other European countries (Askvall et al., 2021; Bucchi & Saracino, 2018; Lazarus et al., 2020).

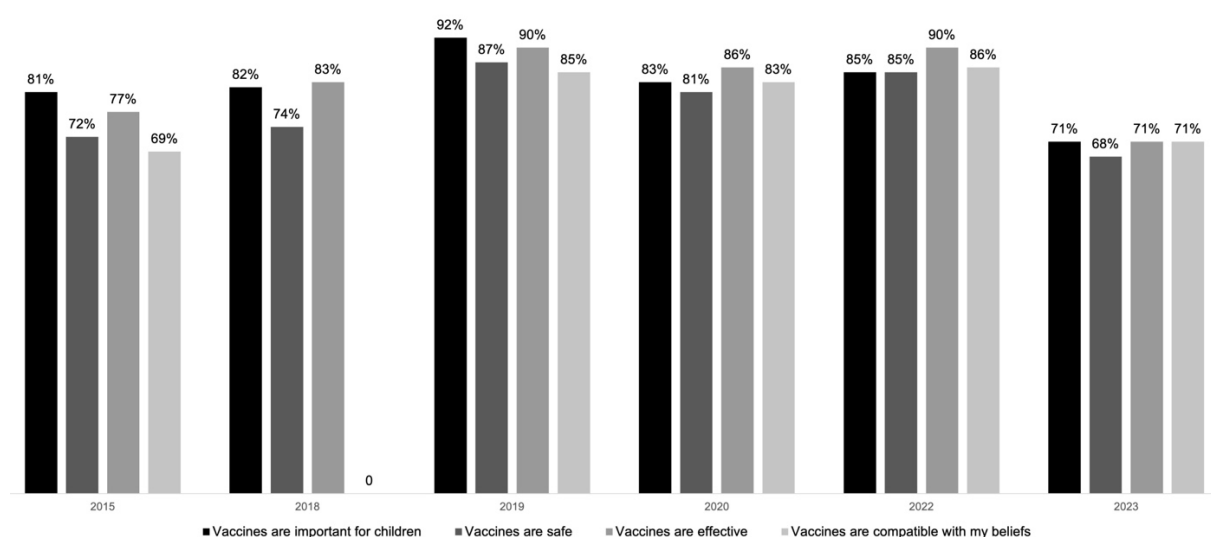
Recent data from the Vaccine Confidence Index (VCI), developed by the Vaccine Confidence Project,⁴³ provide valuable insights into how vaccine confidence has evolved over time in Italy. The VCI tracks public agreement with four key statements: “vaccines are important for children,” “vaccines are safe,” “vaccines are effective,” and “vaccines are compatible with my beliefs”. Italian data collected in 2015, 2018–2020, and 2022–2023 show notable fluctuations (Fig. 9). In 2015, confidence levels were moderate, with 81% agreeing on the importance of children getting vaccinated, 72% on the safety of vaccines, 77% on their effectiveness, and 69% on their compatibility with personal beliefs. By 2019, these figures peaked, reaching 92% for importance, 87% for safety, 90% for effectiveness, and 85% for compatibility—indicating a marked increase in

⁴² *Observe Science in Society* is an independent research institute that since 2003 monitors opinions and attitudes towards science and technology in Italy.

⁴³ <https://www.vaccineconfidence.org/>.

confidence towards vaccines. However, in the following years, particularly after the COVID-19 pandemic, confidence began to decline. While 2022 data still showed relatively high levels (85% for both importance and safety, 90% for effectiveness, 86% for compatibility), by 2023 there was a noticeable drop across all indicators: importance for children to get vaccinated fell to 71%, safety to 68%, effectiveness to 71%, and compatibility to 71%.

Fig. 9 – Agreement with four vaccine confidence statements in Italy, 2015–2023. Percentages from the Vaccine Confidence Index on vaccines’ importance, safety, effectiveness, and compatibility with beliefs (no data for “compatibility” in 2018).



Source: Own elaboration on Vaccine Confidence Index data.

These trends suggest a sharp rise in vaccine confidence around 2019, followed by an erosion likely linked to the pandemic’s complex aftermath that brought confidence levels across the four items below those recorded in 2015. Overall, these findings highlight that vaccine confidence is not static; rather, it is a dynamic and fragile phenomenon, sensitive to broader social, political, and institutional developments.

Regarding vaccine hesitancy among parents in Italy before the onset of the COVID-19 pandemic, a cross-sectional survey conducted by Giambi et al.

(2018) in 2016 analyzed the degree of vaccine hesitancy among parents of children aged between 16 and 36 months: 15.6% of parents defined themselves as vaccine hesitant. One year later, in 2017, Bertoncello et al. (2020) administered an online questionnaire to Italian parents with children aged between 3 and 84 months. Based on alignment with vaccination schedule and self-reported vaccination status, the percentage of vaccine-hesitant parents is 32%. However, as Attwell et al. (2021: 464) pointed out, Italian institutions have not been able to understand “the drivers of vaccine refusal, nor the best strategies to address it”.

Vaccine-hesitant parents tend to advocate for their stigmatized group (see Section 2.3), often becoming members of Free- or No-Vax associations. To date, in Italy, there is no clear overview of the number of Free-Vax, as well as No-Vax, associations. Indeed, it is not easy to identify all these associations for four main reasons. First, many of these association are not exclusively involved in vaccine-related issues; second, most of these association are not present on the internet; third, most of them are small and not formally structured; finally, many of these organized groups formed in response to the introduction of Law No. 119/2017 and either disbanded a few months later or split up and reconstituted under other names. This is a very diversified association landscape, often not clearly visible and therefore difficult to trace. However, to have a preliminary idea of the number and geographical distribution of these Free-Vax associations, a map was created (Fig. 10). The map was constructed based on the list of Free-Vax associations that in 2018 signed the citizens' initiative law proposal on “Suspension of compulsory vaccination for the age of development”.⁴⁴ This law proposal was presented by Corvelva association – the Veneto Regional Coordination for Vaccination Freedom – and supported by 66 associations that advocate for freedom of choice in vaccination decisions throughout Italy.

⁴⁴ Citizens' initiative law proposal, published in the Official Gazette n.147 of 27 June 2018.

Fig. 10 – Number of Free-vax associations that signed the citizens' initiative law proposal No. 147/2018 by region, (n=61).*



* Five associations are missing due to a lack of geographical reference and/or because they are no longer in activity.

Fig. 10 constitutes a first attempt to visually represent how the phenomenon is distributed territorially: 46 out of the 61 Free-Vax associations are in Northern Italy. As highlighted before, the map is not an exhaustive representation of the Italian Free-Vax association landscape. Indeed, since 2018, new associations have been created and others have disappeared. Furthermore, the introduction of several governmental measures to manage the COVID-19 pandemic (see Section 2.5) — such as the Green Pass and distance learning — has fueled civic protests and the formation of specific organized groups.

To better understand how vaccine hesitancy is shaped and framed in the Italian public sphere — particularly in relation to dissent and the visibility of critical voices — it is essential to examine how the media has contributed to constructing

dominant narratives around vaccination. The following section presents findings from an original (Fattorini & Loner, 2025) media discourse analysis of ANSA's coverage of vaccines between 2016 and 2023.

2.3.1. Media representations and the framing of vaccine dissent in Italy (2016–2023)⁴⁵

To better understand how vaccine hesitancy has been shaped and framed within the public discourse, this section presents findings from an exploratory study of 2,890 Facebook posts published by the Italian National Press Agency (ANSA) between January 2016 and December 2023. As the most authoritative and widely syndicated Italian news provider (Newman et al., 2024), ANSA plays a central role in constructing dominant meanings and legitimizing institutional discourses. The study aimed to trace how media narratives evolved in relation to two major turning points in Italian vaccination policy: the introduction of mandatory childhood vaccinations (Law No. 119/2017) and the COVID-19 pandemic.

Drawing on framing theory (Coleman et al., 2011; Entman, 1993; S.-H. Kim & Willis, 2007), the analysis revealed seven dominant media narratives that structured vaccine coverage across two periods: 2016–2019 and 2020–2023. During the first phase, ANSA primarily framed vaccines as: (1) threatened by fake news, with vaccine-critical positions associated with misinformation and disinformation (see also Court et al., 2021; Wagner et al., 2024); (2) lifesaving public health tools, emphasizing stories of vaccine-preventable deaths and promoting awareness of disease risk (Kasperson et al., 1988; Yousaf et al., 2022); (3) politically contentious, particularly during the parliamentary debate and protest around the Lorenzin Decree (Casula & Toth, 2018); and (4) a requirement for a

⁴⁵ The contents of this Section have been published in:

Fattorini, E., & Loner, E. (2025). Exploring Vaccination Narratives: An Analysis of the Vaccination Media Discourses in Italy Between 2016 and 2023. *Journalism and Media*, 6(2), 67. <https://doi.org/10.3390/journalmedia6020067>

specific subgroup, namely children, where coverage focused on bureaucratic and organizational challenges for families and institutions.

In the second phase (2020–2023), ANSA coverage reflected the shifting social and political landscape of the pandemic and adopted new frames: (1) vaccination as a long-awaited scientific achievement, highlighting hope, innovation, and economic recovery (Wagner et al., 2024); (2) vaccination as a social requirement, linking compliance to civic duty and community protection (Entman, 1993); and (3) vaccination as a tool in need of confirmation, especially as new variants emerged and institutional confidence was recalibrated.

The analysis also examined how vaccine hesitancy and opposition were labeled and described. Despite the fact that only 87 posts explicitly employed the term “No-Vax,” the label was often used in emotionally charged contexts and associated with misinformation, protest, and non-compliance. This aligns with international findings on the stigmatizing and polarizing nature of the “anti-vaxxer” label (Court et al., 2021b; Rozbroj et al., 2019; J. K. Ward et al., 2019). The sentiment analysis revealed that posts containing the “No-Vax” term were more likely to be associated with anger, reinforcing the portrayal of dissenters as emotionally deviant or socially dangerous (Carolelli & Schiano, 2023). As further elaborated in Section 1.4.2, the use of the “No-Vax” label in media discourse reflects processes of social labeling and moral boundary drawing that contribute to the stigmatization of vaccine-hesitant individuals.

While ANSA displayed a more neutral tone compared to partisan outlets, its news still contributed to reproducing a deficit model of science communication (Goldenberg, 2016; Seethaler et al., 2019), wherein dissenters are framed as misinformed, irrational, or in need of re-education. This communicative logic often oversimplifies vaccine hesitancy by collapsing diverse motivations into binary oppositions — e.g., informed vs. uninformed, compliant vs. deviant — thus reducing public space for alternative positions and reinforcing polarization (Brunson & Sobo, 2017; Bullock & Shulman, 2021).

The findings also show that the framing of vaccine policy itself shifted: from individualized risk (e.g., protecting one’s child) to collective responsibility (e.g.,

supporting public health campaigns), to contested scientific authority. The narratives around the Green Pass, public demonstrations, and institutional messaging highlighted not only the politicization of vaccination (Bucchi, 2000; Loner et al., 2023), but also its entanglement with national identity, civic belonging, and perceived legitimacy of state power.

Overall, these findings underscore the media's co-constitutive role in shaping how vaccines, dissent, and public responsibility are interpreted. By privileging certain narratives over others, mainstream outlets such as ANSA have helped construct a discursive terrain that constrains the visibility and legitimacy of hesitancy and contestation—dynamics that become particularly salient in localized contexts, as illustrated by the case of Vaccinare Informati association in Trentino explored in the following sections.

2.4. Trentino as a Case Study: Local Governance and Parental Mobilization

The case of Trentino offers a valuable lens through which to observe the intersection of local governance, institutional compliance strategies, and grassroots mobilization around vaccination. The provincial authorities have historically adopted a stricter approach to enforcing childhood vaccination mandates compared to other Italian regions, reinforcing sanctions and introducing measures that publicly distinguish between compliant and non-compliant children. At the same time, this regulatory context has contributed to the emergence and consolidation of local associative responses such as Vaccinare Informati, which represents one of the most structured and enduring Free-Vax associations in the Autonomous Province of Trento. Its long-standing presence, territorial anchoring, and formal recognition as an interlocutor by political authorities make it an ideal case to investigate how vaccine-critical activism evolves over time, navigates internal tensions, and adapts to shifting political and epidemiological conditions.

2.4.1. Vaccination policy enforcement and pandemic exceptions in Trentino

The Autonomous Province of Trento represents an interesting case in the Italian vaccine-related legislative landscape (Fig. 11). Unlike other Italian regions, including other autonomous regions, the Province of Trento approved resolutions that strengthened the sanctions already provided by Law No. 119/2017 for non-compliant parents between 2017 and 2018.

Fig. 11 – The location of the Autonomous Province of Trento in the Italian territory.



While other regions, such as the Autonomous Province of Bolzano, adopted an approach that emphasized dialogue with parents, the Province of Trento adopted a more aggressive policy for compliance. Trentino's Provincial

Resolutions No. 322/2018⁴⁶ and No. 547/2018⁴⁷ represent its approach: the first introduces the suspension of monthly economic benefits (called “service vouchers”) for non-compliant families, while the second excludes children not fully vaccinated from summer camps. Furthermore, Trentino’s political and health authorities have introduced the label “conforme” (compliant) and “non conforme” (non-compliant) to identify, respectively, children who have fulfilled their vaccination obligations and those who have (totally or partially) not done so (Fig. 12).

Fig. 12 – Infographic “Vaccines: What to do” realized by the Provincial Agency for Health Services of the Autonomous Province of Trento (APSS) in 2017 to inform citizens about the childhood vaccination requirements introduced by Law No. 119/2017.



Source: www.ufficiostampa.provincia.tn.it/Comunicati/Vaccini-che-fare.

⁴⁶ Resolution of the Provincial Council of Trento no. 322 of 2 March 2018.

⁴⁷ Resolution of the Provincial Council of Trento no. 547 of 9 April 2018.

Thus, “No-Vax” and “non-compliant” labels have negatively labelled those people who have expressed their opposition either to vaccination practices or to vaccination mandates. This has generated social tensions between those who decided to vaccinate their children according to the national vaccination schedule and those who chose not to do so.

However, despite the generally strict approach adopted by Trentino's authorities toward childhood vaccination compliance, some flexibility was introduced in the context of the COVID-19 pandemic. Notably, Trentino's authorities implemented an exemption from the Green Pass requirement for school transportation for students aged 12 to 19, which remained in effect until 31 March 2022, provided that students wore an FFP2 mask.⁴⁸ This suggests that, even within a rigid compliance framework, pragmatic adaptations were made in response to evolving circumstances.

2.4.2. Vaccinare Informati association: Organizational structure and local activism

This Section focuses on Vaccinare Informati, a Free-Vax association rooted in the Autonomous Province of Trento that has played a prominent role in local activism against vaccination mandates. It traces the evolution of the association from 2017 to its recent strategic repositioning, examining its organizational structure, membership dynamics, territorial presence, and advocacy. Particular attention is paid to the shift in 2024, when the association began reframing its contestation of childhood vaccination mandates within a different rights-based legal framework.

⁴⁸ Circular of the Autonomous Province of Trento no. 104661 of 10 February 2022.

2.4.2.1. The association's origins, goals, and internal dynamics

This thesis focuses on a Free-Vax association — i.e., one that advocates for the freedom of choice in vaccination decisions — in the Autonomous Province of Trento (Italy). Vaccinare Informati (Fig. 13) is the only Free-Vax association in Trentino and since 2006 has organized and promoted events and public initiatives regarding vaccines and health. The association has three main goals, aimed at promoting freedom of choice in vaccination decisions, providing accurate and reliable information on the risks and benefits of vaccines, and supporting all those people harmed by vaccines:

“1. Freedom of vaccine choice

No one, in fact, can be forced into a health treatment when it could generate harm to the individual. Vaccine damage, unfortunately, exists and is provided for by Law 210 of 1992 passed by the Italian Parliament, and also by Law 229/2005. Freedom of choice for health protection is an inalienable democratic and constitutional right.

2. Comprehensive information free from all interests about the benefits and risks of vaccines

3. Solidarity, closeness, and respect for all those harmed by vaccine

We want the children or adults harmed by this medical practice not to remain invisible and unknown, but to have an answer to the suffering of so many families.”⁴⁹

Fig. 13 – Logo of Vaccinare Informati association.



Since its establishment, Vaccinare Informati has organized and promoted public events (Fig. 14), demonstrations (Fig. 15), and awareness-raising

⁴⁹ Goals presented in the association website: <http://www.vaccinareinformati.org/>.

campaigns (Fig. 16) regarding vaccines and health. Given the fact that the association does not have a physical headquarters, and besides the annual membership meeting, events like conferences and demonstrations constitute the main way for Vaccinare Informati's members to meet.

Fig. 14 – Public projection of the documentary “Invisibili” (“Invisibles”) on the adverse reactions of the anti-COVID-19 vaccine, Vaccinare Informati association (in collaboration with the Comitato Ascoltami), Trentino, 11 November 2022.



Fig. 15 – Demonstration “Together for freedom of vaccination choice and the right to work. Demonstration in support of healthcare workers against Decree Law 44/2021”, Vaccinare Informati association, Trentino, 24 April 2021.⁵⁰



Fig. 16 – Awareness raising campaign against vaccination obligations, Vaccinare Informati association, Trentino, February 2018.⁵¹



⁵⁰ “Free-Vaxxers!! Without blackmails”, “We want transparency, truth, freedom”, “Those who manage fear rule the world. Fear comes from ignorance. Open schools for all”.

⁵¹ “They call me non-compliant. In September I won’t be able to go to kindergarten anymore. I simply ask for the right to be a child. Break the silence. Freedom of vaccination choice”.

Vaccinare Informati association was selected for three main reasons. First, unlike other Free-Vax associations in Italy that tend to form specifically to oppose a particular vaccination or health policy (and are therefore likely to disappear shortly afterwards), Vaccinare Informati has been active in the territory well before the reinforcement of childhood vaccination obligations (Law No. 119/2017). Second, Vaccinare Informati has become a reference point for vaccine-hesitant families who need support in their vaccination choices (also) in other regions of the country. Third, given its long history in the promotion of freedom in vaccination decisions in Trentino and its openness to dialogue over the years, Vaccinare Informati has been recognized as an interlocutor by the provincial political authorities.⁵²

Beyond its institutional positioning, Vaccinare Informati also developed a structured system of internal communication and organization, despite the absence of a physical headquarters. The association has a website⁵³ and a well-structured system of communication with its members: official communications from the Vaccinare Informati board and promotion of initiatives are sent via email (through periodical newsletters), via Telegram, and on the website. The coordination of the activities is managed by board members and the specific organization of events — like conferences and demonstrations — occurs mainly via dedicated groups on WhatsApp and Telegram or — since the onset of the COVID-19 pandemic and the restrictions introduced for unvaccinated people (Section 2.2) — via Zoom meetings. All the members of the association —

⁵² The Autonomous Province of Trento (2016), *Vaccinare informati, appello ai consiglieri provinciali*, in <https://www.consiglio.provincia.tn.it/news/giornale-online/Pages/articolo.aspx?uid=178481> (retrieved July 25, 2022); The Autonomous Province of Trento (2018), *Libera scelta vaccinale: i comitati dai consiglieri provinciali per rilanciare la battaglia*, in <https://www.consiglio.provincia.tn.it/news/giornale-online/Pages/articolo.aspx?uid=179553> (retrieved July 25, 2022); The Autonomous Province of Trento (2018) *L'associazione Vaccinare Informati nuovamente ascoltata dai consiglieri* <https://www.consiglio.provincia.tn.it/news/giornale-online/Pages/articolo.aspx?uid=179555> (retrieved July 25, 2022); The Autonomous Province of Trento (2021), *Vaccinare informati: meno green pass e meno mascherine*, <https://www.consiglio.provincia.tn.it/news/giornale-online/Pages/articolo.aspx?uid=181592> retrieved July 25, 2022); The Autonomous Province of Trento (2022), *In IV Commissione anche l'Associazione Vaccinare informati, che contesta le discriminazioni*, <https://www.consiglio.provincia.tn.it/news/giornale-online/Pages/articolo.aspx?uid=181822>.

⁵³ <http://www.vaccinareinformati.org/>.

including the board members — conduct their activities on a totally voluntary basis — membership entails the payment of 20 euros per year — by making available their professional and non-professional skills and the activities promoted are therefore organized thanks to the contribution of the members.

Over time, the association's membership base has undergone significant changes, reflecting both external policy shifts and internal dynamics. The number of members of the association has varied greatly over time, especially as specific vaccination policies have come into force. In 2016, the Association's membership did not exceed 250 – a number that underestimates the number of actual sympathizers, as the association counts each family as one member. Following the introduction of Law No. 119/2017, however, the number of members increased significantly to 1,200. The association is comprised of one member per family unit; consequently, there are numerous additional supporters. For instance, only one of the two parents is required to pay or renew the annual membership, and the parent is registered as a member even if the entire family unit can benefit from and participate in the association's activities. Considering that, since 2019, the number of members has nonetheless dropped again, in 2025 counting 200 members.

Several factors contributed to this decline, which became particularly evident after 2019. The decline in membership can be attributed to four primary reasons that emerged between 2019 and 2024. The first reason, which is more general, is that over the years, Vaccinare Informati has consistently extended its support even to individuals who have not been members. The absence of a mandatory membership requirement for access to information and assistance led to a situation where non-members were less motivated to engage in membership.

The second reason explaining the association's membership decline became apparent in early 2019. Following the receipt of support from the Vaccinare Informati, including assistance in reporting suspected adverse events following immunization and the provision of templates for "defensive writings" to contest the economic penalty stipulated under Law No. 119/2017, some members opted not to renew their membership, perceiving their issue as "resolved".

The third reason pertains to the escalating divergence of perspectives within the Association. A significant proportion of the members — including half of the board — expressed the sentiment that the Vaccinare Informati should expand its scope, extending its activities beyond vaccination issues and encompassing other subjects such as digitalization (e.g., contesting the increased digitalization of public administration services) and education (e.g., against the introduction of so-called “gender ideology” in schools). The divergence of opinions regarding the association's scope ultimately resulted in the decision of several members to depart and establish connections with a recently formed association in Trentino, namely Uniamoci.⁵⁴ This newly formed association advocates for a wide range of subjects besides vaccines, including war, work, and education, and it was particularly active during the period of the COVID-19 pandemic, organizing vocal No-Green Pass demonstrations.

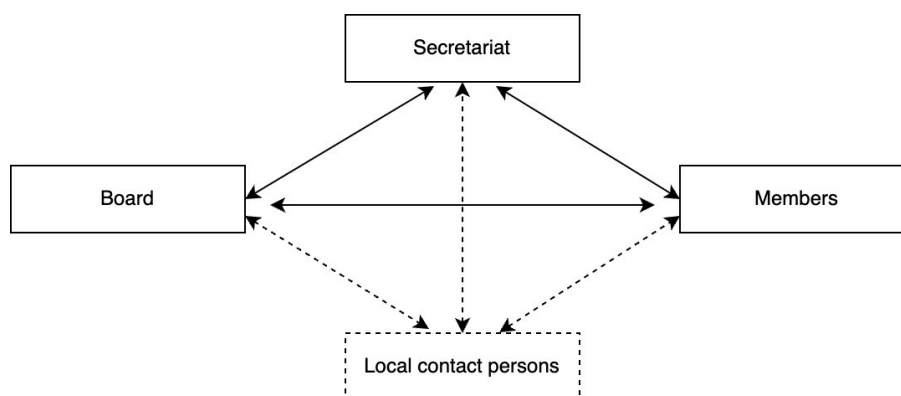
Finally, the fourth reason relates to the role of Vaccinare Informati during the pandemic. Despite the association's opposition to measures like the Green Pass and anti-COVID-19 mandates and their penalties (discussed in Section 2.2), it was less active in engaging in direct advocacy against these measures. Instead, Vaccinare Informati has maintained its primary scope (i.e., the opposition to childhood vaccination mandates) and provided support — though not direct organization, with a few exceptions — for COVID-19-related initiatives led by other groups. Furthermore, between 2020 and 2023, Vaccinare Informati has pursued its objectives, conducting several advocacy activities, but without giving enough visibility to them within and outside the association. The “behind-the-scenes activities and the reduced orientation toward specific pandemic-related activities have led some members, facing restrictions due to noncompliance at various levels and with their children's situation already stabilized in alternative pre-school services or in compulsory education, to connect with other associations that, during the pandemic, openly aimed to assist suspended healthcare workers or other professional categories and organize protests against government policies.

⁵⁴ <https://uniamocitrentino.org/>.

2.4.2.2. Local action, territorial networks, and strategic shifts

The progressive decline in membership also led to significant changes in the association's internal structure and territorial presence. The loss of a substantial number of members and the reduced salience of childhood vaccination mandates during the pandemic also led to a change in the association's internal structure. Until 2020, the organizational structure of Vaccinare Informati comprised the board, the secretariat, the members, and local contact persons (Fig. 17).⁵⁵ These latter subjects were responsible for establishing a territorial network for the association within the Trentino region, and their on-site advocacy has been particularly important, especially between 2017 and 2018. Conversely, between 2020 and 2021, the role of and people's willingness to be local contact persons diminished significantly. Despite being still active, this role has now been mainly incorporated into the board.

Fig. 17 – Representation of the structure of the Vaccinare Informati association.



Since 2024, Vaccinare Informati — in strict collaboration with an association committed to promoting and protecting subjective rights — has

⁵⁵ The hierarchy among the different roles in the association is informal, aimed only increasing the efficiency and role switching from one role to another is possible and dynamic. Confirmation of the board members and the election of new board members takes place once a year at the membership meeting.

revised its legal and advocacy strategy in response to ongoing debates surrounding childhood vaccine mandates. While in earlier years the association openly questioned the constitutionality of Law No. 119/2017, it has recently redirected its focus toward specific legal provisions within the same law, particularly Article 3-bis, which regulates documentation requirements for school admission, and toward Article 1 (paragraph 5) of Law No. 219/2017,⁵⁶ which affirms the right to refuse medical treatment.

The association's new legal emphasis centers on Law No. 219/2017, which codifies the principle of informed consent and guarantees the right of individuals to refuse or withdraw from any diagnostic or therapeutic intervention at any time, even when such refusal may result in death or serious health consequences. According to Vaccinare Informati, this provision should be interpreted in light of supranational legal instruments such as the Oviedo Convention (Article 5)⁵⁷ and the Charter of Fundamental Rights of the European Union (Article 3),⁵⁸ which reinforce the primacy of individual autonomy in health-related decisions. From this perspective, the association argues that vaccination mandates cannot override the individual's legally protected right to informed dissent, and that refusal of treatment, when expressed formally, constitutes a legitimate legal act.

In addition, Vaccinare Informati draws attention to Article 3-bis of Law No. 119/2017, which specifies the documentation required for school access, including certification of vaccination, exemptions, or deferments. The association emphasizes that the law does not strictly require completed vaccination for school attendance but allows for alternative forms of compliance, including the formal submission of "informed dissent." Through this legal shift, the association seeks to reframe its opposition not on constitutional grounds, but on the legal and procedural ambiguities within existing Italian health legislation.

⁵⁶ Law No. 219 of 22 December 2017, published in the Official Gazette No. 12 of 16 January 2018.

⁵⁷ Oviedo Convention on Human Rights and Biomedicine, 4 April 1997, ratified by Law No. 145 of 28 March 2001, published in the Official Gazette No. 95 of 24 April 2001.

⁵⁸ Charter of Fundamental Rights of the European Union, 2012 O.J. C 326/391.

The case of Vaccinare Informati illustrates how localized vaccine-critical activism can adapt to shifting political and legal contexts, combining grassroots engagement with evolving rights-based arguments. The association's long-standing presence and institutional interactions make it an exemplary case through which to explore the broader socio-political dynamics of vaccine hesitancy in Italy. The following Chapter presents the methodological design and research strategy used to investigate these dynamics through in-depth qualitative analysis.

CHAPTER 3

Data and methodological framework

Introduction

The present chapter delineates the methodological framework employed in the study, which is oriented towards a comprehensive understanding of the phenomenon of vaccine hesitancy among organized groups of parents, with a particular focus on those who align with the Free-Vaxxer ideological orientation. The central aim of this research is to contribute to improving dialogue between vaccine-hesitant citizens and political, health, and scientific institutions, moving beyond the polarized discourse often surrounding vaccination. The study explores the range of vaccine-related positions and the personal, social, and epistemological factors that shape them. It aims to provide a more nuanced understanding of vaccine hesitancy, one that acknowledges the complexity of individual beliefs while recognizing the broader social and political contexts in which these beliefs are situated (Bucchi et al., 2022; Larson et al., 2018).

This Chapter outlines the research design and methods used to address the five core research questions introduced in Chapter 1 (Section 1.6). These questions investigate: the diversity of vaccine-related positions among organized Free-Vaxxers; the experiential and epistemological underpinnings of these positions; the potential influence of the COVID-19 pandemic on vaccine attitudes; and the role attributed to science and scientific expertise in parental narratives. Each of these questions requires access to different dimensions of meaning and reasoning embedded in parental accounts, thus calling for a methodological approach capable of capturing both descriptive patterns and interpretive depth. This is why a combination of qualitative content analysis and thematic analysis

was employed to analyze the corpus of interview data in a systematic yet flexible way.

Given the complexity and context-dependency of these questions, a qualitative methodology was chosen. Qualitative methods are particularly well-suited for capturing the depth and diversity of parental beliefs, experiences, and epistemologies, as well as the role that social networks, media, and personal history play in the formation of vaccine-related opinions (Borkman, 1976; Poltorak et al., 2005). Semi-structured interviews (Silverman, 2016) were utilized to furnish participants with the autonomy to articulate their reflections and encounters in their own words, whilst enabling the researcher to delve more profoundly into particular subjects as they emerged. This flexibility is crucial for understanding the diversity of positions within the Free-Vaxxer movement and the multifaceted nature of vaccine hesitancy.

This research is grounded in the sociology of health, sociology of science, and Science and Technology Studies (STS), drawing on theories that emphasize the role of social context, trust, and alternative epistemologies in health-related decision-making (Epstein, 1996; Jasanoff, 2004). The study adopts an interpretivist approach, which seeks to understand the meanings and social processes that underpin individuals' health decisions (Geertz, 1973). By using this approach, the research aims to move beyond simplistic categorizations of vaccine-hesitant individuals, recognizing the dynamic and context-dependent nature of their attitudes toward vaccination.

This chapter provides an overview of the research design, data collection methods, and analysis techniques employed in this study. The rationale for using a multi-method approach — combining content and thematic analysis — and the use of MAXQDA software for coding and analyzing interview data will also be explained. Finally, ethical considerations related to participant recruitment and data handling are discussed.

3.1. Research design

This study adopts a qualitative research design grounded in an interpretivist epistemology, aimed at understanding how vaccine-hesitant parents construct, negotiate, and articulate their beliefs and experiences within organized Free-Vaxxer contexts. Given the exploratory nature of the research questions and the need to access meaning-making processes, qualitative methods were selected to generate rich, context-sensitive insights into participants' experiences, narratives, and epistemologies.

The research combines two complementary data collection strategies — semi-structured interviews and participant observation — to explore both participants' expressed views and their situated practices. These methods are particularly suited to the investigation of complex and sensitive topics such as vaccine hesitancy, where social context, identity, and trust in expertise are deeply entangled (Poltorak et al., 2005; D. Silverman, 2016). Their combined use facilitated a more contextualized understanding of the lived experience and social dynamics underpinning vaccine-critical orientations. A detailed account of the data collection procedures is provided in Section 3.1.2.

The study adopts a multi-method qualitative approach (Alejandro & Zhao, 2024), integrating Qualitative Content Analysis (QCA; Schreier, 2012) and Thematic Analysis (TA; Boyatzis, 1998). QCA was employed to develop a structured and comprehensive coding frame, allowing for a systematic categorization of the material. This process ensured transparency in how data were organized and interpreted, and enhanced dependability — understood as the consistency and traceability of the analytical procedures over time (Lincoln & Guba, 1985). TA was used to identify latent patterns of meaning, conceptual links, and cross-cutting themes within and across interviews. The integration of these two methodological approaches facilitated both descriptive differentiation and interpretive abstraction in addressing the study's five central research questions. These questions investigate: (1) the spectrum of vaccine-hesitant positions and motivations among organized parental groups; (2) how personal experiences and

emotional dimensions influence parental vaccine decision-making; (3) the narrative and epistemological patterns that emerge in parents' accounts; (4) the perceived impact of the COVID-19 pandemic on their vaccine-related attitudes; and (5) the ways in which these parents relate to scientific authority and draw upon alternative forms of knowledge.

Data analysis was supported by the qualitative software MAXQDA, which facilitated the organization of the corpus, application and retrieval of codes, co-occurrence analysis, and visual exploration of thematic patterns. Ethical considerations and reflexivity were integral to all stages of the research process, from participant recruitment to the interpretation and presentation of findings.

The following sections present in detail the sampling strategy (3.1.1), data collection procedures (3.1.2), and analytical workflow (3.2), followed by a discussion of trustworthiness and research quality criteria (3.3) and ethical safeguards and considerations (3.4).

3.1.1. Data collection: Participant observation and semi-structured Interviews

The data collection phase of this study combined two complementary qualitative strategies: participant observation and semi-structured interviews. This dual approach was chosen to capture both situated practices and articulated narratives of vaccine-hesitant parents active within the Free-Vax movement. Participant observation enabled immersion in the everyday contexts of the association under study, offering insight into group dynamics, communicative practices, and material culture. Semi-structured interviews provided in-depth accounts of participants' experiences, motivations, and epistemologies, allowing them to articulate their perspectives in their own terms.

Using these methods in combination enhanced the richness and credibility of the data, creating opportunities for triangulation between observed behavior

and self-reported narratives. It also allowed for a more nuanced understanding of the interplay between lived experience, social interaction, and individual meaning-making in shaping vaccine-related positions. The following sub-sections describe in detail the implementation of participant observation (3.1.1.1), the design and conduct of semi-structured interviews (3.1.1.2), and the reflexive positioning of the researcher throughout the fieldwork (3.1.1.3).

3.1.1.1. Participant observation

Before and alongside the semi-structured interviews (Section 3.1.1.2), participant observation (Guest et al., 2013) was undertaken. Often described as the observational counterpart to qualitative interviewing, participant observation allows the researcher to access a group's practices, meanings, and interactions by "trying to observe and acquire the perspectives of the people involved in certain groups or social processes" (Di Domenico & Phillips, 2010, p. 655). In this study, it was essential to engage directly with the everyday contexts of organized Free-Vax parents, particularly those connected to the Vaccinare Informati association.

Fieldwork began in April 2021 and continued until December 2024. As Mills (2014) notes, initiating participant observation before interviews offers several advantages: it allows interview questions to be tailored to participants' concerns; it provides insight into communication styles that can refine the interview guide; and it familiarizes the researcher with the specific research environment. Immersion in the association's activities was therefore a necessary first step.

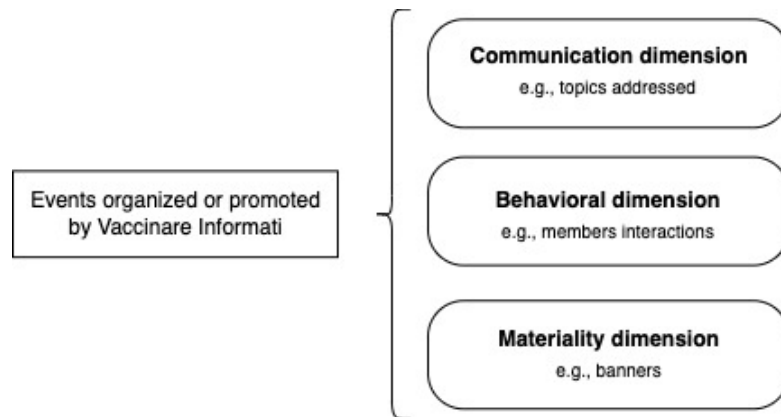
Observation took place both in-person and online, at demonstrations, conferences, webinars, public projections, and membership assemblies organized or supported by the association. Pandemic restrictions on unvaccinated people (see Section 2.2) meant that many public events previously held in community halls or theatres were moved online. For online events, digital ethnography techniques were adopted (Ardévol, 2012; Garcia et al., 2009),

capturing textual and visual interactions on meeting platforms, such as chat contributions, shared images, and emoticons.

The observation was uncovered (Di Domenico & Phillips, 2010), with the researcher adopting the role of observer as participant (Gold, 1958). This positioning involved active participation in activities to facilitate richer observation, while refraining from becoming a formal association member. The approach strengthened trust and rapport, provided opportunities to recognize and interpret behaviors in context, facilitated the identification of potential interviewees, allowed for informal conversations with members, and enabled the researcher to become familiar with the group's vocabulary and sensitive topics. It also reduced reactivity — the tendency for behavior to change in the presence of outsiders (Bernard, 2006; Guest et al., 2013).

Fieldnotes, photographs, and collected materials (flyers, posters, banners) documented the events and served both to inform the interview guide and to triangulate findings. Observations were organized into three analytical dimensions (Fig. 18): a communication dimension, focusing on topics, metaphors, slogans, symbols, and tone of voice; a behavioral dimension, concerning rituals and member interactions; and a material dimension, encompassing objects used or distributed by members. Key informants (Given, 2008; Mack et al., 2005) — articulate members knowledgeable about their community — played an important role in clarifying meanings, validating interpretations, and facilitating access.

Fig. 18 – Main dimensions investigated through participant observation.



In total, the researcher attended 15 events, seven of which were conducted online. Table 4 summarizes the 15 events in which participant observation was conducted between 2021 and 2024. The list reflects the variety of formats (demonstrations, webinars, assemblies, film projections, and seminars) and thematic focuses addressed by the association during the study period. Including both in-person and online activities, these events provided a diverse set of contexts for observing communicative practices, group dynamics, and material culture.

Tab. 4 – List of Vaccinare Informati events in which participant observation was conducted.⁵⁹

Type of event	Date	Topic(s)
Webinar	April 2021	Vaccination mandates
Demonstration	April 2021	Freedom of choice in the vaccination decision, right to work, and support for suspended healthcare workers
Demonstration	May 2021	Defense of the Italian Constitution, freedom of choice in vaccination, right to education, right to work
Demonstration	October 2021	Freedom of choice in the vaccination decision, adverse events following immunization
Webinar	November 2021	Children's rights and COVID-19
Webinar	December 2021	Risk and benefits of anti-COVID-19 vaccines for children
Membership assembly	May 2022	Overview of the Vaccinare Informati activities, renewal of the board, future projects and directions
Public projection	November 2022	Documentary addressing adverse effects of anti-COVID-19 vaccines
Webinar	March 2023	Vaccine-injuries
Webinar	March 2023	History of vaccinations, support to immune system
Webinar	March 2023	Cardiovascular damage caused by viruses and vaccines
Membership assembly	May 2023	Overview of the Vaccinare Informati activities, renewal of the board, future projects and directions
Webinar	November 2023	Childhood vaccination mandates, non-review of the vaccination requirement
Public projection	October 2024	Documentary on the “denied truths” about COVID-19 (such as critics towards the management of the pandemic, adverse-events following immunization not recognized)
Seminar	December 2024	Freedom of choice in the vaccination decision from a legal perspective

⁵⁹ In Spring 2024, the researcher could not participate in the event organized by the association because of the visiting period conducted abroad.

Observing this range of activities was essential for capturing the breadth of communicative, behavioral, and material practices that characterize the association's public and internal life.

3.1.1.2. Semi-structured interviews

Semi-structured qualitative interviews (Given, 2008; Lewis-Beck, 2004; Roulston & Choi, 2018) were conducted to explore participants' experiences, attitudes, motivations, and epistemologies related to vaccination. This method was chosen because it allows participants to maintain the rhetorical construction of their experience (Lindlof & Taylor, 2002), while offering the interviewer flexibility to adapt questions to each participant's narrative trajectory (Corbin & Strauss, 2008).

A total of 46 interviews were carried out between April 2022 and November 2023, following a pilot interview — not included in the final analysis — was essential to refine the interview guide and improve interviewing techniques for sensitive topics (M. A. A. Majid et al., 2017). Ten of these participants were re-interviewed from an earlier 2018 study (Fattorini, 2023) conducted soon after the introduction of Italy's Law No. 119/2017 on childhood vaccination mandates. Of the 21 parents interviewed in 2018, only ten remained active members in 2022. 46 interviews were conducted in person, with two via Zoom due to logistical constraints.

The interview guide (Appendix A) was designed to align closely with the research objectives and theoretical framework presented in Chapter 1. Its construction was shaped by the five central research questions, which explore the diversity of vaccine-hesitant positions, the role of experiential and affective factors in decision-making, the emergence of narrative patterns, the impact of the COVID-19 pandemic, and relationships with science and alternative forms of knowledge. It also drew on key literature on vaccine hesitancy — particularly studies emphasizing parental epistemologies, experiential knowledge,

institutional trust, and socio-political framings of vaccination (e.g., Hobson-West, 2007; Poltorak et al., 2005; Bucchi et al., 2022). Insights from participant observation were incorporated, ensuring that concerns, discursive patterns, and culturally resonant framings identified in the field informed the questions. Finally, the 2018 fieldwork provided familiarity with participants' frames of reference and recurring themes.

The guide was thematically structured to support conversational flow and encourage participants to articulate their narratives freely. While a core set of questions was maintained across interviews, the semi-structured format allowed for flexibility in sequencing and wording, enabling deeper probing when relevant themes emerged. Particular care was taken to avoid normative framings and to use accessible, culturally sensitive language, especially on topics such as adverse events, stigma, and exclusion from services. Table 5 presents the thematic dimensions of the interview guide. Each dimension was designed to elicit narratives that could address one or more research questions, while ensuring coverage of the personal, social, and institutional contexts shaping vaccine-related decision-making.

Tab. 5 – Summary of interview guide dimensions.

Dimension	Description
Demographics	Information on occupation, education, and number of children
Vaccination Decisions	Parental choices regarding childhood and COVID-19 vaccines; motivations and timing
COVID-19 Experiences	Personal or family experiences with COVID-19 infection
Health & Lifestyle	Broader lifestyle and health-related practices that may shape vaccine attitudes
Association Membership	Involvement in Vaccinare Informati
Adverse Events	Experiences or reports of vaccine-related adverse effects
Political Institutions	Perceptions of government vaccine policies in 2017 and during the pandemic
Educational Institutions	Experiences with school-based vaccine policies and their consequences
Healthcare Institutions	Relationships with pediatricians and general practitioners around vaccination
Media	Views on how media handled vaccine issues before and during the pandemic
The “No-Vax” Label	Social impact of the label and its influence on parental relationships
Science	Trust in science and scientific communication regarding vaccination

Together, these dimensions offered a comprehensive yet flexible framework that could be adapted to the conversational flow of each interview while still covering all key areas of interest.

Table 6 maps the alignment between the five research questions and the thematic dimensions of the interview guide. This alignment ensured that the interviews systematically covered all aspects of the study’s analytical framework, while allowing flexibility for participants to prioritize and elaborate on themes most relevant to their experiences.

Tab. 6 – Alignment of research questions with key themes and interview dimensions.

Research Questions	Key Themes	Related Interview Dimensions
RQ1. What range of vaccine-hesitant positions can be identified among organized Free-Vaxxers?	Typologies of hesitancy; vaccination choices; motivations	Vaccination Decisions – Adverse Events – Association
RQ2. Can experiential dimension and parental epistemologies account for the variety of personal trajectories of Free-Vax parents?	Personal experience; parental knowledge; health choices; identity	Vaccination Decisions – Health & Lifestyle – Adverse Events – Association
RQ3. Can distinctive discursive patterns and parental epistemologies be identified in vaccine-hesitant parents' narratives about vaccination?	Narratives; language; trust/distrust; framing of science and institutions	Science – “No-Vax” Label – Media – Vaccination Decisions
RQ4. Have these vaccine-hesitant parents changed their attitudes towards vaccines since the onset of the COVID-19 pandemic? If so, which factors have been more relevant?	Impact of COVID-19; shifting positions; contextual drivers	COVID – Vaccination Decisions (re: COVID) – Political Institutions – Educational Institutions – Healthcare Institutions
RQ5. What are the main elements that characterize the relationship of Free-Vax parents with science and scientific experts?	Trust/distrust in science; perception of scientists; authority	Science – Media – Healthcare Institutions

This structured alignment reinforced the methodological rigor of the interviews, linking empirical data collection directly to the central aims of the research.

3.1.1.3. Reflexivity and researcher role

This study builds on a long-standing engagement with the Free-Vax association, initiated in 2018 (Fattorini, 2023). That early phase introduced the researcher to the group's internal dynamics and laid the groundwork for establishing rapport. Between April 2021 and December 2024, the researcher returned to the field for the present study, re-interviewing 10 of the original 21

parents and conducting 36 new interviews with additional members between April 2022 and November 2023. This longitudinal and expanded engagement offered a unique opportunity to trace the evolution of parental vaccine attitudes and epistemologies over time, particularly in the context of the COVID-19 pandemic.

Throughout both research phases, a deliberately neutral positionality was adopted. Although broadly aligned with the institutional consensus on the value of vaccination, the researcher approached the topic not as an advocate but as a sociologist seeking to understand how individuals arrive at divergent conclusions through lived experiences, social networks, and epistemic frameworks. Personal views were intentionally bracketed to foster open, trust-based dialogue with participants whose perspectives are often marginalized or stigmatized in public discourse. The aim was not to evaluate the veracity of claims, but to explore the meanings and social processes underlying them (Berger, 2015; Geertz, 1973).

This commitment to neutrality was particularly important — and challenging — during the pandemic, a time marked by heightened polarization over issues such as face masks, lockdowns, and institutional trust. Most participants in this study expressed critical views of public health measures. In response, the researcher made a conscious decision — particularly in early interviews — to forgo face masking when meeting participants in their homes or in public settings. While this choice initially caused discomfort, especially in early 2022, it was recognized that insisting on masking could introduce symbolic and interpersonal distance, potentially undermining rapport. The decision reflected an ongoing, embodied reflexivity and sensitivity to the social norms of the community under study (England, 1994).

Participant observation, conducted between April 2021 and December 2024, further deepened understanding of the group's internal logic, emotional landscapes, and shared narratives. It also underscored the fluid and sometimes fragile boundaries between observer and participant. As a university-affiliated researcher often perceived as an institutional outsider, attention was paid to the power asymmetries inherent in this positionality. Strategies to mitigate these included transparency about research goals, iterative informed consent, and

ethical attentiveness in the representation of participants. Fieldnotes and reflexive memos documented not only observed interactions but also the researcher's influence on events and their interpretation (Blee, 1998).

By making reflexivity an ongoing practice rather than a discrete stage of research, these positional decisions — from the earliest contacts to the interpretation of findings — were integral to fostering trust, eliciting rich and candid narratives, and ensuring that participants' perspectives were represented with depth and nuance.

3.1.2. Sampling strategy

Initially, for this project, the plan was to identify Vaccinare Informati members not interviewed before through a “second stage” sampling strategy (Barbour, 2014). This approach allows for the selection of interviewees based on relevant and/or under-explored characteristics in order to increase heterogeneity. However, due to the COVID-19 pandemic restrictions, the majority of Vaccinare Informati's events were moved online (see Section 3.1.1.2), and demonstrations were less frequently organized, even in the later stages of the pandemic. As these public events were essential to recruiting potential interviewees, the intended sampling approach could not be implemented. Consequently, a snowball sampling strategy was adopted (Given, 2008), still aiming to capture heterogeneity in vaccine-related decisions with the help of two key informants.

A longitudinal dimension was introduced through the inclusion of participants from an earlier exploratory study conducted in 2018. In that study, 21 vaccine-hesitant parents — all over 18 years of age and members of Vaccinare Informati — were recruited through snowball sampling (Barbour, 2014; Given, 2008) and interviewed shortly after the introduction of increased childhood vaccination requirements under Law No. 119/2017. Access to the field was negotiated during that period, and the interviews provided valuable insights that informed the design of the present research. In 2022, all 21 were contacted again;

however, only 10 were still members of Vaccinare Informati (regarding the decrease in memberships, see Section 2.4.2.1). These 10 were re-interviewed for the present study, forming part of the final sample.

The inclusion criteria for the current study were: being a parent or legal guardian; aged 18 years or older; and being a member of the Vaccinare Informati association. Participation required signing an informed consent form (see Appendix B), a copy of which was given to each interviewee. Participation was voluntary, and confidentiality was assured. The researcher was solely responsible for conducting the interviews, handling the recordings, and analyzing the data. All interviews were pseudonymized, and any information that could directly or indirectly identify participants or third parties (other than public figures) was removed at the transcription stage. In line with institutional guidelines, this study did not require formal approval from the Research Ethics Committee of the University of Trento.⁶⁰ Ethical oversight was ensured through adherence to established principles of voluntary participation, informed consent, confidentiality, and data minimization. Interview recordings and transcripts were securely stored on password-protected devices accessible only to the researcher.

Given the contested and politically sensitive nature of vaccination, particular attention was paid to potential emotional and reputational risks for participants. These included distress when recounting experiences of stigma, exclusion, or conflict, as well as concerns about social, educational, or professional repercussions should their views be publicly attributed. To mitigate these risks, interviews were conducted in a participant-led manner, allowing interviewees to steer conversations away from topics they found uncomfortable or emotionally taxing. In reporting the findings, care was taken to avoid the inclusion of contextual details that could render participants indirectly identifiable, especially with regard to workplaces, schools, or local institutions. Throughout the research process, participants were approached not as objects of scrutiny but

⁶⁰ <https://www.unitn.it/en/research/responsible-research/ethics-and-integrity/research-ethics-committee>.

as interlocutors whose perspectives required careful, respectful, and ethically attentive representation.

The resulting sample reflects the diversity of roles, experiences, and perspectives within the Free-Vax association. Table 7 provides a detailed overview of the socio-demographic, professional, and experiential characteristics of the 46 interviewees.

The 46 interviewees present a heterogeneous set of socio-demographic, professional, and experiential characteristics. Women were in the majority (31; 67.4%), with men accounting for 15 participants (32.6%). The sample was characterized by relatively high educational attainment, with 17 participants (37.0%) holding a university degree (graduation or PhD), 15 (32.6%) having completed secondary schooling, 13 (28.3%) holding a professional diploma, and 1 (2.2%) reporting only compulsory education.

Occupational categories, classified according to the International Standard Classification of Occupations (ISCO-08) at the 1-digit “major group” level, showed a predominance of Professionals (17; 37.0%), followed by Technicians and Associate Professionals (6; 13.0%), Service and Sales Workers (5; 10.9%), Craft and Related Trades Workers (5; 10.9%), Clerical Support Workers (4; 8.7%), Managers (4; 8.7%), Elementary Occupations (3; 6.5%), and Skilled Agricultural, Forestry and Fishery Workers (2; 4.3%). Occupational categories follow the ISCO-08 major group classification, which organizes jobs into broad skill- and task-based categories (e.g., Professionals, Technicians, Service Workers, Elementary Occupations — the latter including routine manual roles such as cleaners or agricultural laborers).

Tab. 7 – Socio-demographic, professional, and experiential characteristics of the 46 interviewees.

Variable	Category	n	%
Interviewed in 2018 study	No	36	78.3%
	Yes	10	21.7%
Role in association	Board	8	17.4%
	Member	38	82.6%
Gender	Female	31	67.4%
	Male	15	32.6%
Level of education	Primary (compulsory schooling)	1	2.2%
	Secondary (diploma)	15	32.6%
	Secondary (professional diploma)	13	28.3%
	Tertiary (graduated)	15	32.6%
	Tertiary (PhD)	2	4.3%
Childhood vaccination choices	Vaccinated	4	8.7%
	Partially vaccinated	5	10.9%
	Vaccinated and partially vaccinated	2	4.3%
	Partially vaccinated and unvaccinated	14	30.4%
	Vaccinated and unvaccinated	2	4.3%
	Vaccinated, partially vaccinated, and unvaccinated	1	2.2%
	Unvaccinated	18	39.1%
Interviewee had COVID-19	No	5	10.9%
	Yes	41	89.1%
Experienced AEFI	Direct	11	23.9%
	Direct and indirect	9	19.6%
	Indirect	23	50.0%
	None	3	6.5%
Primary medical orientation	CAM	43	93.5%
	Conventional	3	6.5%
Secondary medical orientation	CAM	4	8.7%
	Conventional	42	91.3%
Food choices	Biological food	42	91.3%
	Biological food (health issues)	3	6.5%
	None	1	2.2%
Occupational category (ISCO-08 major groups)*	Clerical Support Workers	4	8.7%
	Craft and Related Trades Workers	5	10.9%
	Elementary Occupations	3	6.5%
	Managers	4	8.7%
	Professionals	17	37.0%
	Service and Sales Workers	5	10.9%
	Skilled Agricultural, Forestry and Fishery Workers	2	4.3%
	Technicians and Associate Professionals	6	13.0%

* Occupational categories follow the ISCO-08 major group classification, which groups jobs into broad categories based on task complexity and skill requirements.

Childhood vaccination choices varied considerably. A small proportion (4; 8.7%) reported fully vaccinating their children, 5 (10.9%) partially vaccinated only, and 18 (39.1%) did not vaccinate any of their children. The remaining 19 participants (41.3%) adopted mixed approaches — for example, vaccinating some children fully, others partially, and/or leaving others unvaccinated.

Regarding experiences of adverse events following immunization (AEFI), half of the participants (23; 50.0%) reported only indirect experiences (i.e., involving individuals outside their immediate family), 11 (23.9%) reported only direct experiences involving themselves or their children, and 9 (19.6%) reported both direct and indirect experiences. Only 3 participants (6.5%) reported no such experiences.

The vast majority (41; 89.1%) reported having contracted COVID-19 at least once. In terms of primary medical orientation, most participants (43; 93.5%) identified with complementary and alternative medicine (CAM) as their main reference, while only 3 (6.5%) prioritized conventional biomedicine. Secondary medical orientation was predominantly conventional medicine (42; 91.3%), often combined with CAM. Dietary choices reflected similar lifestyle orientations, with 45 (97.8%) reporting exclusive or predominant consumption of organic food, and 3 (6.5%) of these citing specific health reasons for doing so.

Taken together, these characteristics portray a group with relatively high educational attainment, a notable concentration in professional and technical occupations, a strong orientation towards CAM, and considerable diversity in vaccination behaviors. The combination of shared orientations — such as the preference for organic food and CAM — with highly varied vaccination practices underlines the complexity of parental positions within the Free-Vax association and provides essential context for interpreting their narratives. While this profile provides valuable insight into the composition of the study group, certain imbalances should be noted. While women were overrepresented, this does not necessarily indicate a gendered pattern in parenting activism or the association's dynamics; rather, in many cases, both partners were involved, and the interviewee was selected primarily for reasons of availability, which may have

influenced the sample composition. The sample also included a relatively high proportion of participants with higher education and professional or technical occupations, which may not fully represent the socio-economic diversity of vaccine-hesitant parents in the wider population. These characteristics should be taken into account when considering the transferability of the findings (Lincoln & Guba, 1985).

3.2. Data analysis: MAXQDA, content analysis, and thematic analysis

The analytical process followed a sequential yet iterative structure. All interviews were first transcribed manually and verbatim, ensuring accuracy and preserving relevant paralinguistic cues. The complete set of transcripts was then imported into MAXQDA (version 24.10.0, VERBI Software, 2021), which served as the primary environment for managing, coding, and retrieving the qualitative material.

The development of the coding frame combined deductive elements — derived from the research questions, theoretical framework, relevant literature, and previous research (Fattorini, 2023) — with inductive categories emerging directly from participants' accounts (see Section 3.2.1). Once finalized, the coding frame was systematically applied to the entire dataset. The final stage of analysis involved an interpretive phase, in which coded segments were examined, compared, and synthesized to construct higher-level themes, which subsequently informed the structure and content of the empirical chapters.

The analytical strategy adopted in this thesis is directly informed by its theoretical orientation. Drawing on Science and Technology Studies and sociological approaches to health and trust, vaccines are treated as socio-technical objects whose meanings are produced through everyday practices, institutional arrangements, and communicative interactions. This perspective

requires an analytical approach capable of attending both to patterned representations and to situated processes of meaning-making. Qualitative Content Analysis (QCA) was therefore used to map recurring themes, framings, and narrative regularities across the corpus, while Thematic Analysis (TA) enabled an interpretive engagement with how parents construct, negotiate, and revise vaccine-related meanings over time. This combination allows for an analysis that is simultaneously systematic and sensitive to context, reflexivity, and relational dynamics, in line with the interpretive and processual commitments of the theoretical framework.

This study thus adopted a multi-strategy analytical design, integrating QCA and TA in a complementary manner to capture both the breadth and the depth of the dataset. Particularly, QCA was used as a systematic data reduction technique, focusing exclusively on material relevant to the research questions (O'Dwyer, 2004). This approach facilitated the identification of topic frequencies, timing, and co-occurrences, thereby enabling a structured descriptive differentiation of the dataset — particularly for RQ1 and RQ4. QCA was chosen for its capacity to combine latent interpretation with the systematicity of a structured coding frame. The coding frame was developed and applied following the eight-step process outlined by Schreier (2012): selecting the material; building the coding frame; defining categories; trial coding; evaluating the coding frame; main analysis; presenting findings; and ensuring quality through reliability checks.

The trial coding phase was conducted on nine interviews (approximately 20% of the dataset), purposively selected to reflect the diversity of participants' profiles and experiences. This step allowed for the refinement of category definitions, the testing of mutual exclusivity and exhaustiveness criteria, and the assessment of intra-coder stability before proceeding to the main analysis.

Thematic Analysis was then undertaken to move beyond descriptive categorization toward the identification of latent patterns and conceptual meanings. This step was essential for grouping codes into higher-level constructs and developing interpretive themes that addressed RQ2, RQ3, and RQ5. The

thematic analysis followed the four stages described by Boyatzis (1998): recognizing patterns in the data; encoding these patterns into meaningful categories; clustering codes into thematic groupings; and interpreting their significance in relation to the research questions. This process enabled the articulation of meta-themes that capture the complexity of participants' perspectives and provided an interpretive synthesis that situates them within the broader theoretical framework outlined in Chapter 1.

The adoption of these two complementary strategies was driven by the need to address different analytical demands within the same project. QCA enabled systematic data reduction, frequency mapping, and co-occurrence analysis — particularly relevant for RQ1 and RQ4 — while TA allowed for the identification of latent patterns, the grouping of codes into higher-level constructs, and the interpretation of these patterns in light of the study's conceptual framework, especially for RQ2, RQ3, and RQ5.

This integration reflects the logic of a multi-method qualitative data analysis (MMQTDA) design (Alejandro & Zhao, 2024), in which analytical techniques from distinct methodological traditions are applied within a single qualitative study. Previous research has used such integration to strengthen validity through the triangulation of findings (Gouvias & Alexopoulos, 2016) or as part of sequential designs where one method informs the other (Trautwein & Bosse, 2017). In this study, the integration was neither purely sequential nor solely for triangulation; rather, it reflected a targeted allocation of analytical approaches to the main research questions: QCA was applied primarily to RQ1 and RQ4 — where mapping and comparing patterns of occurrence were central — while TA was used for RQ2, RQ3, and RQ5 to identify latent thematic structures and articulate higher-level conceptual relationships.

The following Sections describe in detail the construction and refinement of the coding frame, followed by an account of how content and thematic analyses were applied to address the study's research questions.

3.2.1. The codebook

The codebook used in this research was developed through a combined inductive–deductive approach: inductively, by coding 46 semi-structured interviews with Vaccinare Informati vaccine-hesitant parents; and deductively, by drawing on key conceptual lenses from the sociology of health, sociology of science, Science and Technology Studies (STS), and prior research on vaccine-hesitant parents conducted in 2018 (Fattorini, 2023).

The codebook comprises 13 macro-areas and a total of 265 codes, including main codes (first level), subcodes (second level), and sub-subcodes (third level). Table 8 provides an overview of each macro-area, specifying its analytical focus, the main code labels, and the number of codes at each hierarchical level. This table is intended as a concise synthesis of the codebook structure used in both the content and thematic analyses. The full version of the codebook, including detailed definitions, inclusion/exclusion criteria, and illustrative excerpts, is available in Appendix C.

Tab. 8 – Codebook overview (summary).

Macro-Area	Description	Main Code Labels	Main Codes (Level 1)	Subcodes (Level 2)	Sub-subcodes (Level 3)
I. Decision-Making Process and Parenting	How parents form, implement, and evaluate their vaccination choices, drawing from personal values, parenting ideals, risk perceptions, and information networks	Opinion formation; Choice implementation; Choice evaluation	3	13	9
II. Vaccines and Vaccination Mandates	Perceptions of vaccine characteristics and experiences with childhood vaccine policies, including mandates and sanctions	Safety; Efficacy; Traditional vaccines; Vaccination choices; Childhood vaccination policies	5	8	3
III. Anti-COVID-19 Vaccines	Perspectives on mRNA vaccines, pandemic-related policies, and mandates affecting adults, especially during COVID-19	mRNA vaccines; Safety; Efficacy; COVID-19-related policies; Anti-COVID-19 doses	5	4	2
IV. Vaccine-Related Attitudes	Attitudes toward vaccination as a practice, including concerns about health, safety, and procedural transparency	Vaccine concerns; Technical and procedural concerns; Economic and governmental concerns; Vaccine hesitancy; Vaccination practice	5	9	20
V. Personal Experiences	Personal and family health experiences that inform or motivate vaccine-related decisions	Healthcare interactions; Medical history	2	12	6
VI. Social Relationships and Consequences	How vaccine decisions affect family dynamics, peer relations, and social tensions	Partners' approach; Relationships with peers; Tensions with family; Tensions with children's peers; Social influences	5	10	0

Macro-Area	Description	Main Code Labels	Main Codes (Level 1)	Subcodes (Level 2)	Sub-subcodes (Level 3)
VII. Social Labeling and Representations	Labeling dynamics and social representations of vaccine-hesitant individuals and those who vaccinate	Vaccination labels; Negative social perceptions	2	7	10
VIII. Communication and Information	Narratives on public, institutional, and media communication about vaccines and the pandemic	Public vaccination debates; Authorities' communication; Media's communication	3	4	10
IX. Political and Health Institutions	Trust in political and health institutions and how they manage vaccine mandates and pandemic regulation	Trust in institutions; Parent-institution relationships; Regulation of childhood vaccination mandates; Regulating the pandemic	4	5	0
X. Mobilizing	Collective mobilization efforts, mutual support, and association-based advocacy	Engagement with other associations; Advocate the cause; Association; Mutual support; Networking	5	4	0
XI. Educational Services	Parents' experiences with educational institutions and their implementation of vaccine and COVID-19 rules	Pre-school services and staff; Schools and teachers	2	5	3
XII. Lifestyles	Alternative educational, healthcare, and lifestyle choices made in response to vaccination mandates	Educational choices; Living choices; Food-related choices; Work choices; Medical care choices	5	7	3
XIII. Science and Experts	How parents understand scientific knowledge, evaluate scientific expertise, and contrast expert and lay knowledge	Expert-lay people boundaries; Scientific method; Scientific experts and their institutions; Science and scientific knowledge	4	8	16

3.2.1.1. Intra-coder stability

Intra-coder reliability, also referred to as intra-coder stability, concerns the consistency with which the same coder applies a coding frame to qualitative data across multiple occasions. It ensures that coding decisions are systematic and not influenced by momentary biases (Schreier, 2012). While inter-coder reliability — measuring agreement between multiple coders — is often considered the stronger check due to the diversity of perspectives it incorporates, intra-coder reliability is a valuable alternative when a suitably qualified second coder is unavailable (Schreier, 2012).

The coder's expertise and familiarity with the research context play a critical role in producing meaningful and valid interpretations, enabling the coding frame to be applied with appropriate contextual understanding (Krippendorff, 2004; Campbell et al., 2013). Therefore, in qualitative content analysis, assessing intra-coder reliability is an important strategy for demonstrating the consistency and rigor of the coding process when inter-coder checks are not feasible.

In this study, as the researcher was the sole coder, the entire dataset of 46 interviews was re-coded using MAXQDA following a 15-day interval between the initial and second rounds of coding, thereby reducing potential recall bias and simulating independent coding conditions. The coding process was guided by a multi-method approach combining elements of content analysis and thematic analysis. To evaluate consistency between the two coding phases, Cohen's Kappa coefficient was calculated. The resulting Kappa value of 0.92 (see Appendix D) reflects a very high level of agreement, indicating strong stability in the application of codes.

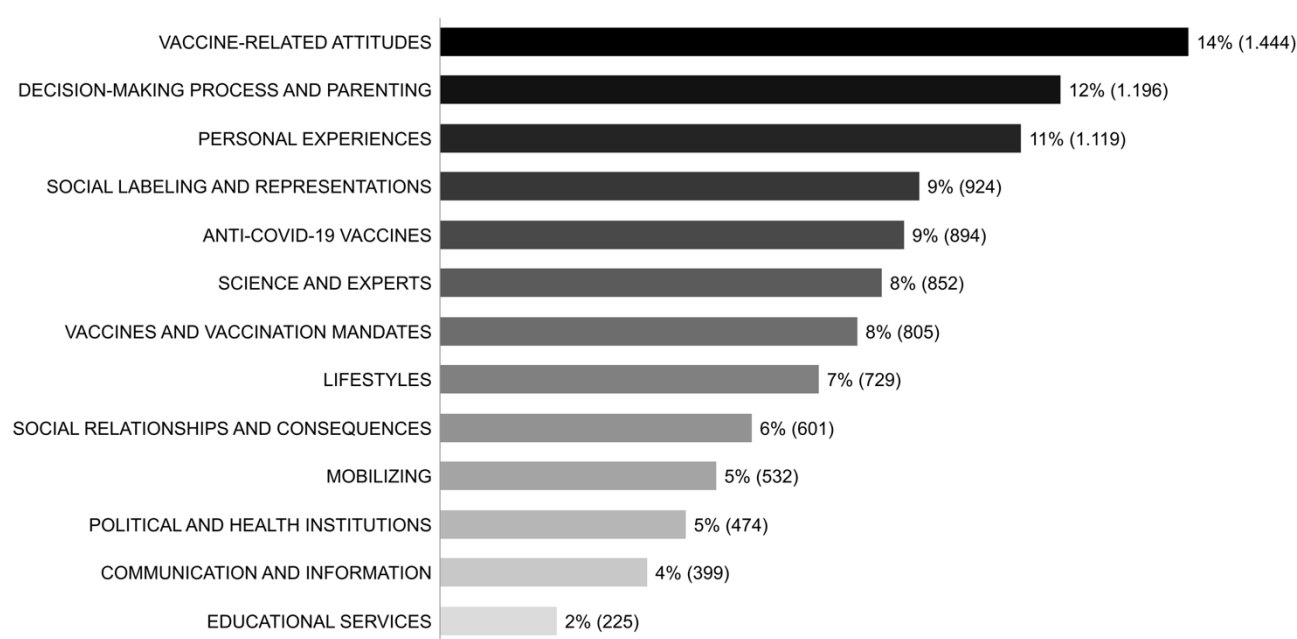
Intra-coder stability is particularly important in structured or multi-method qualitative designs where transparency and analytical rigor must be demonstrable (Guest et al., 2012; Armstrong et al., 1997; Miles et al., 2014). While Cohen's Kappa originates in quantitative research, it has been increasingly adopted in qualitative studies to support coding reliability and provide evidence of systematic analytical practice (Campbell et al., 2013).

3.2.2. Codebook descriptive statistics

The final code system comprised 13 top-level macro-areas, capturing the main conceptual domains of the analysis. Across the 46 interviews, a total of 10,194 coded segments were assigned.

As shown in Figure 19, the most frequently coded macro-area was *Vaccine-Related Attitudes* (14%, 1,444 coded segments), followed by *Decision-Making Process and Parenting* (12%, 1,196) and *Personal Experiences* (11%, 1,120). These three categories alone account for over one-third of all coded segments, indicating that participants' reflections on personal experiences, parenting values, and vaccine-related concerns were central throughout the narratives.

Fig. 19 – Code frequencies distribution of the code system in each of the 13 macro-areas across the 46 interviews, 10,194 coded segments.



Other salient macro-areas included *Social Labelling and Representations* (9%), *Anti-COVID-19 Vaccines* (9%), and *Science and Experts* (8%), suggesting a significant focus on issues of social identity, pandemic-related policies, and

epistemic trust. In contrast, macro-areas such as *Communication and Information* (4%) and *Educational Services* (2%) appeared less frequently, though they remained analytically relevant — particularly in relation to the institutional and structural consequences of non-compliance.

This distribution provides a useful map of how vaccine hesitancy was articulated across personal, relational, and systemic dimensions, and of the relative salience of each thematic cluster in participants' accounts. The relatively balanced representation across macro-areas confirms the breadth of the codebook and reflects the multidimensional nature of the vaccine hesitancy phenomenon.

While these descriptive patterns offer an overview of the thematic distribution across the dataset, the subsequent stage of analysis sought to integrate these categories into broader conceptual groupings, resulting in the higher-level themes presented in Section 3.2.3.

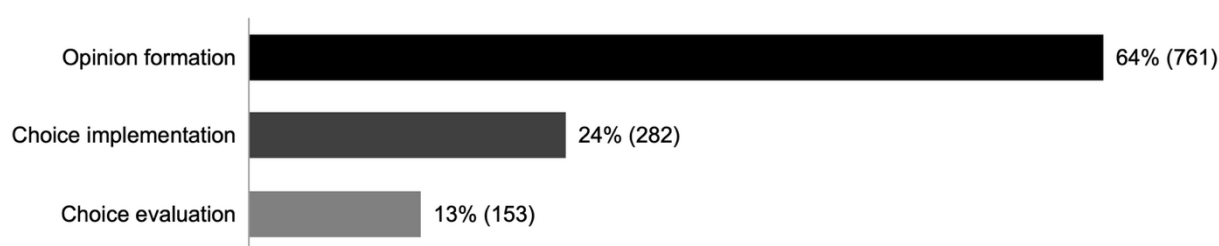
3.2.2.1. Macro-Area I: Decision-Making Process and Parenting

The first macro-area, *Decision-Making Process and Parenting*, accounts for 12% of the total coded segments (1,196 out of 10,194), making it the second most referenced area across the dataset. This macro-area captures how parents navigate their vaccine-related decision-making, from the initial stages of forming an opinion to implementing and later evaluating their choices.

The category *Opinion formation* represents the majority of references within this macro-area (64%, 761 segments), reflecting the importance parents attribute to narrating how their views on vaccination took shape (Fig. 20, the full overview of the distribution of the coded segments is available in Appendix D). Within this category, the most frequently coded subcode is *Diseases perceptions* (45%, 339), which includes evaluations of SARS-CoV-2 (45%, 153), vaccine-preventable diseases (VPDs) more generally (32%, 107), and comparative assessments between disease and vaccine risks (23%, 79). These segments

demonstrate how parents often contextualize their hesitancy by drawing on their own risk perceptions and health-related reasoning.

Fig. 20 – Distribution of coded segments within the macro-area Decision-Making Process and Parenting at the parent codes level.



The *Information ecosystem* subcode, accounting for 25% of references under *Opinion formation* (187 segments), reflects the diversity of sources considered by parents. Traditional media (23%, 43), unspecified sources (20%, 37), peers (19%, 35), and healthcare professionals (14%, 26) were frequently cited. Notably, digital sources such as the web and social media (13%, 25), and scientific publications (11%, 21), indicate a plural and often selective information landscape, shaped by both formal and informal channels.

The second main category, *Choice implementation*, makes up 24% of the macro-area's references (282 segments), pointing to the active, agentic process through which decisions are enacted. The most common subcode here is *Making an informed choice* (51%, 144), followed by *Thoughtful choice* (26%, 72) and *Taking responsibility* (23%, 66). These findings underline how many parents view their actions as informed, morally conscious, and intentional.

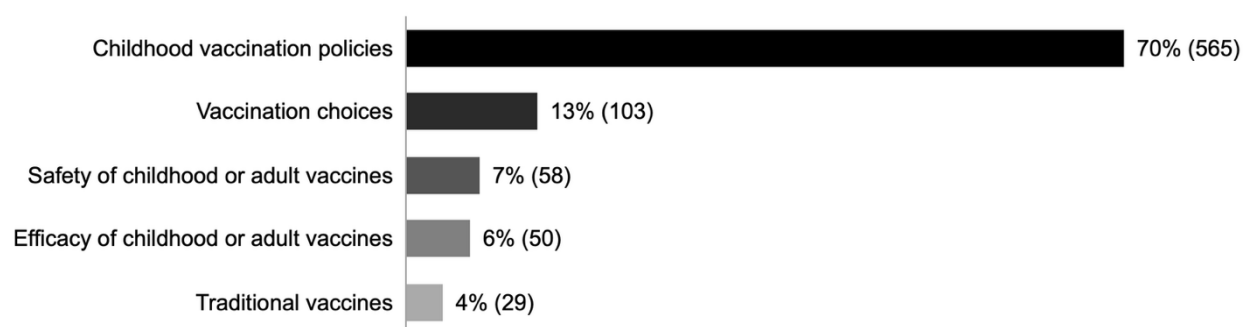
Finally, *Choice evaluation* constitutes 13% of references in the macro-area (153 segments), with a majority of mentions concerning *Openness to vaccinating* (64%, 98), and fewer focused on *Healthy children* as validation of their decisions (36%, 55). This retrospective stance shows how some parents remain receptive to vaccination under specific conditions, resisting rigid or binary categorizations of hesitancy.

3.2.2.2. Macro-Area II: Vaccines and Vaccination Mandates

Macro-Area II accounts for 8% of the total coded segments (805 out of 10,194), indicating a notable, though not predominant, concern in participants' narratives. This macro-area examines how vaccine-hesitant parents assess the biomedical, regulatory, and institutional aspects of vaccines, with particular focus on childhood vaccination policies, mandates, and compliance decisions.

The largest proportion of references falls under the code *Childhood vaccination policies* (70%, n=565), indicating that policy frameworks — especially their evolution and institutional consequences — are a central object of concern (Fig. 21, the full overview of the distribution of the coded segments is available in Appendix D). Within this, *Law 119/2017*, which introduced mandatory childhood vaccinations in Italy (discussed in Chapter 2), is the most frequently cited code (44% of policy-related references, n=250), underscoring its salience in parental reflections and resistance. *Sanctions for non-compliance* follow closely (35%, n=195), with parents particularly highlighting the exclusion from educational services (69% of sanction-related references, n=135) and, to a lesser extent, economic fines (31%, n=60). The Trentino's approach to enforcement, perceived as particularly strict, also emerged in 7% of policy-related references (n=37), while *Law 210/1992* — focused on compensation for adverse events — remains marginal (4%, n=22).

Fig. 21 – Distribution of coded segments within the macro-area Vaccines and Vaccination Mandates at the parent codes level.



The code *Vaccination choices* (13%, n=103) provides important nuance, revealing the heterogeneity of parental choices. While 39% of the coded segments refer to unvaccinated children (n=40), partial vaccination accounts for 33% (n=34), and 28% (n=29) of parents report having fully vaccinated their children. These findings challenge binary labels and underscore the presence of selective, negotiated compliance strategies among vaccine-hesitant parents.

Lastly, perceptions of the safety (II.1, 7%, n=58), efficacy (II.2, 6%, n=50), and traditional nature (II.3, 4%, n=29) of vaccines appear less frequently. These categories are nonetheless meaningful, as they signal that for a portion of respondents, concerns extend beyond mandates and include biomedical and temporal dimensions of vaccination—such as trust in long-established vaccines versus skepticism toward newer ones.

Taken together, Macro-Area II sheds light on how parental vaccine hesitancy is shaped not only by health-related concerns but also by normative, political, and institutional frameworks that define the boundaries of autonomy, responsibility, and social belonging.

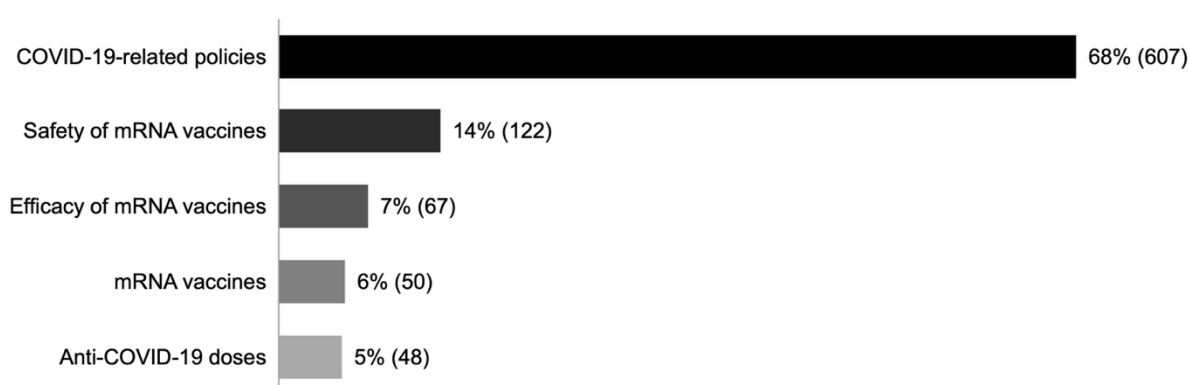
3.2.2.3. Macro-Area III – Anti-COVID-19 Vaccines

The third macro-area, *Anti-COVID-19 Vaccines*, accounts for 9% of the total coded segments (894 out of 10,194), indicating the prominent role of the COVID-19 pandemic in shaping the experiences and narratives of vaccine-hesitant parents. This macro-area explores how participants made sense of the pandemic-specific vaccination campaign, its biomedical premises, and related institutional measures.

The most frequently coded category is *COVID-19-related policies*, which alone represents 68% of all coded references in this macro-area (607 segments, Fig. 22, the full overview of the distribution of the coded segments is available in Appendix D). Within this category, *Green Pass requirements* are the most discussed topic (38%, 233 references), followed by *anti-COVID-19 vaccination mandates* (27%, 165), and *non-medical interventions* (21%, 126). *Job-related*

consequences account for the remaining 14% (83 references), revealing how pandemic regulations — both medical and administrative — significantly affected personal and professional life, contributing to stress, exclusion, or resistance.

Fig. 22 – Distribution of coded segments within the macro-area Anti-COVID-19
Vaccines at the parent codes level.



The second most frequent category is *Safety of mRNA vaccines*, accounting for 14% of macro-area references (122 segments), followed by *Efficacy of mRNA vaccines* (7%, 67) and general reflections on mRNA vaccine technology (6%, 50). These references indicate enduring concerns about the novelty of mRNA technology, its perceived experimental nature, and the perceived lack of long-term testing. While some participants expressed open skepticism, others focused more specifically on fears of adverse effects and uncertainty about real-world effectiveness.

The final category, *Anti-COVID-19 doses*, comprises only 5% of references in this macro-area (48 segments), but it provides relevant insight into participants' actual behaviors. The vast majority (94%, 45 references) reported not receiving any COVID-19 vaccine dose. However, a small subset (6%, 3 references) did report having completed the first vaccination cycle. Although numerically limited, these cases are analytically significant, as they demonstrate how compliance with vaccination can coexist with broader vaccine hesitancy. These participants often cited external pressures — such as work-related requirements, family concerns,

or heightened perceptions of risk — as decisive factors, pointing to the complexity and situatedness of vaccine decision-making.

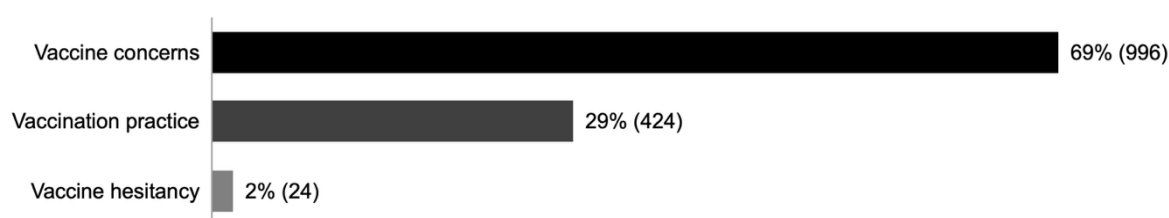
In sum, Macro-Area III shows how the COVID-19 vaccination campaign — particularly through institutional mandates and novel technologies — played a dual role in reinforcing pre-existing hesitancy and in prompting complex negotiations with authority, expertise, and biomedical innovation.

3.2.2.4. Macro-Area IV – Vaccine-Related Attitudes

The fourth macro-area, *Vaccine-Related Attitudes*, comprises the largest share of coded material, accounting for 14% of the total segments (1,444 out of 10,194). This indicates the central role of conceptualizations, concerns, and framings of vaccination in structuring the orientation of vaccine-hesitant parents. The macro-area captures how participants reflect on the purpose, content, implications, and symbolic meaning of vaccination in both everyday life and public discourse.

The most substantial share of coded segments in this area refers to the code *Vaccine concerns*, which alone accounts for 69% of all references in the macro-area (996 segments, Fig. 23, the full overview of the distribution of the coded segments is available in Appendix D). These concerns span three sub-categories: *Health concerns* (56%, n = 554), *Economic and governmental concerns* (26%, n = 254), and *Technical and procedural concerns* (19%, n = 188). Among the most frequently cited subcodes are *Fear of AEFI* (Adverse Events Following Immunization, 26%, n = 145), *Personalized vaccination schedule* (14%, n = 78), and *Pharmacovigilance* (10%, n = 58). These figures confirm that personal and embodied perceptions of safety — often anchored in direct or indirect experiences — remain crucial in shaping hesitancy. However, participants also articulate distrust in institutional and structural dimensions, including the role of pharmaceutical companies, vaccine approval procedures, and the broader alignment between health policies and political or economic interests.

Fig. 23 – Distribution of coded segments within the macro-area Vaccine-Related Attitudes at the parent codes level.



The second most frequent category, *Vaccination practice*, accounts for 29% of macro-area references (n = 424) and sheds light on the symbolic, normative, and sociocultural meanings attributed to vaccination. Among the most recurrent subcodes are *As a choice* (21%, n = 90), *Useful in specific contexts/situations* (15%, n = 65), and *Business-driven* (13%, n = 57). These entries reveal a tendency among participants to reframe vaccination as a situational and deliberative act, rather than a universal or standardized intervention. Additionally, other codings such as *Not the first or only prevention measure*, *As a violence*, or *Undisputable* reflect how vaccination is positioned at the intersection of moral legitimacy, health autonomy, and political critique.

The third category, *Vaccine hesitancy*, is less frequently coded (2%, n = 24) but remains analytically significant. In 83% of these cases (n = 20), parents reported that their hesitancy had increased after the COVID-19 pandemic, whereas only a minority described their skepticism as stable over time. This aligns with the broader literature that documents how trust in vaccination — particularly in its institutional framing — has been reshaped or eroded in the post-2020 context.

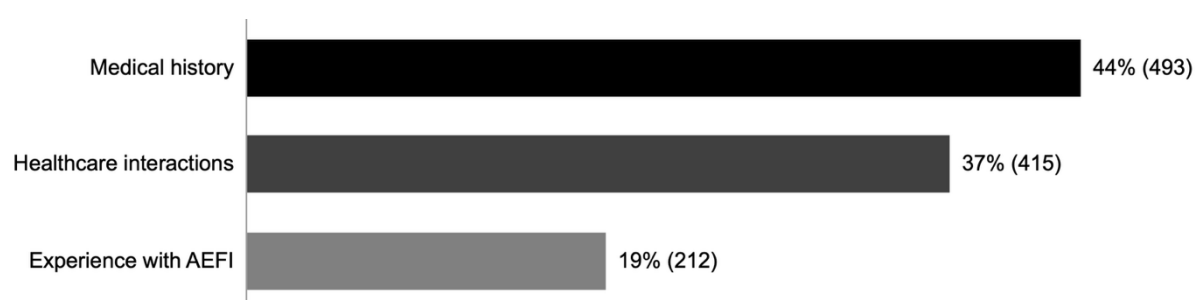
Taken together, the data from Macro-Area IV highlight how vaccine-related attitudes are not reducible to mere skepticism or misinformation. Rather, they reflect a layered interpretive landscape in which biomedical reasoning, embodied knowledge, and critiques of institutions coexist and interact. These representations will be further examined in Chapters 4, 5 and 6, particularly in relation to parental reasoning, expert–lay boundaries, and the social construction of vaccination as both practice and symbol.

3.2.2.5. Macro-Area V – Personal experiences

Macro-Area V accounts for 11% of the total coded segments (1,120 out of 10,194), highlighting how personal experiences and biographical trajectories are central to the interpretive frameworks of vaccine-hesitant parents. This area captures not only embodied and familial experiences of illness but also complex interactions with healthcare institutions and professionals.

The most frequently coded category is *Medical history*, which represents 44% of all references within this macro-area (493 segments, Fig. 24, the full overview of the distribution of the coded segments is available in Appendix D). Within this, the most prevalent subcategory is the experience of COVID-19 infection (41%, 203 references), especially the interviewee's own illness (45%, 91 references), followed by infections within the nuclear family (39%, 79) and the extended family (15%, 33). These narratives are often used to downplay the severity of SARS-CoV-2 or to justify vaccine refusal. Other frequently mentioned subcategories include *children's medical history* (23%, 113), *personal health conditions* (17%, 84), and, to a lesser extent, *pregnancy and childbirth experiences* (8%, 39) and *relatives' health histories* (12%, 58), underscoring how family health narratives inform individualized vaccine risk assessments.

Fig. 24 – Distribution of coded segments within the macro-area Personal experiences at the parent codes level.



Healthcare interactions constitute the second most relevant domain (37%, 415 coded segments). The relationship with the pediatrician or general

practitioner is the most frequently mentioned (23%, 95 references), followed by expressions of trust or distrust in doctors (21%, 87) and experiences in the vaccination hub (20%, 82). Other frequently discussed issues include problematic communication or inaccurate information (15%, 63) and interactions with other healthcare professionals (16%, 68). These encounters frequently appear as critical junctures that either reinforce or challenge parental confidence in institutional medicine.

The third component, experience with AEFI (Adverse Events Following Immunization), represents 19% of macro-area references (212 coded segments). Most of these involve direct experiences by the interviewee or their family (58%, 122 references), while second-hand accounts from friends and acquaintances (42%, 90) reflect the social diffusion of vaccine-critical narratives through trusted relational channels.

Taken together, the codes grouped in this macro-area reveal that vaccine hesitancy is not solely a matter of ideology or information but is often deeply rooted in experiential knowledge, relational trust, and family-oriented health reflexivity. Personal and intergenerational health histories, as well as everyday encounters with the healthcare system, play a pivotal role in shaping the epistemic legitimacy of parental vaccine decisions.

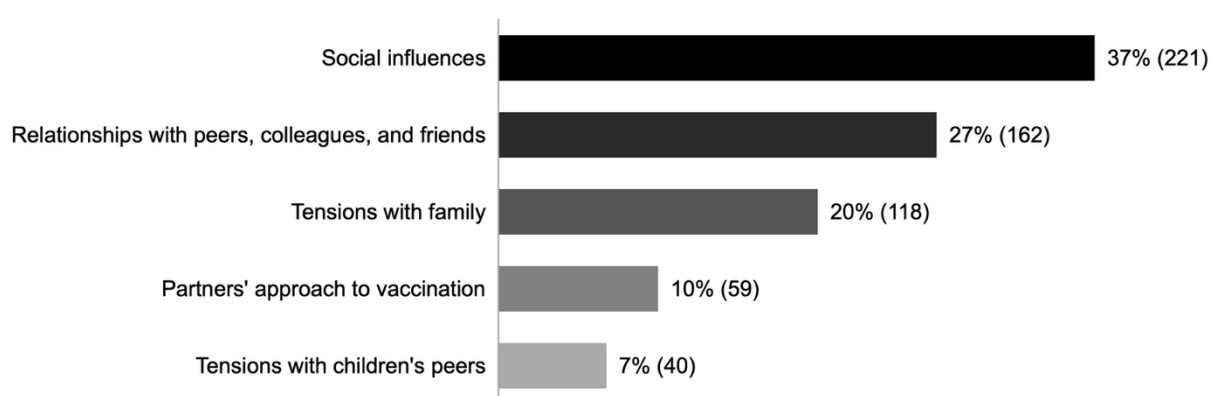
3.2.2.6. Macro-Area VI – Social Relationships and Consequences

The sixth macro-area, Social Relationships and Consequences, accounts for 6% of the total coded segments (601 out of 10,194), illustrating the relevance of interpersonal dynamics and social repercussions within vaccine-hesitant families. This macro-area captures how vaccination choices and public health policies reverberate through social ties, producing tensions, alignments, and experiences of judgment or isolation.

The most frequently coded category within this domain is *Social influences*, which accounts for 37% of all references in this macro-area (268 segments, Fig. 25, the full overview of the distribution of the coded segments is

available in Appendix D). Participants frequently report perceptions of a *social divide* (50%, 133 references), *social pressure and judgment* (31%, 84), and in some cases a strategic *avoidance of vaccine-related conversations* (19%, 51). These accounts illustrate how vaccine hesitancy often entails negotiating one's position within broader social discourses and hierarchies of conformity.

Fig. 25 – Distribution of coded segments within the macro-area Social Relationships and Consequences at the parent codes level.



The second most frequent code is *Relationships with peers, colleagues, and friends* (27%, 193 references). Within this category, participants describe tensions during the pandemic (33%, 64 references), absence of tensions (31%, 60), and changes in post-pandemic relationships (18%, 35), alongside disagreements linked to childhood vaccine choices (18%, 34). These narratives reflect both the polarization of public discourse and the contextual fragility of everyday social bonds.

Tensions with family represents the third most salient category (20%, 143 references). Of these, nearly half concern anti-COVID-19 vaccine or measures disagreements (47%, 67 references), followed by mentions of no family tensions (36%, 52) and childhood vaccine disagreements (17%, 24). These findings highlight how intergenerational dynamics are both a source of conflict and, in some cases, a space of alignment or tolerance.

Although less frequently coded, *Partners' approach to vaccination* still offers valuable insight into intra-couple dynamics (10%, 71 references). In the majority of cases (64%, 45 references), partners were misaligned or initially misaligned, suggesting that divergent views within couples are a common feature of the decision-making process.

Finally, *Tensions with children's peers* represents the least coded category (7%, 47 references) but reveals important symbolic and relational dimensions of parental vaccine decisions. Among these, 35% (16 references) concern COVID-19 stance tensions, 43% (20) indicate no peer-related tensions, and 8% (4) refer to vaccination status tensions. These accounts underline how children, too, are affected by the social ripple effects of parental vaccine choices.

Taken together, the distribution of codes in Macro-Area VI reveals the socially embedded nature of vaccine hesitancy, showing how decisions around immunization resonate across intimate and broader social networks. Participants' experiences shed light on processes of affiliation, distancing, judgment, and disengagement that mark the everyday moral negotiations surrounding health-related choices.

3.2.2.7. Macro-Area VII – Social Labeling and Representations

The seventh macro-area, Social Labeling and Representations, accounts for 9% of the total coded segments (924 out of 10,194), highlighting the central role of symbolic categorization, social judgments, and identity politics in the lived experience of vaccine-hesitant families. This macro-area investigates how individuals and groups are labeled, how these labels are interpreted or contested, and how such symbolic boundaries influence dynamics of recognition, marginalization, or identity negotiation.

The most frequently coded category in this domain is Vaccination labels, which represents 68% of the references in the macro-area (628 segments, Fig. 26, the full overview of the distribution of the coded segments is available in Appendix D). Within this category, the majority of references concern

representations of people who vaccinate (71%, 449 references). These individuals are often depicted as having *succumbed to external pressures* (27%, 122 references), as *uninformed* (19%, 84), as *blind conformists* (14%, 61), or as *authority followers* (16%, 74). Less frequent representations include convinced vaccinators (10%, 43), repented individuals (7%, 33), those afraid of questioning themselves (4%, 19), or simply *disinterested* (3%, 13).

Fig. 26 – Distribution of coded segments within the macro-area Social Labeling and Representations at the parent codes level.



The second most frequent subgroup is the *No-Vax label* (25%, 157 references), with accounts distributed between its application during the pandemic (55%, 87) and in 2017 (45%, 70), especially in relation to the enforcement of Law 119/2017. Less frequently mentioned labels include *Free-Vax* (3%, 17) — typically used to signal informed and autonomous positioning — and *non conforme* (1%, 5), an administrative term employed by the Province of Trento to identify children not in compliance with vaccination mandates (see Section 2.4.1), and discussed as a source of bureaucratic exclusion and symbolic stigmatization.

The second major code in this macro-area is *Negative social perceptions*, which makes up 32% of the references (296 segments). This category captures how labeling translates into social devaluation and exclusion. Within it, nearly half the references concern perceived discrimination (49%, 145 references), followed by stigmatization (36%, 108), hate (9%, 26), and segregation (6%, 17). These accounts often describe strained interpersonal relationships, reputational

damage, and feelings of being unjustly targeted due to one's vaccination stance or perceived non-conformity.

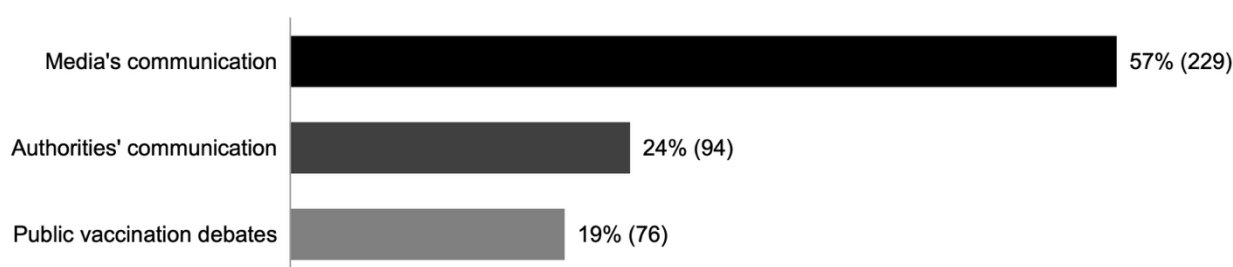
Overall, the patterns emerging from Macro-Area VII illustrate how vaccine hesitancy becomes embedded within wider moral and political discourses of belonging, rationality, and civic virtue. Labels act as powerful classificatory tools, simultaneously marking out boundaries between conforming and non-conforming subjects, and shaping how vaccine-hesitant parents negotiate visibility, legitimacy, and trust across social settings.

3.2.2.8. Macro-Area VIII – Communication and Information

The eighth macro-area, Communication and Information, represents 4% of the total coded segments (399 out of 10,194), reflecting participants' widespread concerns about the role of political, health, and media communication in shaping public perceptions and deepening polarization during the vaccine controversy. This macro-area captures critiques of how information was conveyed, filtered, or manipulated, as well as broader reflections on the limits of public discourse and the perceived absence of inclusive or pluralistic debate.

The most frequently coded category in this domain is *Media's communication* (Fig. 27, the full overview of the distribution of the coded segments is available in Appendix D), which accounts for 57% of macro-area references (229 segments). Within this category, participants predominantly point to the media's role in emphasizing fear of contagion (21%, 47 references), blurring boundaries between mainstream and non-mainstream outlets (19%, 44), and supporting vaccination mandates or policies (12%, 28). Other themes include the marginalization of dissenting views (11%, 26), polarization of the debate (11%, 26), and the circulation of misinformation or "fake news" (10%, 23). A smaller proportion of segments address portrayals of dissent or critical voices (10%, 22) and lack of transparency (6%, 13), contributing to a broader critique of how the media shaped the epistemic landscape of the pandemic.

Fig. 27 – Distribution of coded segments within the macro-area Communication and Information at the parent codes level.



The second most frequent category, *Authorities' communication*, makes up 24% of references (94 segments) and documents participants' dissatisfaction with official messaging. Criticisms focus primarily on communication by political authorities (50%, 47 references), often described as unclear, coercive, or politically instrumental. Additional segments mention misinformation or “fake news” by authorities (26%, 24) and problematic communication by health authorities (24%, 23), reinforcing a perception of institutional unreliability or manipulation.

The third category, *Public vaccination debates*, accounts for 19% of the macro-area (76 segments), with the majority of references centered on anti-COVID-19 vaccination discourse (66%, 50 references). Participants often describe this discourse as aggressive, moralizing, or intolerant of dissent. In contrast, childhood vaccination discourse receives less attention (34%, 26), suggesting that the pandemic context intensified the visibility and emotional intensity of public controversies.

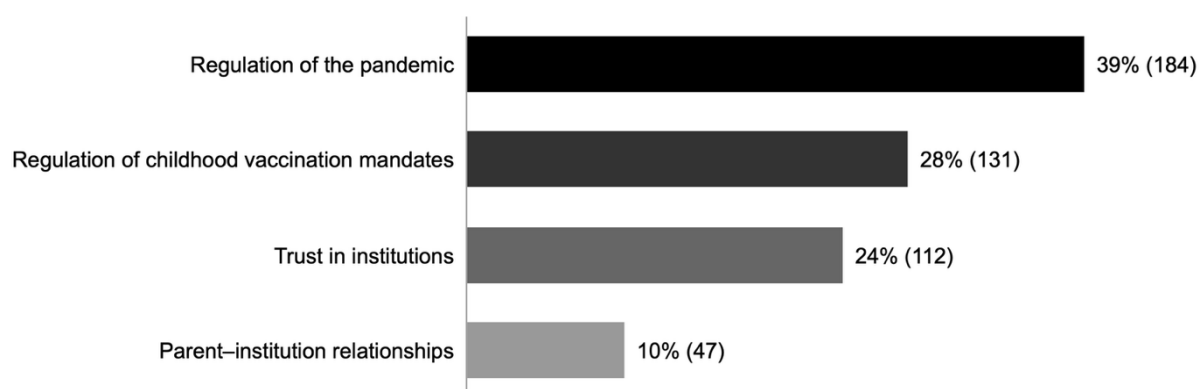
Taken together, the distribution of codes in Macro-Area VIII highlights a shared sense of informational disillusionment. Participants express a perception that official and mediated communication lacked transparency, plurality, and dialogue, contributing to feelings of alienation and epistemic disempowerment. Communication is not simply a background process but emerges here as a constitutive dimension of conflict, shaping how legitimacy, trust, and belonging are negotiated in times of health crisis.

3.2.2.9. Macro-Area IX – Political and Health Institutions

The ninth macro-area, Political and Health Institutions, represents 5% of the total coded segments (474 out of 10,194). This domain captures how vaccine-hesitant parents perceive, interpret, and interact with institutional actors and their decisions — especially in contexts of regulatory enforcement and trust (or mistrust) toward state authorities. The macro-area brings into focus the lived consequences of institutional action and inaction, as well as the broader climate of institutional credibility and responsiveness.

The most frequently coded category is *Regulation of the pandemic*, which comprises 39% of the references in this macro-area (184 segments, Fig. 28, the full overview of the distribution of the coded segments is available in Appendix D). Within this group, participants mostly focus on national-level authorities (76%, 140 references), followed by local (15%, 27) and international institutions (9%, 17). This category encapsulates critiques of how governments handled the COVID-19 crisis, including restrictions, mandates, and perceived failures in public health management. Responses suggest that the pandemic response acted as a key moment of rupture in institutional trust.

Fig. 28 – Distribution of coded segments within the macro-area Political and Health Institutions at the parent codes level..



The second most represented category is *Regulation of childhood vaccination mandates*, with 28% of the macro-area references (131 segments). Here again, national authorities are most cited (57%, 75 references), followed by local (37%, 48) and international levels (6%, 8). Participants reflect on how legal obligations related to childhood vaccinations were framed, implemented, and justified by different levels of government, often describing a punitive or coercive approach and highlighting regional differences.

Trust in institutions accounts for 24% of the coded material (112 references) and reveals divergent evaluations of institutional credibility. Most statements express distrust in political institutions (64%, 72 references), while a smaller share refer to the healthcare system (36%, 40). This category surfaces narratives of perceived manipulation, conflicts of interest, or opaque decision-making processes — especially when scientific or medical authority was perceived as aligned with political agendas.

Lastly, *Parent–institution relationships* accounts for 10% of the macro-area (47 references), focusing on the microsocial dynamics between families and public institutions. Most accounts describe perceived neglect or exclusion (70%, 33 references), including feelings of being unheard, sidelined, or treated as second-class citizens. A smaller number of cases (30%, 14) detail instances of institutional responsiveness, dialogue, or accommodation — although often framed as exceptional or belated.

Taken together, the distribution of codes in Macro-Area IX highlights a fractured institutional landscape, wherein national political authorities emerge as both the most visible and most criticized actors. The accounts underscore how vaccine hesitancy is embedded in broader dynamics of institutional legitimacy, pointing not only to the role of mandates, but also to the quality of public engagement, transparency, and perceived fairness in governance practices.

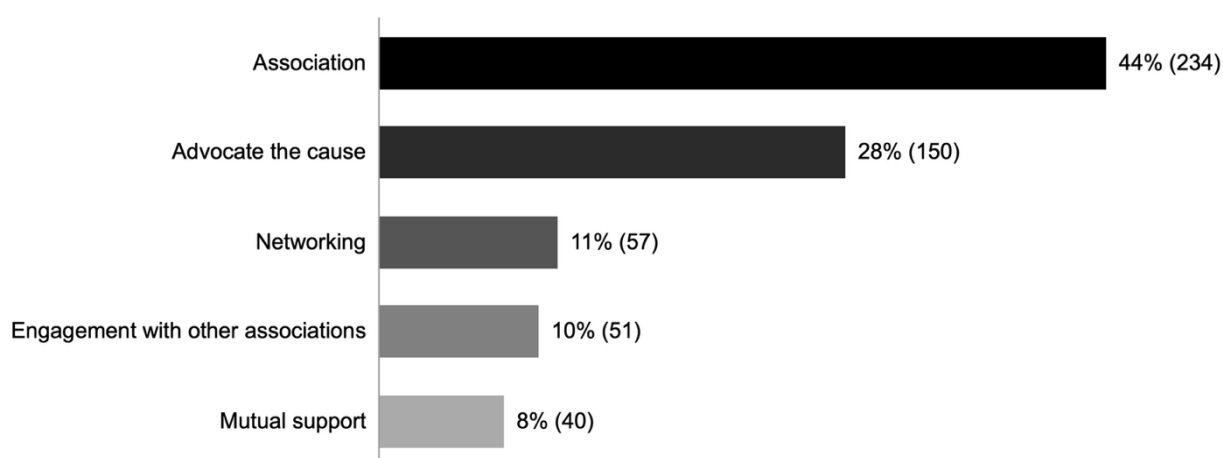
3.2.2.10. Macro-Area X – Mobilizing

The tenth macro-area, Mobilizing, represents 5% of the total coded segments (532 out of 10,194), highlighting the collective dimension of vaccine hesitancy and the significance of organized action, solidarity, and civic engagement. This macro-area sheds light on how families navigate institutional exclusion through participation in formal and informal networks, particularly the association Vaccinare Informati, which plays a central role in many interviewees' experiences.

The most frequently coded category is *Association*, which accounts for 44% of the macro-area's segments (234 references, Fig. 29, the full overview of the distribution of the coded segments is available in Appendix D). This category specifically concerns Vaccinare Informati, the association to which most interviewees are affiliated. The majority of references focus on the association's concrete activities (49%, 115 references), such as providing legal assistance, organizing events, or disseminating information. A significant number of participants described their personal motivations and pathways for becoming a member (25%, 58 references), often linked to feelings of exclusion, the search for support, or the need to protect their parental rights. Other participants reflect on the association's role (22%, 51 references), characterizing it as a symbolic and practical counterpoint to institutional narratives. A smaller proportion (4%, 10 references) mention losing members, pointing to internal tensions, strategic disagreements, or the effects of evolving social dynamics.

The second most frequent category, *Advocate the cause*, represents 28% of the coded material in this macro-area (150 references). It captures how individuals engage in vaccine-related activism, from public communication and information dissemination to efforts aimed at influencing others or defending rights. This advocacy work is often grounded in personal experiences and framed as a form of civic responsibility.

Fig. 29 – Distribution of coded segments within the macro-area Mobilizing at the parent codes level.



The remaining references pertain to *Networking* (11%, 57 references), *Engagement with other associations* (10%, 51), and *Mutual support* (8%, 40). These codes reflect the broader ecology of relationships and collaborations that sustain vaccine-critical positions. While *Networking* emphasizes efforts to build alliances and share resources across individuals and collectives, *Engagement with other associations* denotes interactions beyond Vaccinare Informati, sometimes crossing thematic or political boundaries. *Mutual support* highlights everyday practices of solidarity, caregiving, and emotional sharing among like-minded families, showing how dissent fosters new relational infrastructures.

Overall, Macro-Area X reveals the ways in which vaccine-hesitant parents convert private discontent into collective presence. Mobilization here is not only oppositional but also reparative, offering participants resources, recognition, and a sense of belonging in the face of institutional delegitimation.

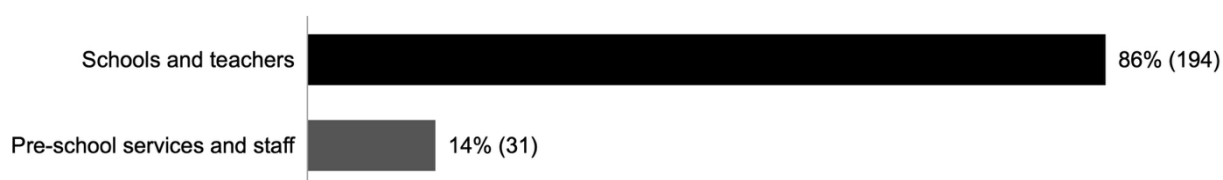
3.2.2.11. Macro-Area XI – Educational Services

The eleventh macro-area, Educational Services, accounts for 2% of the total coded segments (225 out of 10,194), and captures participants' reflections on their interactions with educational institutions and personnel, focusing on how

schools and pre-schools mediate public health regulations, implement mandates, and respond to parental concerns. Though quantitatively smaller, this domain offers a critical lens on the intersection of institutional compliance, educational environments, and parental experiences.

The majority of coded segments (86%, 194 references) fall under the category *Schools and teachers* (Fig. 30, the full overview of the distribution of the coded segments is available in Appendix D), which centers on interactions with primary and secondary schools. Within this category, the most prevalent code concerns *Schools' implementation of pandemic regulations* (42%, 82 references), which highlights how schools applied or enforced COVID-19-related rules such as masking, sanitation, or quarantines. These narratives often point to rigidity, miscommunication, or perceived inconsistencies. This is followed by accounts of *Experiences with primary/secondary schools* (21%, 41) and *COVID-19 experiences with primary/secondary schools* (19%, 36), both of which capture trust in school personnel, children's emotional experiences, and adaptive challenges. Additional subcategories include the *School-level management of vaccination rules* (10%, 19) and *Distance learning and digital schooling* (8%, 16), revealing tensions around documentation practices, pedagogical challenges, and infrastructural gaps during remote education.

Fig. 30 – Distribution of coded segments within the macro-area Educational Services at the parent codes level.



The remaining 14% of references (31 segments) relate to *Pre-school services and staff*. Here, participants discussed how pre-school institutions interpreted and enforced vaccination mandates (*Pre-school-level management*

of vaccination rules, 52%, 16 references), their broader experiences with pre-school environments (*Experiences with pre-school services*, 39%, 12), and how these settings handled pandemic rules (*Implementation of pandemic regulations*, 10%, 3). These segments underscore the role of early childhood education services in shaping trust and institutional navigation for parents of young children.

Altogether, the content in Macro-Area XI reveals that schools and pre-schools are not merely passive transmitters of state policy but active actors in shaping how vaccine mandates and pandemic protocols are experienced at the ground level. Educational institutions become a crucial site of negotiation—between policy and practice, compliance and contestation, institutional authority and parental agency.

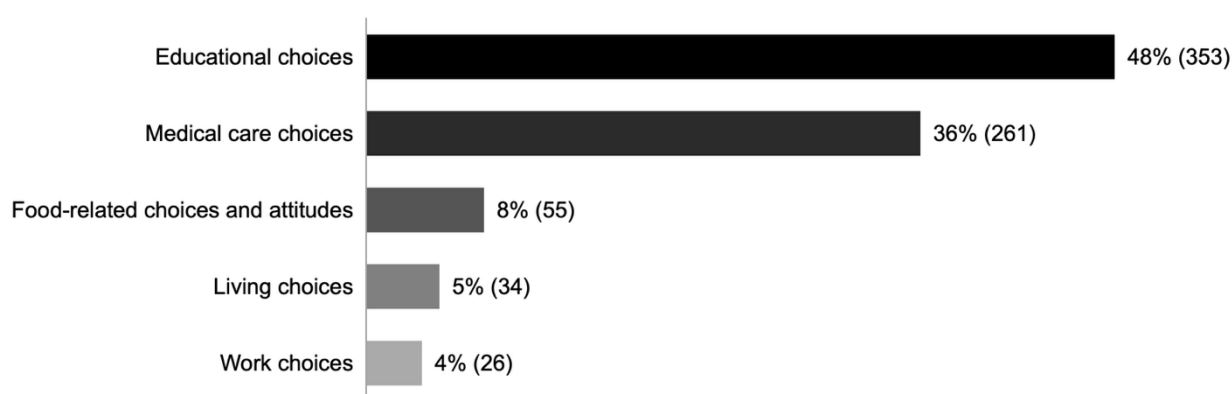
3.2.2.12. Macro-Area XII – Lifestyles

The twelfth macro-area, Lifestyles, represents 7% of the total coded segments (729 out of 10,194), highlighting how vaccine hesitancy is often embedded in broader life arrangements that reflect distinct ethical orientations and parenting values. This domain explores how families reconfigure their daily practices in education, healthcare, food, and work to align with their worldviews and resist institutional pressures.

The most frequently coded category in this macro-area is *Educational choices* (Fig. 31, the full overview of the distribution of the coded segments is available in Appendix D), accounting for 48% of all references (353 segments). Within this category, the largest share pertains to *Alternative options* (58%, 204 references), including homeschooling, forest schools, educational farms, and informal parent-led networks. Many participants emphasized the need for alternative options (34%, 70) as a direct response to the exclusionary effects of Law 119/2017, particularly for children under the age of six. Other preferred solutions included home schooling or “scuola parentale” (15%, 30), parents’ associations (15%, 30), informal groups of parents (14%, 29), and kindergarten or school in the woods (12%, 25). Choices related to public pre-school services

or school account for 16% of references (58), often reflecting compromise rather than ideological alignment. Time-related challenges and organizational burdens were noted under management and time-related costs (14%, 51), and economic costs were referenced in 11% of cases (40).

Fig. 31 – Distribution of coded segments within the macro-area Lifestyles at the parent codes level.



Medical care choices constitute the second largest category within the macro-area (36%, 261 segments), revealing a heterogeneous landscape of health practices. Participants reported turning to complementary and alternative medicine (CAM) in 48% of these references (126), while others expressed more nuanced engagements with conventional medicine (43%, 113), often driven by pragmatic considerations. A smaller subset (8%, 22) discussed the use of homeopathic vaccines and detox remedies as alternatives or supplements to standard immunization protocols.

The remaining categories, while less frequent, contribute to a more comprehensive portrait of everyday life. *Food-related choices and attitudes* appear in 8% of macro-area references (55 segments), often linked to ideals of purity, bodily autonomy, or preventive care. *Living choices* (5%, 34) reflect residential decisions motivated by ecological, educational, or ideological concerns. Lastly, *Work choices* (4%, 26) include career adjustments or reorientations aimed at maximizing parental presence, resisting mandates, or aligning work with ethical and lifestyle preferences.

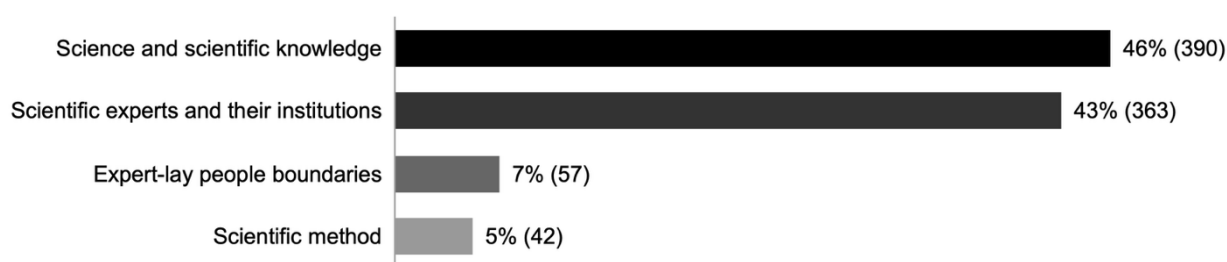
Altogether, Macro-Area XII illustrates how vaccine hesitancy extends beyond biomedical skepticism to encompass a holistic redefinition of the good life — one that privileges autonomy, coherence with personal values, and active disengagement from perceived institutional overreach.

3.2.2.13. Macro-Area XIII – Science and Experts

The thirteenth macro-area, Science and Experts, comprises 8% of the total coded segments (852 out of 10,194), highlighting the centrality of epistemic questions in parents' vaccine-related narratives. This domain explores how participants reflect on the credibility of scientific knowledge, the role of experts, and the boundaries between professional authority and lay reasoning. The material collected under this macro-area reveals a complex landscape of mistrust, re-evaluation, and re-appropriation of knowledge, where scientific legitimacy is continuously scrutinized and negotiated.

The most frequently coded category is *Science and scientific knowledge* (29% of macro-area references, 326 segments), encompassing critiques of the scientific system and debates over epistemic authority (Fig. 31, the full overview of the distribution of the coded segments is available in Appendix D). Within this category, participants particularly emphasized the need for a plurality of voices (20%, 66 references), expressed concerns about scientism (17%, 56), and stressed that scientific knowledge changes (14%, 47), reflecting a reflexive and dynamic understanding of how knowledge is produced and revised. Other recurring topics include the moral intentions of science — captured under benevolence/malevolence (11%, 37) — and calls for independent science (10%, 33) and real science (8%, 26), as opposed to what is perceived as mainstream or corrupted knowledge.

Fig. 32 – Distribution of coded segments within the macro-area Science and Experts at the parent codes level.



The second most frequently coded category is *Trust and credibility issues* (24%, 274 segments), reflecting a widespread concern about the integrity of scientific actors. Key concerns include conflicts of interest (27%, 74 references), the role of media-facing scientists (22%, 60), and perceptions that scientists are hiding or altering information (19%, 52). These codes underline a perception of science as not only institutionally vulnerable but also compromised by political, economic, or reputational factors.

The category *Expert-lay people boundaries* accounts for 16% of the macro-area (184 references). Here, participants assert the empowerment of personal experience or knowledge (72%, 132 segments), elevating intuitive, experiential, or commonsense reasoning as epistemically legitimate — sometimes even superior to formal expertise. A smaller subset (28%, 52) denounces the dismissal of lay knowledge or concerns, often citing feelings of being patronized or excluded from institutional discourse.

Perceived constraints or pressures on scientific experts is another significant theme, comprising 15% of the total (171 segments). This category captures the belief that scientists are limited in what they can say or do due to institutional loyalty, political expediency, or reputational fear. The most frequent subcode here is under pressure (40%, 68 references), followed by not considering alternatives (33%, 56) and not contesting mandates (27%, 47). Together, these indicate a sense of silencing, complicity, or lack of epistemic courage among institutional experts.

Finally, the category *Scientific method* accounts for 12% of macro-area references (142 segments). Most of these segments (77%, 109) involve critiques of methodological failures — including bias, lack of transparency, or selective data use — while a smaller proportion (23%, 33) recognizes scientifically solid practices when participants perceive research as independent, rigorous, or ethically sound.

Taken together, Macro-Area XIII reveals how vaccine hesitancy is closely linked not only to institutional mistrust but also to a broader reconfiguration of epistemic authority. Parents construct alternative hierarchies of knowledge, sometimes rejecting scientific dominance in favor of experiential truth, while at other times demanding more rigorous, transparent, and independent science. This dual stance — critical yet aspirational — sheds light on the nuanced and deeply reflective nature of their relationship to science and expertise.

While the descriptive statistics illustrate the relative weight of each macro-area and highlight patterns of salience across the dataset, they do not in themselves capture the underlying conceptual architecture of the participants' narratives. To facilitate a more analytically robust interpretation, the next Section introduces a set of ten higher-level themes. These themes were developed by systematically grouping related codes and subcodes according to their conceptual coherence, in close dialogue with the theoretical framework outlined in Chapter 1. This thematic framework serves to organize the qualitative material in a way that foregrounds interpretative depth, enabling a more nuanced understanding of how parental experiences, values, and knowledge claims are articulated across the interviews.

3.2.3. Thematic framework

To support the thematic analysis, a set of higher-level themes was developed by systematically grouping the codes and subcodes derived from the full codebook. This process was informed by the theoretical framework outlined in

Chapter 1, which draws on insights from the sociology of science, Science and Technology Studies (STS), and the sociology of health and parenting. Furthermore, the function Code Relations Browser (CRB) in MAXQDA was adopted to further identify patterns between codes and displays based on the frequency of their co-occurrence. The resulting thematic framework consists of ten overarching themes that synthesize the conceptual and analytical affinities emerging from the interview material. Each theme integrates multiple dimensions from participants' accounts, enabling a rich interpretation that connects individual experiences with broader social, political, and epistemic dynamics.

This Section describes each higher-level theme, summarizing its conceptual focus and the types of empirical materials included (see Table 9). These descriptions clarify the analytical structure underpinning the thematic analysis and make explicit how codes were organized and interpreted (the detailed codebook with definitions and illustrative excerpts is available in Appendix C).

Tab. 9 – Summary table presenting the higher-level themes.

Higher-Level Theme	Summary	Key Code References
Reflexive and Individualized Parenting	Parents make vaccine decisions through personalized reflection, grounded in their child's needs, neutral/alternative sources, and integrative health approaches.	I.1.1, I.1.3.3, I.1.2.4–5, XII.5.1–3, I.1.5, I.1.6
Moral Economy of Parenting and Responsibility	Decisions framed as morally responsible, informed, and ethically motivated, balancing individual choice with social responsibility.	I.2.1–3, I.3.1, IV.5.4, IV.5.9, XII.5.3, I.1.4, IV.5.3
Risk Perception and Vaccine Practice	Sense-making of vaccination risk through disease/vaccine risk assessments, critiques, personal experiences, and contextual trust in science.	I.1.3.1–3, IV.1.*, IV.2.*, IV.3.*, V.2.1.*, V.2.6.*, XIII.4.6.8–9, IV.5.1, IV.5.7–8
Rediscussing Scientific Authority and Epistemic Pluralism	Challenges to institutional science, valuing lay expertise, diverse information sources, and visibility of dissenting views.	I.1.2.*, XIII.1.*, XIII.2.*, XIII.3.*, XIII.4.*, VIII.3.5–8, IV.5.5–6, VIII.2.1, VIII.3.4

Biopolitics, Autonomy, and Resistance	Mandates seen as intrusions into bodily/parental autonomy, with resistance framed in moral and political terms.	II.5.4.*, III.4.4, IV.5.5–6, XIII.3.1–3, IV.5.8, X.2, IX.1.*, IX.2.1, IX.3.*, IX.4.*
Experiential Knowledge and Situated Trust	Trust/mistrust shaped by personal and vicarious medical experiences, including AEFI, pregnancy, and healthcare interactions.	V.1.*, V.2.6.*, V.2.2–5, IV.1.12, IV.1.5, V.2.1.*, XIII.3.2.5
Institutional Exclusion and Alternative Pathways	Mandates lead to exclusion from services and reorientation toward alternative educational and social arrangements.	II.5.4.*, XI.1.*, XI.2.*, XII.1.*, XII.1.2.1–7, X.1, X.3.2, X.3.4, X.4, X.5
Contested Public Narratives and Media Representations	Polarization of vaccine debate through institutional/media discourse, stigmatization, and strategic labeling.	VIII.1.*, VIII.2.*, VIII.3.*, VII.2.*, VII.1.3.*, VII.1.4.*, VII.1.1–2, VIII.3.1–3
Parenting and Social Identity	Vaccine choices tied to family relations, identity, and alignment with alternative cultural norms.	VI.1.*, VI.2.*, VI.3.*, VI.4., VI.5.*, VII.1.1–2, VII.1.3.1–2, VII.1.4.*, XII.1.1, XII.1.2.*
Collective Engagement and Mobilization	Collective organization to support members, advocate epistemic pluralism, and influence public discourse.	X.1, X.2, X.3.*, X.4, X.5, XIII.4.6.1–6, XIII.4.6.7, XIII.4.6.10

Reflexive and Individualized Parenting: This theme includes codes describing how parents formulate vaccine decisions through personalized, context-sensitive reflection. It captures their detailed knowledge of their children's needs (I.1.1), their belief in tailored protection strategies (I.1.3.3), and their preference for sources perceived as neutral or alternative (I.1.2.4–5). It also includes personal approaches to medicine, such as combining conventional and complementary therapies (XII.5.1–3), and reflective decisions about one's role as a parent (I.1.5, I.1.6). This theme reflects the sociology of health literature on particularistic approaches to children's health, where decisions are shaped by perceived individual needs. It aligns with Giddens' (1991) reflexive project of the self and Beck's (1992) reflexive modernization, as discussed in Chapter 1,

showing how parents selectively integrate expert and lay knowledge within broader processes of multi-layered reflexivity (Numerato et al., 2019).

Moral Economy of Parenting and Responsibility: Codes under this theme emphasize how parents construct their vaccine decisions as morally responsible, informed, and ethically motivated (I.2.1–3, I.3.1). They also portray vaccination as an individual choice (IV.5.4), or as a socially conscious act (IV.5.9), which ties into broader parental duties of protection and care (XII.5.3). Moments of doubt (I.1.4) and the search for alternatives to vaccination as sole prevention (IV.5.3) are also part of this moral landscape. This theme links to sociological studies of parenting and health responsibility, where decision-making is framed as part of a broader ethical commitment to children's wellbeing. It also aligns with Lee et al.'s (2014) work on parenting culture, which highlights the moralized expectations placed on parents to make informed, responsible, and proactive health choices. In this sense, vaccination decisions are situated within wider cultural narratives about "good parenting" and responsibility toward both the child and society.

Risk Perception and Vaccine Practice: This theme brings together all the ways parents make sense of vaccination risks. It includes their understanding of disease and vaccine risk (I.1.3.1–3), health concerns (IV.1.*), technical doubts (IV.2.*), political/economic critiques (IV.3.*), and reliance on personal medical or COVID-related experiences (V.2.1.*, V.2.6.*). Broader worldviews about trust, safety, and morality in scientific advice are also included (XIII.4.6.8–9), alongside perceptions of reassurance (IV.5.1), context-specific usefulness (IV.5.7), and doubts about rushed processes (IV.5.8). This theme engages with Beck's (1992) risk society and the sociology of health literature, showing how parents' risk assessments combine personal experience, social trust, and critical readings of biomedical narratives. It also aligns with Goldenberg's (2021) analysis of how vaccine hesitancy is shaped not only by scientific risk assessments but by deeper moral and epistemic considerations, underscoring the relational nature of trust in science.

Rediscussing Scientific Authority and Epistemic Pluralism: This theme includes critiques of the epistemic dominance of institutional science and

highlights alternative ways of knowing. It incorporates parents' diverse information sources (I.1.2.*), empowerment of lay knowledge (XIII.1.*), contestations over scientific method (XIII.2.*), and reflections on expert credibility (XIII.3.*, XIII.4.*). Media criticism and calls for visibility of dissenting views are also addressed (VIII.3.5–8), including concerns about faith-based or violent framings (IV.5.5–6) and distrust of institutional communication (VIII.2.1, VIII.3.4). This theme draws on STS concepts such as civic epistemologies (Jasanoff, 2005) and lay expertise (Epstein, 1996), illustrating how parents re-negotiate the boundaries of legitimate knowledge. It also reflects boundary-work (Gieryn, 1999), where the credibility of both mainstream and alternative science is contested.

Biopolitics, Autonomy, and Resistance: Here, vaccine mandates and sanctions are understood as forms of bodily or parental intrusion. The theme includes references to Law 119/2017 and its sanctions (II.5.4.*), job-related exclusion (III.4.4), moral critiques of coercion (IV.5.5–6), and distrust in scientific independence (XIII.3.1–3). It also includes perceptions of being rushed (IV.5.8), moments of advocacy (X.2), and the broader questioning of autonomy under institutional regimes (IX.1.*, IX.2.1, IX.3.*, IX.4.*). This theme aligns with Foucault's concept of biopolitics and Rose's (2007) notion of biological citizenship, framing mandates as exercises of state power over bodies and populations. Resistance is cast as a defence of autonomy and parental authority in the face of institutional control.

Experiential Knowledge and Situated Trust: This theme highlights how personal and vicarious experiences shape parental trust or mistrust in vaccination. It includes interactions with healthcare professionals (V.1.*), experience of adverse events (V.2.6.*), pregnancy and medical histories (V.2.2–5), and emotional reactions such as fear of AEFI (IV.1.12, IV.1.5). Trust in experts is seen as relational, context-bound, and influenced by personal or familial experience (V.2.1.*, XIII.3.2.5). Consistent with Borkman's (1976) concept of experiential knowledge and recent work on trust in science (Trench, 2025; Rowland et al., 2022), this theme shows how lived experiences underpin selective

and conditional trust. Mistrust often functions as reflexive vigilance rather than wholesale rejection.

Institutional Exclusion and Alternative Pathways: The codes here describe how vaccine mandates resulted in exclusion from services and triggered alternative choices. These include educational exclusion due to sanctions (II.5.4.*), the management of mandates by schools (XI.1.*, XI.2.*), educational reorientation (XII.1.*, XII.1.2.1–7), and the support role played by associations (X.1, X.3.2, X.3.4, X.4, X.5). This theme connects with the literature on exclusion and marginalisation in health and education systems, where institutional policies create barriers that reconfigure life trajectories. As shown in studies of vaccine-critical activism (Hobson-West, 2007; Dubé et al., 2021) and civic epistemologies (Jasanoff, 2005), mandates and sanctions are not only perceived as administrative constraints but as forms of political exclusion that prompt collective responses. In this context, parents' shift towards homeschooling or alternative educational paths can be read as a form of health consumer activism (Bastian, 1998) and as a strategy for safeguarding autonomy and value alignment in the face of what they perceive as coercive public health measures.

Contested Public Narratives and Media Representations: This theme captures how public discourse, institutional messaging, and media coverage have polarized the vaccine debate. It includes critiques of childhood and COVID vaccine discourse (VIII.1.*), institutional and media communication (VIII.2.*, VIII.3.*), and experiences of stigmatization (VII.2.*, VII.1.3.*, VII.1.4.*). Labels and portrayals such as 'Free-Vax' and 'Non conforme' (VII.1.1–2), as well as media fear emphasis and transparency concerns (VIII.3.1–3), are also included. The analysis draws on the sociology of public communication of science, showing how narrative framings and labelling processes shape public perceptions and fuel polarisation (Brunson & Sobo, 2017; Vanderslott et al., 2022). As discussed in Chapter 1, the widespread use of the “No-Vax” label exemplifies a process of stigmatization (Goffman, 1963; Link & Phelan, 2001, 2006) that conflates heterogeneous positions and reinforces a deficit-model view of publics (Seethaler et al., 2019). Such discursive strategies not only misrepresent vaccine-hesitant

parents but also risk entrenching social divisions and diminishing opportunities for constructive dialogue (Heyerdahl et al., 2022).

Parenting and Social Identity: This theme examines how vaccine decisions are connected to family dynamics, parental roles, and social positioning. It includes codes on spousal alignment (VI.1.*), peer/family tensions (VI.2.*, VI.3.*, VI.4.), social judgments (VI.5.*), and self-identification through labels (VII.1.1–2, VII.1.3.1–2, VII.1.4.*). It also touches on alignments with alternative educational cultures (XII.1.1, XII.1.2.*). In line with research on parenting culture (Lee et al., 2014; Reich, 2016), vaccination decisions emerge here as part of broader identity work, where parental roles, lifestyle choices, and social affiliations are intertwined. As noted by Leach and Fairhead (2007), these decisions are embedded in moral narratives of responsible parenting and can signal alignment with alternative cultural and educational values. In this sense, vaccine decisions function not only as health behaviors but also as markers of belonging, distinction, and sometimes resistance within specific social worlds.

Collective Engagement and Mobilization: Finally, this theme addresses collective organization among vaccine-hesitant parents. It includes association membership (X.1, X.2, X.3.*, X.4, X.5), efforts to pluralize scientific discourse (XIII.4.6.1–6, XIII.4.6.7, XIII.4.6.10), and the role of associations as both epistemic and civic actors. Drawing on Chapter 1's discussion of health social movements (Brown et al., 2004) and collective action framing (Benford & Snow, 2000), this theme shows how organized activism operates both as mutual support and as a strategy to influence epistemic and policy landscapes.

In order to maintain analytic transparency and to clarify how the thematic framework developed from the coding process informs the structure of the empirical chapters, Table 10 maps each higher-level theme to its primary locus of discussion within Chapters 4–6. While all themes are theoretically interconnected and some reappear across multiple chapters, the table identifies the chapter in which each theme receives its most substantial and sustained treatment.

This mapping serves two purposes. First, it demonstrates how the thematic synthesis of the qualitative data aligns with the empirical focus of each chapter. Second, it shows the analytical progression from the broader thematic framework (developed in Section X.X) to the focused narrative and interpretive choices in the empirical sections. The distribution of themes reflects both the inductive emergence of patterns from the interviews and their theoretical integration with the conceptual lens outlined in Chapter 1.

Tab. 10 – Mapping of higher-level analytical themes to their main discussion across Chapters 4–6.

Higher-Level Theme	Main Empirical Chapter(s)
Reflexive and Individualized Parenting	5
Moral Economy of Parenting and Responsibility	5
Risk Perception and Vaccine Practice	5, 6
Rediscussing Scientific Authority and Epistemic Pluralism	6
Biopolitics, Autonomy, and Resistance	4, 6
Experiential Knowledge and Situated Trust	5, 6
Institutional Exclusion and Alternative Pathways	4
Contested Public Narratives and Media Representations	4, 6
Parenting and Social Identity	4, 5
Collective Engagement and Mobilization	4, 6

Note: While each theme has a primary locus of discussion, several are addressed in multiple chapters when relevant to more than one analytical focus.

As shown in Table 10, some themes are primarily associated with one empirical chapter — for example, *Institutional Exclusion and Alternative Pathways* is discussed in depth in Chapter 4, in relation to the impact of vaccine

mandates on educational and occupational participation. Other themes, such as *Risk Perception and Vaccine Practice* or *Experiential Knowledge and Situated Trust*, traverse multiple chapters, reflecting their centrality to both decision-making processes (Chapter 5) and debates on scientific authority (Chapter 6).

This overlap illustrates that the thematic framework is not a rigid categorization but a relational structure, where individual themes interact in ways that mirror the lived complexity of parental experiences. In several cases, the same theme is approached from different angles in different chapters — for example, Collective Engagement and Mobilization appears in Chapter 4 in the context of resistance to exclusion, and in Chapter 6 in relation to the pluralization of scientific discourse.

3.3. Validity, reliability, and trustworthiness

In qualitative research, the assessment of methodological rigor does not rest on the criteria of validity, reliability, and replicability typically used in quantitative paradigms. Instead, this study adopts the framework of trustworthiness proposed by Lincoln and Guba (1985), which comprises four key dimensions: credibility, transferability, dependability, and confirmability. These criteria are grounded in an interpretivist epistemology and are designed to ensure that the research process and findings are both methodologically sound and epistemologically coherent.

Credibility refers to the plausibility and believability of the findings from the perspective of the participants and the broader context of the study. To enhance credibility, this research triangulated data from semi-structured interviews and participant observation, enabling cross-validation of emerging insights. Moreover, the coding and theme development processes were supported by extensive memo writing and attention to contextual cues in the interviews, further grounding the findings in participants' lived experiences. Transferability concerns the extent

to which the findings may be relevant or resonant in other settings or contexts. Rather than seeking generalizability, this study provides thick descriptions of the research context, participant profiles, and analytic processes, enabling readers to make informed judgments about potential applicability beyond the specific case of Free-Vaxxer parents. Dependability addresses the consistency and transparency of the research process over time. This study ensured dependability through the detailed documentation of analytical procedures, including the construction of the codebook, criteria for code application, and iterative coding cycles. The use of qualitative analysis software (MAXQDA) further supported systematic data management and traceability. Confirmability pertains to the degree to which the findings are shaped by the data and not unduly influenced by researcher bias. Confirmability was strengthened through reflexive engagement at multiple stages of the research, including the explicit documentation of theoretical assumptions, positionality, and potential interpretive influences. Regular memoing and iterative review of coding decisions also contributed to this goal. Together, these criteria serve to enhance the robustness and transparency of the study, ensuring that the knowledge claims generated are both contextually grounded and methodologically accountable.

This chapter has detailed the methodological foundations of the study, explaining how the research design, data collection, and analytical strategies were tailored to address the complexity of vaccine hesitancy within organized parental contexts. The use of semi-structured interviews and participant observation provided complementary perspectives on participants' beliefs, experiences, and practices, while the development of a 13-macro-area codebook enabled systematic data categorization. The integration of qualitative content analysis and thematic analysis within a multi-method framework ensured that the study could map both the frequency and distribution of key topics and the deeper patterns of meaning underpinning them. Considerable attention was devoted to maintaining methodological transparency and rigor, operationalized through Lincoln and Guba's (1985) trustworthiness criteria: credibility, transferability, dependability, and confirmability.

The subsequent chapters present the empirical findings derived from these methodological procedures. Organized according to the higher-level thematic framework developed in Section 3.2.3, each chapter examines a distinct dimension of the research questions while also showing the interconnections between them. Chapter 4 begins by analyzing the social consequences of vaccine mandates for Free-Vaxxer families, focusing on experiences of exclusion, adaptation, and collective mobilization, and situating these within broader debates on parental autonomy, health governance, and civic participation.

CHAPTER 4

The social consequences of vaccination mandates on non-compliant families

Introduction

Drawing on the data collection and analytical strategies outlined in Chapter 3, this chapter examines the social consequences of vaccination mandates for Free-Vaxxer families, focusing on two key moments: the 2017 childhood immunization requirements under Law No. 119/2017 and the exceptional measures introduced during the COVID-19 pandemic. Together, these moments offer a comparative lens for tracing how state-citizen relationships in public health evolve, and how institutional rules reshape everyday life.

While vaccination mandates are often presented as straightforward instruments to protect population health, an STS perspective reveals their dual role as social and political instruments. By giving scientific knowledge legal and institutional force, mandates extend their reach beyond healthcare decisions, regulating access to education, employment, and public spaces. In doing so, they become embedded in the everyday governance of family life — shaping parental identities, reconfiguring relationships, and influencing life trajectories. As Shore and Wright (1997) note, policies do not merely regulate behavior; they intervene in social worlds, producing new categories of belonging and exclusion.

The analysis draws primarily on the thematic clusters of *Institutional Exclusion and Alternative Pathways*, *Biopolitics*, *Autonomy*, and *Resistance*, *Parenting and Social Identity*, *Contested Public Narratives and Media Representations*, and *Collective Engagement and Mobilizations*. These themes reveal how non-compliant families experienced mandates as mechanisms of

institutional exclusion, moral and political encroachment, and social marginalization, while also showing the strategies they developed to adapt, resist, and create alternative pathways.

First, mandates generated institutional and material consequences — such as school exclusion, fines, job loss, and restrictions on public space — that concretized biomedical authority through rules and sanctions. These structural effects reverberated through social networks, reshaping daily routines and compelling parents to navigate new bureaucratic and legal challenges.

Second, these institutional constraints spilled into socio-relational dynamics. They strained family relationships, fueled tensions with peers and colleagues, and triggered community pressures, often intensified by compliance checks and pandemic documentation. In these contexts, many parents practiced reflexive vigilance (Rowland et al., 2022; Hendriks et al., 2016; Van de Walle & Six, 2014) to decide when, where, and to whom they would disclose their views or vaccination status, aiming to preserve harmony and protect social ties.

Third, mandates carried profound symbolic and identity-related consequences. Public labelling — from “No-Vax” to “non-compliant” — and the associated stigma co-produced by institutional categorization and media discourse (Douglas, 2005; Ward et al., 2019) defined moral boundaries between responsible and irresponsible citizens, shaping how dissent was recognized or delegitimized. Parents responded in varied ways, from reclaiming discursive space through alternative labels like “Free-Vax” to rejecting categorization altogether.

In facing these challenges, parents mobilized adaptive and resistant strategies — from avoiding disclosure to creating informal support networks and engaging in grassroots advocacy. The case of Vaccinare Informati illustrates how collective organization can act as an alternative knowledge infrastructure (Jasanoff, 2005; Wynne, 1992), sustaining resilience through mutual aid, shared expertise, and locally grounded civic action.

Rather than functioning solely as neutral public health tools, vaccination mandates emerge here as points of articulation between science, law, and everyday life, where competing norms, responsibilities, and interpretations of care are negotiated. They reveal the tensions between the universalizing logic of biomedical governance and the relational, situated forms of reasoning that shape families' health decisions (Leach & Fairhead, 2007; Pols, 2014), and expose the challenges of governing health in contexts marked by social pluralism and differentiated trust in institutions (Tomasi, 2017; Ward et al., 2022).

4.1. Institutional exclusion and life reconfigurations

The most immediate and tangible effects of vaccination mandates were institutional. Whether through pre-school enrolment restrictions introduced by Law No. 119/2017 or employment limitations tied to COVID-era mandates, families who chose not to comply encountered formal barriers to participation in key areas of public life. Yet institutional exclusion rarely ended at the point of legal sanction. For many, it set in motion a broader reorganization of everyday life, prompting difficult decisions about children's education, parents' employment, and the reshaping of community networks.

This Section examines how mandates, by linking compliance to access, transformed not only opportunities but also the conditions under which families navigated schooling, work, and public participation. It begins with the changes introduced by Law No. 119/2017, which vaccine-hesitant parents experienced as a critical turning point: the exclusion of non-compliant children from pre-school services and the imposition of economic fines created immediate material consequences, but also far-reaching social, political, and emotional tensions. These early experiences would later inform how families interpreted and

responded to the broader, more pervasive restrictions introduced during the COVID-19 pandemic.

4.1.1. Childhood vaccination mandates

Law No. 119/2017 constituted a significant shift in the governance of vaccination in Italy (see Section 2.1). Before its enactment, while four⁶¹ vaccines were formally mandated, the regulatory framework lacked stringent enforcement mechanisms. Sanctions for non-compliance were seldom applied and were often interpreted as limited deterrents, allowing room for strategic non-adherence with relatively low social or legal consequences (Attwell et al., 2021; Attwell, Navin, et al., 2018).

Before the enactment of Law No. 119/2017, while four vaccines were formally mandated, the regulatory framework lacked stringent enforcement mechanisms. In the 2000s, sanctions for non-compliance were limited to economic fines,⁶² which were often perceived as a bureaucratic nuisance rather than a significant deterrent. Furthermore, the absence of exclusion sanctions for non-compliance also meant that non-vaccinated children could still access early childhood education services despite their vaccination status. Many Vaccinare Informati members interviewed — most of whom had at least one child before the law's enforcement — recalled this earlier period as marked by greater institutional flexibility and a more respectful attitude toward parental choice:

“So we went [to the vaccination hub]. At the time, no one asked you anything; maybe they asked me two questions, but nothing serious. My husband and I signed [the liability waiver for choosing not to vaccinate] and that was the end of it. [The child] could go to kindergarten.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 9)

⁶¹ Anti-diphtheria, anti-tetanus, anti-polio, and anti-hepatitis B.

⁶² In the Autonomous Province of Trento, the economic fine was suspended in 2012 as part of the “Provincial Immunization Promotion Plan for the Province of Trento” (Resolution of the Provincial Council of Trento no. 17 of 13 January 2012).

“At that time, back in 2010, the situation was very calm, meaning there was no [pressure to vaccinate]... In fact, it was handled in a very peaceful manner.” (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 11)

“Faced with the vaccination requirement [of 2017], we were also negatively surprised by the Province's reversal from a stance that was much more in line with respect for people, which, let's say, was previously possible even if you had to pay the fine.” (Alice, 42 y.o., 2 children, unvaccinated – Pos. 15)

This relatively lenient regulatory environment formed the baseline against which parents later assessed the post-2017 changes. The shift was not only legislative but also symbolic — from a system perceived as negotiable to one marked by strict enforcement, exclusionary measures, and intensified social pressure. Understanding this contrast is crucial to comprehending the perceived emotional and political significance of the “after” period.

The enactment of Law No. 119/2017 marked, in the eyes of many interviewees, a profound shift in the State's approach to childhood vaccination. For some parents, it arrived “like a bolt out of the blue” (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15); while for others, signs of a change of direction were already in the air in the years before 2017. Whether it was perceived as an unexpected or a pre-announced measure, all the parents interviewed agreed that it was economic and political interests that made Italy the leader in the vaccination strategies back in 2014, leading to the creation and implementation of this law.

“Because even in 2017, something was already brewing. They gradually came to the decision in 2017. In the end, these are all political and economic decisions that have nothing to do with healthcare. Unfortunately, that's how it is”. (Sara, 58 y.o., 2 children, unvaccinated – Pos. 99)

What had previously been perceived as an area of greater parental choice was now reframed through the lens of stricter legal obligation, backed by sanctions and direct consequences for non-compliant children's (i.e., partially vaccinated or unvaccinated) access to early education. Several parents described this as a “before and after” moment, in which the relationship between

families and public institutions was redefined. The law's enforcement mechanisms were interpreted not merely as administrative measures but as coercive tools that curtailed personal autonomy in health-related decision-making.

"Personally, I don't like the interference of the collective entity of the State in the personal sphere, so this thing is absolutely not okay with me. [...] but what affects me more is the psychological pressure exerted by the State, which wants to encroach on the personal sphere, on the body, which is [inviolable]". (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 30)

Parents repeatedly framed the change as a transition from dialogue to imposition. While some acknowledged that vaccination mandates had existed in Italy in the past, they emphasized that the new law linked compliance directly to children's social participation in social life (see 4.1.1.1), thereby transforming the meaning and stakes of non-compliance. Thus, this association between health decisions and educational rights was perceived as unprecedented and deeply troubling. It was not only the legal content but also the framing of the measure — presented as urgent, necessary, scientifically supported, and non-negotiable —, that shaped perceptions of an abrupt hardening of State policy.

"But overnight, with the Lorenzin decree, I found myself saying: okay, we're going from three to ten or eleven [vaccines]. At first, they were even talking about fourteen mandatory vaccines, which is crazy... I looked outside and said, I don't see any dead bodies on the street, honestly [laughs]. I don't see any pandemics wiping us out. I couldn't understand the reason for all this." (48 y.o., 3 children, unvaccinated – Pos. 15)

Among vaccine-parents, the most controversial aspect of Law 119/2017 is the rationale behind the penalties for non-compliance. Parents view the exclusion of unvaccinated children aged 0-6, institutionally justified by the potential danger to public health, and their subsequent reintegration into the school system at ages 6-16 as contradictory and as evidence that the law is not primarily aimed at protecting public health.

“It has nothing to do with health. Absolutely nothing [...]. In my case, I paid the fine. Okay, now it's as if I had vaccinated my children [they can go to school]. So, it has nothing to do with health, absolutely nothing.” (Sara, 58 y.o., 2 children, unvaccinated – Pos. 51)

“They have excluded healthy children from kindergarten overnight. I mean, they went the year before. And the year after? But what happened when they went to kindergarten? My child went to kindergarten, even though he/she wasn't vaccinated. And what happened? Nothing! And the following year, he/she couldn't go. Why?! Is it a health issue or something else? This was very, very sad, very bad [...].” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 17)

“I told them [the other parents] about the fine: ‘Does this seem normal to you?!’. If I pay the fine, [the child] is good to go, so where is the health risk? Where is the problem?” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 53)

Furthermore, the fact that the exclusion only affected the pre-school age group (0-6 years) encouraged vaccine-hesitant parents with children already in school — and therefore only affected by the financial penalty — to take a less strong stance.

Beyond the material consequences, interviewees described the law as carrying a strong symbolic message: non-compliance was not simply discouraged but rendered socially and institutionally undesirable (see Sections 4.2. and 4.3). Several participants used terms such as “threat”, “constraint”, “blackmail”, or “punishment” to capture the emotional and psychological charge of this shift, emphasizing that it fostered feelings of resentment, mistrust, disillusion, and great uncertainty. This was particularly acute among vaccine-hesitant parents who had previously navigated the system without direct conflict, and who now found themselves positioned in open opposition to institutional norms.

“The moment when [the discussion on mandatory vaccination] began was [among the most] difficult: when the decree-law was debated, there was a lot of media pressure, and the [mediatic and institutional] buzz was a bit [harsh and overwhelming]... well, that was because I wasn't psychologically ready.

So, that period was particularly difficult. Then, after that, there was still a year of back and forth, a power struggle, with the institutions creating pressure [to comply].” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 11)

The change also reconfigured the temporal horizon of parental decision-making. Whereas, before 2017, choices could be more easily revisited and adjusted over time, the mandate imposed a perceived immediate and binary decision — comply or face exclusion — at a moment when children were entering or continuing their path in early education. This temporal compression intensified the emotional weight of the decision and left little space for gradual negotiation or trust-building between families and healthcare and political institutions.

Interviewees’ accounts reveal a complex perception of how different levels of authority — local, national, and international — handled the implementation of Law No. 119/2017. At the national level, the Ministry of Health and the central government were seen as the primary drivers of the mandate, setting a uniform legal framework that left little space for negotiation. For many parents, the tone of national communication was perceived as prescriptive and uncompromising, presenting compliance as the only acceptable choice. Some noted that the framing of the law by political leaders and health officials positioned it as a necessary corrective to a public health crisis, leaving little room for public debate or recognition of parental concerns. This approach was interpreted by several participants as deliberately narrowing the scope of acceptable positions and delegitimizing dissent.

International actors and drug regulatory agencies — such as the World Health Organization (WHO), the European Medicines Agency (EMA), and the Italian Medicines Agency (AIFA) — were occasionally mentioned in parents’ narratives, usually in relation to the broader policy environment in which Law 119/2017 was introduced. For some, these bodies — presented as directed by private interests (including those of pharmaceutical companies) — were seen as exerting indirect influence on national policy, providing legitimacy and external pressure for the adoption of stricter vaccination requirements. While references to these actors

were less frequent, they were often framed as part of a perceived global alignment toward more coercive vaccination governance.

“So [Law No. 119/2017] seemed like a rush job. That was my impression. To be able to introduce as many vaccines as possible right away. I don't even understand the reason for it, I don't know if there are political or economic agreements between pharmaceutical companies, AIFA, etc. And it seems like rushing some vaccines that make no sense, such as the one for hepatitis B.” (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15)

While Law No. 119/2017 established a uniform national vaccination framework, interviewees in the Autonomous Province of Trento emphasized that local authorities adopted an even stricter enforcement approach. Participants described Trentino as “wanting to be first in line” in applying and expanding sanctions for non-compliance, thus adopting a stricter approach compared to that of the Autonomous Province of Bolzano.

“Well, with the association [Vaccinare Informati], we tried several times to engage in dialogue... on a few small occasions, there was some discussion [laughs], but then they just carried on with what they were doing. I mean, the decisions had probably already been made, I don't know what prompted them to push so hard. If it was due to this feeling that still persists in the Autonomous Provinces of Trento and Bolzano of always wanting to be top of the class [laughs], to show their efficiency and so on. And beyond the fact that there was a starting point, that is, the system here was already more computerized, so it was possible to take a whole series of actions that in the rest of Italy, even if there had been the will to do so, were not possible. However, they were the first to issue fines, which was not done in South Tyrol. Now they have also started imposing sanctions on those who submitted a written defense, so let's say they are picking up where they left off in 2017. And I don't know, I mean, I can't explain why they chose to take such a hard line.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 59)

According to all the interviewees, this more intransigent approach to non-compliance is indicative of a subservience to the national government rather than an exercise in autonomy.

“I don't know where they forgot about autonomy, because they could have really [changed things]... A provincial council with a majority from the same political party: they could have said, ‘But ours is an Autonomous Province, we choose to do this and that's what we'll do.’ Instead, in some cases, they did even worse than the national decisions. [...] there was subservience on the part of Trentino, on the part of our Trentino politicians”. (Sara, 58 y.o., 2 children, unvaccinated – Pos. 45)

Vaccinare Informati association was particularly active in advocating against the increased sanctions introduced by the Province — i.e., the suspension of monthly economic benefits for non-compliant families and the exclusion of children not fully vaccinated from summer camps (see Section 2.4.1). Thanks to their pressure and intervention with provincial authorities, the exclusion of non-compliant children from summer camps was overcome.

“I remember that there was also the issue of summer camps, which at one point the Province of Trento had decided to prevent ‘non conformi’ [non-compliant, a specific term used by provincial authorities] children from attending. However, that was resolved because we also took action with the association, we raised the issue with a couple of provincial politicians, and they backed down. So, in the end, the child was able to participate in the summer camps.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 73).

The broader heightened Province's strictness contributed to a perception of Trentino as a particularly inhospitable environment for non-compliant families, amplifying the sense of urgency and pressure to either comply with vaccination mandates or seek alternative educational arrangements. Vaccine-hesitant parents, in particular, described feeling more closely monitored than in other regions, with local institutions perceived as active agents in identifying and managing non-compliant families rather than as intermediaries between citizens and national policy.

Taken together, these accounts suggest that parents did not experience the mandate as a singular, top-down imposition from Rome, but as a multi-level governance process in which local and national authorities interacted — and, in some cases, reinforced each other's authority — under the broader umbrella of international health policy. This layering of institutional influence was often interpreted as amplifying the rigidity of the mandate and narrowing the scope for individual negotiation or local adaptation.

4.1.1.1. Sanctioning non-compliance: Pre-school exclusion and economic fines

Parents' accounts indicate that the enforcement of Law 119/2017 was not experienced solely as a central or local government action, but as a process mediated through educational institutions, where the attitudes and choices of staff could strongly influence how exclusion was felt. At the pre-school level, families often described receiving formal notifications about non-compliance, accompanied by deadlines for submitting vaccination certificates or proof of exemption. While the language of these communications was typically administrative, their delivery could feel intimidating, especially when coupled with reminders about impending exclusion.

Several parents recalled a lack of solidarity from pre-school staff, who were perceived as enforcing rules without concern for the child's inclusion or emotional well-being. For some, the absence of support or advocacy from teachers reinforced the sense that their child's exclusion was treated as a bureaucratic inevitability rather than a situation warranting dialogue or care.

"They handled it as they wanted to handle it. They didn't really do much, in fact, I would say nothing at all, to allow the excluded children to attend. They said it was the families' choice, that families could choose differently, and the school would be open to them too. [...] But you know how it is, they say it's a personal choice and you have to accept the consequences, that's what they said. It's not like they did anything to help these families. [...] So [the law] was accepted and they didn't even bother too much about it, with the consequent

decline in enrollment and everything else. Because there are a lot of excluded children, especially in this area. [...] But here, quite a few [children] were left out, quite a few were left out. But I didn't see that they were worried [...]. No." (Irene, 52 y.o., 2 children, unvaccinated – Pos. 17)

"Terrible. Terrible. [They handled the exclusion] as if nothing had happened, quietly. She went there [to kindergarten], and then she didn't go anymore. No one asked why, no letter, nothing, no teacher saying, "Look, I'm sorry for you," no phone call, nothing. Do you know when you walk down the street and there's a dead body and you just keep going? That's how people are now, totally indifferent, inhuman, no empathy at all, no 'Well, that's the way it is, what can I do about it?'. That's how it is. And unfortunately, this passive attitude is triggered by the whole system, a system in which people feel powerless: 'Well, that's the way it is, what can you do about it?'. [...] This is what worries me so much." (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 37)

In primary and secondary schools, implementation was more uneven, partly because the legal consequences for non-compliance were less immediate. Parents reported periodic checks of vaccination status and follow-up letters from school administrations. Some institutions acted mainly as intermediaries, relaying instructions from local health authorities without comment — a stance interpreted by some as neutrality, but by others as indifference to the challenges faced by non-compliant families. In other settings, staff were perceived as actively encouraging compliance, invoking arguments about public health and collective responsibility, which could intensify feelings of pressure.

"Well, let's say [the schools] complied with the law... then it depends on the school, [...] but in general they complied with the order they received. And then, too, the sensitivity of the school administrators made a difference [...]: in whether or not to request health data or in addressing [the issue] in a certain way. In general, however, they tried to respect privacy [...], in short, there was a certain respect, not to go too far." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 113)

“In educational institutions, there is a Pontius Pilate-style washing of hands. ‘If they say so’, they are mere executors, so they stand aside without taking a critical stance and simply pass on the paperwork. They carry out what they are told to do by those at the top, and that’s it, they go ahead with their procedures. It is clear that in some elementary schools, there is a certain unfairness in trying to get as many people as possible vaccinated through this phobia, so that first, perhaps, a threatening letter always arrives from the school stating that one is subject to vaccination obligations until the age of 16 and must therefore comply with vaccination obligations. However, no one says that if you don’t comply, there is no problem with school attendance. [...] So there is both a bit of indifference, i.e., not wanting to compromise oneself to keep them in school, and a bit of what we might call ‘dirty tricks’, a bit of ambiguity in trying to get as many people as possible vaccinated, in my opinion.” (Lorenzo, 43, 2 children, unvaccinated – Pos. 38)

Through Vaccinare Informati’s activities, the not-so-clear communication by the schools about the absence of consequences for school attendance based on the vaccination status, which was highlighted by Lorenzo’s words, was solved. This has constituted an important achievement for the association, a necessary step to provide accurate information to families who had decided not to comply (or only partially) with the national vaccination schedule.

“Until recently, when it came to enrolling in elementary and middle school, they [the schools] would send a letter explaining that children could not attend school unless they were vaccinated, but that is not true. We know very well that in the Lorenzin law, as bad as it is, there are two sentences — the paragraph and the article [Article 3bis paragraph 5] — that make it clear that children can still enroll and attend school. Starting this year, this important clause has been added, even if it is at the bottom of the letter, even if it is in small print, but it is there. So let’s say that thanks to pressure, including from our association, we wanted at least that clarification, which we felt was important for those who have a first child starting elementary school for the first time and may have some hesitations. [...] No, they are unfair; it is clear that they are unfair. They say they are compulsory, and that’s how it is.” (Beatrice, 53 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 53)

Across both pre-school and school settings, parents noted that the way rules were communicated and enforced could shape their relationship with the institution. When staff appeared indifferent to the principle of inclusion or disengaged from the social consequences of exclusion, this could deepen feelings of alienation and mistrust, reinforcing the perception that educational institutions had aligned themselves with exclusionary state policy rather than with the inclusive values they were expected to uphold.

“Ah, that [the exclusion] is extremely discriminatory, that's a terrible thing: how can you exclude children from [pre-]school because [they're not vaccinated]? How can you do that? I mean, it's unbelievable, something I would never have expected. Children are excluded because, well, who knows why. Then they talk about inclusion, all this nice talk: ‘school must be inclusive’, but they're the first ones to exclude them.” (Edoardo, 64 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 27)

Among the sanctions introduced by Law 119/2017, the exclusion of unvaccinated children from early childhood education was the one most often described as disruptive to family life. Parents framed this measure as an infringement on children's right to education and socialization, emphasizing its immediate and visible consequences. For those who valued early education as a formative experience, exclusion was perceived as a form of institutional punishment directed at the child for the parents' choices.

“Oh yes, we were very affected [by the exclusions]. Yes, because our [third child] skipped the last year of kindergarten; the child was excluded because of our choice.” (Nora, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 7)

“But [the law] is unfair. It's definitely not fair. It deprives children of their sacred right to socialize. I'm not talking about school yet, because we're still in the pre-school period [in terms of exclusions], but socializing: being with their peers, playing, growing up. I mean, there are stubborn parents like us, but we can't penalize the child at this level. Accept the child anyway. Penalize the parents, fine them, write them... I don't know, whatever you want. But let

the child play with their peers. This is truly violence against children. That's what I think". (Giorgio, 62 y.o., 3 children, vaccinated, partially vaccinated, and unvaccinated – Pos. 15)

In practical terms, exclusion required families to reorganize childcare arrangements, sometimes on short notice, with significant implications for parents' work schedules and income.

"Ah, it was stressful [the introduction of vaccination mandates] because so many points of reference fell away. The kindergarten is ultimately an important point of reference because if a family wants to have stable jobs, both husband and wife, a kindergarten is important. Finding yourself from one day to the next without a place [at the kindergarten], without people to entrust your child to, is difficult. [...] And yes, it was hard." (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 39)

Economic and work-related implications that, for other vaccine-hesitant parents, constituted an insurmountable obstacle. The high costs associated with identifying alternative childcare options and the necessity of dual income to support the family led some of them to acquiesce to the vaccination requirements.

"If there were no obligation, what would I have done? I think I would have vaccinated them anyway, spreading the vaccinations out even more over time, I think... So [with the vaccination requirement], I would say no, I won't vaccinate them. But I need to have them in a facility. For daycare, luckily, I have grandparents who can look after them" (Chiara, 38 y.o., 3 children, vaccinated)

"And fortunately, we consider ourselves lucky to be able to find these solutions and afford them. Because we know that not all families can do this, and we know families who have given up and vaccinated their children because they couldn't manage alternatives that are entirely at their own expense." (Michele, 48 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 29)

“Well, exclusion is [laughs], I don't think I can find the words because for me it just can't exist. For whatever reason, I find the exclusion of children to be a very heavy punishment. [...] On the other hand, however, from other points of view, if we want to put ourselves in their shoes, it was certainly a winning strategy. I mean, it's obvious that from a purely human point of view, I find it despicable. But this [strategy] allowed them to achieve their goal. And they knew it because a working family, I mean, you put them right [back to the wall]... And there must have been many who vaccinated their children, understandably, for this reason. So, from a strategic point of view, it makes perfect sense: they chose the winning strategy [Laughs]. Battles and wars are made up of strategies, so I raise my hands, they chose the right one.”
(Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 35)

The monetary sanction for non-compliance was perceived in more ambivalent terms. For some parents, the fine was a manageable expense that they chose to absorb as part of maintaining their stance on vaccination. For others, particularly those facing economic constraints, the threat or imposition of the fine, along with the costs of children's exclusion, were among the decisive factors in initiating vaccination. In these cases, the decision was described not as a change of conviction but more as a pragmatic but thoughtful and necessary calculation. While materially less disruptive than exclusion from school, the fine carried its own symbolic weight. Several participants viewed it as a form of state “blackmail,” in which economic pressure was used to override parental autonomy in health decisions. Others criticized the fine as an additional inequitable sanction, affecting lower-income families while leaving wealthier households relatively unscathed.

“I mean, in my opinion, fines are wrong. They say ‘Okay, I'll push people, take their money, and then they'll get vaccinated’. [...] It's true that I have a lot of children, but I could have bought a car by now with all the money I've spent on kindergarten [...]. I don't agree with fines. Some parents, in the end, because they don't have the financial resources, had to vaccinate against their will, or there are those who could pay the fine and went ahead and spent money to be able to have a service similar to kindergarten and nursery

school.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 25)

Parents often discussed the exclusion and the economic fine together as components of a single coercive framework. Both were seen as measures designed to restrict the scope of parental choice by attaching tangible costs — social and/or economic — to non-compliance. In this way, the sanctions reinforced each other. Indeed, on the one hand, exclusion heightened the emotional, logistical, and economic pressure on families with younger children. On the other hand, the fine added further financial strain to families already paying for the alternative educational options and extended financial disincentives into later stages of schooling. Together, they embodied the law’s shift from persuasion to compulsion, and, in the eyes of many interviewees, marked a fundamental change in the role of the State in personal health decisions.

4.1.1.2. Finding a solution: The creation of alternative options

The emotional impact of exclusion extended beyond logistical concerns. Interviewees spoke of feeling “forced out” of public spaces and institutions. They described it as an injustice to be treated as second-class citizens, despite being required to pay taxes even for services — i.e., public nursery school and kindergarten — that they cannot benefit from.

“I shouldn’t be forced to find my children the alternative to the alternative to the alternative. I live in a civilized society, I pay taxes, I am a citizen like everyone else, and I am not a second-class citizen. I pay for services, even those I cannot use. I mean, no thanks. So you take away certain things because I can’t benefit from them? Fine, but then I won’t pay anything.”

(Dalila, 40 y.o., 2 children, unvaccinated – Pos. 47)

All vaccine-hesitant parents affected by their children’s exclusion responded by seeking or creating alternative educational options, such as homeschooling or small parent-led initiatives, which they described as spaces of relatively

increased autonomy. While these alternatives were sometimes *ex-post* embraced as positive developments towards alternative educational approaches, they were also recognized as an unavoidable consequence of exclusionary policies that narrowed parents' options within the main educational system. The exclusion of unvaccinated children from early childhood education has indeed created an urgent and often abrupt need for alternative arrangements. For many families, this necessity arose with little advance warning, compressing the time available to research, evaluate, and secure viable options. Parents described the process as stressful, time-consuming, emotionally draining, and in some cases, negatively affecting their physical health.

"So, I got sick in 2019 because of what happened in 2017-2018. I developed a [disease]. And I'm convinced [...] that my blood was poisoned in 2017. [...] Because I couldn't sleep at night in 2017, thinking that my children were being excluded, thinking that my rights [were being trampled on]." (Natalia, 48 y.o., 3 children, unvaccinated – Pos. 15)

"That year was really [terrible]. I must tell you that summer left an indelible mark on me. Indelible, really: messages, chats, wait, do this, see what you can do, rack our brains... Then there were only a few months [to find a solution] because they always did crap in the summer months, so people's attention implicitly [shifted to other issues]. So, what do you do in two months? Nothing. Then kindergarten starts even earlier, I think, on September 1. And you don't know if the child is going or not. And [her child] asked me, "How many days until kindergarten?". And you say, [expletive], what do I tell the child? No, no, it was... it was a rough time." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 47)

The lack of institutional guidance meant that families had to navigate the search independently, relying on informal networks, word-of-mouth recommendations, trial-and-error exploration of available options, or experimenting with the creation of alternative educational realities. This urgency was particularly acute for working parents, who not only faced the disruption of their children's education but also an immediate childcare crisis. Several interviewees recounted the emotional toll of having to withdraw children from

familiar settings and established peer groups, an experience described as both unsettling for the children and distressing for parents.

“However, this will backfire because those children who have been excluded from kindergarten, for example, who have not been able to interact with their peers, perhaps they have done so, or if they have done so in alternative nursery schools — which is a positive thing by the way— they receive information from their parents that they will carry with them throughout their lives. My child was unable to attend the last year of kindergarten and was very disappointed about that. He/She will remember this for the rest of his/her life and will tell his/her children, his/her grandchildren, his/her siblings, and his/her friends about it.” (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated, Pos. 77)

Sometimes, the difficulty in finding a daycare solution was compounded in rural or less densely populated areas, where fewer alternatives existed and distances to available options could be considerable.

“At first it seemed a bit like that [difficult]: the distance, the cost, this and that. Eh... you make choices, you must give up other things and prioritize that.” (Laura, 36 y.o., 1 child, unvaccinated – Pos. 83)

For many, the search for alternatives was not driven by preference but by an imposed necessity directly triggered by the legislative change. The challenge was not only to find an educational setting that could legally accept unvaccinated children but also to ensure it aligned with the family’s values, pedagogical preferences, and logistical constraints. This combination of legal, moral, and practical considerations made the process complex, reinforcing the perception that they were navigating a parallel educational system outside the mainstream.

In responding to exclusion, families turned to a diverse array of educational alternatives, reflecting both pragmatic problem-solving and, in some cases, a deliberate embrace of pedagogical approaches that resonated with their values. When an alternative option was not available nearby or perceived as adequate, vaccine-hesitant parents have been at the forefront of creating new realities. This required a considerable effort in terms of energy and time, often described as a second job.

“When we realized that this was going to happen [that the children would be excluded], we started meeting with other parents to try to figure out what to do. And from there, we founded an association and started looking for spaces and teachers. Everything was done by the law, in the sense that it was a registered association, because everything was done according to the rules. [...] It took years... for us parents, it was a bit like a second job.” (Vittoria, 49, 2 children, unvaccinated – Pos. 15)

“And then, well, my little child never went to kindergarten; he/she couldn't. So I got together with other mothers to do something different. And even that wasn't easy, because your days off work were your turn [to take care of the children], so it was [really challenging]...” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 11)

Table 11 summarizes the main types of alternatives adopted or created by Vaccinare Informati's parents, from more structured realities to more informal ones. One common route was relying on private kindergartens or schools, which, operating outside the public system, were not bound by the same exclusion rules. Although tuition costs and limited availability posed significant barriers for some families. These settings were valued for offering continuity of care, a structured learning environment, and providing educational approaches with a child-centered learning.

Another solution involved reliance on or the creation of educational farms or kindergartens/schools in the woods (also known as “green schools”), which appealed for their small group sizes, close contact with nature, and flexible, child-centered pedagogies. While some parents had long been interested in these approaches, others discovered them only as a result of exclusion, later appreciating their perceived developmental benefits.

Tab. 11 – Alternative educational arrangements adopted by non-compliant families after the introduction of Law No. 119/2017.

Type of alternative	Description	Key characteristics
Private kindergartens or schools	Enrollment in fee-based private institutions not subject to the same exclusion rules as public and private (receiving public funds) pre-schools	Higher tuition fees; limited availability; perceived as more flexible and/or adopting a preferred educational approach
Educational farms	Farm-based educational settings combining childcare with agricultural and outdoor activities	Small-scale; nature-oriented; limited capacity; often informal or community-run
Parents' associations	Collectively organized educational projects by parents, often legally structured as associations	Shared costs and responsibilities; strong social network component; variable educational content
Informal groups of parents	Unregistered parent-led initiatives for collective childcare and education	Highly flexible; low formal oversight; dependent on mutual trust and shared values
Kindergarten or school in the woods	Outdoor, nature-based education models inspired by forest school principles	Emphasis on outdoor activities; small groups
Homeschooling and <i>scuola parentale</i>*	Education delivered at home by parents or hired tutors, sometimes in small cooperatives	Full parental control over curriculum; requires high time commitment; legal notification to authorities

* Alternative solution adopted especially after the onset of the COVID-19 pandemic.

Parents' associations also played a central role in both creating and sustaining alternatives. These collectives enabled resource-sharing, coordination of schedules, and joint hiring of educators, effectively building small-scale educational communities. Similarly, informal groups of parents emerged as grassroots responses based on mutual-help practices, often hosted in private homes or community spaces, with responsibilities distributed — on a rotating basis — among participating families. These arrangements required high levels of trust and cooperation but provided a degree of autonomy and adaptability rarely found in formal settings.

A smaller but significant share of families chose homeschooling and the “scuola parentale” — i.e., a small group of parents who decide to educate “at home” their children together by sharing resources (for instance, by hiring a private teacher and buying schoolbooks). Both solutions involve legal notification to authorities and full parental responsibility for instruction. While less common in the immediate aftermath of Law No. 119/2017, this option gained greater traction during the COVID-19 pandemic, when school closures and new vaccination requirements (e.g., face masks) heightened interest in fully independent educational arrangements.

Across these options, adaptability emerged as a key characteristic of non-compliant families’ responses to exclusion. However, these arrangements carried substantial logistical and financial demands. Parents frequently spoke of the economic strain of tuition fees or shared costs, the time investment required for coordination and commuting, and the personal energy needed to maintain these parallel systems. While many valued the autonomy these solutions afforded, they also underscored the trade-offs and vulnerabilities inherent in sustaining education outside the institutional mainstream.

Interestingly, the rise of these alternative options created to keep non-compliant children and allow them to follow an educational and socialization path, was seen as positive by some parents and with a more critical eye by others. Indeed, on one hand, by most parents it was seen as an unparalleled opportunity for growth outside a “standardized” educational system, for acquiring transferable skills, and for developing individual potential. Mainly small realities in which the focus is on the child, and the parents are encouraged to participate and contribute actively at different levels.

“But I think it was a great opportunity, one that was well seized. [...] It was an opportunity to question a whole series of principles that public schools have acquired over the years. So also more democratic, more participatory schools. More participatory, first and foremost for parents, because they are all self-managed entities in which parents play a major role both operationally and in decision-making. But also for children, in short, many more outdoor activities, more of a real response to the needs of individual children, and

smaller classes.” (Matilde, 43 y.o., 2 children, vaccinated and partially vaccinated – Pos. 49)

“I take an alternative route, which may actually be more enriching than a municipal nursery in the end, even for us as parents, because we are more directly involved in our child's development. In other words, in the end, this is better than passively accepting a service provided by the community.” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 11)

On the other hand, a minority of parents think that the creation of these alternative options would be detrimental to public education. Indeed, these vaccine-hesitant parents highlighted that the public system should be strengthened “from the inside”. Instead, once parents exit it, they generally prefer continuing on alternative or private options.

“So, I could have sent her to a private school [considered] No-Vax, but instead I decided to enroll her in a public school in [place in Trentino]. Because, in my opinion, the world needs to be changed from within, not from without.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 27)

In any case, the implementation of alternative options — especially the less informal ones — was not easily achievable because these realities have often been hindered, either overtly or implicitly, by local authorities.

“That whole period was [a difficult time]... We had to roll up our sleeves, not knowing what to do, slowly trying to build a parallel alternative. At that time, there was opposition [from the authorities]. So we have only now managed to achieve it, now that we are in 2022, since 2018, so...” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 30)

“And yet again, this resentment towards alternative realities, as if we were... Oh! You pulled us out of everything! We can't even [reorganize ourselves]... we're not bothering you, the municipality, the Province, or anyone else, we're managing everything on our own. But you see? It's still not enough.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 55)

Furthermore, such initiatives also tend to face public disapproval. Indeed, sometimes these realities are perceived by other citizens — especially by those living next to them — as posing a risk to their health due to the prevalence of unvaccinated children.

“However, at the beginning of 2018, when they started creating these associations, these alternative schools, many people were skeptical or made these [nasty] jokes. In short, many people did not behave maturely. I don't know if I'm explaining myself clearly. Like these gentlemen who told us that they were afraid of getting sick... I mean, psychologically, it was very difficult.”
(Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 21)

“But the worst thing I encountered was this: anyone who set up an alternative nursery or preschool was viewed very negatively by people who heard that such a facility existed in the area. “Why?! How?! Unvaccinated children can be together and spread diseases to everyone?!”, because that was it [the argument] back then. When no one, no one, asked whether people aged 50 and over had any trace [in terms of immunization] of [childhood] vaccines.”
(Nicholas, 53 y.o., 2 children, unvaccinated – Pos. 27)

For many interviewees, the experience of Law No. 119/2017 did not remain confined to the sphere of childhood vaccination. In retrospect, the law (and its sanctions) was frequently interpreted as the opening move in a broader governmental strategy to expand health mandates into new domains.

“So what have they made you understand? That from one day to the next, they [the institutions] can take everything away from you. Don't do what they say? That's it, you're cut off. That's how it was for the children; that's where they started. They said it, but you know [it would be the beginning of something bigger]... You say no, come on, that's impossible. [Expletive], now they've served them the COVID issue on a silver platter.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 53)

When the COVID-19 pandemic began, some parents perceived the introduction of compulsory COVID-19 vaccination for specific categories, the

Green Pass, and other restrictions as a direct continuation of the coercive logic first experienced with the Lorenzin law. In their accounts, Law 119/2017 had “set the precedent,” both normalizing the use of sanctions to enforce compliance and demonstrating the State’s willingness to link personal health choices to access to education, employment, and public spaces. This sense of continuity fueled interpretations of the pandemic measures as the next stage in an ongoing process, rather than an exceptional response to an unprecedented crisis, and reinforced a long-term mistrust toward institutions and public health authorities.

4.1.2. COVID-19 pandemic: Extension of exclusion to the labor market and public space

The onset of the COVID-19 pandemic marked, for many interviewees, not a rupture but a deepening of the coercive dynamics they had first encountered with Law 119/2017. Measures such as compulsory COVID-19 vaccination for certain professional categories, the introduction of the Green Pass, and restrictions on access to public spaces were interpreted as the logical continuation of a process that had begun with the extension of vaccination requirements to pre-school education. Just as pre-school access had been conditioned on compliance with the Lorenzin Law, pandemic measures linked employment, mobility, and participation in public life to adherence to new vaccination mandates. This continuity in both rationale and enforcement mechanisms reinforced the belief that the COVID-19 policies were less an exceptional public health response than the next step in a pre-existing governmental strategy to normalize the use of sanctions as a tool of health governance.

4.1.2.1. Non-medical interventions and the Green Pass

The first stage of the COVID-19 response involved a series of non-medical interventions — mask mandates, social distancing rules, and repeated lockdowns — that affected the daily lives of all citizens. Among Vaccinare Informati's parents, these measures were often framed as disproportionate, inadequately justified, or damaging to children's well-being. Particularly, mask requirements in schools were described as physically uncomfortable, harmful, and socially alienating for children, with some parents questioning their necessity or effectiveness and highlighting the institutional inconsistencies in regulating their implementation. These concerns emerged repeatedly in interviews, often couched in terms of inconsistency and lack of scientific justification.

"But also the fact that these masks, which seemed to be useless at first, then became useful, and then they were protecting you, no, then they were protecting others. [...] And even there, these are absurd things because... I mean, they have no scientific basis, there's nothing... I mean, now we're all free from masks except for private sector workers, who are no different from public sector workers, and except for our children. Yet there are still parents who can't see this and say that something is wrong. This surprises me in a negative way because, in my opinion, people's minds are degenerating..." (Alessandra, 42 y.o., 5 children, Vaccinated and partially vaccinated – Pos. 27)

"I am also very concerned about face masks at school. This is an issue we have been dealing with for two years. My child has suffered greatly. Masks are a real problem, especially because they are inconsistent: inconsistent because children go to school wearing masks, then they leave school at four o'clock, they all go to the park and they all play and hug each other, rightly so in my opinion, without masks. [...] There are absurd, absurd, absurd inconsistencies. And the children have suffered a lot." (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 33)

"Because, when the most important thing is to respect social distancing and mask-wearing rules, it's clear that this also ruins the relationship." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 65)

These accounts of disproportionate and inconsistently applied measures foreshadowed parents' reactions to the introduction of the Green Pass, which they saw as an even more intrusive and exclusionary policy.

The implementation of pandemic-related rules in educational settings was a central feature of families' experiences during COVID-19. At the pre-school level, the scope of measures varied but typically included mask-wearing requirements for staff, restrictions on parents entering facilities, and, in some cases, Green Pass checks for adults accessing the premises. Although the number of pre-school-specific accounts was limited, several parents described the environment as more controlled than before the pandemic, with daily routines altered by health checks and stricter drop-off/pick-up protocols. Most of vaccine-hesitant parents considered these protocols excessive or even potentially detrimental to children's development:

"The [third child] won't go to [public] kindergarten here either. Why? Because these masked teachers don't... I don't know how other parents think, but for me it's very harmful for them to spend six or seven hours a day with someone they can't see, at that age... It's serious even in elementary school, but the younger they are, the more damage it does." (Clara, 37 y.o., 3 children, vaccinated)

In primary and secondary schools, enforcement was more extensive and systematic. Parents reported a combination of national directives and school-specific protocols that covered mask mandates, distancing rules, temperature checks, ventilation procedures, and frequent reminders about hygiene practices. From late 2021 onward, Green Pass verification became a visible and routine element, particularly for staff and for parents attending school meetings or events. Some parents perceived these measures as intrusive, describing them as constant reminders of compliance requirements, while others saw them as practical adaptations to a challenging context. For some, mask-wearing in particular became a symbol of disproportionate restriction:

"It was a disgrace, an absolute disgrace, because they made children pay the highest price. Children who, as I said before, are less affected, almost zero, by the disease, were forced to wear this mask for seven to eight hours

a day. Something that even we adults don't do [...]. Recently, they have even been made to wear FFP2 masks when there are two or more positive cases, masks that are not approved for children, so they are a risk to their health. But this seems to be taking a back seat.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 91)

A defining feature of this period was the shift to distance learning, particularly during periods of lockdown or when quarantine rules required entire classes to isolate. Parents described both logistical and emotional challenges: managing home-based instruction alongside work commitments, limited digital infrastructure in some households, and the social and educational losses associated with prolonged screen-based learning. In families where vaccination status led to additional restrictions — such as inability to participate in extracurricular activities — the experience of schooling during the pandemic could feel doubly exclusionary. For many, the experience of online learning itself was seen as educationally and socially damaging.

“After school with DAD [distance learning], let's forget about it, another tragedy. If the grades were already like that [barely passing], they ended up like this [plummeted]. A truly... because I say, there are lots of young people who take lessons on the computer, especially university students or those who take support lessons, but it's a choice, and so you're motivated to do it. There, it wasn't a choice, it was something that was forced upon them due to certain situations, and so it wasn't a choice. And so they were there, staring at the screen.” (Nora, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 13)

Accounts from primary and secondary school contexts suggest a diversity of enforcement styles. Some schools applied rules with strict consistency, checking documents and enforcing distancing with little flexibility. Others showed discretion in application, finding ways to maintain a sense of normality where possible:

“Then, of course, the older one started attending school in person, but then it was the year of the lockdown [...]. But come on, I have to say that even

though it's a public school, and therefore the teachers were rightly required to comply with certain regulations, they handled it in a flexible way. They always tried to [...] make use of the outdoor space, the garden. In short, I have to say that they tried to find a compromise.” (Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 23)

Accounts from primary and secondary school contexts suggest a diversity of enforcement styles. Some schools applied rules with strict consistency, checking documents and enforcing distancing with little flexibility. Others showed discretion in application, finding ways to maintain a sense of normality where possible. However, even in more flexible settings, parents often felt that the school environment had become a site of surveillance and rule enforcement, with staff placed in the dual role of educators and compliance monitors.

“In January [the school was changed] because we wanted to change last year due to the burden of face masks. Then there were, and I think there still are, because I don't think they've been removed, fences in the courtyard for each class. Having to wear masks even when standing still, every second, even if you're at a distance, snacks eaten in two seconds. It seemed like a recruit training camp, and not a very good one at that. And then we also perceived some coercion in the communication of health [...], we saw things that we didn't like in the traditional school system. There was this opportunity because he will be coming here to high school [private school] next year. And we decided that at least for these two years, he could enjoy some social life, friends. [...] Because they were becoming almost like little robots. I want them to think for themselves.” (Luisa, 43 y.o., 2 children, partially vaccinated) – Pos. 23

This blurring of roles could strain relationships between families and schools, particularly when disagreements arose over the proportionality or necessity of specific measures. In some cases, this has led Vaccinare Informati's parents to exit the public school system, as described by Luisa's words.

The introduction of the Green Pass in 2021 marked a new phase in the regulation of everyday life during the pandemic. By making access to workplaces, public transport, hospitality venues, and cultural or sporting events conditional on vaccination, recovery, or recent testing, the Green Pass significantly narrowed

the scope of participation for the unvaccinated. Interviewees frequently described it as a tool of exclusion and a violation of one's rights, as highlighted by Irene's words, designed to pressure compliance through social and economic inconvenience.

"And then you didn't know what to do anymore [not having the Green Pass]. I had to go and run an errand, "No, you need a Green Pass"; I had to do something, "No, you need a Green Pass"; I had to go to [a town in Trentino] to run some errands, I couldn't drink before leaving because I couldn't go to the bar to use the restroom if I needed to. I mean, a whole series of abuses that we suffered that are unparalleled, eh." (Irene, 52 y.o., 2 children, unvaccinated – Pos. 41)

Such experiences were echoed across many interviews, with participants describing similar obstacles and a constant negotiation of daily activities under the new rules. Vaccinare Informati's members highlighted that the Green Pass transformed the abstract risk of exclusion into a concrete reality, affecting not only leisure activities but also the ability to work — having to undergo continuous COVID testing to access workplaces — or fulfil essential social roles. The progressive tightening of requirements — from access to long-distance travel to entry into most public spaces — was perceived as a deliberate strategy to make life increasingly difficult for non-compliant individuals.

In the narratives of many parents, this system echoed the coercive link between vaccination status and school attendance established by Law 119/2017, but extended it to a much broader range of social contexts and groups.

"Because when the Lorenzin law came into force, [...], the thing that clearly weighed most heavily on me, like a rock in my stomach, was exclusion from schools. And so this beginning of segregation, of a kind of racism that began to develop, especially because of a disgusting media campaign. Which was then the same thing done for COVID, exactly the same, it seemed to be the initial test to see if certain things would take root with COVID. It is true that the Lorenzin law did not affect all Italians [...], so the segment of the population [affected] was much more limited." (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15)

However, according to Vaccinare Informati's parents, those who already experienced sanctions and social pressure for being non-compliant under childhood vaccination mandates were more prepared to face COVID-19-related restrictions.

"I mean, honestly, the pediatric vaccine debate, looking back now, was a training ground for dealing with Covid. Because I had to deal with the same issues during COVID, so the whole debate about vaccine pressure afterwards and blackmail over certain fines. Okay, they were small [fines], but fines are useless. So they know this very well, which is why they resorted to social and work-related blackmail, which you know better than I do. So, honestly, that was already a training ground." (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 49)

Beyond exclusion, several parents went further, framing the Green Pass as a mechanism of social segregation. In their view, the policy did not simply regulate access but actively divided the population into two categories — compliant and non-compliant — with vaccination status functioning as a pass to participate in public life or, conversely, as a marker of exclusion. This division was made tangible through daily Green Pass checks, which repeatedly signaled one's belonging — or exclusion — from the normative mainstream. For some, the sense of exclusion was so acute that they drew parallels with extreme historical episodes.

"Look, only the ovens were missing, eh, we arrived and only the ovens were missing [referring to what happened to the Jews during Nazism]. Now, when you talk like that, they say, "Eh, but it's not like that today!" I understand, it's not like it started overnight with the Jews, that they were put in gas chambers. First, you can't go in; the same thing is happening now in shops because you can't go in [without the Green Pass]. And the only historical period in which this was seen was during that period." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 37)

Parents also noted that this binary system legitimized differential treatment and exacerbated social tensions, making it more acceptable to exclude or stigmatize those without the required certification. As explored further in Section

4.3, this dynamic was closely tied to broader processes of labelling and stigmatization, with the figure of the “No-Vaxxer” becoming a shorthand for moral judgement and social otherness.

“I mean, it's fine to do good for humanity, but if you don't do good for every single human being and you want to exclude them, you want to ghettoize them — because let's use the right term, because for me, not being able to go to the bank or the post office was being ghettoized.” (Luisa, 43 y.o., 2 children, partially vaccinated – Pos. 35)

In this way, the Green Pass was perceived not only as a health policy tool but also as a social sorting mechanism, deepening fractures between compliant and non-compliant citizens.

4.1.2.2. Anti-COVID-19 vaccination mandates: Sanctions and job-related consequences

Initially introduced in April 2021 for healthcare workers, the anti-COVID-19 vaccination mandate was progressively expanded to other professional categories — such as school staff, law enforcement, and military personnel — and, in early 2022, to all individuals aged 50 and above (see Section 2.2). This last extension also brought administrative fines for non-compliance, which some perceived as both symbolic and precedent-setting. For vaccine-hesitant parents, these measures were understood both through direct personal experience and by analogy with the earlier childhood vaccination mandates.

“And I also refer back a little to these COVID fines for 50-year-olds of 100 euros. Which are nothing because, well, 100 euros is not a significant amount, whereas the pediatric vaccine was 500, but then it sets a precedent. I mean, as I was saying, it means admitting that you did something wrong, and in my opinion, there is nothing wrong.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 25)

Those who faced professional mandates firsthand frequently described them as non-negotiable ultimatums: either vaccinate or lose the ability to work. The framing left little room for alternative arrangements or exemptions, reinforcing the perception of an all-or-nothing choice dictated by the state.

“Yes, I think that with these impositions they have put a lot of people in a tight spot [...] and therefore have put people in a position where they cannot choose. In fact, it is an implicit obligation. [...] This is a more subtle obligation.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 103)

“Because he/she [sibling] is in a profession that requires vaccination, as I am. But I am also prepared to lose my job because I will not bow to violence of this kind, of this magnitude.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 33)

Even parents not personally targeted by the mandates tended to interpret them as a logical extension of the Green Pass system — a shift from indirect pressure through restricted access to outright compulsion tied to one’s livelihood. The immediacy of the consequences distinguished these mandates from childhood vaccination requirements: while Law No. 119/2017 linked compliance to pre-school attendance and could be navigated through alternative educational arrangements, the COVID-19 mandates threatened adults’ economic stability and professional identity.

“[The anti-COVID-19 mandate was introduced] to make it clear that, unfortunately, people have no choice, that there should be a choice in terms of personal health, but that with our political system, it becomes discrimination. [...] So you choose either your health or your job. And I know that many people, even this year, had to give in to this blackmail to get the Covid vaccine in order to work [...]” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 17)

Comparisons between the two policy frameworks were common. Some parents argued that the anti-COVID-19 mandates were even more severe, given their direct and immediate impact on the capacity to earn a living. Others framed Law No. 119/2017 as the decisive “first step” that legitimized the later escalation to employment-linked mandates.

“I thought I had seen everything after the exclusion of children, but I didn't realize that it was only the beginning.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 11)

“And in fact, now we've said that it has finally affected everyone, finally, obviously, in the sense that there has been a great deal of movement among everyone. In fact, many people have now said to me, “Wow, now we understand you in 2017 [...], now we understand how it felt, how it was.” In fact, we had already been through it a bit, and this thing, let's say, didn't affect us that much personally. [...] in 2017, many people said, ‘Look, something is coming for everyone,’ ‘Eh, conspiracy theorists, eh, crazy people. But people were already saying to be careful, it was a test, they start with one category and then move on. And we saw it here too with the [anti-COVID-19 vaccination] mandate, they started with doctors and then moved on to others. So little by little, they involve everyone.” (Laura, 36 y.o., 1 child, unvaccinated – Pos. 47)

In both cases, the central grievance lay in the perceived erosion of informed, voluntary choice — replaced by state-imposed conditions that connected compliance to fundamental rights and participation in public life, thus metaphorically compared to “a witch hunt” (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15).

The sanctions attached to anti-COVID-19 vaccination mandates were primarily work-related, with suspension from employment without pay representing the most immediate and tangible penalty. For some interviewees, enforcement came abruptly, resulting in the sudden loss of income and an urgent need to secure alternative means of support.

“At home without a salary, contributions don't go up, nothing goes up... dignity goes down the drain because, I mean... and even there, as with children, even worse for adults because who can stay at home without a salary? Maybe for a while, maybe one can... You can't even look for another job if you're full-time, if you're part-time, maybe, but not full-time. [...] Plus, there's also the factor of blackmail at work: today you ask me this, tomorrow what will you ask me?” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 17)

Others chose to pre-emptively resign or take leave (if the option was available), prioritizing personal autonomy and avoiding what they perceived as forced medical compliance. In both scenarios, the mandates produced a profound sense of rupture in individuals' professional trajectories.

"Then last year I took a leave because, unfortunately, it wasn't clear whether our professional category would also be subject to mandatory vaccination. I mean, we're not teachers, so in the end we shouldn't have had to, but I found out about it afterwards... Well, it came out after that, and I had to decide at the end of August. So, I had to take a year's leave of absence; they wouldn't give me just a few months, so I stayed at home for a year [without a salary]. And that wasn't the plan. Yeah, it was a bit tough. Yes, because with only one salary and everything else, the family, it wasn't easy." (Olivia, 42 y.o., 2 children, unvaccinated – Pos. 21)

"Before [being suspended], work was a passion for me [...], but now I see it as just a job. So, I work my hours. I interact with people, which is great, and I'm happy because I enjoy seeing people and children and reading to them, and I still do it with passion. But I do it with my own passion, not the passion that comes from work." (Luisa, 43 y.o., 2 children, partially vaccinated – Pos. 43)

"I'll summarize it like this: after [several years] of working in a nursing home, they asked me to get vaccinated against Covid. And I refused. There were two alternatives: either be suspended or request a year's leave of absence. [...] The contract provides for this possibility: taking a leave of absence to try another work experience. So I applied, and they granted me a year's leave, which expires at the end of the month. [...] And now I am being asked to choose again: either return to or leave my previous job at the nursing home. And my choice was to resign [sighs]." (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 7)

The nature of the impact varied across employment sectors. Public sector employees — particularly in education and healthcare — described rigid enforcement, with strict deadlines, formal notifications, and minimal opportunity for negotiation. In contrast, self-employed professionals faced more indirect repercussions: exclusion from professional premises, inability to participate in industry events, or the gradual loss of clients unwilling to work with someone

lacking the required certification. In some cases, these indirect sanctions were experienced as equally damaging, leading to prolonged economic instability.

“That was the only move the government could make, i.e., take action against public sector employees. Because public sector employees are controlled by the government, while private sector employees are not, because if a company owner needs workers, it makes them work [...] despite the Green Pass.” (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 129)

“Logically, I am over 50 years old and should have been vaccinated to go to work. I am a craftsman, a sole proprietor, and I had to go to my workplace, where I was alone, and be vaccinated, otherwise I couldn't go. To give you an idea, this was one of the totally crazy things about this whole situation.” (Nicholas, 53 y.o., 2 children, unvaccinated – Pos. 23)

Beyond financial hardship, these measures were framed as unjust and discriminatory, targeting individuals for their personal medical decisions rather than their ability to fulfil their professional duties.

“So I mean, they tell me that I was fine before because I was working, but now I'm not, and I'm a Z-grade worker because I don't get vaccinated. So, no thanks. And without ever asking you why you didn't get vaccinated or why you don't want to. The director called me once [...]. I told him/her, ‘It's not that I'm against vaccines, but since vaccination is a health measure, it can't be linked to the right to education or the right to work’. So I want to be judged as a healthcare worker [...], not for my [vaccination] choices, but for how I work.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 17)

“Because no matter how much one may be in favor of a particular medical treatment, thinking that it is right to take away the livelihood of people who do not undergo it and who instead have every right to live like everyone else is madness.” (Alice, 44 y.o., 2 children, unvaccinated, Pos. 107)

“Because [these vaccination mandates] take away your dignity as a worker and as a citizen.” (Lucia, 49 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 47)

Interviewees emphasized the moral dimension of this injustice, describing the sanctions as punitive rather than protective of workplace safety. The resulting

strain often extended into family life, intensifying domestic tensions, altering household roles, and in some cases prompting relocation or career changes. For many, these mandates represented the most extreme form of exclusion experienced during the pandemic—surpassing even the pre-school exclusion under Law 119/2017 in both immediacy and severity.

This experience of acute and immediate exclusion shaped how parents interpreted the broader governance of the pandemic, framing subsequent accounts of national, local, and international decision-making. Parents' narratives depict the COVID-19 response as an intensification of the institutional approaches already seen with childhood vaccination mandates, but with far greater scope and immediacy. At the national level, political authorities were perceived as the principal architects of pandemic regulations, orchestrating a rapid succession of decrees and emergency measures. For several interviewees, the unprecedented rhythm of national decrees became a symbol of this governance approach:

"No one denies that the problem [of the SARS-CoV-2 virus] existed, but to an extent that probably would not have warranted certain types of action. So even there, some things were done only because the groundwork had been laid for them to be done. [...] Dpcm [decrees] every week, one thing after another. Something that had never happened before in history." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 133)

Many interviewees described the tone of national communication as increasingly urgent and uncompromising, with compliance framed not only as a civic duty but as a moral imperative in the face of a public health emergency. The central government was seen as setting the pace of the pandemic response, dictating rules on Green Pass access, workplace mandates, and vaccination requirements for specific professional and age groups. For some parents, this approach reflected a centralized decision-making model that prioritized rapid implementation over public consultation, reinforcing the impression of a top-down, non-negotiable governance style.

For some parents, the alignment of national measures with international recommendations was seen as evidence of an overarching strategy that extended beyond Italy's borders. The government's measures to contain the virus, and the decisions adopted by international authorities such as the European Commission and the World Health Organization, were interpreted as being guided by a wider framework of supranational and private influence. Indeed, interviewees explicitly linked EU pharmaceutical policy and governance — as well as that of medical agencies like the European Medicines Agency — to conflicts of interest. The institutional landscape is thus perceived as permeated by a complex interplay between economic and political interests, and pharmaceutical companies are portrayed as puppeteers capable of pulling the strings of national and international institutional actors

"The WHO itself cannot be said to be an independent body. But this is an argument that applies from the highest levels down, cascading everywhere [reaching national governments]." (Valeria, 51 y.o, 2 children, unvaccinated – Pos. 35)

"I said okay, you want to do ten? Do fifty, but you can't force me. That's what I don't accept. The government shouldn't force people. But why did it force them? Because they're all puppets serving these big families who want to run the world as they see fit. Not to mention the WHO, which is mostly funded by Bill Gates, as everyone knows, and by other chains owned by pharmaceutical companies." (Giada, 64 y.o., 2 children, unvaccinated – Pos. 11)

At the local level, the perception was that regional and municipal authorities in Trentino often acted as strict enforcers of national rules, at times introducing additional procedures or interpretations that intensified the impact on daily life.

"Well, it was handled in a way that was completely aligned with the State on the one hand, and on the other hand, despite requests from parents, and even in the face of criticism regarding certain positions towards minors, then [...] they didn't want to say who was right or wrong. That is, they didn't want to deny a possibility, but they didn't want to endorse a position either. So there was a sort of ambiguity regarding certain prohibitions. Those who don't

have the Green Pass can't get on the bus, but then yes, then no, then maybe up to the age of 12. [...] So, on the one hand, there was ambiguity, perhaps to keep the waters calm to some extent. And on the other hand, there was total misunderstanding." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 99)

Some parents recalled local authorities' role in overseeing compliance checks, managing exclusions from public spaces, and communicating directly with schools and workplaces regarding individuals' Green Pass status. In certain cases, these local measures were viewed as more rigid than the national baseline, further reinforcing the perception of an unyielding governance environment.

Across these governance levels, interviewees noted a significant difference from the pre-pandemic period: the speed and frequency of institutional decision-making. Measures were introduced and amended in rapid succession, often with limited notice, creating a sense of instability and unpredictability. For parents, this dynamic compounded the challenges of compliance, as rules could change from one week to the next, and local enforcement sometimes lagged behind or interpreted updates differently. The perception of an authoritative but volatile policy environment contributed to feelings of uncertainty, reduced trust, and, for some, outright alienation from institutional decision-making.

The progression from non-medical interventions to the Green Pass, and ultimately to targeted vaccination mandates with employment sanctions, illustrates a widening field of exclusion that extended far beyond the school system. For vaccine-hesitant parents, these developments confirmed the perception — rooted in the experience of Law 119/2017 — that public health policy was moving toward increasingly coercive mechanisms. The expansion of exclusion into the labor market and public spaces not only deepened mistrust in institutions but also reshaped interpersonal relationships within families, workplaces, and communities. These strains, and the conflicting views on compliance and legitimacy that fueled them, are explored in the following section on social tensions and relational fractures.

4.2. Social tensions and relational fractures

While institutional mandates restructured the material conditions of everyday life, their effects also extended deeply into the social fabric of families and communities. Decisions about whether or not to vaccinate — and the consequences that followed — rarely remained private matters. They became visible, discussable, and at times contested in households, workplaces, friendship circles, and children's peer groups. These interpersonal dynamics reveal how public health policy is not only implemented through institutions but also lived and negotiated in relationships, often with lasting emotional and relational consequences.

This section examines these dynamics in two interconnected parts. The first (Section 4.2.1) focuses on the immediate social environments in which tensions emerged, including the alignment or disagreement between partners, the responses of extended family, the shifting tone of relationships with peers, colleagues, and friends, and the ways school-level enforcement shaped children's experiences with their classmates. The second (Section 4.2.2) widens the lens to explore broader social pressures, the perception of a deepening divide between compliant and non-compliant citizens, and the strategies parents employed to protect relationships and preserve a sense of normalcy in a climate of heightened polarization.

By tracing these tensions from the private sphere to wider community contexts, the analysis shows how vaccination mandates became embedded in the relational worlds of those affected, shaping not only who could access institutions, but also how individuals and families were positioned within their own social networks.

4.2.1. Family, peer, and school-level dynamics

The impact of vaccination mandates extended beyond the institutional sphere, permeating the everyday relational fabric of parents' lives. Family relationships, friendships, workplace interactions, and school communities became sites where vaccination choices were not only discussed but also scrutinized, negotiated, and, at times, contested. For many interviewees, these dynamics unfolded in emotionally charged contexts where bonds of trust, mutual respect, and belonging were put to the test.

Conversations about vaccination often became proxy debates about values, autonomy, and responsibility, revealing underlying differences in worldviews. In some cases, relationships proved resilient, accommodating disagreement; in others, they were strained or ruptured. At the school level, interactions with teachers, administrators, and other parents frequently involved navigating disclosure, defending choices, or avoiding conflict. In this sense, the social consequences of mandates were not limited to formal sanctions but included the subtle, cumulative pressures that emerge when private health decisions intersect with collective norms and expectations.

4.2.1.1. Family and partner dynamics

Among interviewees, alignment between partners emerged as a critical element in navigating vaccination decisions, particularly given the significant consequences these choices could entail, such as the exclusion of children from early education. Parents repeatedly underscored that being “on the same page” was essential, not only to reduce internal conflict but also to present a united stance in dealings with institutions, schools, and the wider community.

"Yes, I think that [being aligned between partners] was also a strength. Because, in fact, I've seen in other couples that the choice is more difficult when it's only one parent who is pursuing it. If, on the other hand, there is a shared conviction on both sides, you are both stronger in dealing with any problems [...]. And if there are two of you, in short, you are stronger and also

more relaxed in dealing with things, and I must say that this has always been the case for us. So far, yes." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 139)

When disagreements occurred within couples, they were most often linked to decisions about childhood vaccinations, sometimes arising from differing levels of trust in medical advice, varied interpretations of vaccine safety, or contrasting approaches to risk. In some cases, these disagreements required negotiation or compromise before a shared position could be reached.

"At that moment [when it was time to vaccinate the children under the Lorenzin law], we decided, not being in complete agreement, to do it because we had chosen this path anyway." (Luisa, 43 years old, 2 children, partially vaccinated – Pos. 11)

"And when I received the first letter [to go and vaccinate our second child], my husband was a little opposed to it. He wanted him to have at least the main vaccinations. So I read until 1 a.m. to understand, to try to understand quickly what we could do. And after explaining it to him over and over, sending him photos of the descriptions in the book and so on, he began to understand too. I also told him, for example, [...] that pharmacies only stock tetanus vaccines if you want them. Because in the end, that's what my husband was interested in; he was afraid of tetanus. And I told him, look, if you want, you can get it at the pharmacy, go and get it, and then the pediatrician will give it to you. So when I told him that, he calmed down a bit. After that, he didn't bother me anymore, but he did insist for a while that he get them. So in the end, luckily, everything worked out fine." (Ilaria, 38 y.o., 2 children, vaccinated and unvaccinated – Pos. 19)

Once that decision was made and "the direction" set for the family, however, most interviewees reported alignment on COVID-19 vaccination and related mandates, suggesting that the earlier debates over childhood vaccines had been the phase where differences were more likely to emerge and require resolution.

Extended family dynamics added another layer of potential tension. Disagreements with grandparents, siblings, or in-laws were reported in relation to both childhood and COVID-19 vaccines, though the latter often carried less

room for negotiation due to the immediacy and widespread extension of pandemic measures.

"So, I was sorry because it was a difficult time when we didn't know where to put the child [because of the exclusions] and so we didn't have the support of our families." (Camilla, 45 years old, 2 children, unvaccinated – Pos. 11)

"Just like the choice of the COVID [vaccine] for adults, this is just as bad, if not worse. It's enough to cause arguments in the family with the in-laws. This is a terrible thing, truly terrible, that they have created and that has taken root in family circles and small communities." (Chiara, 38 years old, 3 children, vaccinated – Pos. 13)

"Yes [tensions] even within the family. Even within the family. [...] So yes, it has changed... In fact, at the time, the Lorenzin case seemed like a tragedy to us; in short, we were affected by the issue. Looking back now, we say, 'But how good it was before' [Laughs]. I mean, dealing with a situation like that was a whole different ball game." (Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 49)

During the pandemic, extended family members sometimes exerted particular pressure to vaccinate, invoking arguments about collective responsibility or protection of vulnerable relatives. In other cases, family events became complicated by access restrictions, particularly when Green Pass requirements applied to private gatherings in public venues.

"Last Easter, I didn't go to the Easter lunch [...] where the whole family was gathered because they wanted me to take a swab test. And I said, 'No, I'm sorry, enough is enough,' it was 2022. [...] No more tests [laughs]. I told them, 'I'm also against you testing my children' – because they tested the children too, so they could go to lunch with their grandparents – but my wife agreed to have them tested, so we did. My wife went to lunch with the children and so on. But I don't know if you can understand the importance of this. I mean, it's serious, [...] it's a clear indication of how the situation has worsened and has also worsened relations with relatives [...]." (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 45)

"That is, [at my child's first communion] my brother and niece came, [...] which I didn't expect at all. At first he said no, then he thought about it and said, 'Eh, but come on, for [name of the interviewee's first child], then we thought about it. Eh, come on, my child and I will come.' [...] My sister didn't come, and neither did my older niece/nephew. [...] And my brother-in-law, well, we don't even talk to each other [...]" (Emma, 45 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 57)

Not all families, however, experienced conflict related to childhood and/or anti-COVID-19 vaccination choices. Several interviewees emphasized that they had “no family tensions” despite differences of opinion, attributing this to mutual respect, avoidance of contentious topics, or longstanding boundaries around personal health decisions. For these families, harmony was maintained by consciously steering clear of direct confrontation.

Across these varied experiences, parents portrayed the pandemic not as the origin of partner disagreement, but as a context in which prior alignments or misalignments became more visible. For most, early agreement on childhood vaccination decisions created a foundation for unity during the pandemic, while for others, the process of resolving those earlier disputes proved crucial in enabling a coherent family response to COVID-19 mandates.

4.2.1.2. Discussing vaccination choices outside family: Relationships with peers, colleagues, and friends

Tensions linked to vaccination decisions were present in relationships with (parents' and children's) peers, colleagues, and friends, but their intensity and pervasiveness varied across contexts. For childhood vaccines, such tensions tended to arise in specific social settings — most often within parental networks at schools or in local communities. These interactions could involve critical remarks, subtle distancing, or, in some cases, more direct confrontation. However, several parents emphasized that, in the pre-pandemic period, these disagreements were generally limited in scope and did not dominate their social lives.

"I talked to some of my friends who made different choices, and I have to say, even these friends of mine, unfortunately, were a bit harsher than I was. I mean, I dared to say, 'Look, I chose not to,' and some of them said, 'You're irresponsible, you are'... then, via text message, [...] via text message, I just don't consider you anymore. And then, of course, we still see each other, but I've burned my bridges a bit because I saw that we had very different ways of looking at things. (Dario, 48 y.o., 3 children, unvaccinated – Pos. 43)

The pandemic fundamentally exacerbated this landscape. COVID-19 vaccination requirements, mask mandates, and the Green Pass made compliance or non-compliance visible and, in many situations, unavoidable. Colleagues, friends, and community members often became directly involved in debates or confrontations, with vaccination status becoming a decisive factor in shaping inclusion or exclusion from shared activities. For some, workplace relationships deteriorated due to perceived judgment or hostility, while others reported a gradual cooling of friendships as differences in views on pandemic measures emerged. Unlike the more contained disputes over childhood vaccines, pandemic-related tensions often had broader consequences, influencing multiple areas of social interaction simultaneously.

"But by then the atmosphere was completely ruined: the climate among colleagues, the same people who worked with him [husband], well, there were arguments because this topic came up..." (Nora, 47 years old, 3 children, partially vaccinated and unvaccinated – Pos. 19)

"We lost long-time friends with whom we shared vacations, dinners, picnics, homework. They are very much in favor of getting vaccinated, super vaccinated. And they didn't accept, but in my opinion didn't even understand, our position, our choice. They told us that everyone has to take responsibility for themselves, so we realized that perhaps this friendship was over. [...] I would have been willing [to see them], I had nothing against them, even though they all got vaccinated. [...] But it's clear that for them it was a closed chapter and perhaps they felt unprotected by us, that we didn't respect them." (Lucia, 49 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 43)

In many accounts, the pandemic acted as a catalyst for underlying differences, turning latent disagreements into open conflicts. Some relationships ended altogether, either through direct rupture or mutual withdrawal, while others were redefined through reduced contact or a shift toward more neutral, superficial exchanges. The post-pandemic period showed a variety of trajectories: some friendships and professional relationships recovered as vaccination status lost relevance, while others remained permanently altered, with participants expressing lingering mistrust or discomfort.

It is important to note that experiences were not uniform. Many parents reported an absence of tensions with peers, colleagues, or friends, even in cases of divergent views. This was often attributed to mutual respect, shared perspectives, conscious avoidance of contentious topics, or, in the case of the pandemic period, previous “selection” of friendships after the introduction of childhood vaccination mandates. These accounts suggest that while the pandemic heightened the potential for conflict, its effects on social cohesion were uneven, with some networks managing to maintain stability despite the broader climate of polarization.

“But no, because I had already weeded out [my friends] years ago, we were already prepared. Already weeded out, already chosen the people we could walk with. So we were already ready, trained.” (Rachele, 47 years old, 3 children, partially vaccinated and unvaccinated – Pos. 79)

“What you can do, and what I tried to do during the COVID debate between pro-vaxxers and anti-vaxxers, was to try to stay on the side of impartiality. That was quite easy because, fortunately, I have honest friends, including people who chose to get vaccinated, but there was a very calm dialogue about it.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 23)

“Although I must say that in my research group, there was no pressure of any kind, quite the contrary. Even though everyone had decided to get vaccinated, there was complete respect for my decision, even though I had made my position clear, so they knew I wasn't vaccinated. In fact, there was

a great deal of support.” (Matilde, 43 years old, 2 children, vaccinated and partially vaccinated – Pos. 23)

Tensions related to vaccination choices were far less common among children’s peer groups in the context of routine childhood immunizations. Only a few parents recounted situations in which their children were questioned or teased about their vaccination status. These episodes were generally isolated and, in most cases, did not lead to ongoing exclusion or significant disruption of friendships.

The COVID-19 pandemic, however, introduced a new set of dynamics. With the politicization of public health measures and the visibility of compliance, tensions over COVID-19 vaccination stance became more pronounced among children and, especially, adolescents. Some parents reported that their children faced questions, comments, or subtle forms of exclusion from classmates who held different views — or whose families complied with pandemic measures and vaccination requirements. In certain cases, remarks made by peers reflected narratives circulating in the wider society, suggesting that polarization in the adult world was filtering into children’s interactions.

“I am also very concerned about the children because they have started [talking about vaccination status] at school. My older children are in elementary school, but they have already started asking, ‘Are you vaccinated? No, but you have to get vaccinated.’ And obviously, these are things that are discussed in the family and should not reach the children.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 23)

“And with COVID here, for my youngest child, this has been very difficult. She/He’s in sixth grade, and these kids were arguing about this in class during the break between lessons, when the teacher wasn’t there. [...] They wanted to know who was vaccinated and who was not. [...] And so, at first, she/he didn’t know what to say [...], so she tried to dodge the question a little: ‘I made an appointment,’ ‘I don’t know,’ ‘I’ll ask my parents’. [...] At one point, we even said to him/her: ‘Listen, if they pressure you, just say you’ve had it,’ which is awful to say, but just so he/she could be left in peace. [...] Afterwards, they almost got into a fight in class over this. Because they were very

convinced that we were carrying COVID, that we were potential [spreaders]...
[...] That's how it was, even with the older children." (Lucia, 49 y.o., 3 children,
partially vaccinated and unvaccinated – Pos. 25)

While these tensions were not universally experienced, their occurrence during the pandemic illustrates how broader societal conflicts over public health measures could extend into younger generations' social environments. This, in turn, sometimes reinforced parents' own sense of being positioned outside mainstream norms, as they saw their children directly affected by the divisions surrounding vaccination and pandemic measures.

School-level management of both the childhood vaccination rules and pandemic measures had a direct and sometimes unintended influence on children's peer relationships. In some cases, especially during the pandemic, the visibility of compliance — whether through vaccination certificates, Green Pass requirements for participation in activities, or mask-wearing practices — made children's status apparent to classmates and their families. This visibility could reinforce divisions, leading to questions, exclusion from group activities, or subtle forms of distancing. Parents recounted situations in which children were singled out, either explicitly through administrative processes (e.g., being called out of class to deliver documents) or implicitly through restrictions on participation in trips, sports, or events.

"Well... at one point, a notice arrived, but I don't remember exactly what it was about. There were two children in my child's class who weren't vaccinated [with pediatric vaccines]. So the headmistress came in, gave this letter to these two children, and they know among themselves who [is vaccinated and who isn't]... He/She came home and said to me, 'Mom, guess what they told me? 'Ah, so it's something to do with vaccines because they're not vaccinated.' So I went to the school and said, 'Please, when there are communications, either send them directly to me [...] there's no need to hand them out to these kids, or you can call me and I'll come to the school myself [...]'. And then it was the topic after 2017, right? They talked about nothing but vaccines [...], so they also compared notes with each other." (Sara, 58 y.o., 2 children, unvaccinated – Pos. 57)

“But a fifth-grade teacher asked the children, ‘Raise your hand if you’ve been vaccinated [against COVID] in class.’ When [name interviewee’s child] told me, I flew into a rage.” (Emma, 45 y.o., 2 children, partially vaccinated and unvaccinated, Pos. 121)

During the pandemic, remote learning for unvaccinated or quarantined children could also interrupt peer bonds, particularly when these absences were frequent or prolonged. Conversely, in settings where school staff actively worked to minimize the visibility of compliance checks and maintain inclusive participation, the impact on peer relationships was less pronounced. For many families, the way schools chose to enforce rules — strictly, flexibly, or with discretion — played a decisive role in whether the policies’ social consequences were amplified or mitigated in children’s everyday interactions.

These varied experiences within families, peer groups, and school communities formed the immediate social context in which non-compliant parents and their children navigated daily life. Yet the dynamics did not stop at the boundaries of these specific relationships. The same patterns of visibility, negotiation, and exclusion that unfolded in households, classrooms, and friendship circles were embedded in a wider social field — one in which community norms, public discourse, and everyday interactions continually reinforced or challenged families’ positions. It is within this broader arena of influence and judgement that the pressures and strategies described in the following section took shape.

4.2.2. Social pressures, perceived divides, and strategies of avoidance

Within this broader arena of social interaction, parents’ accounts reveal how vaccination decisions became subject to varying degrees of influence and pressure. Experiences of direct or indirect judgment were common, with some interviewees reporting being openly criticized or challenged about their stance, while others described more subtle cues of disapproval or distancing. These

pressures could come from colleagues, friends, or extended family, and in some cases even from casual acquaintances within the local community.

“Then, since you must enroll your child in preschool, you also have pressure from your family, I must say... Yes, a little [pressure]... ‘Why don’t you vaccinate the child? What are you waiting for?! What if the child gets sick?!’. And then you always have someone breathing down your neck.” (Chiara, 38 y.o., 3 children, vaccinated)

“It’s stressful, stressful because even in your relationships with other parents, other families, if the topic comes up... there’s never a discussion, you feel that there’s a heavy judgment against those who don’t conform.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 75)

The intensity of these experiences often varied between the pre-pandemic and pandemic periods. While disagreements over childhood vaccinations were more likely to remain within small circles, the universality and visibility of COVID-19 requirements meant that vaccination status became a socially salient marker in almost every domain of daily life. For some parents, this visibility translated into frequent encounters with social pressure, whether through explicit questioning, insinuations about responsibility, or assumptions about their political or moral values.

“Yesterday, I went to eat at a bar. Two elderly ladies were sitting next to me, and while I was eating, they asked me if I wanted them to hold my baby. I said, ‘No, I can eat with him in my arms,’ and one of the ladies said, ‘No, of course, I understand, with this COVID situation,’ and I said, ‘Look, ma’am, I’m not afraid of COVID, I mean, it’s not that I’m afraid of getting sick, that’s not why. [...] And the lady said, ‘Well, don’t worry, I’ve had three doses of the vaccine, and you’ve had the vaccine too.’ And I said, ‘No, look, I’m sorry, I’m not getting vaccinated while I’m pregnant and breastfeeding,’ because I didn’t want to [tell her that I was against the COVID-19 vaccine]... And she just stood there for a moment, and I’ll tell you, there was my table, there was room to pass. Next to hers was another table, and she put on her mask and, instead of passing by me to get out, [...] she went all the way around. So she passed her table, passed the one next to it, finished the circle, and went out. [...] These attitudes make me smile a little. But on the other hand, they also

worry me because if a person thinks like that, it's worrying." (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 23)

A recurrent theme was the perception of a deepening social divide, with society increasingly seen as split between those who complied with vaccination mandates and those who did not. According to some interviewees, the psychological impact of this social wound, even if it is healed, will persist for a long time.

"Yes, it's annoying. The pandemic has created greater social tensions than there were before because it has created social divisions, such as subgroups in the case of pediatric vaccines. Even the issue of the COVID vaccine yes or no has created social division [...]". (Lorenzo, 43 years old, 2 children, unvaccinated – Pos. 50)

"The way I see it, there has been a major rift, a major rift. Beyond the fact that now everyone can go wherever they want and there are no restrictions [in terms of COVID restrictions], the scar is there and remains." (Enrico, 68 y.o., 2 children, partially vaccinated – Pos. 37)

This divide was not only structural, shaped by access rules and mandates, but also symbolic, reinforced through social labelling and public discourse (see Section 4.3). Some parents felt positioned as outsiders or dissenters, a role they associated with heightened scrutiny and reduced trust in their social interactions.

"Let's say that society, on a global level, is now divided into two. That is, this division is clear-cut, very clear. Vaccinated yes, vaccinated no, COVID yes, COVID no. Because no one has ever denied that COVID exists, no one has ever denied it, but it must be properly assessed. No, no, the distinction is clear; we are now in a binary society. Even within families [...]. But it becomes difficult, even relationships cool off a bit because, one way or another, you end up falling into that discussion [...]. And it has created this double society." (Sara, 58 y.o., 2 children, unvaccinated – Pos. 65)

In response to these dynamics, many parents developed strategies of avoidance. Some deliberately refrained from discussing vaccination in mixed company, steering conversations toward neutral topics to prevent conflict. Others

withheld information about their own or their children's vaccination status, adopting a stance of selective disclosure. These strategies were employed both to preserve important relationships and to reduce the emotional strain of recurrent debates.

"And this thing here puts me in crisis, so I make my choices and keep them to myself a little. If I have to discuss it with other people, I find it difficult to talk about it, whether they are from the healthcare sector or other parents. Because it's very difficult to discuss and debate your children's health. There are people I can reason with, and others who are convinced of what they have done but don't want to listen to reason. And when you tell them that you question something, they look at you a bit like this [badly]: 'What are you saying?! No, the pediatrician says so, you're wrong.'" (Chiara, 38 y.o., 3 children, vaccinated – Pos. 31)

"So don't talk about it anymore. Before, that was all we talked about, but now you only talk about it with people who think like you, because otherwise it leads to conflict. So now there's no dialogue either. I don't even talk about these things with the parents in her class [...]" (Sofia, 47 years old, 3 children, vaccinated and unvaccinated – Pos. 35)

"But that really caused friction between us and even a bit of unease in our relationship. Because this thing divides you, you always feel a bit of discontent inside, those little misunderstandings that don't help. They don't help. So now I'm careful not to talk about vaccines or vaccinations, I pretend nothing happened and that's fine. That's how it is." (Lucia, 49 y.o., 3 children, Partially vaccinated and unvaccinated – Pos. 37)

The combination of social pressure, perceived division, and adaptive avoidance strategies highlights how vaccination-related tensions extended beyond specific relationships to shape broader patterns of interaction. Taken together, these dynamics show how vaccination mandates and pandemic-related measures reverberated across multiple layers of social life.

As previously seen, in the private sphere, alignment between partners often proved decisive in navigating the practical and emotional implications of non-compliance, while disagreements —especially over childhood vaccines —

could have lasting effects on family cohesion. At the community level, relationships with colleagues, friends, and peers were tested as vaccination status became more visible and socially consequential, with some networks fragmenting and others holding steady through mutual respect or avoidance of conflict. Even children's peer groups were not immune, as pandemic-related debates filtered into schoolyard interactions. Across these settings, many parents described navigating a climate of judgement, perceived social division, and strategic self-censorship to preserve key relationships. These processes, in which individual stances became socially defining and sometimes stigmatizing, are further examined in the next Section on labelling and perceived stigmatization.

4.3. Labeling, stigmatization, and public discourse

The relational tensions were shaped not only by personal disagreements but also by broader cultural scripts and public discourse. The social meanings attached to vaccine refusal — or even hesitancy — were often pre-formed by the labels circulating in media, institutional communication, and political debate.

Being vaccine-hesitant not only provokes interpersonal friction; it also exposes families to stigma, misrecognition, and social marginalization. Thus, public labeling became a powerful tool to define — and often delegitimize — vaccine-critical positions. This Section turns to these symbolic consequences and explores how labeling shaped both public perception and self-understanding.

4.3.1. The “No-Vax” label from 2017 to the pandemic

The label “No-Vax” emerged as a prominent public descriptor for those opposing or questioning vaccination in the wake of Law 119/2017. In the accounts of parents, its early use in 2017 was experienced as more narrowly focused,

typically associated with a specific group perceived — both by institutions and the media (see Section 4.3.4) — as ideologically opposed to all vaccines.

For some interviewees, this framing conjured the image of a small, radical minority outside mainstream society, often portrayed as driven by conspiracy thinking or absolute rejection of science. Parents who described themselves as selectively vaccinating, delaying certain vaccines, or questioning only specific aspects of the schedule found this label deeply inaccurate. It collapsed a spectrum of attitudes and experiences — as, for instance, in the case of adverse events following immunization — into a single, monolithic identity, erasing its gradations and complexities.

"Well, the term 'label' says it all, in the sense that, in my opinion, it is a simplification aimed at a specific purpose: categorizing and putting people into a box, so to speak, serves to create distance, create differences, and therefore conflict. And it is abused, in the sense that it is taken to extremes, 'No' 'Vax'. Even though in reality most people, almost all of those I know, would be 'Free-Vax', in the sense that they are in favor of the freedom to choose whether or not to get vaccinated. I'm not against vaccines, if you want to get it, get it, get as many as you want [Laughs]. I would like to be free to choose. But journalism, headlines, etc. love more extreme terms. 'No' is a very strong term that allows you, in a way, to assign blame and take the choice to extremes. Otherwise, if it comes out that we are a group of moderate people, it's not so easy to create factions." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 53)

"Yes, it's really discriminatory. Why No-Vaxxers? Among other things, those who suffered vaccine damage were Yes-Vaxxers, totally convinced. [...] Yet they consider them No-Vaxxers, they've coined a term specifically to discriminate, which is totally unfair." (Edoardo, 64 years old, 2 children, partially vaccinated and unvaccinated – Pos. 29)

Several interviewees recalled that, in 2017, the "No-Vax" label functioned less as a universal insult and more as a politically charged stereotype. It was deployed in media and political debates to delegitimize any opposition to the Lorenzin law. Still, it had not yet become an all-encompassing shorthand for

dissent on public health. While stigmatizing, its reach was relevant but primarily activated in the context of childhood vaccination and parental decision-making. Some interviewees reported attempting to reject or challenge the label, positioning themselves instead as informed, cautious, or “free” decision-makers (see Section 4.3.2 and Chapter 5), and arguing that their stance was unfairly equated with extreme positions.

"And after this headline, we don't find it for ourselves because it's true that we didn't have our children vaccinated, but it wasn't because 'no everything no'. I informed myself, in short, I chose for myself. But I don't say a priori this no, this no, this no. Every time I take the time to look, to think. I'm not close-minded in saying I'll never have a vaccine; in the meantime, I say no and wait and see. So I don't feel like a No-Vaxxer. After that name, No-Vax, was given to certain extremists, whom I didn't agree with either, I didn't feel like I was on that side. I still don't feel like I'm on that side. Extremism is never good, never, ever. So we didn't feel aligned with those provocative, destructive, closed-minded, senseless attitudes. [...] So, no, I don't feel like saying I'm an anti-vaxxer." (Lucia, 49 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 45)

"Ultimately, all labels serve to identify something, whether it's a fact, a person, or an object. And ultimately, what lies behind this reflects me, in the sense that I made this choice and this label is applied to everyone who makes this choice. [...] I'm the first to say, 'Yes, I'm the one they call a No-Vaxxer' [Laughs] because, in the end, it's all about understanding what's behind a label. So, for me, for example, when someone uses this term, I prefer to explain what it means to be a No-Vaxxer. It doesn't mean being a fundamentalist, or a threat to public health, or anything like that. It simply means having made a different health choice, which should be legitimate, in short." (Matilde, 43 y.o., 2 children, vaccinated and partially vaccinated – Pos. 25)

With the onset of the COVID-19 pandemic, however, the scope and connotations of “No-Vax” expanded dramatically.

"In my opinion, the COVID crisis has also worsened the situation with the Lorenzin law because it has obviously been an aggravating factor. But I read

a very interesting article at the time of the Lorenzin law [...]: the author said that all this fuss they've made now about the Lorenzin law, because even then they had already started with No-Vax and so on, was not done because of this law, to avoid measles crises and so on. They did it because, in the meantime, they create this kind of division, labeling, so that if you are a scientific and rational person, you are pro-vaccine. But at the moment, it costs you little because if you don't have children, etc. [it's not a problem]. But the day will come when they will create a similar choice and, in order not to label yourself as anti-vax, ignorant, obscurantist, you will go and get vaccinated with a vaccine you are not convinced about because they have now created the conditions [with childhood vaccination requirements] for something that is easier to create because it does not affect everyone. [...] Three years later, they started again [with the pandemic]: they had already created the label, they took it up again, pumped it up, blackened it well, and used it, and they got what they wanted. And the guy who wrote the article was right." (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 25)

The label no longer referred only to parents refusing childhood vaccines, but came to encompass anyone questioning COVID-19 vaccination, pandemic restrictions, the Green Pass, or other topics.

"And so yes, I absolutely dislike [the label No-Vaxxer]. But like all those terms. However, I know where they come from, I don't give them much importance, I don't feel... I even vaccinated my children. So I don't identify with that term and I try not to pay attention to it because those are terms that are used to label people: No-Vaxxer, No-Mask, No-Tav [protest movement against the construction of the Turin-Lyon high-speed railway line]. But what does that mean?!" (Clara, 37 y.o., 3 children, vaccinated – Pos. 57)

For many participants, this shift represented a transformation from a term used in a specific policy debate to a catch-all category of dissent — one that blurred boundaries between different issues and contexts. Its tone also changed: while in 2017 it was perceived as politically loaded but somewhat bounded, during the pandemic, it was experienced as openly hostile, moralizing, and socially damaging to one's reputation. Interviewees frequently described this later usage as a form of moral accusation rather than factual description. Being called "No-

Vax” in the pandemic context meant being positioned as anti-science, irresponsible toward collective health, and even culpable for prolonging the crisis. The label’s function shifted from targeting a defined set of behaviors (refusal of certain vaccines for children) to policing a much wider range of opinions and actions.

“I think they tried to frame people by cornering them as individuals who are potentially uninformed, misinformed by unreliable sources, extremists.”
(Marco, 47 years old, 2 children, unvaccinated – Pos. 67)

“Like all labels, from conspiracy theorist to denier and so on, they are labels designed to discredit people. That is, without having to discuss it, someone says that person is an anti-vaxxer and already it seems as if the other person is nothing. [...] They are all useless labels. Useful to those who use them, that is.” (Giacomo, 33 years old, 2 children, unvaccinated – Pos. 75)

"No-Vaxxer has now taken on a negative connotation; that's the problem. [...] Instead with the pandemic], there has been a witch hunt. [...] I mean, it could be an acceptable term if it were neutral. But it has taken on very negative connotations, and not just negative, but derogatory ones. But it shouldn't be derogatory, it's just a different way of thinking: one person says no, I'll do it, the other says yes, I'll do it. So I'm fine with you saying pro-vaccine and anti-vaccine. But it has to be neutral, it shouldn't be like that... understand?"
(Giada, 64 y.o., 2 children, unvaccinated – Pos. 23)

For some, this intensification made the term an effective tool of social discipline: it discouraged dissent by attaching strong stigma to any deviation from official health guidance, even on matters unrelated to vaccination.

In the Autonomous Province of Trento, a further layer of labelling emerged with the designation “non conforme” (“non-compliant”), used in official communications to identify children whose vaccination status did not meet legal requirements. Although the term might appear bureaucratically neutral, parents experienced it as a form of institutional marking that signaled deviation from normative expectations. When applied in documents seen by educational staff or administrators, it was perceived as reinforcing a formal separation between

compliant and non-compliant families, with potential for subtle but persistent forms of stigma and depersonalization.

“[I experienced the use of the label] as a constraint, a form of blackmail. Also because seeing “vaccination status: non-compliant” appear on your child’s medical record, come on! At six months old! That’s the first thing they look at when you go to the hospital or the emergency room. That’s really bad, on a human level, it’s really bad.” (Chiara, 38 y.o., 3 children, vaccinated – Pos. 21)

“Which is a terrible term because it is reminiscent of the worst kind of fascist propaganda [...]. ‘Non-compliant’ is a propaganda term, like ‘No-Vax’. But conformity is used for an object; you can’t use it with a person. If you use it for a person, you are already depersonalizing [...]. That is, you are using human beings as objects. By making them objects, you authorize people who disagree with that idea to rail against them, beat them up, do anything, because you are doing it to an object.” (Luisa, 43 y.o., 2 children, partially vaccinated – Pos. 33)

4.3.2. Between internalization and resistance: “Free-Vax” and beyond

While many parents rejected the “No-Vax” label as inaccurate or stigmatizing, some actively sought alternative descriptors to articulate their position. The most prominent of these was “Free-Vax” (free-vaccination), which appeared in both everyday conversation and association-driven communication as a self-designation intended to signal openness to individual choice rather than blanket opposition. For parents adopting this term, “Free-Vax” conveyed a principle of autonomy in health decisions: vaccination should be available but never coerced, and each family should evaluate its appropriateness on a case-by-case basis.

“But here’s the thing, at this moment in history, I don’t like the No-Vax label. I don’t like the label because I am a Free-Vaxxer. In the sense that I don’t hate anyone who makes a different choice [from mine]; on the contrary, I’m very happy that there are people who make different choices because it’s

right that in any field, not just healthcare, everyone should be free to make their own choices [...]" (Dario, 48 y.o., 3 children, unvaccinated – Pos. 41)

Interviewees who embraced “Free-Vax” often framed it as a corrective to the mischaracterization implied by “No-Vax.” They emphasized that their stance was not rooted in a wholesale rejection of science or medicine, but in a skepticism toward one-size-fits-all policies and in the belief that risk–benefit considerations should be personalized (see Chapter 5). Some parents saw the adoption of “Free-Vax” as a way to reclaim discursive space and reframe their position in a more legitimate and less polarizing light.

Because logically, we believe in freedom of choice. Because, as we as an association have always said, we are not against vaccines. When they call me this wonderful name, No-Vaxxer, who told you that?! I'm not saying I'm against vaccines; I'm for the freedom to choose whether to have them or not. Do you want to have them? Have them. I'm not saying no. But why should I say no? Should I fill your head with my beliefs? I can, if I see that you are open to it, talk about it, discuss it. But if I see that you think to vaccinate and I see that you are convinced, that's it, you are convinced." (Nora, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 37)

However, not all vaccine-hesitant parents chose to adopt alternative labels. Some avoided self-identification altogether, wary that any label—whether imposed externally or self-ascribed—could be appropriated or distorted in public debate. For these individuals, even “Free-Vax” carried the risk of being reinterpreted through the same antagonistic lens applied to “No-Vax,” ultimately reinforcing rather than dismantling existing stereotypes. Others viewed the practice of labelling itself as inherently reductive, reducing complex decision-making processes to a single political or ideological identity.

"In the sense that I am more ‘free’, that is, Free-Vax is fine. But the label is not fine either, because even there there are people who have been vaccinated by force, there are people who have been vaccinated out of love, for some particular reason. Some people have not been vaccinated out of fear and not out of a particular awareness, simply because it seemed to them... I mean, there are different nuances, so you can never take people

and say these are black and these are white. It's not my thing, so I've never accepted it and I'll never accept this definition." (Lucia, 49 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 45)

Resistance to labelling was also tied to concerns about social repercussions. Parents recounted instances where revealing any form of self-identification, even a carefully chosen one, could lead to negative consequences in workplaces, schools, or community networks. In this sense, resisting labels was not only an act of political or epistemic independence but also a pragmatic strategy to minimize exposure to stigma and surveillance.

Taken together, the adoption of terms like “Free-Vax” and the refusal to accept labels at all illustrate two divergent strategies in responding to public categorization: one attempting to redefine the narrative by offering a self-chosen identity, the other rejecting categorization as a framework altogether. Both approaches reflect a desire to resist the homogenizing effect of the “No-Vax” label and to assert a more nuanced representation of vaccine hesitancy.

4.3.3. From labels to discrimination, hate, and stigma

For many interviewees, the effects of public labelling were not confined to the symbolic realm but translated into tangible experiences of discrimination and social exclusion after the introduction of childhood vaccination and, especially, during the COVID-19 pandemic. These ranged from overt hostility in public spaces to subtler forms of marginalization in institutional and community settings.

“And I realized that there really was a level of prejudice and malice, of hatred. I was at the checkout in a supermarket when I heard someone use the label ‘No-Vax’ to describe them as ‘bastards’ and wish them all the evil in the world. But it was something that I said, damn it, after all, they say not to make comparisons with the situation of the Jews or other forms of discrimination, but I don't know. [...] And yes, so I took it badly, of course, I took it badly, I took it as something that required me to draw on my moral strength and learn to keep a low profile.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 11)

“It's not a nice situation. Then at school too, there's always the fear that the child will be discriminated against, targeted, even by the teachers themselves. It's happened, so... not to my child, but there have been cases... so it's not like you can live peacefully.” (Carlo, 51 y.o., 1 child, partially vaccinated)

Parents recounted being treated or fearing being treated differently in workplaces, schools, or healthcare facilities once their vaccination stance became known, describing changes in tone, reduced willingness to engage, or outright denial of services. In some cases, the discrimination was procedural — linked to the formal enforcement of vaccination mandates — but in others, it stemmed from individual attitudes shaped by dominant public narratives.

“[The COVID-19 vaccine] ‘Prevents complications in hospital,’ who said that? Many have ended up [in hospital], but if you end up there as an anti-vaxxer, you don't get treated very well. And that's the danger: you're afraid to say you're going because you know they'll treat you like dirt. I mean, you hear so many things, I mean, it's not... you hope you won't need to go at all [...].” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 37)

Stigmatization was a recurrent theme, with participants reporting that their position was framed not as a legitimate health choice but as a moral failing or social threat. The perception of being viewed as irresponsible, ignorant, or dangerous was heightened during the COVID-19 pandemic, when public discourse cast non-compliance as a direct risk to collective safety.

Some accounts went further, describing episodes that participants characterized as hate or social aggression. These included verbal insults from strangers, confrontational exchanges in public places, and — in rarer cases — online harassment targeting individuals or groups critical of vaccination policy. While such incidents were not universal, they contributed to a climate in which vaccine-critical parents felt under constant observation and at risk of censure. The heightened emotional tone of public debate during the pandemic amplified these dynamics, making dissent not only unpopular but, in some contexts, socially perilous.

"On social media, how many hateful, malicious comments have been made by doctors and nurses against people who have made a different choice? They have scared people." (Sofia, 47 years old, 3 children, vaccinated and unvaccinated – Pos. 17)

"Because even there, I have Facebook, you heard everything: snipers from balconies, 'Where are you going?' [Laughs], Madonna. [...] I mean, I heard children playing with a ball down in the garages and you hoped you had neighbors who thought like you, because otherwise it was over! So, there was also animosity between neighbors, with whom you might have gotten along before. And you can't heal those things because, rightly, I can't forget how you treated me or what you said to me." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 31)

Interviewees also spoke of a pervasive sense of surveillance, both formal and informal. In workplaces and schools, compliance with mandates was monitored through documentation checks, Green Pass controls, and reporting procedures, which some interpreted as mechanisms of social policing. Informally, parents recounted feeling "watched" by neighbors, colleagues, or other parents, particularly in small communities where vaccination status could quickly become common knowledge. This monitoring —whether institutional or social — was experienced as an erosion of privacy and a constant reminder of their position outside the normative mainstream.

"Yes, but look, ridiculous, ridiculous, ridiculous situations. The forest ranger comes down from the woods, looking at you through his/her binoculars and running after you. What do you want?! [Laughs] Up here at the top of the road, [a sign] says, 'Stay at home, if I see you passing by, I'll call the police'. [...] But then everyone was a sheriff, even on the street. Some ladies or gentlemen would shout at you from their windows, 'Stay at home!'. I mean, we've come to this... [...] These children at school who can't turn around, just thinking about it made me feel sick..." (Francesco, 66 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 37)

Overall, these experiences of discrimination, stigma, and hostility were understood not as isolated incidents but as interconnected consequences of a

broader labelling process. Public discourse, policy enforcement, and everyday social interactions combined to produce an environment in which vaccine-hesitant parents and their families could be treated as suspect, deviant, or morally deficient. These dynamics contributed not only to feelings of marginalization but also to the polarization of public debate, reinforcing the symbolic boundaries between the compliant and the non-compliant.

4.3.4. Media and institutional roles in shaping public perceptions of dissent considerations

Interviewees frequently highlighted the mutually reinforcing roles of media and political or health authorities in shaping public discourse on vaccination and in framing those who opposed or questioned official policies. Across both the childhood vaccination mandates of 2017 and the COVID-19 pandemic, participants perceived a continuity in the strategies used: a reliance on emotionally charged messaging, the simplification of complex positions into polarized categories, and the portrayal of dissent as illegitimate or socially harmful.

“They worked hard on fear, on terror [of COVID]. [...] But they terrorized, terrorized.” (Giulia, 56, 2 children, partially vaccinated and unvaccinated – Pos. 17)

In the context of Law 119/2017, parents recalled that media narratives often framed the debate as a confrontation between science and ignorance, presenting the “No-Vax” as a small but dangerous fringe group. National and local authorities were seen as playing an active role in reinforcing this framing, using press conferences, public statements, and health campaigns to present vaccine mandates as urgent, non-negotiable measures. While some acknowledged that the intention was to increase coverage rates, others interpreted the tone as deliberately antagonistic, aiming to discredit any form of critical engagement.

“The media needs to identify things, to give things names, and this also involves a political choice not to moderate tones, not to seek aggregation. And that's fine with the media because if you talk about No-Vaxxers, you

immediately give the reader something to latch onto. So there are the anti-vaxxers, the anti-Green Pass, the anti-this, the anti-that, and by doing so, you give the reader information that allows them to orient themselves, but you also contribute to increasing the level of social conflict and dampening the nuances. I mean, I've never felt like an anti-vaxxer, as I think many people do. Instead, you find yourself forcibly placed in that category from which you cannot escape, simply because you may have doubts or because you have made a choice that is slightly different from others. That's what I think. It may be convenient for some people. Certainly, if our goal is to have an inclusive society, [...] we are going in the opposite direction. And as long as we follow these political and media dynamics, we will not be able to go in that direction." (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated, Pos. 27)

"Well, let's say that the issue was treated very critically by the local newspapers, precisely because of the different positions. And despite there being several letters or in-depth articles of a certain kind, [...] there was no debate. [...] And there were always very rhetorical responses, if you will, along the lines of 'That's how it is, that's how it has to be done. Those who don't vaccinate do so because they look it up on the Internet and don't know anything'. In other words, very generic categorizations: we are all ignorant, and therefore those who think differently do so not because they are informed, but because they are ignorant, plain and simple. [...] This information has been passed on by the media, both in print and on television news programs. And this, let's say, weighs heavily because it leads to conflict between people." (Alice, 44 y.o. 2 children, unvaccinated – Pos. 101)

During the COVID-19 pandemic, these dynamics intensified. Interviewees described how both news outlets and official channels presented an increasingly binary vision of the public: those who complied with health measures and those who resisted, the latter now frequently equated with being “No-Vax,” regardless of their actual vaccination history or reasons for hesitancy. Political authorities — both at national and local levels — were perceived as instrumental in setting the tone of this discourse, sometimes spreading unreliable information, and often framing opposition as selfish, dangerous, or even radicalized. International authorities and transnational organizations were also cited as contributing to a

global narrative that stigmatized dissent, which local media and institutions then reproduced.

"[Many parents] They have vaccinated their children, they have been vaccinated themselves, and they have vaccinated their children. Probably motivated by the fear spread by the media and the government. The Prime Minister comes and tells us, 'If you don't get vaccinated, you will die and cause others to die. Get vaccinated, live,' which is completely false. We talk a lot about fake news, but wow, this is the mother of all fake news. And it was said by the Prime Minister. This is the level of information, eh..." (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 95)

Parents pointed to several mechanisms through which media and institutions contributed to the marginalization of critical voices. One was the polarization of the debate, where nuanced or conditional forms of hesitancy were collapsed into the same category as absolute refusal, erasing distinctions and reinforcing stereotypes. Another was the portrayal of dissenting individuals or groups as emotionally unstable, misinformed, or ideologically extreme, often using selective examples to represent the whole. A further mechanism was the marginalization of dissenting views in public forums — critical perspectives were excluded from debates, given limited airtime, or presented only to be refuted or ridiculed by experts in real time.

"Despite this, a demonstration was held in Pesaro with, as I recall, sixty thousand people. In short, a fairly large number, which the media [laughs] completely ignored." (Marco, 47 years old, two children, unvaccinated)

"Every now and then they invited someone [with different views on TV], but they didn't let them speak, they attacked them, they... but no, well, information, that is, there was an increase in censorship [during the pandemic] that was frightening." (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 115)

"A little something has been brought to light. But always with those in favor, strongly ready to obstruct. Anyone who thought differently was ridiculed; they wanted to ridicule them. People had to be, not dumbfounded, but convinced that those who thought differently were wrong. But in a way that made them

laugh at them, mock them. That's what happened. It was obvious." (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 71)

Health authorities, for their part, were often seen as relying on a top-down communication style that prioritized directive statements over dialogue.

"And then at a public meeting with the local health authority, I remember asking which children these vaccines are tested on. Because in order to protect my son from measles, I also want to understand how many other children are sacrificed in the trials. And he [a doctor representing the local health authority] responded by sidestepping the question [...]." (Luisa, 43 years old, 2 children, partially vaccinated – Pos. 11)

Vaccination campaigns — amplified by media outlets — were described as emphasizing urgency and moral obligation, leaving little space for discussion of risks, uncertainties, or individual circumstances. Political authorities, meanwhile, were frequently associated with more combative rhetoric, using language that, in the eyes of some interviewees, inflamed public hostility toward non-aligned people.

"Terrible, there were even advertisements [promoting the COVID-19 vaccination campaign]. Well, there were also billboards that said, in essence, 'vaccinated or isolated'. (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 29)

These communicative dynamics were compounded by broader perceptions of neglect or exclusion in institutional relationships. Many parents felt that their concerns were systematically ignored or dismissed, both in public discourse and in direct interactions with political or health authorities. Efforts to initiate dialogue were often met with standardized responses or outright silence, reinforcing the perception of a one-way communication flow in which authorities spoke to citizens rather than with them.

"There was a discussion, and I remember, for example, that the association [Vaccinare Informati] took action, went there [to the Province], and there was a dialogue. But it was more of a dialogue on the part of the associations that were asking questions and therefore presenting themselves and seeking discussion. On the other hand, there was some listening, but there was no response, at least not a thoughtful response to all the questions. There was

a response in line with what were, in short, the central positions. That's what happened." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 95)

While a minority of participants recalled instances of institutional responsiveness — such as local meetings, individual consultations, or targeted outreach — these were described as exceptional rather than routine.

Trust in institutions emerged as a central theme linking media narratives and governance practices. Political institutions were often seen as prioritizing compliance metrics and public image over substantive engagement with dissenting views, leading to a further erosion of confidence. Health institutions, while sometimes perceived as more technically competent and less politically driven, were also criticized for failing to provide transparent, accessible information and for aligning too closely with political messaging. In both cases, the absence of meaningful dialogue was interpreted not only as a strategic choice but as a signal that dissenting citizens were beyond the boundaries of legitimate participation in public debate.

"As an association, we have been asking to meet with the institutions for months. We kept sending emails and certified emails, and the [association president] kept calling them, saying, 'Yes, yes, you're right,' but no one wants to listen to us. I mean, are you so afraid of a handful of people coming to ask you questions? [...] At least in our experience, there is no dialogue." (Marco, 47 years old, 2 children, unvaccinated – Pos. 121)

"So it's clear that institutions have closed their doors to families." (Beatrice, 53 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 53)

The interplay between institutional authority and media coverage thus created a feedback loop: official statements shaped headlines, and media narratives amplified the tone and content of institutional communication. For many parents, the result was the normalization of stigma against vaccine-hesitant individuals. When institutional leaders described non-compliant citizens in derogatory terms and the media reproduced these statements uncritically, it not only shaped public opinion but also legitimized discriminatory attitudes and

behaviors in everyday life. As discussed earlier in this section, these representations contributed to experiences of stigmatization, discrimination, and even hate, embedding them within a broader political and communicative context.

4.4. Networking, mutual aid, and advocacy: The role of Vaccinare Informati

The introduction of vaccination mandates, particularly in early childhood, catalyzed a new phase of engagement among non-compliant parents. Many interviewees recalled how the abrupt shift from voluntary to mandatory vaccination created a pressing need to find others facing similar challenges, both to counter feelings of isolation and to access trusted, alternative sources of information. In this context, Vaccinare Informati emerged as more than a voluntary association — it became a recognized reference point for families navigating the social, legal, and emotional consequences of non-compliance.

“It [Vaccinate Informati] is a point of reference; we know that there are others who share our views, and in case of doubt or need, we know who to turn to. We feel more secure knowing that there is an association that shares our views.” (Giorgio, 62 y.o., 3 children, vaccinated, partially vaccinated, and unvaccinated – Pos. 47)

“The association plays an important role because, on the one hand, it provides opportunities for learning and reflection, thanks in part to the fact that it invites doctors rather than suggests readings [...]; and on the other hand, it offers very important support to families, including families who have suffered vaccine damage, adverse effects, providing practical, real support in the form of guidance, assistance, and contacts with doctors who can treat them. In other words, this association — like others of its kind outside Trentino — is often the only avenue, the only door that opens to real help. Because on the other hand, [at the institutional level], the proposals are few and far between, and they are also ineffective. This is because everything is

in line with a certain type of thinking and treatment strategy.” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 131)

Parents described the association as a space where their concerns were met with understanding rather than dismissal. It provided an environment in which it was possible to speak openly about doubts, adverse experiences, and strategies for protecting children’s health without fear of stigma or confrontation. This relational climate was not only valued for its emotional benefits; it also underpinned a collective learning process in which information, resources, and practical know-how circulated between members. Many viewed Vaccinare Informati as a counterweight to institutional communication, offering what they perceived as more balanced or transparent information than official channels.

Motivations for joining the association ranged from the need for reliable, critically oriented information on vaccines and mandates to the desire for solidarity in contexts of institutional exclusion. For some parents, the association was instrumental in providing concrete guidance on legal procedures, exemption requests, or how to respond to school and healthcare authorities. Others highlighted the reassurance of knowing that someone else had already navigated similar challenges — a form of “experience-based mentoring” that reduced uncertainty and strengthened individual confidence.

“Vaccinare Informati helped me a lot, first of all, to find other people who had made the same choice as me, and then to get information. They did various things; they also gave us [support] on how to deal with fines, for example, how to appeal or even how to respond to this letter from the school principal that I told you about [...]. So, [joining Vaccinare Informati] helped me a lot to know, since they also have lawyers and everything, how to respond correctly regarding my rights and options.” (Sofia, 47 y.o., 3 children, Vaccinated and unvaccinated – Pos. 41)

The association’s activities were both educational and supportive. Public meetings, thematic conferences, and participation in community debates allowed members to deepen their understanding of vaccination policies and their implications. Alongside these, Vaccinare Informati coordinated solidarity funds for causes aligned with its mission, such as providing financial assistance to

individuals injured by vaccines. Such actions reinforced the association's role as an active agent of care and as a moral community invested in protecting perceived victims of unjust policies.

Although the association did not engage in formal lobbying, many members participated in locally grounded advocacy — approaching municipal or provincial representatives, presenting petitions, and contributing to public discussions in schools, neighborhood meetings, or local councils.

“But I've seen several parents take action. [...] Right now, I'm focusing on the issue of summer camps. It took me seven months to get an appointment [with the authorities]. But we got it. Me, another mother [from the association], the provincial family agency, and the local summer camp. In short, small things, I have an idea for a little project, I'm focusing on that without shooting in the dark. Let's see if we can do it... a bit like a drop falling on a rock [...].” (Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 33)

“So when this thing started [Law No. 119/2017], my first child was already attending kindergarten here, and so I felt obliged to defend this right. [...] And I started to raise awareness among the teachers themselves [...]. I sent a letter to the mayor, I sent a letter to the kindergarten [...].” (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15)

These initiatives aimed to overcome part of the sanctions provided for non-compliance — especially the additional sanctions introduced in Trentino (see Section 2.4.1) —, challenge dominant narratives around vaccination, broaden the public health debate, and legitimize alternative perspectives grounded in informed choice and parental autonomy. In recounting these various initiatives in support of the cause, however, many interviewees pointed out that despite their best efforts, many of these initiatives did not receive the hoped-for support from either institutions or citizens.

“Yet it is always difficult [to achieve results at the political level] because I also see [husband's name] once went to speak at the Provincial Council together with a representative of the association: there is total closure, or rather, perhaps there had been some glimmers of hope, but afterwards it all

turned out to be a bluff.” (Nora, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 37)

“Precisely, in collecting signatures [in support of children excluded from nurseries], [it was difficult] to hear other parents say, ‘No, I’m not signing because I’ve made a different choice’. And I said, ‘Yes, but I’m not telling you that you shouldn’t vaccinate your children, it’s just a signature in support of those [who are excluded]’. And so I was really upset. [...] in the end, all the signatures, all the demonstrations we organized, the letters written to politicians and various public figures, ended up being a waste of time.” (Camilla, 45 y.o., 2 children, unvaccinated – Pos. 11-13)

For numerous interviewees, *Vaccinare Informati* was not simply an optional affiliation but a vital infrastructure for sustaining their position in a context of political pressure and social stigma. By combining the roles of informational hub, mutual aid network, and collective voice, the association helped transform individual resistance into coordinated action. It offered a protective social environment where values could be shared and defended, making it easier for parents to endure the personal and relational costs of dissent. In doing so, *Vaccinare Informati* contributed to the resilience and visibility of vaccine-critical families within their local communities and beyond.

Considerations

The analysis of the consequences of vaccination mandates on non-compliant families shows that public health policy is not only enforced through formal mechanisms but is also embedded in everyday relationships, identities, and community life. Across contexts — from households to public arenas — mandates operated simultaneously as material constraints and symbolic markers, restructuring social worlds and influencing the ways parents positioned themselves within them. These dynamics align with sociological perspectives on the social life of policy (Shore & Wright, 1997) and on how laws become lived

experiences negotiated in specific relational settings. In this case, legal mandates for childhood and COVID-19 vaccination were not experienced solely as health measures but as interventions into the domains of family decision-making, social belonging, and moral identity, illustrating the interplay between structural regulation and the micro-politics of everyday life.

Patterns in partner and family alignment recall the literature on parental decision-making as a negotiated process (Reich, 2016; Faircloth, 2014), in which coherence of values and mutual trust are decisive for managing the risks and uncertainties associated with child health. The empirical evidence extends this framework by showing how earlier negotiations over childhood vaccines shaped the capacity of couples to respond coherently to pandemic mandates. In line with the concept of reflexive vigilance (Rowland et al., 2022; Hendriks et al., 2016; Van de Walle & Six, 2014), many parents actively monitored both policy changes and social contexts, adapting their disclosure strategies to preserve family harmony and protect social ties.

The tensions and fractures observed in peer, workplace, and school environments resonate with Goffman's (1963) analysis of stigma as a relational process in which social visibility — here amplified by compliance checks and pandemic documentation — increases the risk of judgment or exclusion. These findings nuance existing accounts by showing how the politicization of vaccination not only sharpened adult conflicts but also filtered into children's peer interactions, producing intergenerational effects of polarization.

The symbolic dimension of these conflicts is illuminated by the labelling processes parents described. The "No-Vax" label, and later the bureaucratic designation "non-compliant," functioned as markers of deviance in both public discourse and administrative practice. As in Douglas's (2005) account of moral boundary-making, these labels defined who was inside or outside the moral community of responsible citizens. Echoing Ward et al.'s (2019) analysis, the force of such labels lies in their ability to collapse diverse positions into a monolithic identity perceived as irrational, dangerous, or morally deficient — a process that both erases internal variation and facilitates stigma. The shift from a

bounded political stereotype in 2017 to a moralized accusation during the pandemic reflects a change in the communicative environment, reinforced by media and institutional narratives (Bucchi & Neresini, 2007). Parents' responses — whether through reclaiming terms like “Free-Vax” or rejecting labels altogether — show active contestation of imposed identities and, in some cases, deliberate strategies to avoid the reinforcing loop of stigma.

The role of Vaccinare Informati illustrates how collective organization can mitigate the isolating effects of mandates and stigma. Consistent with theories of civic epistemologies (Jasanoff, 2005) and lay knowledge production (Wynne, 1992; Epstein, 1995), the association functioned as an alternative knowledge infrastructure, where experience-based expertise was valued and shared. It also acted as a moral community (Leach & Fairhead, 2007) and a site of collective resilience (Norris et al., 2008), transforming individual resistance into coordinated action through the circulation of information, mutual aid, and local advocacy. Unlike formal lobbying, its practices — petitions, municipal engagement, participation in community debates — reflect a grassroots mode of civic action (della Porta & Diani, 2020) embedded in community relationships rather than institutionalized power channels.

Taken together, the findings show how vaccination mandates reconfigure intimate and community relationships, create new boundaries of trust and belonging, and co-produce stigma through the interplay of public discourse and institutional labelling. They reveal the role of grassroots associations as infrastructures of dissent, combining informational, emotional, and practical resources to sustain resilience under conditions of political pressure. They also extend the concept of reflexive vigilance to encompass not only the monitoring of institutional signals but also the strategic management of social visibility within everyday networks. In this way, Chapter 4 bridges the analysis of formal governance and informal social dynamics, illustrating how public health mandates travel beyond their policy goals to shape the lived realities, identities, and collective strategies of those who resist them.

CHAPTER 5

Navigating uncertainty: Parental decision-making in the context of vaccine hesitancy

Introduction

Building on the methodological and analytical framework presented in Chapter 3, this chapter examines the processes through which Free-Vaxxer parents make vaccination decisions, focusing on how personal experiences, medical histories, and perceptions of risk intersect with parental epistemologies to shape both individual choices and collective identities. These decisions do not arise in isolation but emerge from a web of moral reasoning, experiential interpretation, and social interaction — processes that reflect broader values, responsibilities, and ways of knowing.

Public discourse often frames parental vaccine hesitancy as a problem of ignorance or irrationality. From a science and technology studies (STS) and sociology of health perspective, however, it is better understood as a complex epistemic and moral practice. Parents engage in what Pols (2014) terms epistemic labor: critically evaluating information, integrating biomedical and experiential evidence, and situating health decisions within the lived contexts of their children and families. Rather than rejecting science outright, many adopt the stance of reflexive health citizens, selectively trusting, questioning, and reinterpreting expert claims in light of biographical experience and relational commitments.

This chapter is informed by the thematic clusters of *Reflexive and Individualized Parenting*, *Moral Economy of Parenting and Responsibility*, *Risk*

Perception and Vaccine Practice, Experiential Knowledge and Situated Trust, and Parenting and Social Identity. These themes illuminate how parents navigate uncertainty and construct vaccine decision-making as a reflective, morally charged, and context-dependent process.

The analysis unfolds in four interrelated sections. First, it explores how parents interpret and recalibrate risk in light of their children's specific vulnerabilities and past health events, often reframing selective or delayed vaccination as an act of protection rather than neglect. Second, it examines the moral economy of parenting, showing how responsibility is enacted through active engagement, vigilance, and the prioritization of intimate, situated knowledge over generalized policy guidelines. Third, it traces the role of experiential knowledge and situated trust in shaping decisions, highlighting the selective reliance on chosen professionals, peer networks, and association-based resources. Fourth, it considers how these orientations are sustained and expressed across broader life domains — from educational choices and healthcare strategies to dietary and lifestyle commitments — situating vaccination decisions within a coherent “life project” grounded in autonomy and health-consciousness.

While the empirical focus spans both childhood vaccination under Law No. 119/2017 and COVID-19 vaccination, these are treated as distinct yet interconnected contexts. Each generated its own uncertainties, pressures, and justificatory frameworks, shaping how doubt emerged, evolved, and was acted upon. Throughout the chapter, these strands are examined in parallel within each thematic section, tracing both continuities and points of rupture across vaccine experiences. In this way, the chapter situates parental decision-making not as a binary pro/anti choice, but as a dynamic process embedded in biographies, relationships, and value-driven ways of life.

5.1. Information, doubt, and the search for clarity in vaccine decision-making

For most vaccine-hesitant parents in this study, hesitancy did not begin as a fixed stance but emerged over time as a response to moments of uncertainty. Doubt often started with a specific question — about the necessity, safety, or timing of a vaccine — and evolved into a broader search for clarity. This search drew on a wide range of sources, from pediatric consultations and peer exchanges to online communities, social media, and alternative health networks, each offering varying degrees of trustworthiness, accessibility, and alignment with parental values.

These information-seeking trajectories were rarely about collecting neutral “facts” alone. They also involved a deeper negotiation of meaning, in which institutional narratives were weighed against personal experiences, perceived contradictions, and silences in official communication. Central to this process were risk perceptions — concerning both vaccine-preventable diseases and the vaccines themselves — which shaped how parents interpreted information and imagined potential outcomes for their children.

Consistent with theoretical perspectives that frame vaccine hesitancy as dynamic and context-dependent (Larson, 2022; Peretti-Watel et al., 2015), the accounts presented here reveal decision-making as an iterative, revisable process. Choices were revisited as new information, experiences, and circumstances arose, meaning that doubt and certainty could shift repeatedly over time. This section examines these dynamics as a whole before turning, in 5.1.3 and 5.1.4, to the vaccine-specific contexts of childhood immunizations and COVID-19 vaccination, where these broader decision-making processes took distinct forms.

For vaccine-hesitant parents in this study, vaccination decisions rarely emerged as a fixed stance. Instead, they were the product of a progressive process of opinion formation, triggered by moments of doubt and sustained by deliberate information-seeking. In many accounts, doubt did not appear suddenly

but unfolded over time — sometimes beginning before the birth of a first child, sometimes prompted by specific events such as a medical encounter, an adverse experience (see Section 5.3), or exposure to conflicting narratives.

The timeline also intersected with key policy moments: some participants recalled that their questioning began before the introduction of Law 119/2017, often during pregnancy or early parenthood, while others described the law itself as a catalyst for doubt, perceiving the mandate as a signal of institutional pressure rather than reassurance.

For many parents, the shift toward vaccine hesitancy began with a single moment of doubt rather than a wholesale rejection of immunization. This doubt could emerge before the birth of a first child — for example, during pregnancy when vaccination schedules were first encountered — or in the early years of parenthood when the first doses were due.

“And when the letter arrived [to start the vaccination cycle], we waited a month. And from then on, when the letter arrived, I started to find out more. With material, first from one source and then from another. Then I started reading the vaccine leaflets, read the leaflets and it's crazy. There are some incredible things described in them. Okay. So you go and ask for information [from the medical staff] and they don't know anything. So I ordered some books, I asked *Vaccinare Informati* for books to read, I ordered them. And so I started reading, reading a lot, a lot, a lot. And okay, I found that my doubts about not having any kind of vaccination were fading day by day.” (Nicholas, 53 y.o., 2 children, unvaccinated – Pos. 31)

In some accounts, questioning arose even earlier, shaped by observing others' experiences or reflecting on one's own medical history. In these cases, by the time children were born, parents were already approaching vaccination with a measure of caution.

Others situated their first doubts after the introduction of Law 119/2017, describing the mandate as a turning point. For some, the law generated curiosity to learn more about vaccines; for others, it produced a sharper sense of suspicion.

“And even with my youngest, my third child, I found it much harder to vaccinate him/her because he/she was born after that law came into effect. I asked myself questions, I said, why? Then why make it mandatory for certain vaccines [that don't protect the community]? [...] And this law made me have doubts.” (Clara, 37 y.o., 3 children, vaccinated – Pos. 15)

“However, it was the Lorenzin law that really got me up in arms, in the sense that I didn't understand the point of tackling the issue in such an imposing and fundamentally anti-democratic way. Because, at the end of the day, health choices should be individual.” (Matilde, 43 y.o., 2 children, vaccinated and partially vaccinated – Pos. 13)

The sudden shift from recommendations to legal obligation was perceived by these parents not as an indication of urgency or necessity, but as an overreach that raised questions about the political and economic drivers behind health policy. This does not mean these parents immediately refused vaccines; rather, the law acted as a prompt to re-examine assumptions they had previously taken for granted.

In both pre- and post-mandate cases, the first seeds of doubt were often linked to a specific observation or event: a medical professional's inability to answer a detailed question, hearing about an adverse reaction in someone's child, noticing discrepancies between official information and lived reality, or discovering that a vaccine was being given against a disease they had never seen or heard of in recent decades. Some parents described the initial reaction as surprise, followed by a drive to understand more. Sometimes the initial doubt was triggered from inside the health system itself, when a professional signaled caution and the limits of standard protocols. This prompted parents to “start looking” more broadly and reconsider prior assumptions.

“So, let's say that [second daughter] had mild dermatitis in the first few months. I say mild because then [third son] was born and that's when the real dermatitis started. And when we went to the vaccination hub, because we had received the invitation to vaccinate, the midwife said to me, 'Look, in my opinion, you should wait for now. Because if you vaccinate, it could make the dermatitis that [first daughter] has a little worse'. And she added, 'Let's

keep this between us'. So from there we started to do some research, to look into it. And with [second daughter], we decided not to vaccinate her at all."
(Giulia, 56 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 7)

Importantly, this early questioning was rarely framed by participants as “anti-vaccine” sentiment. On the contrary, they saw it as a natural part of responsible parenting — taking the time to know one’s child, to tailor health decisions to their needs, and to avoid blindly following protocols that might not account for individual differences. The expression “knowing your child” encapsulates this ethos: the conviction that a parent’s intimate knowledge of their child’s constitution, health history, and environment gives them a legitimate role in determining medical interventions.

Once a question had arisen, the process of forming one’s own opinion took shape through active engagement with multiple information sources. Rather than relying passively on media or institutional reports, some parents described highly structured attempts to verify information through different channels, including medical professionals and scientific publications.

“In order to make this choice [not to vaccinate], I analyzed each [vaccine] individually together with doctors, I consulted texts, yes, scientific texts too [...], texts that not only tell you the story, but also provide you with graphs and data. So an analysis leads you down a certain path.” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 23)

Particularly, parents described a diversified information ecosystem when searching for vaccine-related information, encompassing six main types of information sources (summarized in Table 12):

Healthcare professionals — primarily pediatricians, but also other specialists, nurses, and pharmacists. Experiences here varied widely: some parents valued open dialogue with trusted professionals, while others recounted

dismissive or authoritarian encounters that reinforced their need to “verify” medical advice elsewhere.

Peers and associative networks — conversations with friends, relatives, or members of parents’ associations often played a key role, providing experiential accounts that were perceived as more authentic or relevant than generic institutional guidelines.

Web and social media — while frequently used, these were approached selectively. Parents rejected the common stereotype of vaccine-hesitant individuals as uncritical consumers of online misinformation. They distinguished between social platforms (often seen as chaotic or polarized) and specialized forums, blogs, or association websites, which were valued for providing in-depth or alternative perspectives.

Scientific publications and official data — some participants sought out peer-reviewed studies, epidemiological reports, or official statistical datasets, aiming to “go to the source” and avoid media filters.

Other sources — including books, conferences, and events organized by medical professionals outside mainstream channels.

TV, radio, and newspapers — these were generally distrusted. Traditional media were often portrayed as aligned with political or pharmaceutical interests, overly alarmist about diseases, and dismissive toward dissenting views.

Tab. 12 – Vaccinare Informati parents' information ecosystem: main sources, perceived roles, and illustrative excerpts.

Information source	Perceived role / evaluation	Illustrative excerpt
Healthcare professionals	Ambivalent: some trusted for open, dialogical encounters; others seen as dismissive, authoritarian, or "complicit" with institutional agendas. Selective trust depending on personal fit and willingness to listen.	"Instead, the experience with the other child was a consultation lasting more than two hours [...]. It was a really pleasant consultation, but from a purely medical point of view, in the sense that he didn't skimp on explanations, even to our questions, I must say, and we went even further. [...] I would do it again because he was a really welcoming, punctual doctor. He never skipped over anything like the other doctor, who had a bit of difficulty and ended up scrambling to find answers [...]. He also gave us some interesting information." (Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 37)
Peers and associative networks	Strongly valued as experiential, authentic, morally resonant. Provided reassurance and "proof by example." Association networks often mediated first contacts with dissenting knowledge.	"Because I was ignorant too, and a friend of mine told me, 'Look, I didn't vaccinate my child,' 'Oh, you can do that?' 'Yes, look,' and that's where I started." (Sofia, 47 years old, 3 children, vaccinated and unvaccinated – Pos. 27)
Web and social media	Used selectively: distinction between chaotic/polarized platforms and targeted blogs, forums, Telegram groups, or association websites. Parents stressed active filtering, not passive consumption.	"I follow the groups [on Facebook] on Telegram to see what they say. And I always take everything with a grain of salt because not everything is true." (Fabiana, 60 y.o., 2 children, partially vaccinated – Pos. 43)
Scientific publications and official data	Considered authoritative when accessible; sought to bypass media/institutional filters. Engagement ranged from PubMed searches to reading review literature.	"We did all the interviews with the vaccinating doctor, bringing stacks of studies from PubMed and so on." (Luisa, 43 y.o., 2 children, partially vaccinated – Pos. 11)
Other sources (books, conferences, alternative events)	Books and alternative events (conferences, association lectures, documentaries) were key for self-education and critical perspectives. Enabled long-term immersion into "parallel knowledge networks."	"So you have to read books, read articles, or attend conferences, sacrificing your evenings [to stay informed]. Actually, they are not wasted." (Valeria, 51 y.o., 2 children, unvaccinated – Pos. 31)
Traditional media (TV, radio, newspapers)	Largely distrusted: portrayed as alarmist, politically aligned, or pharmaceutically biased. Alternative outlets (e.g., BioBlu) sometimes filled the gap, though often acknowledged as problematic.	"We haven't listened to the news for two years now. We've banned it completely. When it's time for the news, we put on BioBlu or music, or we watch something on the Internet. [...] I don't listen to Rai [the main public radio broadcaster] or anything like that anymore." (Giorgio, 62 y.o., 3 children, vaccinated, partially vaccinated, and unvaccinated – Pos. 27)

As Table 12 shows, parents rarely relied on a single source but combined them in ways that reflected both availability and perceived trustworthiness. This multi-source approach was not random but guided by an effort to identify consistency, detect contradictions, and fill perceived gaps. Cross-checking information was described as a form of epistemic diligence, with parents aiming to verify whether institutional messages aligned with empirical evidence or matched their lived experience. The act of seeking diverse perspectives was closely tied to the value placed on making an informed choice. For participants, this meant more than passively receiving medical advice — it was an active, moral duty to critically examine available information, weigh risks and benefits, and arrive at a decision that could be defended both rationally and ethically. Many described this as an inseparable aspect of their parental role (see Section 5.2), bound up with protecting their child's health in a way that acknowledged individual variability. An “informed” choice was therefore not synonymous with compliance, but with personalized judgment, often in tension with standardized vaccination schedules.

In this process, trust and mistrust were not binary opposites but dynamically distributed across sources. A parent might trust their pediatrician on general child health but not on vaccination, or value an official health report while doubting the political motives behind its promotion. This selective trust formed part of a broader epistemic strategy in which parents positioned themselves as active investigators rather than passive recipients of biomedical authority.

This interplay of selective trust and active investigation did not end with the search for information. Instead, it laid the foundation for how parents interpreted and evaluated vaccination itself. The criteria they used to judge credibility — consistency, transparency, alignment with lived experience — became the same criteria applied to weighing vaccine risks and benefits, producing patterns of concern that were diverse in content but coherent in their underlying logic. Across interviews, parents' narratives about vaccination risks and benefits coalesced around three broad domains of concern: health-related considerations, technical and procedural issues, and economic or governmental factors. While these categories often overlapped in practice, they offer a useful

framework for understanding how different strands of skepticism interacted to shape decision-making.

5.1.1. Health concerns about vaccines

In parents' accounts, health-related considerations occupied the center of their vaccine decision-making. These were rarely abstract principles but instead reflected a deeply personalized calculus of risk versus necessity, anchored in the conviction that protecting their child's health required active, ongoing evaluation rather than passive adherence to standard schedules. Doubts often took root when parents perceived a mismatch between their child's actual vulnerability to a disease and the potential risks posed by the vaccine intended to prevent it. These concerns often emerged from within-family comparisons, where parents observed perceived differences in health trajectories between vaccinated and unvaccinated siblings:

"But above all, to assess my children's health. So, since the second one had a few problems with vaccines, nothing serious, nothing to worry about. But actually, if I showed you the pediatric records of my second and third daughters, there's a huge difference: the third one never has anything, never goes to the pediatrician, while with the second one I have a whole pile [referring to the medical records]." (Sofia, 47 years old, 3 children, vaccinated and unvaccinated – Pos. 11)

A recurring starting point was the observation that many vaccine-preventable diseases were no longer visible in their communities. The absence of measles outbreaks, the rarity of pertussis cases, or the fact that younger generations had never seen polio created a sense of temporal and epidemiological distance. When official communication described these diseases as urgent threats, parents found it difficult to reconcile these warnings with their lived reality. In such contexts, the risks associated with vaccines — whether well-documented or suspected — felt more immediate and tangible than the diseases themselves.

This comparative weighing of risks was reinforced by doubts about pharmacovigilance. Parents described the monitoring of adverse events not as a neutral, transparent process but as a system prone to underreporting, minimization, or even dismissal. Some recounted experiences where suspected reactions — whether mild or severe — were met with skepticism or were attributed to coincidence rather than investigated. These experiences, first-hand or mediated through peers, fostered the belief that official statistics underestimated the frequency and gravity of adverse events, thereby weakening confidence in assurances of vaccine safety.

“[...] reporting adverse reactions is also very difficult; it is a burdensome process, doctors absolutely do not want to do it, nobody wants to bother. And so active pharmacovigilance has never existed; passive pharmacovigilance is, let's say, half castrated in the sense that it is there, but barely functioning. And so it doesn't bring the real problems to light. I mean, how can I weigh things up if I don't know the extent of the problems that have occurred? So if you do a risk-benefit assessment when the risks are highly underestimated, obviously the benefits come out on top [laughs], that's pretty obvious.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 107)

Within this frame, the idea of personalized vaccination schedules emerged as a rational, protective measure. Parents felt that children's immune systems and health histories varied too widely to justify a uniform timetable. They spoke of the need for preliminary antibody tests and thorough anamnesis to determine whether a child actually needed a vaccine, whether timing could be adjusted, or whether certain formulations might be more appropriate. When these requests were denied — framed by the system as unnecessary or impractical — parents perceived it as a refusal to acknowledge individual variation, and as evidence that institutional priorities lay in protocol adherence rather than tailored care. Parents frequently underlined this demand for individualized assessment with vivid analogies, contrasting the lack of pre-vaccination evaluation for children with the careful checks performed on animals:

“I also asked in my defense statement [to contest the fine and explain my position] that my daughter be examined before vaccination. Because the vet

examines our dog before vaccinating it, it gives it a thorough check-up, because if it has any problems, the vet doesn't vaccinate it. But it's not like that with children. You take them all there, and no one examines them.”
(Laura, 36 years old, 1 child, unvaccinated – Pos. 59)

Health concerns were not only about timing and necessity but also about the impact of vaccines on the immune system. The notion of “too many, too soon” captured the fear that administering multiple vaccines in close succession might “overload” a young child’s defenses.

“So why scare these parents at a time when their children are at their weakest [newborns], when their immune systems are still developing and forming? Are you going to hammer away at them when their child is only three months old? No, that's not right.” (Sara, 58 y.o., 2 children, unvaccinated – Pos. 49)

For some parents, this reasoning crystallized in narratives that connected vaccination to the emergence of chronic conditions, particularly allergies.

“The moral of the story: the oldest [of the nieces and nephews] is riddled with allergies and is 16 years old. He/She was vaccinated when he/she was one year old and is still paying the consequences. The others, even if they throw themselves into the snow, don't get sick. I swear. Not even in the rain, nothing. They have antibodies this big [laughs].” (Emma, 45 years old, 2 children, partially vaccinated and unvaccinated – Pos. 47)

Comparisons with pharmaceutical drugs were frequent: if potent medications required precise dosing and careful patient monitoring, why should vaccines be exempt from similar individualization? This analogy, for parents, underscored the perceived asymmetry in how medical interventions were evaluated and justified.

For some, these concerns crystallized around specific feared outcomes. While only a minority explicitly linked vaccines to autism, the association persisted in certain narratives, typically grounded in personal observation or trusted peer testimony rather than in broad ideological claims.

“Well, it's hard to say even there, because among the vaccine-damaged people I've met, there's one who was healthy before the vaccine, up to a year

and a half, and then had autism spectrum disorders. From one day to the next, he/she stopped talking and smiling. You know... I know a couple of cases like that, so... I think it's possible [the vaccine-autism correlation], and I'm not saying that every autistic person is like that because of the vaccine. But, in my opinion, there are cases.” (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 73)

More common were worries about triggering autoimmune disorders, chronic conditions, or adverse reactions in children who already possessed immunity — whether from past infection or maternal antibody transfer. The possibility that vaccines could “disturb” an otherwise healthy system reinforced the desire to intervene only when strictly necessary.

“Then many children who were not vaccinated at the time [2017-2018] had antibody tests [...] and it was found that many had antibodies for almost everything [almost all the diseases for which mandatory vaccinations are required]. They went to the doctors and said, ‘My child has antibodies, at least remove these vaccines’, ‘No, they all have to be done’. And when you know there are antibodies, a vaccine can then cause [damage]...” (Laura, 36 y.o., 1 child, unvaccinated – Pos. 11)

What united these varied concerns was a precautionary ethos: when the threat of disease seemed distant and the safety of vaccines uncertain or imperfectly acknowledged, the most responsible course appeared to be delaying, spacing, or declining certain vaccinations. In this sense, health-related concerns did not stand alone but were deeply entwined with broader patterns of epistemic labor — cross-checking sources, interrogating institutional narratives, and insisting on decisions that felt both medically and morally defensible. These health concerns thus served as both a foundation and a filter, shaping how parents would later interpret technical, procedural, and even political aspects of vaccination policy.

5.1.2. Technical and procedural concerns about vaccines

Beyond questions of health impact, many parents scrutinized the mechanics of vaccination — the composition of the products, the formats in which they were offered, the transparency of information, and the reliability of official monitoring systems. These were not casual observations but part of a sustained, detail-oriented engagement with the vaccination process, in which technical aspects were inseparable from moral and epistemic expectations.

For some, the entry point was the question of vaccine components. Narratives ranged from general unease about “chemical additives” to precise, technically informed discussions of aluminum salts, formaldehyde, and other adjuvants or stabilizers. Parents often cross-referenced package inserts, scientific literature, and peer testimonies to understand what these substances were, why they were present, and what risks they might entail. Here, distrust was heightened by a perception of selective transparency: ingredients were listed but their functions were either unexplained or framed in ways that seemed to minimize possible harm. This left parents to fill the gaps themselves, sometimes reinforcing worst-case interpretations.

Closely linked was the question of vaccine formulations. Many parents expressed a preference for monovalent vaccines, seeing them as a way to accept certain protections while avoiding unnecessary exposure to others. Lack of single-antigen options converted nuanced preferences into a binary choice. Parents framed this as a structural barrier that undermined personalization even when they sought targeted protection.

“This friend of mine, for example, chose not to vaccinate them [his/her children]. But she keeps them covered with tetanus shots because he/she lives in the countryside and is afraid that while playing [they will get infected] [...]. So I mean, even there it's not a question of a crazy person putting his/her children [in danger]. That is, the risk he/she has recognized as really important for his/her children is tetanus, and that's why he/she has them vaccinated. It's difficult because, obviously, if you go to a vaccination center,

they give you other vaccines along with tetanus, so he/she managed to find a doctor who would administer it [the monovalent vaccine]... [...] But the point is, even there, you still want to protect your child. And it becomes difficult to do so because you either take the whole package or nothing.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 17)

“[...] even when there were measles epidemics, I wanted to vaccinate my children against measles. But I only wanted to vaccinate them against measles. And you can't find single vaccines there. Why is that? And also against tetanus. It happened to me in 2021, when I got a tick bite [...], they had to make a small incision in the hospital under anesthesia. They told me, now we're going to give you a tetanus shot. I knew it wasn't just tetanus, so I asked, 'Is it just tetanus?', and they said, 'No, there's also diphtheria and pertussis'. And I said, 'Are you kidding me? What do I need the pertussis vaccine for, since it only affects babies in the first few months of life?', 'This is the tetanus vaccine, it's a trivalent vaccine', and so I said, 'I'm not interested, I don't want it'.” (Fabiana, 60 years old, 2 children, partially vaccinated – Pos. 11)

Yet their accounts showed different shades: some parents were willing to proceed with combined vaccines if monovalent options were truly unavailable, while others saw the absence of monovalent products as an intentional restriction designed to enforce full compliance. In both cases, the unavailability of choice was read as an institutional decision that overrode parental agency.

The demand for comprehensive, comprehensible information ran through all these concerns. Parents contrasted the brevity and uniformity of official communication with the diversity and specificity of their own questions. In their accounts, consultations with pediatricians often stayed at a general level, leaving unanswered questions about long-term safety, effectiveness in current epidemiological conditions, or the management of known risks. For some, this was experienced as a lack of respect for the informed consent process; for others, it was a sign that professionals themselves might not have access to or be encouraged to share the full picture.

"Then, among other things, when the Lorenzin law made pediatric vaccinations mandatory, there was the hexavalent vaccine with additional monitoring, for example. And so it was in the fourth phase of testing [in the so-called "post-marketing surveillance" phase]. And there was the fact that, in any case, for vaccine drugs, they are not required to do all the studies and they are not required to publish them all in their entirety. And so many things were not disclosed to parents or to people who were interested in this or wanted to be interested in this. So it was a compulsion to inject a drug that was not well understood [...]" (Alessandra, 42 years old, 5 children, vaccinated and partially vaccinated – Pos. 25)

Adverse event reporting was another focal point. Parents frequently referred to cases — their own or those shared in their networks — where suspected vaccine reactions were dismissed or left unrecorded. The procedural dimension was key here: even if adverse events were statistically rare, the refusal to document them undermined the credibility of official safety claims. Some framed this as negligence; others suspected deliberate underreporting to protect vaccination targets. In both framings, the absence of systematic acknowledgement created a sense that the monitoring system was more about maintaining confidence than about uncovering the truth.

"So pharmacovigilance, as it stands, is completely useless. And they've also made it difficult because every now and then the AIFA [Italian Medicines Agency] website crashes, meaning you can't finish entering the data. If you ask the doctor to do it, they won't. Doctors don't do it. At the hospital, there have been cases of people reporting a possible adverse effect: 'But the doctor told me it was the vaccine, but I can't write it down, I can't certify it, I can't declare it'. Many people don't even know that it's possible to report an adverse event. There is a law, Law No. 210/1992, which gives those who can prove they have suffered damage the possibility of obtaining compensation. This law, according to another law, should be posted in all vaccination centers, but it is not. In Italy, there are no longer any medical examiners willing to pursue vaccine damage claims. So the law exists, but in practice, it is not possible to benefit from it. The commission that would then have to evaluate this request is a military medical commission, and they have orders [...] not to accept it, except for a few cases that are impossible to deny. They

have orders to reject the requests. I learned this directly from a medical examiner who has worked on these cases for years. So this is the situation, it's taboo." (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 105)

Finally, concerns about testing and updating vaccines tied these procedural critiques to broader temporal and political contexts. Some parents questioned whether certain products still matched circulating strains or whether their development and testing had been sufficient before approval.

"Oh my God, I said at the time that if they were more up-to-date vaccines [I might have had my children vaccinated], but not those from 40 years ago because the attenuated viruses they still use are very old..." (Sara, 58 years old, 2 children, unvaccinated – Pos. 21)

The COVID-19 period amplified these concerns, with its compressed development timelines and emergency authorizations (see Section 5.1.5). While some parents acknowledged the urgency of the pandemic, others saw the speed of production and deployment as proof that safety could be compromised under pressure, a concern that, once articulated in the COVID-19 context, was retroactively extended to routine vaccinations.

What emerges from these accounts is not a uniform rejection of technical processes but a spectrum of positions: from those who might accept vaccination if these procedural issues were addressed, to those who see the flaws as embedded in the very logic of the system. Across this spectrum, technical and procedural concerns operated as a lens through which parents interpreted the broader politics of vaccination, reinforcing selective, cautious, or resistant decision-making strategies.

5.1.3. Economic and governmental concerns about vaccines

For many parents, hesitancy toward vaccination was not only a matter of medical risk or procedural shortcomings but also a question of political economy. Vaccination policy was interpreted through a lens that linked biomedical decisions

to wider structures of power, governance, and market dynamics. Here, the act of vaccinating a child was not a purely clinical event but a node in a much larger network of economic interests and political strategies.

A recurring motif was the belief that vaccination campaigns were part of a broader plan. For some, this was expressed in general terms — a sense that mass immunization was one instrument among others for exerting social control or consolidating state authority. For others, the narrative was more specific: vaccination mandates, especially after Law No. 119/2017, were seen as deliberate tools to condition public behavior, marginalize dissenting voices, and normalize compliance in other areas of public life. The policy shift was interpreted not only as a health measure but as a precedent for extending state influence over intimate, family-level decisions.

“Also because, if you pay a fine in elementary school, you can attend, so this made us realize that this was more of a political decision than a public health one.” (Carlotta, 35 years old, 2 children, unvaccinated – Pos. 15)

Interwoven with these political readings were critiques of pharmaceutical companies and their role in shaping both vaccine production and public health agendas. Parents described the vaccine market as an ecosystem in which profit motives inevitably influenced research priorities, product portfolios, and marketing strategies.

“It could be something very useful, done scientifically and in good faith, without thinking about money. Because here it's more a question of business than health, at the end of the day.” (Sara, 58 years old, 2 children, unvaccinated – Pos. 95)

“It's the industry that manages this thing [...], business is business. That is, the business is giving drugs to healthy people [...]. That is, the pharmaceutical companies are the ones who manage it, who push for this thing [...]. So it's all political and industrial lobbying that has managed this, to their liking, of course.” (Lorenzo, 43 years old, 2 children, unvaccinated – Pos. 62)

While some acknowledged that companies need to operate within economic frameworks, they doubted whether such frameworks could coexist with

an uncompromising commitment to public health. Specific concerns included the consolidation of vaccine production in the hands of a few multinationals, perceived lobbying activities, and the idea that companies might push for broader vaccination schedules to expand markets rather than to meet genuine epidemiological needs.

These critiques often extended to the intersections between economic and political interests. Some framed vaccination as a biomedical discovery subsequently repurposed through market logics and mass communication — especially during the COVID-19 pandemic. In this view, mandates and campaigns signaled commercialization more than public health.

“What do I think about vaccines? That they were a great discovery that was then exploited to make money off us in the end. That's what I think. To make money off us, and I don't know if for other purposes too, but mainly that's what it's for. Because it's not always possible to sell drugs to healthy people, you know. And it was a great opportunity. They took a great discovery and turned it into something like this... From this episode [the pandemic] onwards, a great deal of marketing has been done, because to convince billions of people [to get vaccinated], well, you also need a communications expert, don't you?” (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 31)

Parents questioned the independence of public health authorities from the pharmaceutical industry, highlighting perceived conflicts of interest in advisory committees, research funding, and post-marketing surveillance. The sense that regulatory agencies might prioritize economic relationships over critical scrutiny undermined trust in their ability to act as impartial guardians of public safety. In this framing, transparency was not simply about providing more information but about demonstrating freedom from vested interests.

While these narratives could take on a strongly oppositional tone, they were not uniform in intensity. Some parents saw economic and political pressures as distortions of an otherwise valid public health tool — a problem that could, in principle, be mitigated through stricter regulation, better oversight, and stronger separation between industry and governance. Others, however, viewed these

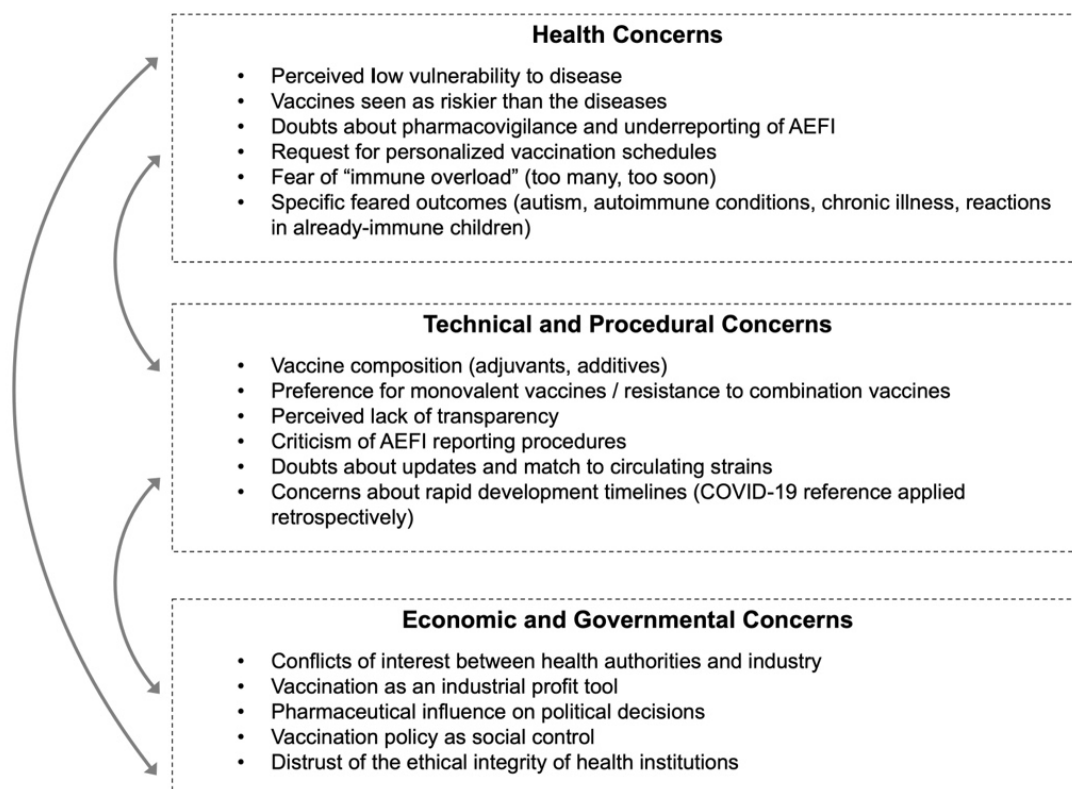
pressures as intrinsic to the system, making it impossible to disentangle vaccination policy from the imperatives of profit and political control. In the latter case, hesitancy was less about any specific vaccine and more about resisting participation in what they saw as a structurally compromised enterprise.

“So what are we talking about? We are talking about a system that serves other interests. And, inevitably, prevention is only good when it feeds the pharmaceutical industry, because in the end, that's what the vaccine is, right? Prevention that pays off...” (Carolina, 52 years old, 2 children, unvaccinated – Pos. 17)

Importantly, these economic and governmental concerns did not operate in isolation. They often interacted with health-related and procedural critiques, creating a reinforcing loop: doubts about the safety or testing of vaccines fed into suspicions about the motives of those promoting them, while perceived economic and political entanglements lent weight to calls for greater transparency, independent research, and alternative vaccination schedules. In this way, concerns about power and profit acted as both a background frame and an active driver of parental decision-making, shaping the moral and epistemic terms on which vaccination was accepted, delayed, or refused.

These findings regarding health-, technical-, and interests-related concerns surrounding the vaccination issue suggest that parents' vaccine hesitancy cannot be reduced to a single set of objections but is instead rooted in a spectrum of concerns that range from the clinical to the procedural to the political. Figure 33 summarizes these domains and their specific manifestations as they emerged from participants' accounts.

Fig. 33 – Typology of vaccine concerns emerging from parents' narratives, grouped into three interrelated domains: health, technical/procedural, and economic/governmental.



The concerns described above — spanning health risks, procedural weaknesses, and economic-political entanglements — did not emerge in a vacuum. They took shape within specific temporal and epidemiological contexts, which colored both the type of doubt parents expressed and the trajectory it followed. In the interviews, two contexts stood out as especially significant in structuring how uncertainty began and evolved: the domain of routine childhood vaccination and the more compressed, high-pressure environment of COVID-19 vaccination.

For many interviewees, doubts about childhood vaccines developed gradually, often years before the pandemic and Law No. 119/2017. These narratives were embedded in long-term reflections about parental responsibility, the changing visibility of vaccine-preventable diseases, and shifting relationships

with healthcare providers. Some parents traced the turning point to personal encounters with the vaccination system — such as difficulties obtaining tailored schedules, unacknowledged adverse events, or perceived gaps in official explanations. Others connected the timing of their doubts to external policy shifts (as discussed in Chapter 4), especially the introduction of Law No. 119/2017, which for some crystallized concerns about state overreach and for others prompted them to investigate vaccines more closely. In both cases, the slow accumulation of experiences and reflections created a decision-making process that was deliberate, iterative, and deeply personalized.

By contrast, COVID-19-specific doubts emerged in an environment of compressed timelines, heightened uncertainty, and intensified social pressure. Parents who had spent years forming their positions on childhood vaccination now found themselves confronting a novel pathogen, unfamiliar vaccine technologies, and a political climate in which compliance was publicly framed as a civic duty. For some, the urgency and novelty of the situation reinforced their earlier hesitations, especially around pharmacovigilance, testing timelines, and conflicts of interest. Others, even those previously open to certain vaccines, felt that the speed of development and deployment confirmed their fears about the influence of non-scientific priorities. The pandemic context also reframed risk perception: while the threat of SARS-CoV-2 was acknowledged, its severity was weighed against perceived uncertainties of the vaccines, leading to reassessments that were often more abrupt and emotionally charged than in the childhood vaccine context.

In this way, the same core concerns — about health effects, procedural integrity, and the interplay of economic and political forces — played out differently depending on the temporal horizon and the perceived balance between disease risk and vaccine uncertainty. The following Sections examine each of these domains in turn: 5.1.4 explores the gradual emergence of doubts about routine childhood vaccination, while 5.1.5 focuses on the more immediate, high-stakes decision-making processes around COVID-19 vaccines.

5.1.4. Contextualizing childhood vaccine doubts: Disease perceptions, technology types, and safety–efficacy assessments

For many parents in this study, doubts about childhood vaccines did not take the form of a blanket rejection but rather emerged from a layered process of evaluation in which diseases, vaccines, and personal circumstances were assessed together. This process was neither static nor uniform: perceptions could evolve over time, shift in response to new information, and be shaped by broader health events such as the COVID-19 pandemic. What united these narratives was the conviction that decisions about childhood vaccination should be grounded in a personalized appraisal of risks and benefits, rather than in adherence to a universal standard.

Perceptions of the diseases themselves were often the first filter through which parents approached vaccination. Certain vaccine-preventable diseases, such as diphtheria and polio, were described as having little current circulation in Italy, making the corresponding vaccines appear less urgent except in specific travel or migration contexts. This was sometimes accompanied by the belief that the rare cases still reported might originate from vaccine-derived infections rather than “wild” strains, raising questions about whether the intervention could paradoxically reintroduce the very risk it sought to prevent.

“So I say, what is the risk profile at the moment? Polio? Well, we are in a polio-free zone. We know that most cases of polio nowadays are vaccine-derived, so what is the risk? [...] Now there is basically no risk of polio, diphtheria... Diphtheria, yes, it doesn't have a significant incidence in Italy, now, in Europe, in our society.” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 21)

Yet this low perceived urgency did not apply across the board. Some diseases retained a prominent place in parental risk assessments, with tetanus emerging as a recurrent example. Unlike diseases perceived as dependent on interpersonal transmission, tetanus was seen as linked to environmental exposure — wounds, accidents, contact with contaminated objects — and thus

as a realistic possibility in everyday life. For some, this justified at least partial adherence to the schedule, even when other vaccines were questioned or refused. Other VPDs, such as pertussis, varicella, or measles, were filtered through direct or mediated experiences. For some parents, these experiences confirmed that the illnesses were generally mild in healthy children, leading to a preference for natural immunity. For others, they highlighted potential complications, reinforcing the idea that prevention was warranted — but not necessarily through the standard schedule or formulations offered. In these accounts, the perceived severity of a disease was not absolute but conditional, varying according to the child's age, underlying health, and living environment.

“My concern, my fear, was tetanus. We were planning to have the child vaccinated against tetanus, but not immediately, only when he began attending the community.” (Fabiana, 60 y.o., 2 children, partially vaccinated – Pos. 11)

“Exanthematous diseases are not a cause for concern because we also had them when we were children, and they helped us grow up. So we are not worried about them at all. The only disease that worried us more was perhaps tetanus.” (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 25)

“For example, there are some diseases that scare me, like measles, because I've never had it. So the things I haven't had [...] scare me because I don't know how I'll react. So, for example, I know that if someone here at the nursery tells me there's a case of measles, I know you can vaccinate them within 48 hours of the person coming into contact with it. And it's effective. I'm not saying you have the same coverage, but anyway. And I keep that in mind. That's it. On the other hand, my partner has had measles, so he's less afraid of it because he got through it without any problems. That's it. To tell you that not all vaccines or diseases are the same. [...] But the fear of disease is instilled [by the institutions].” (Carlotta, 35 y.o., 2 children, unvaccinated – Pos. 37)

Within this broader assessment, parents often distinguished between what they called “traditional” vaccines — long in use, based on older technologies — and newer products, particularly those using mRNA platforms. Traditional

vaccines such as tetanus, diphtheria, and, in some cases, measles, were often considered more familiar, better studied, and thus carrying a sense of relative stability. This perception was linked to the idea that decades of use allowed more time for possible long-term effects to emerge and be documented.

“[...] pediatric vaccines have been in use for forty years, so it may well be that active pharmacovigilance is no longer necessary. But in the case of COVID, with an experimental drug, the level of attention should be very high. [...] After all, mRNA is a special technology, unlike traditional vaccines, for which we know more or less [how they work and what they do]. Apart from the excipients and adjuvants they contain, etc., they probably can't do much more than that. This one [the COVID-19 vaccine], however, could have long-term effects that are impossible to evaluate. (Matilde, 43 y.o., 2 children, vaccinated and partially vaccinated – Pos. 31)

“Well, I have to say that [the anti-COVID-19 vaccine] gives me less confidence than the others. [...] All in all, I believe that pediatric vaccines can have consequences and reactions, because it has happened to people I know. But maybe, that way, I would feel more confident about pediatric ones. Even if I had to travel to a country where vaccinations are required, I would feel a little more comfortable about those vaccinations. I know they can also have side effects, but I know that there has been a certain type of study, and extensive testing has also been done.” (Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 57)

However, the COVID-19 pandemic introduced an important comparative shift. In light of their skepticism toward mRNA vaccines, some parents re-evaluated traditional childhood vaccines as “relatively safer” — not necessarily because they were considered risk-free, but because they contrasted with the perceived novelty, speed of development, and incomplete knowledge surrounding the anti-COVID-19 products. This relative positioning, however, did not automatically translate into acceptance. For some, the increased risk they attributed to mRNA vaccines merely shifted traditional vaccines up one notch on a risk continuum, without moving them past the threshold of personal safety. In other words, “more established” did not mean “safe enough” to warrant unconditional administration.

Perceptions of safety and efficacy were rarely abstract: they were grounded in parents' appraisals of their own family's living conditions. Parents who described their households as healthy, with good nutrition, clean environments, and ready access to healthcare, often argued that their children's actual exposure to infectious diseases was low. This environmental and social positioning was seen as a form of "natural protection" that reduced the necessity for routine vaccination — a reasoning reinforced by the belief that a strong immune system could handle most childhood illnesses without serious consequences.

"Our body is a perfect system. It is a system that, with a good immune system, well-trained, with good food, physical activity, etc., I believe that it is capable of fighting any disease." (Dario, 48 y.o., 3 children, unvaccinated – Pos. 21)

When discussing vaccine safety, most interviewees highlighted the health-related risks of giving the same vaccine to all children without considering their individual differences (see Section 6.1). Adverse events following immunization, discussed in detail in Section 5.3, were among the most cited sources of doubts related to vaccine safety. Furthermore, safety evaluations often drew parallels with pharmaceutical drugs: if medicines with potent biological effects were prescribed selectively and accompanied by close monitoring, interviewees often interrogate themselves on why vaccines — also pharmacologically active — are administered to all children according to a fixed timetable.

"But with a drug that is the same for everyone, there are bound to be some people who cannot tolerate it. Even with aspirin, some people cannot tolerate it, I mean. So even more so with a drug like a vaccine, which contains additives, metals, and other things that are quite significant." (Luisa, 43 y.o., 2 children, partially vaccinated)

Adverse events, whether directly experienced or recounted by trusted peers, were key moments in reshaping these safety perceptions, particularly when parents felt such events were dismissed or inadequately investigated (see Section 5.3).

Parents' specific safety concerns about childhood vaccines were not limited to immediate adverse events but also encompassed broader anxieties about the vaccine product itself and its long-term effects. Some drew attention to ingredients perceived as toxic — such as mercury, aluminum, or even “residual DNA” — and questioned why these would be tolerated in vaccines when analogous contaminants would lead to the withdrawal of pharmaceutical drugs. Others highlighted historical episodes in which specific vaccines (e.g., Sabin, Salk, or HPV) were associated with reported harm, reinforcing the idea that vaccines could “leave permanent damage”.

“The papilloma virus vaccine has been withdrawn from the market in America and some other countries, based on studies showing the damage it has caused. There is certified evidence of this... You decide if you want to take the risk, but I'm not taking it.” (Sara, 58 y.o., 2 children, unvaccinated – Pos. 63)

Importantly, safety debates often extended to structural issues of pharmaceutical regulation and transparency: interviewees expressed mistrust toward companies that, in their view, withheld or downplayed trial data, and toward institutions that allowed “experimental” vaccines to be used on children. Thus, vaccine safety was assessed not only at the bodily level but also within a wider moral economy of trust, accountability, and perceived concealment.

Efficacy was also subject to contextualized reasoning. Parents sometimes argued that natural infection in childhood could confer stronger or more lasting immunity than vaccination, particularly for diseases considered mild at that age but more severe in adulthood. Concerns about the efficacy of childhood vaccines often rested on both personal and second-hand experiences of “vaccine failures,” such as children contracting measles, mumps, or whooping cough despite being vaccinated. Many interviewees contrasted these episodes with the perceived robustness of natural immunity, which they described as “lifelong” and more reliable than the “temporary coverage” of vaccines.

“Now that I'm an adult, I don't have any antibodies from the vaccines I had [as a child]. I have antibodies from the diseases I've had. So what good were the vaccines if, as an adult, you're not covered or you continue with

vaccinations throughout your life? You vaccinate against measles as a child — I always use measles as an example — but when you reach 16, that's it, you're free. Because maybe those antibodies will last you a few more years, but at 30, you might be infected with measles. And at 30, if you get measles, it's a tough disease, it's really risky.” (Sara, 58 y.o., 2 children, unvaccinated – Pos. 73)

The issue of waning immunity was repeatedly raised, with participants questioning the rationale for early-life vaccination when protection might lapse before the disease became truly risky in adolescence or adulthood. This reasoning could underpin a selective acceptance strategy: avoiding certain vaccines in childhood to allow for natural immunity, while remaining open to targeted protection later in life.

“I had chickenpox, mumps, and I felt terrible [...]. So yes, you can feel bad, but you recover, in the sense that I'm not so worried about it right now. Maybe I would avoid them getting it when they're older. Although even in that case, there are people who have had chickenpox as adults and have recovered. Well, as a midwife, some diseases worry me. Chickenpox is dangerous for pregnant women. Not so much for the mother but for the baby because there is no cure, just like rubella. So [...] I hope the child gets chickenpox at least, so she can get it naturally.” (Camilla, 45 y.o., 2 children, unvaccinated – Pos. 35)

Others referenced antibody testing as evidence of inconsistency, noting cases where vaccinated children showed no measurable protection while unvaccinated siblings did. In some cases, indeed, the vaccinated subject may be a “non-responder” and therefore not develop any vaccine coverage. This is an argument often employed to support the necessity for antibody testing prior to and following immunization, thereby refuting the equation “vaccinated = protected”.

“Also because, within the Vaccinare Informati association, there are those who had the antibodies tested with completely unpredictable results. That is, people who had been vaccinated but were not covered, and people who had not been vaccinated but were covered. [...] So [...] perhaps the antibody test is more valuable than saying, ‘Ok, I'll protect myself with a vaccination’, which

often has no effect on the person. And so maybe it's true, we vaccinated our first child [against tetanus] and we're not worried if he/she gets a scratch. But maybe he/she has a lower level of antibodies than our second child, who was not vaccinated. It's true that with tetanus, you don't really risk much, but theoretically, our first child could be at greater risk than his/her sibling, but you don't know. So it could also be a bit misleading to say that I'm immunizing myself by getting the vaccine." (Michele, 48 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 63)

"On the advice of the association, we did the antibody tests. So, the second child had had the anti-polio and anti-tetanus vaccines, but he/she was not covered for either tetanus or polio. In other words, it was as if he/she had not had any vaccinations at all. So, even more so, one wonders about the effectiveness of the vaccines." (Fabiana, 60 y.o., 2 children, partially vaccinated – Pos. 11)

This perceived unpredictability blurred the line between protection and non-protection, leading parents to argue that vaccination could not be equated with guaranteed immunity. In this sense, efficacy judgments were entangled with ideas of individual biological variability and framed against the promise of certainty implied by universal vaccination programs.

These accounts, further discussed in the next sections, reveal a continuum rather than a binary split between acceptance and refusal. At one end, some parents accepted parts of the childhood schedule, especially for diseases they deemed relevant and for vaccines they regarded as both traditional and relatively stable. At the other end, some rejected most or all vaccines, often grounded in mistrust of institutional safety assurances. Between these poles lie a wide range of conditional acceptance strategies, combining disease-specific and technology-specific evaluations with personal and environmental considerations.

What makes this continuum particularly significant is that it does not map neatly onto public discourse categories such as "pro-" or "anti-vaccine". Instead, it reflects an ongoing negotiation in which parents weigh epidemiological reasoning, technological familiarity, lived conditions, and personal experiences to determine — case by case — whether a given vaccine meets their threshold for

necessity and safety. Childhood vaccine doubts, in this light, are not simply the product of misinformation or ideology, but of a deliberate, situated, and continually updated process of judgement.

5.1.5. COVID-19 vaccine doubts: Perceived risks, novel technologies, and the role of mandates

Parents' narratives on anti-COVID-19 vaccination were embedded in their broader frameworks for assessing medical interventions but also carried distinct features linked to the novelty of both the virus and the vaccine technology. The emergence of SARS-CoV-2 was initially met with varying degrees of concern. For some, the early months of the pandemic — particularly before the availability of vaccines — were marked by uncertainty and caution, often shaped by the intense media coverage and evolving institutional responses. Yet over time, many participants came to see COVID-19 as a disease whose actual severity, especially in children and healthy adults, was lower than initially portrayed.

“Children who, as I said before, are less affected, almost zero, by the disease.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 91)

“However, COVID never scared me as a disease in itself. [...] When we tested positive for COVID, I had two days of flu symptoms, but I've had much worse flu in my life years ago, many years ago. My children tested positive and didn't even have a slight fever; my husband had a slight cough. My mother-in-law, who is 85, didn't even test positive. She isn't vaccinated either, and she's always there with us, but she didn't test positive either. Just to say, they said that older people are more at risk than others...” (Irene, 52 y.o., 2 children, unvaccinated – Pos. 37)

The absence of severe cases in their immediate networks, combined with perceptions of high survival rates, fed into the conviction that the personal threat was limited. In some accounts, this perception was reinforced by comparisons with other illnesses — seasonal influenza was often cited as a more familiar and equally, if not more, impactful threat.

For others, the perception of the virus was not dismissive but still relative: COVID-19 was acknowledged as potentially dangerous for certain groups, such as the elderly or those with pre-existing health conditions, but not as a disease that justified mass vaccination campaigns for the whole population. This risk differentiation — seeing vulnerability as stratified rather than universal — was a key driver of their hesitancy toward population-wide mandates.

“In short, maybe I say okay, maybe [vaccinate against COVID] the weak, the elderly. But, I mean, I'm healthy and you're healthy and young, also your children, don't vaccinate them...” (Giulia, 56 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 24)

“But I don't think it was just a simple flu, as they said at the beginning. I believe it is a virus in its own right, perhaps even potentially more dangerous than the flu, but certainly not particularly lethal. And therefore, manageable by a healthy organism. That's it.” (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated – 51)

The technology used in anti-COVID-19 vaccines, particularly mRNA platforms, became a focal point of doubt. For many parents, mRNA vaccines were not only new but represented a departure from what they considered “real” vaccines. In these narratives, “real” vaccines were those using well-established technologies, often with attenuated or inactivated pathogens, and a long track record of use in humans. The mRNA platform, by contrast, was portrayed as experimental, lacking the decades of post-marketing surveillance that underpinned confidence in “traditional” vaccines. Even those who had previously been skeptical toward older vaccines sometimes described them as “relatively safer” when compared to mRNA products — not because their reservations about traditional vaccines had disappeared, but because the novelty of the COVID-19 vaccines introduced what they perceived as an even higher level of uncertainty.

“Ah, I find that [the COVID-19 vaccine] even more worrying because, from what seems to be coming out of official scientific sources, there are risks involved. In particular, the most widely reported risk is that of myocarditis in adolescent males, and on top of that, adding this vaccine to the others already planned for such young children without knowing its long-term

effects. Let's remember that it was approved on an emergency basis. So it's an experiment, unlike all the other vaccines, which, for better or worse, have a clinical history spanning several decades. Here we are talking about something that is completely unknown in the long term." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 73)

This perceived experimental nature was tied to a broader unease about the compressed development timelines. The speed of clinical trials, emergency use authorizations, and rapid global deployment were viewed as incompatible with a robust assessment of long-term safety. Parents frequently emphasized that safety is not only a matter of immediate adverse events but also of potential long-term consequences, which, by definition, could not have been studied in such a short period. For some, this temporal gap alone was reason enough to delay or refuse vaccination, particularly for children, whose perceived low vulnerability to severe COVID-19 further diminished any sense of urgency.

Safety concerns were compounded by a perceived mismatch between institutional communication and lived realities. Parents recounted encountering several adverse events — either directly or through trusted networks — that they felt were dismissed or insufficiently investigated by health authorities. A situation perceived as being “dramatic”. Reports of myocarditis, pericarditis, or other inflammatory conditions, especially in younger people, were salient in these accounts.

“Well, now the situation with COVID vaccines is dramatic because hospitals are filling up with people with thrombosis, myocarditis, and so on.” (Carlo, 51 years old, 1 child, partially vaccinated – Pos. 105)

“However, now that the studies are available, the adverse effects are visible. They exist. Myocarditis in young people is not something you can just dismiss by saying, “Oh well, what has changed?” At the very least, you cannot rule out the possibility that there may be a correlation. Then, study it. Maybe there isn't one. But if you rule it out [a priori], you are already lying. Because you cannot know that there is no correlation.” (Luisa, 43 y.o., 2 children, partially vaccinated – Pos. 47)

The handling of these reports was often read as confirmation of broader patterns of underreporting and minimization already familiar from their experiences with other vaccines.

Efficacy, too, was a contested terrain. Initial promises of high protection rates were contrasted with later shifts in official messaging toward the prevention of severe disease rather than infection or transmission. Parents interpreted this change not merely as the natural evolution of scientific knowledge but as evidence of overstatement or premature certainty in early communications. This recalibration of expectations, combined with breakthrough infections among the vaccinated, reinforced doubts about whether the benefits of vaccination — particularly for children and low-risk adults — outweighed the perceived risks.

“They said the vaccine protected you, and that’s not true. They said the vaccine prevented transmission of the virus, and that’s not true. They said that with the vaccine you wouldn’t get sick, and that’s not true.” (Silvia, 57 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 21)

“Absurd, absurd. Because then, if they gave you the assurance, the certainty that you wouldn’t get sick [I would consider the anti-COVID-19 vaccine]. But it seems to me that three-quarters, maybe even more, got sick. And when they got sick, they infected others. No, because I’ve heard from more than one person.” (Emma, 45 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 103)

“Then I don’t understand why it’s a problem to say it, by the way. I mean, what’s the problem with saying, ‘Guys, we’re studying this therapy, these new drugs, these prophylactics that allow you to have a milder form of the disease,’ which is the truth. It’s nothing more than that. Because it has saved lives, but I don’t think as many as expected. Because people continue to die from COVID, despite the vaccines, despite the boosters and everything else.” (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 51)

For many parents, perceptions of COVID-19 risk were reshaped through direct or closely observed experiences of infection. In their narratives, illness severity appeared unevenly distributed: some elderly relatives or individuals with underlying conditions experienced more serious courses, occasionally requiring

hospital care, while children in their families were most often asymptomatic or had only mild symptoms, frequently likened to those of seasonal flu. For many parents, these experiences reinforced the view that the disease posed limited personal danger to healthy children and adults in their demographic. Others acknowledged that COVID-19 could be serious for specific groups, yet argued that their own family's encounters with the virus did not justify blanket vaccination mandates. In both cases, witnessing infections in both vaccinated and unvaccinated relatives further undermined confidence in the idea of vaccination as a potential barrier to transmission, and contributed to the perception that institutional messaging on the necessity of mass vaccination was disproportionate to the actual risk observed in their immediate social worlds.

Among those who had previously accepted other vaccinations without much hesitation, these lived experiences of the virus sometimes acted as a catalyst for doubt — but more often, it was the intersection of such experiences with the introduction of mandates, restrictions, and access limitations that drove a deeper re-evaluation. In these cases, COVID-19 infection narratives became part of a broader critical shift, in which questions about proportionality, necessity, and personal freedom began to extend beyond the pandemic to vaccination policy as a whole.

"Well... in some ways [my position on vaccines has] intensified because if I see that you're coming down so hard on me to get a vaccine that's for my health, then we're back to square one: and that's not right. If you have to take away my job to protect my health, who wants to risk their health? No one. [...] You take away my job to protect my health? But you're starving me. My health also depends on my job because it means I can earn a living. And if you take that away, then we're back to square one [...], we're still at the starting point. Nothing has changed, except for the worse, that's for sure." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 65)

"Look at what's happening now with this vaccine: more people are dying, you could say, but people don't realize it. At least I think so [that hesitation has grown with the pandemic], I think about it too much. But if you're not aware, you can't [have doubts] ... So, okay, I don't want to beat myself up [for

vaccinating my children] because what's done is done. But now that I know, that's it. They won't be vaccinated again.” (Clara, 37 y.o., 3 children, vaccinated – Pos. 19)

For some parents, these experiences during the pandemic reinforced pre-existing skepticism toward vaccination, leading to what they described as a consolidation of their hesitancy (“stable vaccine hesitancy”). For others — including individuals who had previously accepted routine immunizations without significant doubt — the management of the pandemic, and particularly the use of mandates, restrictions, and access limitations, acted as a catalyst for a shift toward greater distrust (“increased vaccine hesitancy”). In these cases, the opposition to COVID-19 vaccination often expanded into a more generalized critical stance toward other vaccines, embedding COVID-19-specific doubts within a broader re-evaluation of vaccination as a whole.

The intersection of virus perception, technology skepticism, safety concerns, and contested efficacy created a distinctive profile of COVID-19 vaccine hesitancy. While some parents located their refusal within a broader critique of pharmaceutical and governmental agendas, others framed it primarily as a question of proportion and prudence: when the disease seemed limited in severity for their demographic, and the vaccine technology was both novel and hastily implemented, the rational choice, in their view, was to abstain or delay. In this context, the lived experience of pandemic mandates and restrictions was not a peripheral factor but, for many, a decisive element shaping both their COVID-19-specific stance and their evolving position on vaccination more generally.

5.2. Being a good parent: moral responsibility and relational identity

For members of *Vaccinare Informati*, the decision about vaccination is inseparable from the moral identity of being a “good parent.” This identity is not

defined simply by adherence to biomedical recommendations, but by the ability to know one's child in depth, to protect them from harm — whether that harm is framed as coming from disease or from medical intervention — and to act with deliberate, informed intent. "Knowing" here refers to an intimate, embodied familiarity with the child's constitution, medical history, patterns of illness, and behavioral responses, often built up through years of close observation. This situated knowledge becomes the primary reference point for evaluating health recommendations, sometimes overriding abstract epidemiological arguments or population-level directives.

"Only parents can make an informed [vaccination] decision. An outsider cannot make it." (Dario, 48 years old, 3 children, unvaccinated – Pos. 15)

"So I prefer to keep my child healthy, with a strong immune system, so that if he/she gets sick, I know how to treat him/her. I know how to find information and how to look for good doctors. I prefer to do it this way." (Laura, 43 y.o., 1 child, unvaccinated – Pos. 43)

Protection, in this framing, is an active, ongoing duty that cannot be outsourced to institutions. Parents position themselves as the ultimate guardians of their child's wellbeing, which means engaging critically with information and resisting the idea that institutional advice alone is sufficient for responsible decision-making.

"But anyway, based on my experience in the health sector, as a parent I could never have slept peacefully knowing that I was treating such an important issue superficially. In other words, when they made me doubt, telling me to 'be careful, find out more,' I had to do it. I couldn't say, 'Well, if the system says so, I'm fine with it, someone else is telling me, and that's okay.' I had to be like Saint Thomas [laughs] and deal with all the consequences." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 65)

As seen in Chapter 4, this proactive stance extends far beyond health decisions: when vaccination mandates led to the exclusion of children from educational and social spaces, many of these same parents were on the front line of creating alternative arrangements — from informal schooling groups to tailored extracurricular activities — to ensure their children's wellbeing and

development. Protecting one's child thus entails defending them both from perceived biomedical risks and from the social, institutional, and emotional consequences of policy measures.

"Most likely, some people would have doubts, but it's difficult to support a decision that goes against what institutions and public opinion tell you. It puts you in a minority position, exposes you to criticism and discrimination, and it's not easy. So, from a certain point of view, I understand, but this is about our health and that of our children." (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 95)

"Taking your child to school, picking them up, you have a considerable monthly fee. These are choices that really affect the family. And I think children realize this: my mom and dad decided this. Someone once told me that it's an elite choice. No, I don't think so. It's about loving your children and making sacrifices [...] to give them the best." (Chiara, 38 y.o., 3 children, vaccinated – Pos. 59)

Central to this moral position is the practice of risk comparison, explored in depth in Sections 5.1.1–5.1.5. Here, the "good parent" is one who continually weighs the risks of vaccine-preventable diseases against the risks attributed to vaccines themselves, recalibrating these judgements in light of new experiences, information, or changing circumstances. This calculation is highly personalized: diseases considered dangerous for the general population may be seen as low-risk for their own healthy child, while certain vaccines — particularly newer technologies — are judged to carry heightened uncertainties. In this context, even parents who ultimately choose to vaccinate, whether partially, on a delayed schedule, or in full compliance with the national calendar, describe their decision as legitimate only if it has been reached through independent reflection.

"In the end, you are the one who must deal with the consequences of what happens, whether you vaccinate or not. So you must make as informed a choice as possible." (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 47)

Information-seeking is not incidental to this moral stance but one of its core expressions. As discussed in section 5.1, parents construct what they see as a

“thoughtful choice” by actively navigating a plural, and sometimes contradictory, information landscape. They cross-check sources, integrate lived experiences, consult professional and lay networks, and evaluate data for relevance to their specific child. This process is valued as much as — if not more than — the content of the decision itself.

“Let's say that what they may not have considered, even with COVID, is that people who make different choices don't necessarily do so out of superficiality, ignorance, or lack of interest in their children's health. Usually, it's the opposite. [...] These are people who inform themselves, read up on the subject, and do a lot of research for their own health and that of their families.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 17)

“I think that every parent, if they are informed, chooses what is best for their child: some choose to vaccinate for the good of their child, others choose not to vaccinate for the good of their child. There are those who say they do it because everyone else does, and in my opinion, those are the worst. Because if someone says, ‘I vaccinate because I have informed myself and I think it's the best thing to do’, that is perfectly respectable. Just as I respect my own opinion, I also respect that of others.” (Irene, 52 y.o., 2 children, unvaccinated – Pos. 33)

Acting without such due diligence is framed as a moral failure, an abdication of parental responsibility. For these parents, an informed choice is not a one-time consent to a medical act but an ongoing, participatory process that remains open to revision.

This combination of intimate knowledge, protective duty, risk balancing, and epistemic diligence reframes vaccine hesitancy not as a retreat from responsibility but as a heightened form of it. In their own moral economy, the “good parent” is precisely the one who refuses passive compliance, resists delegating critical health decisions, and remains committed to acting in ways that are both individually tailored and defensible within their value framework — even, and perhaps especially, when these actions run counter to mainstream expectations.

“Why do you think I wasn't more comfortable sending her to nursery instead of working my butt off to keep her at home and create something [alternative]? I mean, it's much easier to trust and delegate to the doctor, the teacher, someone else, saying, ‘You do it, I don't want to worry about it’. But that's not how it works. We all [as parents] must take responsibility.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 25)

“And even people my age, even my cousins, who tell me, ‘That [alternative kindergarten] is a den of No-Vaxxers, and besides, you have to do the cleaning yourself.’ I feel like saying, ‘Well, you probably choose where to put your child just to park him/her there’. And we want to make a different choice. And it's kind of the same thing with vaccines. Do you do what everyone tells you because you have to, or did you have that child and try to take responsibility for the choices you make?” (Carlotta, 35 y.o., 2 children, unvaccinated – Pos. 37)

Building on the moral imperatives outlined above, many vaccine-hesitant parents in this study saw the act of deciding about vaccination as the embodiment of those values. Taking responsibility was not simply an abstract principle but an everyday practice, grounded in concrete decisions about their children's health, education, and well-being.

This responsibility was understood in two interconnected ways. On one hand, it is a challenging responsibility, shaped by the awareness that non-compliant or partially compliant choices carry significant social and institutional burdens. As discussed in Chapter 4, these can include exclusion from educational settings, public criticism, strained relationships with healthcare providers, and — in the COVID-19 context — restrictions tied to vaccination status. Parents repeatedly stressed that the decision “is not taken lightly” or “for fun”; in their view, it would have been easier to comply with mandates, avoiding the potential costs. On the other hand, this same responsibility is embraced as a core moral duty of parenthood. Participants expressed pride in making health decisions themselves, insisting that parents — not institutions — are best placed to safeguard their children's wellbeing. This conviction extends beyond vaccination to other spheres, including education, as seen in Chapter 4, where

many were directly involved in creating alternative schooling pathways or tailored educational solutions for their excluded children. Taking ownership of such decisions is framed as part of “knowing one’s child” and acting in accordance with their specific needs, even when this means resisting institutional pressure.

"Look... and they used to make me, but even now, in some ways, I envy those who don't have to deal with this nonsense [exclusions, fines, and other sanctions] because it's really a burden to bear. I'll tell you, it's better now, but in the early years, you say [it's hard]... but now when you get there, when you hear certain things, you can't go back. You can move forward, but you can't go back. Now I can't pretend I haven't heard certain stories, that I don't know."

(Dalila, 40 y.o., 2 children, unvaccinated – Pos. 45)

In this dual framing, the burden does not diminish the sense of fulfilment derived from fulfilling what they see as their ethical role. Parents accept the risks of going against mainstream expectations because they believe that an informed, deliberate choice — whether this results in refusal, partial compliance, or full adherence to the national schedule — is the only legitimate choice. Here, responsibility is both a weight — because of the structural consequences attached to dissent — and a badge of moral integrity, signaling to themselves and others that they have fulfilled their parental duty through reflection, care, and autonomy.

This deep sense of ownership over health decisions also shapes how parents position themselves in relation to others — a dynamic explored in the next section, where relational identity emerges as a key dimension of how vaccine-hesitant parents narrate and legitimize their choices. For many interviewees, being a “good parent” was not only about knowing one’s child and making a considered decision, but also about positioning that decision in relation to the choices of others. Vaccination choices became a point of comparison through which parents defined themselves as reflective, informed, and committed — often in contrast to what they saw as the more passive or unquestioning approaches around them. This work of differentiation was central to sustaining their own decisions, particularly when these carried the social and institutional costs discussed in Chapter 4.

Interviewees often described “people who vaccinate” in ways that reflected both moral judgment and situational understanding. Certain categories expressed a sharp contrast — such as blind conformists or authority followers, seen as examples of uncritical compliance.

“In other words, there is a real lack of information. Parents trust what they are told. And they don't listen to reasons other than those given by their pediatrician. You see this a lot.” (Chiara, 38 y.o., 3 children, vaccinated – Pos. 53)

“[...] the thought that institutions are not acting in your best interests is too much for many people to bear. So they prefer not to even think about it. ‘They tell me I have to do it, if they say so, it must be right, so I'll do it. That's it, I'm done, I'm not thinking about it anymore, I don't want to think about it anymore.’ That's the situation.” (Carlo, 51 y.o., 1 child, partially vaccinated – 95)

“Respect for authority is seen as the foundation of being a ‘true citizen’. That is, being respectful of others is clearly what it means to be a true citizen. Citizens in the sense of having civic sense. But the fact that civic sense is only seen as such if one adheres without question is what makes me so perplexed, because civil disobedience and personal reflection are the foundation of freedom of thought.” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 125)

These figures served as a foil to the interviewees’ self-image as parents who undertake the work of searching, comparing, and evaluating (as discussed in 5.1), and who consciously weigh risks of disease and vaccination (Sections 5.1.4 and 5.1.5). Yet this boundary-making was not uniformly negative. Many parents drew a distinction between those who vaccinated without question and those who, after a careful search for information, concluded that vaccination was the best choice for their family. The latter — often referred to as convinced vaccinators — were generally regarded with respect, as they were seen to have exercised the same kind of active, reflective agency that interviewees valued in themselves, even if the outcome of their deliberation was different. In their view, what mattered most was not the decision to accept or refuse vaccination, but that

it was arrived at deliberately, with full engagement in the responsibilities of parenthood.

“Then there are people who understand. People who say, ‘Okay, you’ve decided not to vaccinate, but we’ll still let the children play together. I’ve vaccinated mine, I’m sure vaccines work, I’m sure my child is protected, I’m not worried.’ And that’s how it should be.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 21)

Other categories reflected empathy or personal history. Those who succumbed to pressures — whether from mandates, school access rules, or professional requirements — were often seen as victims of coercive contexts rather than poor decision-makers.

“Because they take away your dignity as a worker, as a citizen [due to COVID-19 vaccination requirements]. For some families, I think it has been really tough. And they had to do it [get vaccinated] in order to live, to eat, to eat. And at that moment, I think you get to the point where you have to agree to it in order to live, because either you die one way or you die the other.” (Lucia, 49 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 47)

“I have a friend who, unfortunately, was in this situation [...]. He/She had made the choice not to vaccinate his/her child, but at a certain point [he/she had to give in]... He/She was working just to survive and had to work, so she/he couldn’t afford private daycare or not work. So he/she vaccinated his/her child for that reason alone.” (Matilde, 43 y.o., 2 children, vaccinated and partially vaccinated – Pos. 45)

Similarly, those not informed were sometimes understood as having lacked access to information or support networks, rather than as unwilling to think. In other accounts, uninformed parents were blamed for not taking the vaccination decision seriously.

“They say vaccines are mandatory, but there’s this ambiguity, isn’t there? If a parent doesn’t look into it in depth, they say, ‘Oh my God, watch out here.’ I’ve seen some who believed it was also mandatory for elementary school attendance because they might just stop at what’s written in the newspaper or word of mouth.” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 38)

"So I started asking mothers who vaccinated their children: have you looked into it? Why are you doing it? [...] Most of them don't even know what they're injecting into their children: they're told what to do, they do it, and they don't know. [...] I asked them, what did they do to them? 'Oh, I don't know, the booster they told me to give them,' they had no idea what they were doing to their children." (Laura, 36 y.o., 1 child, unvaccinated – Pos. 11)

Importantly, many interviewees acknowledged having occupied some of these categories themselves in the past: several had once vaccinated without much questioning, others had been convinced vaccinators before changing their views, and a number described themselves or those who got the vaccine as repented — this was primarily in relation to COVID-19.

"And now, who knows, maybe someone has changed their mind because of what they see. Even though the adverse effects are kept hidden, they are there, they exist, and some people are starting to notice them, either because they have experienced them personally or because they are perhaps beginning to change their minds." (Edoardo, 64 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 53)

"Many people still don't realize this; the majority don't. They think that the state acts in our best interests. For them, realizing that the health authority does not act in my best interests, that the doctor who advises me does not act in my best interests, is too big a leap. It was for me too. So I understand it perfectly well." (Clara, 37 y.o., 3 children, vaccinated – Pos. 29)

This reflexivity shows that the boundaries they draw are not fixed divides but positions along a trajectory of experience and reconsideration. In constructing their vaccine decisions, interviewees did not only focus inward, on their own children's needs, but also outward, on the social world in which those decisions would be made and judged. Self-definition often took shape through contrast — describing "others" whose approaches to vaccination they saw as fundamentally different from their own. This was not always antagonistic: in many cases, it reflected a mapping of moral positions in a landscape of parental agency, where the dividing line was less about what decision was taken and more about how it was reached.

Parents often located themselves — and others — along a spectrum of engagement with vaccination decisions. This was not merely an exercise in judgment, but a way of situating their own actions within a relational and moral field. The resulting categories, while sometimes overlapping, reflect three broad orientations toward vaccination: informed and deliberate decision-making, passive or delegated compliance, and constrained or changed positions over time. Crucially, respect was accorded to those who, in the interviewees' eyes, acted with intentionality and knowledge — even when their conclusions were different. Conversely, what drew the most criticism was not a particular choice *per se*, but the absence of active, informed responsibility, especially when it concerned children's health.

The typology presented in Table 13 synthesizes these relational distinctions, illustrating how interviewees described and morally evaluated different parental orientations toward vaccination, and highlighting the perceived overlaps between categories.

Tab. 13 – Typology of perceptions of “people who vaccinate” among Vaccinare Informati members, as described in interviews, with notes on overlap and moral valence.

Grouped Orientation	Category	Description (per interviewees’ narratives)	Notes on Overlap / Moral Valence
Informed and Deliberate	Convinced vaccinators	Respected for embodying legitimate parental agency, even when choosing to vaccinate; share the ethic of informed decision-making	Sometimes self-identified in past vaccination decisions <i>Respectful</i> — valued as legitimate parental agency, even when the decision differed from that of the interviewee. Seen as sharing the same process-oriented ethic
	Blind conformists	Unquestioningly comply with norms or mandates, without independent inquiry	May overlap with “authority followers” and “not informed” <i>Critical</i> — presented as the opposite of the reflective, informed parent
Passive or Delegated	Authority followers	Defer to medical or institutional advice without personal verification	Seen as problematic due to abdication of parental responsibility <i>Critical</i> — seen as overly deferential, but sometimes with understanding if trust is rooted in positive past experiences
	Disinterested	Show little interest in health decision-making, leaving it to institutions	Critiqued for detachment from children’s health matters <i>Negative</i> — framed as abdicating parental responsibility
	Afraid of questioning oneself	Avoid information to preserve comfort of the official narrative	Motivated by emotional self-protection <i>Critical</i> — perceived as avoiding self-examination, often due to fear of confronting uncertainty
	Not informed	Vaccinated without access to diverse sources or networks. Seen partly as a structural failing but also criticized as serious negligence toward one’s child’s health	Often overlaps with “authority followers” or “blind conformists” <i>Ambivalent/Critical</i> — understanding when linked to lack of access to information, but also seen as problematic to be uninformed about children’s health
Constrained or Changed Over Time	Repented	Came to regret past vaccination decisions, often after adverse events or changed perceptions of risk–benefit (frequently linked to COVID-19)	Some interviewees self-identified here from past experiences <i>Respectful/Affiliative</i> — often self-referential, signaling a shift toward critical engagement
	Succumbed to pressures	Vaccinated under mandates, restrictions, or workplace requirements Criticism directed at the coercive context, not the individual	Sometimes overlaps with “informed” if the decision was still carefully weighed <i>Ambivalent/Understanding</i> — seen as a consequence of coercive contexts; empathy often expressed toward the individual, with criticism aimed at systemic pressures rather than personal failings

These orientations were not fixed. Many interviewees noted that people could — and did — move between them over time, as new experiences, information, or pressures arose. Several participants themselves recalled earlier phases when they had been “not informed” or had acted as “convinced vaccinators” before shifting their stance. Others pointed to the pandemic as a turning point, producing both “repented” vaccinators and those who felt they had “succumbed to pressures” in order to maintain employment or access to services.

For some, this relational mapping was also a way of reaffirming their own moral economy of parenting — one that values attentiveness, autonomy, and critical engagement. This ethic was not confined to the vaccination decision itself. As discussed in Chapter 4, the same proactive orientation drove parents to design alternative educational spaces, organize peer support networks, and advocate for policy changes they believed aligned with children’s best interests.

Membership in *Vaccinare Informati* often functioned as a platform for these forms of mobilization, enabling parents to coordinate with like-minded associations, disseminate information, and represent their stance in public debates. In this sense, relational identity was inseparable from collective action: it grounded personal decisions in a broader community of practice, and gave moral weight to the act of taking a stand — whether in the consultation room, the school meeting, or the public square.

The association *Vaccinare Informati* provided a space in which this relational identity could be shared, reinforced, and translated into collective action. Joining the group was often described as a turning point — a moment of encountering others who had faced similar dilemmas, made similar sacrifices, and validated one’s approach to parenting. Membership was not only about receiving information; it was about entering a community that affirmed the value of critical decision-making and mutual support.

"In fact, my first contact with *Vaccinare Informati* was through a dear friend [...]. So he/she gave me the name and number of the [co-founder of the association], who was the first president. I called him. I was really stressed because I couldn't understand it; it seemed to me that no one else had made

the same choice as me. Everyone else was vaccinating, and you were the only one in the world. And he said to me, 'Don't worry, there are lots of us, but come and I'll explain everything to you, no problem'. I still remember the tone of his voice, the words he said to me: 'Don't worry, there are lots of us.'" (Nicholas, 53 y.o., 2 children, unvaccinated – Pos. 23)

"When my third child was little, when I started studying, I went to some evening conferences [organized by Vaccinare Informati]. When there was all this turmoil about exclusion, and we were all there not knowing what to do... Vaccinare Informati helped me a lot, first of all to find other people like me and then to get informed." (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 41)

Within this network, the moral economy of parenting outlined in Chapter 1 — with its emphasis on particularistic knowledge of one's child, refusal of passive compliance, and defense of parental autonomy — was not just discussed but enacted in everyday practices.

Parents described mentoring newcomers through the decision-making process, sharing detailed research strategies, and providing practical guidance for navigating health services or education systems in ways that aligned with their values. Others took on more public-facing roles: organizing conferences and information evenings, coordinating solidarity funds for families facing fines or exclusion, or working with allied associations to lobby local and national authorities.

"So, let's say it was a period [2017-2018] of intense activity, through the Vaccinare Informati association [...]. And so we took action, gathering information, signing petitions, even going to the provincial authorities together with other members, etc." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 15)

Some were active in creating alternative educational pathways for children excluded under vaccination mandates, ensuring that these spaces reflected the same principles of child-specific care and informed parental choice that underpinned their health decisions.

“So, in the end, you come to terms with the idea that, okay, there is this exclusion, society has decided that, okay, it doesn't belong to me. You do it for your child, so you start rolling up your sleeves. Then you start networking slowly, and in short, building the alternative was also a really beautiful and positive experience.” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 11)

These types of initiatives were not only pragmatic responses to institutional pressures; they also functioned as material expressions of a collective moral stance, reinforcing parents' sense that their efforts were part of a broader, legitimate struggle for freedom of choice.

This collective dimension directly reflects the moral economy of parenting outlined in Chapter 1, in which the protection of children's well-being is pursued not only through individual decisions but also through shared, value-driven infrastructures. This proactive stance did not emerge with COVID-19. As discussed in Chapter 4, many interviewees had already responded to childhood vaccination mandates by building these alternative infrastructures of care and education, engaging in advocacy, and cultivating networks of mutual aid. COVID-19 restrictions and mandates later intensified these dynamics, adding new layers of exclusion and new arenas for contestation, but the underlying orientation toward active defense of parental autonomy was already well established. In both contexts, relational identity was strengthened not only by differentiating from the mainstream, but also by embodying an alternative — through everyday practices, collective projects, and the visible commitment to act in line with one's convictions.

5.3. Experiences, biographies, and the weight of the personal

Parents' vaccination choices emerged from a dense web of personal and family experiences, rather than from abstract calculation. Adverse events following immunization (AEFI) — whether personally experienced, affecting a

child, or occurring within their trusted networks — medical histories, pregnancy and childbirth experiences, and relationships with healthcare providers all left tangible marks on how risks and benefits were weighed. These episodes, whether directly linked to vaccines or not, became part of a broader biographical record that shaped parents' sense of what it means to protect a child well. In this way, lived experience functioned as both an evidentiary resource and a moral compass, anchoring decisions in the specificities of one's own life and relationships.

For the parents interviewed, vaccination choices were inseparable from the textures of lived experience. Decisions emerged not as detached calculations but as biographically embedded judgments, grounded in concrete health events, family histories, and embodied encounters with the healthcare system. As outlined in Chapter 1, these accounts show how experiential knowledge — the situated, practice-based understanding derived from direct and vicarious experience — intertwines with parental epistemologies. In this framework, life events are not a passive background; they are active epistemic resources used to evaluate, confirm, or contest biomedical recommendations.

Among the most influential experiences recounted were suspected or confirmed AEFI that significantly influenced later vaccination decisions and positioning — not without struggle.

“Among other things, with a thought that is nevertheless very critical, that is, very tormented because by not vaccinating my children, I realize that I am making a very difficult choice for them. In the sense that I am certainly exposing them to a risk, to a danger. [...] So it is a very critical, very painful thing. But on the other hand, we have this initial shock [of a potential adverse effect on our child] that is still alive...” (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 11)

These occurred not only in children but also, in some cases, in the interviewees themselves. Parents spoke of fevers, inconsolable crying, neurological symptoms, allergic reactions, or episodes of prolonged malaise following vaccination. For some, these events were officially recognized as

vaccine-related; for most, they were either not investigated or were rapidly dismissed as unrelated without considering or addressing parents' concerns.

"But I had my first child in 2012 and I vaccinated him/her according to the schedule and he/she had [...] adverse reactions to the first, second, and third doses of the hexavalent vaccine and also to the MMR vaccine. And when he/she had the MMR vaccination, well, I had given him/her the first dose of the hexavalent vaccine, and he/she cried for three days and three nights in a row. [...] And their advice, both from the local health authority and my pediatrician, was to increase the dose of paracetamol. [...] When I went for the second dose, I mentioned that I had had this problem [...], and they told me it was normal. So I gave him/her the second dose and the same thing happened, the same adverse reaction [...] and the same thing with the third dose. [...] And after a few days, he/she started to be unable to walk. I mean, he/she was in front of me and his/her legs gave way [...]. In the emergency room, they checked that the child couldn't stand and that he/she had pain in his/her limbs [...]. I asked the doctor to check that the child couldn't stand [...] and he replied that he was the doctor, not me. [...] at the end of the visit, he told me [...] that you don't go to the emergency room for something like this, but wait three or four days, and he prescribed paracetamol, of course. [...] So I downloaded the package inserts [for the vaccines administered] [...], and it actually said that one of the adverse reactions [...] was limpness in both the upper and lower limbs, as well as pain in the limbs. [...] It said that if the child cried for more than three consecutive hours, not three days but three hours, the decision to give the second dose should be reconsidered." (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 9)

In these narratives, the significance of an AEFI was not limited to its immediate aftermath. Many parents emphasized that vaccine-related harm could manifest well beyond the day or week after injection. Vaccines, they argued, could trigger processes that remained latent until a later stage — for example, “waking up” a pre-existing but hidden fragility or chronic condition. This possibility, often framed in immunological terms as the result of an “overstimulation” of the immune system, was part of a broader understanding of the body as delicately balanced, and of vaccination as a potential disruptor. The turning point for several interviewees was cumulative: some began the vaccination schedule in good faith

but altered or stopped it after one or more episodes — whether mild but unexplained, or severe enough to cause lasting concern.

Indirect AEFI experiences, such as those reported by trusted friends, extended family, or fellow members of the association, reinforced this perception. These stories were valued for their proximity and perceived honesty, standing in contrast to what parents saw as impersonal statistics or institutional reassurances about the (allegedly) marginal and negligible risk of vaccine damage.

“Not me directly [experience of adverse effects]. But experiences of friends, for one reason or another, little by little over time, talking to one or the other, it emerged that, for better or worse, the famous one in a million is not quite true. And there are more than you think [of those harmed by vaccines].” (Marco, 47 years old, 2 children, unvaccinated – Pos. 115).

“Yes, we know many who have had adverse effects or who have told us about them. [...] I mean, we live in a town of 2,000 inhabitants, so it's easy to know everyone a little. And there are many, not just one in a million. There are many.” (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 35)

“I know many people because, ultimately, within the association, a network of people is created who have consciously made this choice. And many others who have their fingers burned [have experienced adverse effects]. Because it is not certain that the vaccine has side effects; it is not certain, at least I don't know that a priori. I have read recently that ‘it has a side effect of two per thousand’. [...] Of course, for me it's 100% if it affects me, so I need to know if I'm susceptible, if my child is susceptible to this risk [...]” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 27)

Together, direct and indirect accounts produced a patterned perception that vaccines could carry underacknowledged risks, and that vigilance was a non-negotiable parental duty.

For some, these perceptions were further shaped by knowledge of Law 210/1992, which grants financial compensation to individuals who suffer permanent injuries or death from compulsory vaccinations. While intended as a form of social protection, the law also enhanced awareness that such a

mechanism existed was an implicit recognition by the State that vaccines can cause harm, even if rarely.

“But there is a law [Law No. 210/1992], if there weren't [...]... they struggled before passing this law, so I want to say that there were people who were harmed by the vaccine. Unlucky? Certainly, but we don't know who will be unlucky.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 13)

“Because everyone is different, so much so that if there are laws protecting those harmed by vaccines, it is true that such people exist [...].” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 19)

Stories circulated within the association of families navigating the complex, often discouraging procedures to obtain this recognition. Accounts of prolonged bureaucratic struggles, rejected claims, and the emotional and financial toll of these processes reinforced parents' belief that institutional acknowledgement of harm was both grudging and insufficient. In this way, the law became not only a legal reference point but also a symbolic marker in the collective experiential archive, feeding into a broader sense of institutional mistrust.

Vaccination decisions were also anchored in broader medical biographies — the interviewees' own health histories, those of their children, and patterns observed among relatives. Personal histories included autoimmune disorders, severe allergies, recurrent infections, neurological issues, and previous adverse reactions to pharmaceuticals. For some, these conditions were interpreted as clear indicators of heightened susceptibility to vaccine risks. For others, a history of overcoming serious illness without biomedical intervention reinforced trust in the body's self-healing capacity, reducing the perceived necessity of vaccination.

“So, measles, rubella, and mumps: rubella seems like a fairly minor illness to me; I had mumps when I was little, I remember it a little, and I think I can get over it. In short, your immune system doesn't have any particular problems, [...] so why couldn't you overcome an illness like this?” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 23)

Children's medical histories were often decisive. Parents of premature babies, children with respiratory fragility, recurrent fevers, skin conditions, or

developmental concerns often felt that the rigid national vaccination schedule failed to account for these vulnerabilities. In some cases, physicians recommended delaying certain vaccines; in others, parents unilaterally made that choice, drawing on their daily, intimate observation of their child's health.

"Then, at four months, she/he developed quite severe dermatitis, and among the adverse reactions to vaccines [...] was dermatitis. And I said, it's listed among the adverse reactions, and he/she already has it. What is dermatitis? It's an immune system disorder, anyway. I'm going to put something in his/her immune system, so can't we at least postpone the vaccination until his/her dermatitis clears up [...]?' 'No, dermatitis is not a problem,' was the response from the local health authority. [...] My child will not be touched until his/her dermatitis has cleared up." (Laura, 36 y.o., 1 child, unvaccinated – Pos. 15)

"So then when I had my first child in 2013, apart from the fact that he was also hospitalized for a few weeks, he had already taken a lot of drugs at birth. So it seemed to me that he was so small, exposing him to further drugs that weren't so useful, since it's true that some protect against important diseases, but there are also [other] ways to protect yourself." (Camilla, 45 y.o., 2 children, unvaccinated – Pos. 5)

Relatives' histories — particularly when conditions like autoimmune disease or clotting disorders appeared to "run in the family" — were also taken as evidence of inherited vulnerability, reinforcing calls for more personalized protocols.

"However, in the case of my children, it is different because the doubt clearly began many years ago. It began because there had been two cases of suspected vaccine damage in the family, on the father's side [...]. Then, at a certain point, I began to have serious allergy problems [...], and even then, without a precise diagnosis or, rather, without being able to find a reason that could, so to speak, go straight to the source. So this made us realize that there was probably a weakness in the immune system on the other side of the family too, at least on my side. And so, in short, it was further confirmation that perhaps not bombarding the children with antigens was a good thing." (Carolina, 52 y.o., 2 children, unvaccinated)

These embodied baselines often clashed with parents' encounters with the healthcare system. Pre-vaccination consultations, in many accounts, were too generalized, with limited discussion of how a child's specific history might shape their risk profile. Some parents received information they later judged incomplete or misleading — especially about possible side effects and how to recognize them.

“And also because, ma'am, vaccines aren't drugs,’ the doctor at the pre-vaccination interview told me. And I said to him, ‘Well, honestly, if a doctor tells me that a vaccine isn't a drug, then to me, the person telling me that isn't a doctor’. And he said, ‘No, I meant that it's a drug you take when you're not sick, when you're well’. I said, ‘Ah! Because you told me they're not drugs.’ And he said, ‘No, but I expressed myself badly. However, keep in mind, ma'am, that they have no side effects’. And I said, ‘Ah! A doctor who tells me that a drug has no side effects is not a doctor to me’, I repeated. He said, ‘Yes, but there are so few, ma'am. And they are rare’. I said, ‘Look, if it's my child, even once is enough. Even if they are rare, honestly, when I have a healthy child, if he/she is then damaged [by the vaccine]...’” (Irene, 52 y.o., 2 children, unvaccinated – Pos. 61)

“[They don't tell you about the possible adverse effects] Because they have to sell them... When I went for the pre-vaccination interview, I asked for the vaccination leaflets. And they gave them to me. But the doctor didn't even know what was in them. I mean, I asked him questions and he wasn't even able to answer me.” (Ilaria, 38 y.o., 2 children, vaccinated and unvaccinated – Pos. 55)

For those already alert to fragility in themselves or their children, this “felt gap” between lived reality and institutional communication strengthened their resolve to take charge of information-gathering. As emerged in other parts of this chapter, this autonomy was not framed as rejecting science outright but as ensuring that decisions matched the unique health context of the child — a direct expression of reflexive parenting.

The physical and social environments of vaccination hubs also became part of the experiential landscape, shaping parents' stances. Some described

courteous, attentive staff willing to engage with their questions, even when disagreeing with their hesitancy. Others recalled being hurried, discouraged from asking too many questions, or pressured to proceed despite uncertainty. The pace, standardization, and lack of privacy in some hubs symbolized, for these parents, a wider institutional preference for throughput over personalization. For those already undecided, such encounters often deepened mistrust, as they contrasted sharply with the care and attention they expected in matters concerning their child's health.

Many parents traced the roots of their orientation toward active parental agency — and skepticism toward standardized interventions — back to pregnancy and childbirth. Experiences during these periods, even when not directly related to vaccination, were formative in shaping their sense of authority over health decisions. Mothers who felt supported and respected during pregnancy and labor sometimes developed a more collaborative stance toward health professionals. In contrast, those who felt sidelined in decision-making, pressured into unwanted interventions, or dismissed when raising concerns often emerged with a determination to protect their autonomy in all subsequent health matters.

“I was pregnant in 2021, so I didn't get vaccinated against COVID. [...] Later, towards the end of my pregnancy, I remember I only attended one online antenatal class. And that was a terrifying experience, in the sense that they basically told us, “You have to get the vaccine because if you don't, your baby will have this, this, this, and this.” [...] Of course, my child decided to be born when I tested positive for COVID [...]. So I gave birth in the hospital alone, with my partner on the phone. [...] The baby was born negative, but the midwives in the nursery didn't want to see him/her because he/she was in the room with me, who was positive [...]. And even them, [...] the fear they had in coming to me. [...] And then, even if you're not a doctor and maybe you haven't taken the [Hippocratic] oath, my baby is two hours old and you don't want to see him/her?! [...] So this made me very sad and also distanced me a little from dialogue. I mean, for a while I didn't even want there to be any dialogue [with the healthcare professionals].” (Carlotta, 35 y.o., 2 children, unvaccinated – Pos. 25)

“Because many people, myself included, thought that as a doctor, he knew what he was doing. I saw it when I gave birth: they induced labor and then it went wrong and ended in a C-section. I trusted them, thinking that they knew what they were doing. Because they know, they know what's best. But no, I found out later that this wasn't the case.” (Laura, 36 y.o., 1 child, unvaccinated – Pos. 71)

The early months and years of a child's life could reinforce or reshape this orientation. Experiences such as difficulty accessing breastfeeding support, perceived overprescription of medications, or disagreement over how to manage a child's illness deepened parents' conviction that they must remain in control of healthcare decisions. These formative moments built a continuity of stance: the same vigilance that guided birth and early care decisions was later applied to vaccination, creating a consistent logic of protective, parent-led oversight.

Ongoing relationships with doctors played a complex role. Trust could be sustained when practitioners were willing to listen, adapt schedules, and recognize parental observations as valid data. Some parents described long-standing partnerships with pediatricians or general practitioners who, even when pro-vaccine, respected their hesitations and collaborated on individualized approaches.

"You go talk to the doctor, we all do, don't we? Talk to him/her and maybe [you decide to vaccinate], if the doctor approaches you in a non-dogmatic way or offers you a personalized [vaccination] plan, takes certain family dynamics into account, suggests a different schedule, and assesses the immediate risk. He/She might say, 'But in the meantime, let's do the tetanus shot' because your children live in the countryside'. [...] And this way you feel cared for, you feel listened to. Because in my opinion, that's the problem: mistrust of the health authorities they have created, especially after the Lorenzin law. The problem is that you no longer feel listened to. You are not listened to by doctors. Probably because they don't even have time to do so, [...] that is, they have been put in a situation where they have to work in series. But you don't feel listened to, so... And since health is important, and your children's health is sacred, if you don't feel listened to and taken into

consideration, you don't give your child to the doctors." (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 17)

Yet repeated experiences of dismissal, contradictory advice, or perceived unwillingness to acknowledge possible vaccine-related harm eroded confidence. Importantly, this loss of trust did not result in wholesale rejection of medical expertise. Instead, parents cultivated a selective reliance, seeking professionals — often outside the public system — who were perceived as independent, open to dialogue, and respectful of experiential input (see Chapter 6). This selectivity extended to the COVID-19 period, when some turned to non-institutional providers for advice or care, valuing them for their accessibility, transparency, and alignment with parental values. The pandemic widened the scope of these alternative health networks. Some parents sought advice from practitioners of complementary medicine, while others relied on association-based mutual aid, where members shared home-care strategies or coordinated support for those affected by restrictions. For many, these experiences reinforced the belief that viable, trustworthy healthcare could exist outside institutional structures, further embedding skepticism toward state-run systems.

"In fact, here in [name of area in Trentino], a small group was formed by social health workers, nurses, and two doctors who had been suspended. If you got sick with COVID, they would come to your house and give you the protocol... not paracetamol and watchful waiting. They would come, measure your oxygen saturation [...]. In short, many people were treated this way here. Forget about your primary care physician if you want to save yourself." (Sara, 58 y.o., 2 children, unvaccinated – Pos. 77)

"So hats off to those who managed to treat people, because I am also reminded of [name of home care group during COVID]: all doctors who got together and set a great example. That is what treating people is all about." (Olivia, 42 y.o., 2 children, unvaccinated – Pos. 93)

"When all seven of us had COVID, [...] a doctor from [place in Trentino] came for free. He came because I called him to ask him what we should take and so on, and he asked me what my oxygen saturation was. I told him mine and asked him to write me a prescription. At a certain point, you see that there

are still good people out there, he called me on the phone and I said, 'But you didn't send me the prescription,' 'But I'm here [...]'. He arrived, and he traveled many miles [...]. But I want to say that people like him were going around to people's homes for free. And there are those from [name of home care association during the pandemic] who go around to people's homes and heal them. One in the center of [Italian city] seems to have treated five hundred people, and no one ended up in the hospital, and now they've expelled him." (Anna, 72 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 19)

These accounts illustrate how vaccination decisions were woven into the fabric of biographical experience, mediated through a distinctly parental mode of knowing. As discussed in Chapter 1, experiential knowledge derives its authority not from general statistical trends but from the immediacy, trustworthiness, and embodied relevance of lived events. In this context, parental epistemology — the conviction that parents possess unique, privileged insight into their children's health — becomes both a lens for interpreting past experiences and a guide for future action. Whether rooted in AEFI, family medical histories, encounters during pregnancy and early care, or ongoing relationships with healthcare providers, these experiences form a cumulative repertoire that parents draw upon when assessing the proportionality and appropriateness of vaccination. They are not treated as isolated anecdotes but as part of a coherent evidentiary framework, one in which the duty to protect the child is exercised through vigilant, situated, and often resistant engagement with biomedical authority.

Within this evidentiary framework, first-hand experiences of years of legal battles (as in the case of Anna) and stories circulating in the association about families struggling — often unsuccessfully — to obtain recognition under Law 210/1992 became a further layer of shared experience.

"We were lucky that they recognized the vaccine damage because it was so obvious. [...] After many years, they recognized it because, in my opinion, they already knew about it right away. The pediatrician already knew [...]. We kept going, kept moving forward. My husband said, 'I'm not coming anymore, I'm not coming anymore'. I kept going to the medical-hospital commission in

[place] and in the end, unanimously, sixteen doctors said, 'Yes, it was us'." (Anna, 72 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 23)

"And this thing here [the possibility of vaccine damage], why don't they acknowledge it? I don't understand why there is this assumption that absolutely not. But why not? It's also a mockery of those who have decided to trust and rely on it, knowing that there are risks. But if damage does occur, it must be officially recognized as such." (Laura, 36 y.o., 1 child, unvaccinated – Pos. 39)

"[Name of association member], I mean, experienced it firsthand. I'm not telling you what I think [about vaccine damage], I'm telling you about him/her who experienced it. He/She's still waiting for full compensation, if we're being honest. They'll pay you anyway, won't they? That's how they get away with it. I'll pay you. Okay, but it's not that everything is based on money [...]." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 47)

These legal and bureaucratic hurdles were interpreted not only as proof of the material and emotional costs of vaccine-related harm — which extend beyond the individual (potentially) harmed because the "vaccine damage affects the whole family" (Anna, 72 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 35) — but also as confirmation that institutional systems could fail or even abandon those who trusted them. In this way, Law 210 cases entered the collective experiential archive, reinforcing a parental epistemology in which vigilance, caution, and, at times, refusal were framed as necessary acts of protection against both biomedical risk and institutional neglect. As discussed in Chapter 4, these contested encounters with the state resonated with other mechanisms of institutional exclusion in the interviewees' lives, deepening the sense of being positioned outside the protections afforded to compliant citizens.

5.4. Decision outcomes and alternative practices

These deeply personal trajectories ultimately culminate in concrete vaccination decisions, choices that rarely fit neatly into categories like “pro-” or “anti-”. Instead, they reflect a continuum of approaches shaped by the same logics of individualist parenting and parental epistemologies discussed in Chapter 1. Final decisions about whether, when, and how to vaccinate are deeply entangled with broader orientations toward health, family, and everyday life, and often connect to practices such as educational preferences, food, living choices, and approaches to healthcare. What begins as an individual medical decision frequently becomes part of a coherent set of everyday practices through which parents seek to enact and preserve their values across multiple domains.

Interviewees’ choices for their children ranged from completing the full recommended schedule to adopting partial, delayed, or entirely absent vaccination pathways. For those following partial or delayed schedules, strategies often included the use of monovalent vaccines where available, spacing doses over longer periods, or targeting only certain diseases perceived as serious enough to warrant immunization.

"So, in the end, we decided to vaccinate him/her partially. We reached a compromise because my wife wasn't convinced that these injections were so harmless, but she was also somewhat fearful of the context [country]. She is [nationality], so the child would go to [country] every year. [...] so, okay, we vaccinated him against polio, only polio. [...] Since he was traveling to [country], we vaccinated him/her." (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 15)

"So let's say we were a bit inconsistent, in the sense that the first child was fully vaccinated, the second one wasn't vaccinated at all, and the third one was vaccinated a little bit [laughs]. [...] We had three vaccinations very far apart from each other. [...] And then we stopped there." (Giorgio, 62 y.o., 3 children, vaccinated, partially vaccinated, and unvaccinated – Pos. 9)

"And our choice was to only give a few vaccines, the ones that seemed to make the most sense, also from the point of view of protecting the

community, and to vaccinate him/her when he/she started kindergarten. That is, when she actually entered a community [...]. So we had the tetanus vaccine initially at 1 year of age when she started going out and about, and then we decided to have the other two when he/she started kindergarten. At the time, they actually imposed the quadrivalent vaccine on us, not the trivalent one, so in fact the tetanus vaccine, plus diphtheria, polio, and pertussis. And then we had the boosters for those.” (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated –Pos. 59)

None of the parents had considered vaccinating their children against COVID-19, which was generally viewed as posing minimal risk to healthy children. Only one interviewee received two doses of the COVID-19 vaccine, and this was under significant work and social pressures during the pandemic — combined with the belief that avoiding suspension might enable providing for the family and support to others.

Even when a choice was made, it was rarely treated as final. Parents described their decisions as part of a living process, subject to ongoing monitoring, reflection, and re-evaluation. This constant reassessment was driven both by a desire to remain informed and by the realities of living with non-compliance, which was not “price-free”. Exclusion from certain services, the need to justify choices to schools or health authorities, and pressure from social networks all reinforced the importance of being able to defend their position. Many parents expressed openness to vaccinating in the future, but under specific conditions — such as the availability of monovalent vaccines, absence of obligations, products with fewer adjuvants, or those developed using methods perceived as more transparent. In this way, hesitancy was less an ideological endpoint than an adaptive stance, responsive to new information and changing circumstances.

“But there are currently no vaccines on the market without those three ingredients I mentioned earlier: carcinogens, neurotoxins, and human DNA, which has been shown to cause serious problems. If they offer products without these types of substances, I would gladly consider them.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 61)

"I believe that health is priceless, so I think we will have them vaccinated when they are older. Not right now, and not because we are obliged to do so." (Camilla, 45 y.o., 2 children, unvaccinated)

"So, okay, you'll give me a personalized vaccination plan? That's fine with me [I can be open to vaccinate]. But I want an antibody test first, let's do the vaccine, and an antibody test afterwards." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 17)

These vaccination pathways often intersect directly with educational decisions. As discussed in Section 4.1.1, the enforcement of childhood vaccination mandates prompted some families to withdraw from public schooling altogether. Others, already critical of the public system, saw mandates as the final push toward alternatives that better reflected their values.

"However, what we have observed is that if someone had already started with this idea [of wanting a different educational path], when the Lorenzin law came into effect, they went ahead and did it." (Michele, 48 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 33)

"Then, on the other hand, I tell you, so many alternative realities are emerging [...], so many children have arrived thanks to the Lorenzin law. [...] So let's say that gave a boost to many parents. But then, in reality, you discover completely different worlds. Even the new community kindergartens [...] are really different from traditional kindergartens. [...] thanks to these exclusions, it is possible to create something different and beautiful." (Carlotta, 35 y.o., 2 children, unvaccinated – Pos. 47)

Options such as homeschooling, small parent-led groups, and private schools with flexible approaches to vaccination were described not merely as escape routes from mandates but as environments where autonomy, critical thinking, and health-conscious living could be cultivated. This educational orientation formed part of the same protective logic that underpinned vaccination decisions, extending parental agency into the realm of daily learning and socialization.

For many families, approaches to vaccination were embedded within broader healthcare strategies (further discussed in Chapter 6). Some parents

maintained selective use of conventional medicine while integrating complementary and alternative medicine (CAM), whereas others relied primarily on CAM practices such as homeopathy, herbal treatments, or naturopathy. Within this spectrum, “homeopathic vaccines” were sometimes used as a perceived form of protection against vaccine-preventable diseases, preferable to “conventional vaccines”. While in the case of vaccination, “detox cures” were employed to “purify” the body and reduce the risk of adverse reactions.

"I vaccinated my son with homeopathic vaccines. [...] basically, nosodes of diseases are administered. There is a schedule for administration with very precise dilution. I based my decision on the experience and recommendations of an Australian doctor who has administered this type of therapy to many, many people over many years, collecting data using scientific methods and demonstrating greater effectiveness compared to those who have been vaccinated with traditional vaccines." (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 61–63)

"Yes, [after the vaccination] I consulted a homeopath who treated and cleansed the child. Because the child was probably, I use the term congested. His drainage system was congested, clogged, and he/she couldn't drain and cleanse himself/herself." (Chiara, 38 y.o., 3 children, vaccinated – Pos. 11)

These practices were often informed by advice shared within associations and trusted networks, reinforcing the communal dimension of decision-making.

These orientations toward health and prevention often extended into dietary and living habits. Parents emphasized the role of organic produce, the avoidance of processed foods, and specific dietary regimes believed to support immune function.

"Weighing up the fact that there could be possible consequences, adverse reactions [...], we gradually embraced the idea of trying to adopt as healthy a lifestyle as possible. So, by giving up medication in principle, we try to eat a little more natural food at a time, even though in reality [laughs] we also drink Coca-Cola and eat Nutella from time to time. However, we try to limit

ourselves and therefore introduce as few foreign substances into the body as possible.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 29)

“But we have noticed that by following a healthier lifestyle, there are fewer illnesses, less medication, and fewer doctor visits.” (Giulia, 56 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 65)

While none of the interviewees lived in collective housing, some made residential choices that facilitated access to nature, outdoor activity, or proximity to communities with shared values. During the pandemic, work decisions also reflected this stance: some parents were suspended due to non-compliance with COVID-19 vaccination mandates, while others sought alternative employment or income sources to avoid institutional pressures.

Altogether, these narratives reveal that vaccination decisions are rarely isolated acts. They are woven into a broader tapestry of practices and commitments, where education, healthcare, diet, and even work arrangements are shaped by the same underlying ethos. This coherence is maintained through continuous reflection, information-seeking, and adaptation, rather than through rigid adherence to a fixed identity. In this sense, deciding whether and how to vaccinate is one expression — among many — of a dynamic process through which parents seek to align everyday life with deeply held convictions about how best to protect and nurture their children.

Considerations

The analysis of parental vaccine decision-making reveals how health choices are embedded in moral reasoning, biographical trajectories, and situated forms of expertise, rather than reducible to fixed ideological positions. Parents' vaccination decisions emerge not from a wholesale rejection of biomedical knowledge but from a reframing of risk through a particularistic lens (Leach & Fairhead, 2007), where the child's specific vulnerabilities, health histories, and

lived contexts take precedence over population-level averages. Within this framework, the choice to refuse, delay, or selectively vaccinate is often narrated as an act of care and protection — an alternative protection logic that inverts the institutional framing of such practices as risky or negligent. Institutional risk assessments are frequently perceived as insufficient for capturing the nuances of individual cases, particularly when rare but serious adverse events following immunization (AEFI) are part of parents' direct or indirect experience. Many accounts reveal a perceived imbalance in official narratives, with an overemphasis on infectious disease risks and an underestimation of vaccine-related risks, the latter often framed as human-made, imposed, and thus less acceptable than “natural” infection risks — a distinction consistent with Douglas and Wildavsky's (1982) cultural theory of risk. Communication changes, conflicting professional advice, and perceived political–economic entanglements of vaccination are interpreted as amplifying uncertainty and undermining trust (Lewicki et al., 1998; Rowland et al., 2022).

These patterns are consistent with individualist parenting (Reich, 2016; Faircloth, 2014; E. Lee et al., 2014) and the particularistic perspective on child health (Leach & Fairhead, 2007), where intimate, situated knowledge is considered the most legitimate basis for decision-making. They reflect parental epistemology (Goldenberg, 2016, 2021), in which parents claim privileged interpretive authority over their children's needs, and align with risk society perspectives (Beck, 1992; Bucchi & Neresini, 2006) that frame vaccines as hybrid objects combining technical, political, and cultural dimensions. The chapter also engages with lay expertise and experiential knowledge (Wynne, 1992; Epstein, 1995), showing how lived events form a coherent evidentiary base; with reflexive vigilance (Rowland et al., 2022; Hendriks et al., 2016; Van de Walle & Six, 2014), evident in the continuous reassessment of decisions; and with trust and selective mistrust (Lewicki et al., 1998; Rowland et al., 2022), where institutional trust is withdrawn while targeted trust is maintained in chosen professionals or networks. The moral boundary work described by Douglas (2005) is visible in the distinction between reflective and uncritical parents, and institutional exclusion (Lehoux et al., 2012; see Chapter 4) is echoed in parents' accounts of legal and bureaucratic

hurdles. CAM use, as discussed in Chapter 1, operates here not only as a therapeutic choice but as an enactment of parental agency and autonomy.

Protection is construed as an active, non-delegable duty, grounded in ongoing vigilance rather than in fixed ideology. Decisions are recalibrated in light of new experiences, health events, and information, and moral legitimacy is attributed to the process of decision-making rather than its outcome. In this process-oriented framework, parents develop a relational mapping of other parents' orientations toward vaccination. The typology emerging from the data distinguishes between those who vaccinate after informed, deliberate evaluation — often respected even if their choices differ — and those perceived as “blind conformists,” criticized for failing to engage critically. A further empathetic category captures those who “succumbed to pressures,” where critique is directed at systemic coercion rather than individual failings. These relational identities are reinforced by membership in *Vaccinare Informati*, whose collective projects — from educational initiatives to solidarity funds — materialize the moral stance in concrete, collective practices (Polletta & Jasper, 2001).

Decisions are biographically embedded, emerging from a dense weave of personal health histories, pregnancy and childbirth experiences, and family medical trajectories. AEFI, whether confirmed or dismissed, are incorporated into a coherent evidentiary framework in which the possibility of delayed or latent harm is taken seriously, often framed in immunological terms such as “overstimulation” of the immune system. Law 210/1992, which grants compensation for vaccine injuries, serves both as a legal resource and as a symbolic acknowledgment that harm is possible; yet bureaucratic struggles to obtain recognition reinforce mistrust and perceptions of institutional neglect. Pre-existing or familial conditions (autoimmune disorders, allergies, neurological issues) are interpreted as markers of heightened susceptibility, often justifying personalized schedules. The “felt gap” in pre-vaccination consultations — the perception that individual vulnerabilities are overlooked — drives autonomous information-seeking and reinforces the conviction that parents possess privileged interpretive authority over their children's health (Goldenberg, 2016, 2021).

Experiences during pregnancy, childbirth, and early parenting form a critical backdrop for these orientations. Moments in which parents felt sidelined, pressured into unwanted interventions, or unsupported in early care contribute to a durable stance of autonomy and vigilance (Beck, 1992; Wynne, 1992). Trust in healthcare professionals is sustained when practitioners listen, adapt schedules, and acknowledge parental observations as valid; where trust erodes, parents develop selective reliance on independent or alternative practitioners. The COVID-19 pandemic intensified the use of CAM, expanded association-based mutual aid, and reinforced the legitimacy of non-institutional care networks (as discussed in Chapter 1).

The outcomes of these trajectories rarely align with fixed pro-/anti-vaccine labels. Decisions range from full adherence to partial or delayed schedules, selective targeting of diseases, and complete refusal. COVID-19 vaccination for children was unanimously rejected; only one adult participant got vaccinated under intense coercive pressure. Even when a decision is made, it remains open to revision in response to changes such as the availability of monovalent vaccines, products with fewer adjuvants, or greater transparency in development. These decisions are deeply interconnected with other life domains: educational choices (homeschooling, private or parent-led schools), healthcare strategies (integration or substitution of biomedicine with CAM), dietary practices (organic, unprocessed, immune-supportive regimes), residential preferences (proximity to nature, value-aligned communities), and work arrangements adapted to avoid compliance pressures.

In this sense, vaccination decisions are one expression of a coherent “life project” in which autonomy, health-consciousness, and critical engagement are sustained across domains. This study adds empirical depth to existing accounts of vaccine hesitancy by tracing how parental decision-making is embedded in biographical experience and sustained through relational, moral, and practical infrastructures. It advances theoretical debates by showing how individualist parenting, parental epistemology, and reflexive vigilance operate not as isolated constructs but as mutually reinforcing dynamics that integrate risk perception, moral identity, and lifestyle coherence. It also offers a novel process-oriented

typology of parental orientations toward vaccination, reframing hesitancy as an adaptive stance embedded in everyday life rather than a static position. By connecting these patterns to broader mechanisms of institutional exclusion and selective mistrust, the findings highlight how decisions around vaccination cannot be fully understood without situating them in the lived, relational, and value-driven contexts in which they are made.

CHAPTER 6

Rediscussing science, scientific experts, and knowledge production in the vaccination decision

Introduction

Building on the thematic framework presented in Chapter 3, this chapter investigates how Free-Vaxxer parents engage with scientific authority and alternative forms of knowledge, examining the meanings they attach to “science” and the practices through which credibility and legitimacy are negotiated. Whereas the previous chapter traced decision-making as a biographical, moral, and relational process, the focus here shifts to science itself — its methods, its institutional mediators, and its entanglements with politics, economics, and media.

Scientific knowledge, often portrayed as objective and universal, appears in parental accounts as situated, contested, and shaped by social and institutional conditions. From a science and technology studies (STS) and sociology of health perspective, vaccine hesitancy does not emerge as wholesale rejection but as a differentiated set of practices through which parents scrutinize expertise, mobilize experiential evidence, and integrate alternative epistemologies. Parents interrogate the credibility of experts by drawing on children’s embodied experiences, peer testimonies, and associative resources, while also raising questions about conflicts of interest, the management of dissent, and the boundaries of legitimate knowledge.

This chapter engages with the thematic clusters of *Risk Perception and Vaccine Practice*, *Rediscussing Scientific Authority and Epistemic Pluralism*, *Biopolitics, Autonomy, and Resistance*, *Experiential Knowledge and Situated Trust*, *Contested Public Narratives and Media Representations*, and *Collective Engagement and Mobilization*. Through these clusters, it explores how parents contest the primacy of institutional expertise, reframe medicine as fragile and individualized, and navigate polarized public arenas where science becomes a terrain of struggle and meaning-making.

The analysis unfolds in four interrelated sections. Section 6.1 examines how parents define and conceptualize vaccination itself, situating biomedical framings alongside alternative interpretations. Section 6.2 investigates how experts are placed under scrutiny, highlighting contested boundaries between legitimate and illegitimate authority. Section 6.3 turns to embodied knowledge and the ways in which children's health trajectories reconfigure expertise in practice. Section 6.4 analyzes how trust is renegotiated at multiple levels — scientific communities, institutional conditions, and mediated spaces — showing how parents develop plural epistemologies grounded in vigilance and selective validation.

By situating these dynamics within broader debates on epistemic authority, lay expertise, and patient engagement, the chapter argues that vaccine hesitancy should be understood not as an epistemic deficit but as an ongoing renegotiation of science's legitimacy. Parents emerge not as passive refusers but as active constructors of knowledge frameworks, whose practices illuminate the complex intersections of science, care, and civic epistemologies in contemporary health governance.

6.1. What is vaccination? Parents' interpretations and conceptual framing

For members of Vaccinare Informati, vaccination is not a self-evident or homogeneously interpreted practice. Instead, it emerges as a highly contested social and biomedical technology, subject to a plurality of framings that reflect both individual experiences and shared cultural repertoires within the association. Parents' accounts demonstrate that vaccination is not reduced to a single meaning — as public health discourse often implies — but is refracted through diverse lenses that combine perceptions of risk, morality, and institutional credibility.

One of the most recurrent framings is that of vaccination as a reassuring practice. Parents acknowledged that, for many families, vaccination appears as a straightforward and risk-free intervention, a guarantee against infectious diseases, and a means of fulfilling social and parental duties. This taken-for-granted representation is seen as rooted in decades of biomedical discourse and reinforced through pediatric advice and institutional communication.

"[...] my sister-in-law, she vaccinated their children with the tick vaccine, the papilloma vaccine [optional vaccines]. She says, 'You know very well that I think that any new vaccine that comes out, since it's meant to make you better, I'll take it.' I mean, there are people who really believe that. So, there are those who have doubts, those who strongly believe in it, who think that if this discovery has been made, it will definitely and certainly not fail." (Camilla, 45 y.o., 2 children, unvaccinated – Pos. 51)

"Because I respect him [her father]. I understand that he is an elderly man with health issues, even though I personally believe that the [COVID-19] vaccine still carries risks, but in his case, I'm glad he got it. Also because he was very happy to get it, he was afraid of the virus. So now he feels at ease [...]". (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 17)

Yet, while recognizing this dominant framing, Vaccinare Informati parents position themselves at its margins, questioning the plausibility of such reassurance by pointing to personal experiences, perceived gaps in pharmacovigilance, and the invisibilization of vaccine-related risks.

Another widespread interpretation situates vaccination within the domain of business interests. Parents frequently remarked that the pharmaceutical industry and political institutions promote vaccination not solely for public health reasons, but because it represents a profitable technology with guaranteed and expanding markets. Mandatory vaccination laws, multivalent products, and the rapid introduction of new vaccines were often cited as evidence of this entanglement between health policy and commercial gain. In this framing, vaccination becomes less a neutral medical intervention than a driver of industrial profit, raising suspicion about the integrity of scientific and political decision-making.

“I think vaccines are an important tool that have saved humanity in certain situations, and now they have become a profit-making product. I think they have been turned into a profit-making product and are therefore being devalued. And so they are losing the power they should have.” (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 47)

“I welcome the evolution [in the field of vaccines]. I was very surprised by the timing of the COVID vaccine, because usually these things take forever, they move at a snail's pace. Here, there was a real rush, a scramble, with multinationals that have made a killing, cleaned up, really cashed in for fifteen years, I don't know. This really made me understand how many economic interests are behind this world. In other words, money rules from start to finish in the sphere of health, where neither politics nor economics should have a place.” (Chiara, 38 y.o., 3 children, vaccinated – Pos. 81)

Related to this is the conviction that vaccination is not the first or only preventive measure. Parents underscored that before vaccines, improvements in hygiene, nutrition, and living conditions dramatically reduced the incidence of infectious diseases.

“Because, from my point of view, serious prevention should invest much more in food awareness, in promoting cultivation techniques that leave no residues, in promoting lifestyles that combine nutrition with physical activity [...]. In short, there are many things that are well supported by international literature for their preventive aspect and that are not being done.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 9)

“Because proper nutrition and a healthy lifestyle mean that your immune system works properly. And since we are born, the immune system is what fights disease. Also, because vaccines, the initial ones, did not lead to the eradication of diseases. On the contrary, it was the introduction of running water, sewers, etc. So a better lifestyle... Of course, today's diet is no longer rich in nutrients, etc. On the contrary, it is increasingly poor, and the immune system suffers from stress, etc. So, I'm not rushing to get vaccinated.” (Rachele, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 81)

However, the interviewees recognized vaccines as potentially useful and desirable in specific situations — such as at-risk work environments and family medical conditions — and contexts. In this latter aspect, the parents mainly referred to the geographical context and, particularly, to the South of the world. The African continent is often cited as an example of a context where adequate levels of hygiene, nutrition, and healthcare are lacking or non-existent. In these places, a weakened immune system would lead to a high risk of contracting diseases with serious consequences, making vaccination desirable.

“Like all tools, the vaccine has its purpose, its function, and a context in which it is used. So, I don't know, if I were to go to Africa, I would probably get the malaria vaccine. You always have to weigh the risks against the benefits. For me, the tool could be valid, but I don't consider all vaccines to be valid in absolute terms.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 105)

“[...] returning to the subject of hepatitis, hepatitis is transmissible via blood. If it is known that there is a situation in which vaccination is necessary, it is clear that an assessment must be made [and the vaccine considered].” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 39)

Consequently, the efficacy and desirability of vaccination are not dismissed *a priori*, but its risks and benefits are instead evaluated in relation to the specific individual situation and the prevailing socio-cultural context in which it is administered.

For Vaccinare Informati's parents, genuine prevention must be holistic, encompassing diet, environment, emotional well-being, and the strengthening of the immune system through natural exposure. Within this perspective, vaccines are not dismissed outright but re-situated as one preventive option among many — and often not the most important or effective one.

"I repeat, if you're interested in prevention, then take it seriously, but make it a 360-degree prevention: don't let vending machines with junk food in schools. But then, at this point, why even sell that stuff in supermarkets? [...] I mean, give general practitioners more time, more resources, train them and make sure that they work with all their patients to develop a dietary plan, for example. Do you understand what I mean? That's prevention. [...] We're talking about a system that serves other interests. And, inevitably, prevention is only good when it feeds the pharmaceutical industry, because in the end that's what vaccines are, right? Prevention that pays off... Among other things, the individual is the protagonist of their own prevention, that's the most important prevention, but that kind of investment isn't being made. [...] we do prevention, we only do it with vaccines or little else [...]. So tell me clearly, this is prevention that is fine because we have signed a contract."
(Carolina, 52 y.o., 2 children, unvaccinated – Pos. 17–21)

Concerns also arise around the timing and manner of vaccine administration. Vaccination is often described as a rushed practice, particularly in the organizational routines of vaccination hubs. Parents recounted how anamnesis and risk evaluation were condensed into a few questions asked perfunctorily before injection, with little time for dialogue. The sense that such an invasive act is carried out hastily, without adequate personalization, amplifies skepticism about the care and responsibility of the system.

“When someone wants to learn more, they can read up on things before getting vaccinated. Because if someone goes to the vaccination center and asks, they can read the entire consent form they are signing, and they have every right to read it calmly, etc. But there is this whole mechanism of rushing, of ‘other people are waiting’, etc.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 73)

“Because you know that when you go there [to the vaccination center], they just tell you that if the child cries, the thing to do is give them paracetamol. They don't even check on the child except for 15 minutes after the vaccination.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 9)

At the same time, parents recognized that vaccination is deeply embedded in social norms of desirability. This was particularly visible during the pandemic, a period in which the social expectations towards vaccination compliance were made explicit in every sphere of life. Thus, vaccination is perceived as a marker of being a “good parent” and a responsible citizen. Thus, vaccination is a practice generally associated with solidarity and prosocial conduct.

“They [relatives] did it [got vaccinated against COVID] out of duty. When I hear this, it bothers me. Duty to whom? To the nation? To whom? To those who have excluded your children? Duty to those who don't care for you? To those who don't educate you? To those who don't treat you like a human being but like a client?” (Nicholas, 53 y.o., 2 children, unvaccinated – Pos. 37)

This normative expectation reinforces the image of vaccination as a habitual act — something done almost automatically at scheduled ages, with little questioning. Yet parents in the association explicitly reject this automatism, portraying it instead as a form of mass inoculation, where individuality, vulnerability, and biographical specificity are erased in favor of treating children as interchangeable bodies.

“[...] partly because of how this strong trust in vaccines has been built up over the years, most people take it for granted that it should be done. It's a safe thing to do. Also, because the saying “you're an adult and vaccinated”

[translated literally from the Italian saying, which means to be fully grown up] has become commonplace. So, it's considered a customary thing that's good, or rather, that helps in the stages of life." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 65)

"What I don't think is right is mass therapy, which administers drugs only according to a schedule. It works very well with industrial production. So it's done in series, like a battery of chickens. Yes, mass administration." (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 25)

Across all interviews, one principle was emphasized unequivocally: vaccination must remain a personal choice. Parents considered the imposition of mandates as fundamentally illegitimate, violating the moral and bodily autonomy of families. Here, three related framings intertwine. First, vaccination as a choice: parents asserted the right to decide, given that vaccination is not exempt from risks, even if their choices diverge from public health recommendations. Central to this narrative is the role of the parent: according to the interviewees, it must be central in the vaccination decision, regardless of the final choice — which, in any case, must be an "informed choice".

"In the sense that there were informative evenings for parents, during which it was not said 'don't vaccinate your children, vaccines are deadly, vaccines will kill you all' and so on, but it was simply said that it is a personal choice. Free choice was promoted. It was also pointed out that it is not true that there are only pros, there are also cons. Therefore, a considered choice must be made. The informed choice can only be made, rightly, by the parent. The parent has to understand what is best, which vaccine they want to administer, perhaps do some more tests, think for a moment about how their child is doing, etc. Even in peace of mind, because if someone feels like doing all ten, it's right that they do so. I mean, no one ever said they shouldn't. [...] In other words, everyone rightly makes their own choices based on their conscience, based on their own information, and also based on their feelings." (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15)

Second, vaccination as an act of faith: in the absence of full knowledge about risks, parents felt they were being asked to “believe” in vaccines rather than evaluate them — a leap of trust they considered unreasonable.

“Because they saw the [anti-COVID-19] vaccine as holy water, you just have to give it, you can't escape holy water.” (Sandro, 65 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 37)

“But that's not how it is, I just have to trust. So I take a leap of faith in church, but the other thing [vaccination] is not a leap of faith for me. In short, you have to give me proof... why should I be afraid? Or is it no longer acceptable to be afraid? I mean, I don't know what's lurking in my body.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 17)

“If I tell you, ‘Look, I got the vaccine and this happened to me,’ you say, ‘No, no.’ But what do you mean, no?! Look first. This is not scientific behavior; you are dogmatic. Vaccines are now a religious belief: either you believe in it, or you are a heretic.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 21)

Third, vaccination as a violence: when coercion is perceived — for instance, through mandates and sanctions that restrict access to school, work, or income — parents experience the requirement as a profound violation. This framing was particularly pronounced in relation to COVID-19 vaccination, where the link between vaccination and employment, and thus the economic sustenance of families, meant that some felt compelled to undergo a procedure they never wanted.

“My colleague did it against her better judgment: she held out until December to avoid getting it [the COVID-19 vaccine], but then she did it and told me, ‘I feel like I've been violated.’ Yes, it's true. It's true, that's what I would have thought if I had gone to do it, I would have felt like I was being violated, and I would have felt bad mentally. So no, I'm not putting myself in that situation. No.” (Irene, 52 y.o., 2 children, unvaccinated – Pos. 41)

"It's stronger than me, what do you want me to say? For me, it's like you're physically assaulting me. You'd have to sedate me to get me to do it [get vaccinated]." (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 11)

"My wife, who is more pragmatic, says, 'Well, at some point we'll get vaccinated [against COVID] and see what happens.' I, on the other hand, am much less willing to compromise and make other choices. [...] But this thing about the body, I felt a violation of my bodily boundaries, in short. And I still feel that way now. I mean, the inviolability of the body is something that cannot be overlooked every other day. Either it applies to everything or it doesn't apply at all. It leads to a total abandonment of any principle. What principles are still valid and binding in this world? Are there any left, or has everything gone to hell? It seems to me that everything has gone to hell, that anything goes. Anything goes, and that's worrying." (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 47)

In these accounts, the act of being pushed into vaccination under threat of exclusion or livelihood loss is narrated as a form of violence, collapsing the line between medical practice and imposition, and capable of irreparably damaging trust in institutions.

Finally, vaccination is also framed as idealized, undisputable, and lifelong. Parents observed that in mainstream discourse, vaccines are presented as unquestionably safe and universally necessary, an emblem of modern scientific achievement. Thus, vaccination cannot be contested in any way without incurring social disapproval and stigmatization (on the use of labels see Section 4.3).

"But the idea is fabulous. If you think: get vaccinated against measles, against ticks, wow, I'll get vaccinated, and I'll be protected. Put like that, it's fantastic, fabulous. I have memories from when I was a child; they used to say to me, 'Oh, how wonderful, there's this little injection that will save your life'. But when you hear that there are consequences, and serious ones at that, [sighs] I think it's worse." (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 43)

“Unfortunately, doctors who have studied vaccines are taught that vaccines are the salvation of humanity, and so they are convinced of this... it's difficult. But they are also convinced by the studies that have been done because that's what they teach at university: that vaccines have saved humanity. Whereas we think a little differently.” (Valeria, 51 y.o., 2 children, unvaccinated – Pos. 13)

“The vaccine is not harmful, and no one can claim otherwise. This is the official narrative, and you cannot deviate from it. Otherwise, you will be labeled a charlatan, a flat-earthier, an idiot, and so on.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 105)

In practice, this framing underpins their extension across the life course: from preschool entry to upper secondary school, university internships, healthcare professions, and adult employment. Parents described vaccination as a recurring requirement, one that structures entire life trajectories. The problem, from their perspective, is that this institutionalized ideal leaves no space for uncertainty, dissent, or personalization — forcing families into compliance across multiple stages of their and their children's lives.

“But beyond that, let's say that the same – in quotation marks – violence also happens when you want to do a job at a certain age, especially teenagers, because they won't let you do certain jobs if you don't have a tetanus shot. So even there, perhaps we think of young children, and that's true. However, we must remember that [the issue of vaccination] is a problem that affects our entire lives. In other words, vaccinations are an issue that always exists. And adults sometimes forget this. They tend to forget, perhaps because in the workplace they say, ‘I'll have a single vaccine for that problem and that's it’. But that's not really the case. For children, tetanus vaccination is required for many schools and jobs. So a parent who has held out until their child reaches the age of 16 says, ‘OK, it's no longer compulsory’. That's not the case. [...] You go for your occupational health check-up and you're stuck. They say, ‘You can't go to work unless you have this vaccine’. And there, when you don't have the tetanus vaccine, for example, it's not just one, but three vaccines. Because there are the diphtheria and pertussis vaccines. And even then, if you don't want it, you have to ask for the single vaccine,

buy it, and have a doctor give it to you. In other words, it's not a simple process. You always have to fight to explain to the person in front of you why or how. And if you don't want to do that, you have to find a job that doesn't require vaccinations... so I think the struggle is there, it's always there.”

(Beatrice, 53 y.o., 2 children, Partially vaccinated and unvaccinated, Pos. 33)

Taken together, these framings do not represent contradictory positions but rather a coherent alternative epistemology. Parents may simultaneously acknowledge that vaccination is perceived as reassuring by many, recognize its preventive potential in limited contexts, critique its commercialization, highlight the neglect of holistic health, and reject its imposition through mandates. What unites these diverse accounts is a shared effort to redefine what “good health” means: not a standardized biomedical protocol, but a relational, situated, and continuously negotiated practice of care. These positions are not mutually exclusive: each parent articulated a particular configuration of them, attributing different weights to the same elements depending on their own biography, values, and experiences. Within this framework, vaccination becomes one possible tool, whose legitimacy is always conditional on respect for autonomy, transparency, and the individuality of children and families. To capture this plurality, Table 14 organizes the various framings into broader interpretative dimensions, showing how seemingly divergent positions can coexist and be recombined within parents’ narratives.

What emerges from this synthesis is less a collection of discrete positions than a repertoire of interpretative resources from which parents draw. The five broader dimensions provide analytical scaffolding, but in practice, they are mobilized fluidly and often in combination. For example, parents who stress vaccination as a business-driven practice may simultaneously depict it as rushed in its delivery and reinforced through social norms of good parenting. Others recognize its usefulness in specific contexts while insisting it must always remain a matter of personal choice. Rather than contradictions, these overlapping configurations reflect a coherent epistemological stance: skepticism toward universalizing biomedical prescriptions and insistence on relational, reflexive, and

situated understandings of health. This interpretative multiplicity underscores not only how vaccination is contested but also how it is redefined through parental epistemologies that valorize autonomy, lived experience, and holistic care. By organizing the framings into five dimensions — social norm, biomedical governance, contested practice, contingent technology, and politicized commodity — the analysis highlights the structural logics underpinning parents' narratives.

These dimensions are not rigid categories but heuristic tools that make visible the multiple registers through which vaccination is problematized. Ultimately, parents' accounts traverse these registers seamlessly, showing how personal experiences and collective critiques are embedded in wider cultural and political imaginaries. It is against this interpretative backdrop that the next section turns to the question of expertise: how parents assess the authority of scientific knowledge, negotiate the boundaries between experts and lay actors, and situate their own experiences in relation to institutional science.

Tab. 14 – Interpretative dimensions and framings of vaccination as a practice and technology among Vaccinare Informati parents.

Broader Dimension	Framing	Core Meaning	Analytical Dimension(s)	Configuration in Narratives
Vaccination as a Social Norm	Reassuring	Vaccination presented as a risk-free, protective practice that reassures parents against disease	Social reassurance; institutional credibility	Recognized as dominant in society; questioned via pharmacovigilance gaps and lived/observed AEFI
	Socially desirable / prosocial	Vaccination framed as marker of good parenting/citizenship and solidarity	Moral normativity; reputational pressure	Acknowledged as powerful social script; resisted when it erases child-specific considerations
	Habit	Doing vaccines as routine/automatic compliance at scheduled ages	Normalization; path-dependency	Critiqued as unreflective; contrasted with thoughtful choice
Vaccination as Biomedical Governance	Mass inoculation	Standardized delivery treats bodies as interchangeable	De-individualization; bureaucratic throughput	Opposed to bespoke care; linked to personalized schedules/contraindication checks
	Undisputable	Vaccination presented as beyond discussion in public arenas	Discursive closure; stigmatization of dissent	Connected to labeling dynamics; motivates alternative forums for knowledge exchange
	Throughout the life course	Vaccination as recurring requirement from preschool to jobs/internships	Life-course governance; conditional access	Reinforces perception of cumulative coercion; strengthens demand for autonomy at each stage
Vaccination as Contested Practice	As a choice	Vaccination should remain a voluntary, individualized decision	Bodily autonomy; parental sovereignty; moral responsibility	Treated as a non-negotiable principle; rejection of coercion across interviews
	As an act of faith	In conditions of uncertainty, parents feel asked to “believe” rather than evaluate	Epistemic opacity; credibility gaps; contested evidence	Tied to demands for full information, individualized risk assessment, and transparency
	As a violence	When coercion is perceived (e.g., sanctions), vaccination is experienced as moral/physical violation	Coercion; biopolitical intrusion; livelihood risk	Especially salient for COVID-19 mandates and work restrictions
Vaccination as Contingent Technology	Useful in specific contexts / situations	Vaccines accepted for particular diseases/risks or profiles.	Conditional acceptance; proportionality; targeted risk calculus	Supports monovalent preferences, spacing, antibody testing; openness under defined conditions
	Rushed	Delivery perceived as hurried (hubs, brief anamnesis, limited dialogue)	Procedural critique; lack of personalization	Fuels distrust in system care; strengthens preference for longer consultations
	Not the first or only prevention measure	Prevention understood holistically (hygiene, nutrition, environment, immune support)	Plural prevention ethos; “natural” vs. “technological” risk management	Used to justify prioritizing everyday health practices over routine shots
Vaccination as Politicized Commodity	Business-driven	Vaccination driven by pharmaceutical profit and political-industrial interests	Commercialization; institutional mistrust; policy–market entanglement	Paired with critiques of mandates, multivalent products, rapid roll-outs; motivates calls for transparency and independence
	Idealized	Vaccines symbolized as unquestioned scientific triumph	Scientism; perfection narrative	Seen as crowding out uncertainty and debate; parents re-insert doubt and personal relevance

6.2. Disputing scientific authority: Experts under scrutiny

The multiple framings of vaccination outlined in the previous section are deeply entangled with how parents assess the authority of those who claim to speak for science. Critiques of vaccination almost invariably expand into critiques of the experts, institutions, and communicative practices that sustain its legitimacy. Far from rejecting science in the abstract, parents direct their skepticism toward specific actors — pediatricians, public health officials, scientists in the media, and pharmaceutical representatives — whose authority they perceive as compromised by haste, commercial interests, or lack of transparency. In this sense, what is at stake is not science itself but the conditions of epistemic trust: whether experts are recognized as credible knowers whose claims can be relied upon. For parents, scientific authority is not a fixed resource but a contested terrain, constantly evaluated and, at times, redefined through lived experience and peer exchange.

A first recurrent theme concerns the constraints under which experts are perceived to operate. Parents often argued that scientists, doctors, and health officials do not speak freely but are pressured by political institutions, pharmaceutical interests, or professional hierarchies. Experts who might privately harbor doubts about certain policies or vaccines “cannot raise their heads” (Giulia, 56 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 51), unable to voice them publicly, out of fear of sanctions, reputational loss, or career repercussions.

“And then there's the fact that you can't consult with a pediatrician because they can't talk. That's what really threw me off... why can't they talk freely? Once they're employed there, they're employees of the Local Health Authority; they can't tell you any more than that. 'Well, they tell me I have to say to do them, and that's my job.' So, you know, even pediatricians who advised against [vaccines] twenty years ago now recommend them, but only because they are obliged to. Because if the Order of Doctors hears that they

are saying something [not perfectly aligned], then they obviously risk being struck off.” (Laura, 36 y.o., 1 child, unvaccinated – Pos. 11)

Many parents recalled that over the years, outspoken physicians critical of vaccine mandates were marginalized or sanctioned, creating what they described as a “climate of fear” in which doctors felt compelled to follow protocol. The COVID-19 pandemic was frequently invoked in this regard: interviewees repeatedly mentioned the protocol of “paracetamol and watchful waiting” — which they perceived as imposed from above, not evidence-based, and contrary to what attentive care would demand — and the prioritization of the vaccine over the (already known) cures.

“That is, there are few [researchers] who try to express their opinions on [COVID] treatments and are banned. And so this is also an indicator of the fact that there is no desire to arrive at the truth or at treatments. Even there, the discussion of all the treatments that were available, has anyone tried them? They have always been blocked; it has always been ‘No, we must apply this protocol’, but no one has ever tried to refute that protocol.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 139)

“As mentioned earlier, however, a doctor also has a duty to stay informed and be somewhat critical. At least once, they had to work to the best of their knowledge and belief, they said. So they could also afford to try new things. [...] Doctors are the ones who are most afraid now. In my opinion, they see reality very clearly, but like everyone else, they keep quiet. [...] So they know that there are these contraindications to vaccines [adverse reactions], but they care about their jobs, they care about their positions, so... Despite the evidence, however, they do what the local health authority or the Ministry of Health or the National Institute of Health tells them to do. They know that there is the Order of Doctors that will punish them as soon as they step out of line, that keeps them in check. [Those who speak out] are usually those who are close to retirement and have little to lose, so they allow themselves to say what they think and even tell the government and the minister to go to hell.” (Giorgio, 62 y.o., 3 children, vaccinated, partially vaccinated, and unvaccinated – Pos. 51)

This perception of systemic constraint contributed to a broader skepticism: if institutional contexts silence dissent or exclude consideration of alternatives, then the apparent unanimity of expert opinion is itself suspect. In this way, parental critiques blurred the boundary between scientific advice and political obedience, recasting expert consensus as a product of pressure rather than evidence.

Linked to this was a more general critique of credibility and integrity. Parents described many experts as compromised, either because of perceived conflicts of interest with the pharmaceutical industry or because of their excessive media exposure.

“Nowadays, studies and work carried out by individuals with conflicts of interest are accepted as valid. This is not right. The same thing happens with cell phones: the Ministry accepts the results of studies carried out by cell phone manufacturers as valid. [...] If you compare the companies' studies with independent studies, the results are completely different, opposite. However, the institutions accept the companies' studies as valid. And this is what happened with these drugs: marketing authorization was granted on the basis of limited data provided by the manufacturer itself. The regulatory authorities are funded by the pharmaceutical companies themselves [...].”
(Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 109)

“Essentially, I think that the so-called scientific experts were just actors carrying out orders. They made statements and denials uncritically, even in the face of evidence [...]. But in my opinion, they are just actors, more or less aware of what they are doing, all with conflicts of interest, who promote a very partial view and have no credibility. In my opinion, the fundamental problem is that someone with conflicts of interest is allowed to promote something without declaring these conflicts of interest. [...] Even the various virologists or experts or chief physicians, when they have some patent, some funding for their hospital, have something to do with pharmaceutical companies, even if it's just some political blackmail [...], when there is a conflict of interest, that's enough. In my opinion, your opinion is worthless; that is, your opinion is only the result of convenience. Next month, the

conditions will change, and you'll tell me the opposite.” (Michele, 48 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 53)

Scientists who frequently appeared on television during the COVID-19 pandemic were portrayed as “media personalities” more concerned with visibility and influence than with sober, evidence-based communication. For some, the very frequency of their appearances undermined credibility: expertise seemed to turn into performance.

“So, during the pandemic, there were these superstar virologists, as they are called, who bombarded all the news programs with this information — whether true or not, partly true and partly not. And with very sententious statements, not at all open to dialogue and other scientific communities and other doctors. [...] There was no possibility of dialogue beyond those doctors chosen by the health authority or hospitals. So this closed attitude was not good.” (Lucia, 49 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 49)

“And those who spoke on TV all had the same things to say, and those who didn't say the same things weren't invited on TV. In short, this is not science. Real science has doubts: science has the reasonable benefit of the doubt. Instead, they have no doubts. No doubts because this is not science [...]. From Burioni [Roberto Burioni, a virologist, immunologist, science communicator, and professor at the Vita-Salute San Raffaele University in Milan] and the one from Genoa, that Bassetti [Matteo Bassetti, infectious disease specialist, director of the Infectious Diseases Department at San Martino Hospital in Genoa]... [...] Every day on TV, paid, paid, and when did these guys work, excuse me? [Laughs] They were both head physicians... I don't know.” (Anna, 72 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 19)

At the same time, others were criticized as unprepared or inconsistent (as highlighted by Sofia's words), offering advice that later proved contradictory (especially during the COVID-19 pandemic, as recalled by Dalila), or accused of hiding or altering information to align with political imperatives (as Marco recounted). Many of such perceptions emerged from pre-vaccination meetings at local vaccination hubs, where parents felt that the professionals tasked with

informing them lacked adequate knowledge of vaccine risks, contraindications, or alternative approaches. These critiques underscored a profound concern with honesty and transparency: for parents, the issue was less the complexity of science itself than the sense that institutional experts selectively disclosed information, downplayed uncertainties, and thus forfeited epistemic trust.

“And [at the pre-vaccination appointment] I expressed all my concerns, my doubts. But even there I saw that there was a repetitive pattern, that is, of wanting to convince me, a ‘I have to tell you that this is how it is’, but they didn't listen to my questions, they didn't even know how to answer my questions. The fact that a doctor [...] doesn't know how to answer my questions makes me realize even more that you are ignorant, that I know almost more than you, even though I'm not a doctor. But on certain things, we really do know more than certain people. In the end, he didn't know what to do, and the only thing he could do was show me a photo of a child who had died of measles. That's the level of persuasion.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 27)

“Even vaccines, AstraZeneca, Moderna, a big mess like that [referring to the Italian debate on booster doses and whether it was possible to use a vaccine other than the one used in the first vaccination cycle]. But how can people trust it? In fact, there was a moment when there was a bit of a decline because people said, 'Damn, what's going on here? At the beginning, the vaccine was only for a certain age group, then no, then yes, let's use the vaccines we have and move on, then you can have one type of vaccine and another, let's see the mix and see how it goes. And it was the same with children.” (Dalila, 40 y.o., 2 children, unvaccinated – Pos. 49)

“Here too, many things do not add up [in the COVID issue]: why did they have to burn the bodies in Bergamo? [The interviewee is referring to the bodies of people who died of COVID at the beginning of the pandemic in the city of Bergamo, one of the areas hardest hit by the pandemic] Because the literature says that as soon as there is a problem, the first thing to do is to perform autopsies to find out and get to the root of the problem, but here they burned the bodies. They called in the military [who also transported the bodies], and all the documentation is covered by military secrecy. Why? If

we want to solve things, we have to analyze them and deal with them transparently. And this indicates that they don't want to solve them or that they have something to hide. So, in my opinion, we haven't been told the truth about many things, including the numbers. Well, we know very well by now that the COVID death count has been skewed, and it has been stated several times that if someone died of a heart attack but was positive, they were considered a COVID death. And so those numbers are the ones that are thrown around on mainstream TV, etc., and make the phenomenon seem more serious than it is." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 133)

Beyond these critiques of institutionalized expertise, parents also reflected on the relational dimension of authority in their interactions with healthcare professionals. Pediatricians and general practitioners were experienced ambivalently. On one hand, they embodied the proximity and trust that parents often sought: relational continuity, the possibility of open dialogue, and personalized care. On the other hand, many encounters were described as rushed, paternalistic, or dismissive, leaving parents feeling unheard or infantilized. In cases where doctors refused to acknowledge adverse experiences or declined to engage in genuine discussion, parents' trust eroded, reinforcing the conviction that mainstream professionals were bound by protocol rather than responsive to the lived realities of families.

"I'll tell you, I believed in science in the sense that I completely trusted my pediatrician for my first child's vaccinations [who had adverse reactions after all the inoculations, but these were not considered by the doctors]. And then I stopped believing in it, and I no longer trust doctors." (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 27)

"But yes, in the end there is a form of mistrust [towards doctors], a feeling of always being on guard [...]. It happened to me with my children for a minor operation: the doctor told me one thing, I went and looked for medical practices, maybe I found something else. I came back the next time and said, 'Yes, but I read that'. 'Eh, but this, but that, but there', 'Yes, but eh', you understand? [...] And that's when you start to recognize the goodness of a doctor, when you see that at least they are open to discussion. And if they

don't know a practice, maybe they ask you, meaning they have a minimum of humility because they know they can't know everything. Maybe they ask you, find out, and maybe they say, 'No, but look, in your case [...]'. They don't really do this very often..." (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 21)

Some parents turned to alternative practitioners — homeopaths, naturopaths, or sympathetic physicians outside the mainstream — not necessarily because they rejected biomedicine wholesale, but because these figures offered recognition, time, and validation of their concerns.

"Because this is also the issue with pediatricians: how can you have a pediatrician who thinks in a completely different way from you? Who doesn't listen to you? Who doesn't take you into consideration? It's hard as a parent because, damn it, you have to rely on your pediatrician, trust him/her, respect him/her." (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 25)

"Then, for the rest, we also tried to follow pediatricians, when I needed to, who had a more natural approach, so the comparison was based on common ground. In terms of understanding, but above all in terms of a different approach. Because, obviously, no one wants conflict, but you realize that if you ask questions in a certain way, you come across as someone who wants to know more, and that leads to conflict. That's because there's no room for real discussion. They say, 'I'm the doctor,' and that's fine, so you look for other ways [laughs]." (Alice, 44 y.o., 2 children, unvaccinated – Pos. 35)

Here, expertise was reconfigured: credibility did not derive from institutional status alone, but from the willingness to engage relationally and to acknowledge the situated character of parental knowledge. This relational dimension of trust and mistrust also anticipates themes developed in the following section, where parents explicitly contrast their experiential knowledge with biomedical claims.

These critiques reveal a selective and conditional trust in expertise, shaped by both structural suspicion and relational experiences. Parents did not deny the value of scientific knowledge; rather, they contested the authority of its

institutional representatives. Their accounts underscore that epistemic trust is not a blanket orientation toward science but a situated judgment of credibility, shaped by perceived constraints, conflicts of interest, communicative failures, and interpersonal dynamics. In this sense, distrust of experts is less a wholesale rejection of science than an attempt to renegotiate the terms on which scientific authority is recognized. By putting experts under scrutiny, parents redraw the boundaries of what counts as legitimate knowledge, valuing transparency, reflexivity, and responsiveness over hierarchy, consensus, and institutional power.

This reconfiguration of authority also prepares the ground for the next step in parents' epistemological stance: if institutional experts are perceived as constrained, conflicted, or inattentive, then lived experience and peer knowledge become indispensable counterweights. As the following section shows, parents place their own embodied encounters — with children's health, adverse events, and everyday practices of care — at the center of knowledge-making, positioning them not as anecdotal deviations but as valid and necessary correctives to biomedical knowledge.

6.3. Knowledge in practice: Embodied knowledges and the reconfiguration of expertise

The critiques of expertise described in the previous section are inseparable from the ways in which parents validate knowledge in everyday practice. The same moments of distrust or reduced trust — when a pediatrician dismissed an observation, or when an expert on television appeared politically compromised — also functioned as catalysts for parents to rely more heavily on their own experience and embodied knowledge. In this way, the authority of experts and the authority of lived experience are not separate domains but

dynamically interwoven: what is denied or silenced in the medical encounter resurfaces as epistemic capital in parental narratives.

Parental knowledge is often rooted in embodied, biographical experiences that create friction with public health logics. For the parents of *Vaccinare Informati*, such experiences are not anecdotal deviations but epistemically meaningful resources — “situated knowledges” that carry emotional and moral weight. The insistence on listening to one’s own child, observing subtle bodily changes, and drawing on family medical histories reflects an epistemology where the body itself becomes evidence. In this sense, knowledge is not an abstract, universal construct but something lived, monitored, and continuously interpreted in daily practice.

“So, to sum up very briefly, this has been my journey. I made my assessment based on data, personal experience, and that sixth sense that mothers should learn to listen to. Whether it's when a voice tells you, ‘Wait, don't do that to your child’. So I know that if I had vaccinated my child, he/she would have had some minor problems. This is my strong belief, based on my feelings, which I can't explain scientifically, but for me it's a certainty [Laughs]. That's it.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 13)

“I pointed out this weakness to the pediatrician, which the child still has. I told him: ‘I won't be sure until I see a conscious response in the child [the interviewee slightly postponed vaccination], until I can interpret the signals he/she can give me’. Otherwise, how can I tell [if he/she is responding well to the vaccine]? [...] With the third child, I made the same choice [to wait a bit before vaccinating], and I see that he/she is reacting much better than the second child. He/she turned one in December, and I started with the first dose of the hexavalent vaccine this summer.” (Chiara, 38 y.o., 3 children, vaccinated – Pos. 9-11)

Medical histories played a crucial role in this process. Parents recounted long genealogies of illness, allergies, autoimmune conditions, and adverse reactions within their families that informed their decisions about whether and

how to vaccinate. These narratives extended beyond single events, constructing a biographical horizon that shaped perceptions of risk and appropriateness. AEFI experiences, in particular, became turning points: whether officially confirmed or dismissed by healthcare providers, they crystallized the perception that institutional medicine was unwilling to acknowledge embodied realities.

“And so I started to lose faith in science after what happened to my first child [who had adverse reactions after all the inoculations], also because of my pediatrician's reaction... when my child stopped walking [...] I took him to see the doctor and my pediatrician asked me to sign a paper stating that my child was not autistic. I refused, and she got a little angry because she told me that if I didn't sign, she wouldn't get paid. So I said, 'Look, I'll call the local health authority and tell them that you examined him, but I'm not signing it. I don't have the expertise to say that my son isn't autistic. Maybe he is, and I'll realize it in a while.' Her reaction was to tear up the paper, but she was very angry and made it clear to me that something was wrong. That was another episode that distanced me greatly from science, but not from all science, in the sense that I believe in science, but the science surrounding drugs has become my enemy, so to speak.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 27)

“[...] I started having a problem with my eye. [...] So I asked the doctor about vaccines [Allergen Immunotherapy], could it be that the vaccine is causing this problem? 'No, absolutely not'. [...] But I have tingling, deep pain [in part of my body], sharp pains and so on. The doctor I consulted ruled out the possibility that the problem was related to the vaccine. I stopped the vaccine immediately, much to the resentment of the doctor who was treating me. I then went to see a specialist, a very good doctor [...]. And I said to that doctor, 'Listen, doctor, could this problem be related to the vaccine?'. And he said, 'We can't rule it out'. So that reinforced my idea that this problem, not having a definite diagnosis, was related to the vaccine.” (Fabiana, 60 y.o., 2 children, partially vaccinated – Pos. 11)

Such experiences did not merely create doubt; they became epistemic anchors, proof that the body could speak against biomedical assurances. In this sense, the non-recognition of potential AEFI by doctors or institutions reinforced

parental conviction that experiential knowledge must be trusted above official accounts.

This experiential stance was not framed as a rejection of science. Instead, biomedical knowledge was repositioned within a broader plural epistemology in which lay experience and expert advice coexist in tension and interact in different ways. Many parents described the frustration of having their concerns not considered, minimized, or labeled “irrational”, interpreting such dismissals as emblematic of the systemic exclusion of lay voices. Yet they also emphasized that when professionals acknowledged concerns and engaged in genuine dialogue, institutional authority could be partially rehabilitated. Hence, the same interactions that erode trust in experts also generate the conditions under which parental epistemologies gain salience and legitimacy.

Within this framework, everyday fringe medicine (EFM; Vuolanto et al., 2020) occupies a particularly important role. Rather than a wholesale embrace of “alternative medicine,” parents described experimenting with homeopathic remedies, detox cures, or complementary therapies as part of an everyday epistemology of care. These practices were not marginal but normalized, embedded in routines of food vigilance, lifestyle adjustments, and child-rearing strategies.

“But we noticed that by following a healthier lifestyle, we had fewer illnesses, fewer medications, and fewer doctor visits. I started following this low-carbohydrate lifestyle in 2015, supplemented with vitamin D, vitamin C, and omega-3. And in seven years, I've only been home from work sick three times. Before, I used to get the flu at least twice a year, if not three times, with a fever, and I would be off work for a week. So I used to spend two or three weeks at home with the flu. And now, in seven years, I've only been off work for a day or two or three times. I can't explain why, except as a result of this lifestyle. We regularly have blood tests to check our vitamin D levels, especially in winter, because when it drops below a certain level, we supplement it with tablets. And we all take them, the whole family. And I can see that there has really been an improvement. Even my second child had

[infections] all over his/her hands, and within a few months, they went away. He/She had this problem for almost a year, and we couldn't get rid of it. We went to the dermatologist three times [...]. We told him/her to try taking vitamin D, and after a few months, it all disappeared.” (Giulia, 56 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 65)

“I studied naturopathy for myself and my children because every time we ended up in the hospital for something, we realized that there was no real cure, only a temporary fix. But that wasn't enough for us. [...] Conventional medicine is fine, in the sense that you can't live on herbs alone. But, in fact, we never needed to resort to medication. [...] I'm not demonizing medicine, I just don't agree with a certain type of medicine that doesn't align with my way of seeing things.” (Luisa, 43 y.o., 2 children, partially vaccinated – Pos. 13-15)

EFM offered a repertoire of small-scale interventions through which parents enacted autonomy, cultivated attentiveness, and tested responses in practice. Crucially, it functioned as a middle ground: not a full substitution for biomedical protocols, but a reflexive space where parents could mediate between official recommendations and their own observations. In this sense, EFM reconfigured the boundaries of expertise by redistributing epistemic authority: credibility was not monopolized by institutional science (and experts) but constructed through iterative practices of trial, observation, and adjustment.

Parental epistemologies thus emerge as layered and reflexive. Parents did not position themselves simply against biomedical knowledge, but instead wove together different sources — embodied experience, medical biographies, AEFI events, holistic practices, peer exchanges, and institutional science — into hybrid frameworks. Responsibility was central: parents described themselves as morally obliged to “know their children” and to take ultimate responsibility for decisions affecting their well-being. This orientation positioned them not as passive recipients of expert advice but as epistemic agents actively calibrating the hierarchy of knowledge. In this way, the boundary between expert and lay blurred: while institutional experts retained authority in some domains, parents claimed equal if not greater authority in interpreting the embodied realities of their children.

“It's up to us. Sometimes I've seen even with the doctor that it's important to say, for example, ‘Excuse me, but I'd like to have a urine test before taking antibiotics’. If I can, I won't take them, if I have time, because sometimes it's not possible, of course. To see. But it's up to us sometimes. Or ‘Take antibiotics because you have a sore throat’, wait. I don't like swabs, but putting a cotton swab in my throat [...] doesn't hurt, so I'll have a test done to see if it's bacterial rather than viral. In other words, try not to immediately say, ‘Okay, the doctor told me so, ah, that's perfect, that's the solution.’ I'm not saying we should be our own doctors, because that's a big word. Sometimes we don't have all the information we need to understand, so we also need to listen to an opinion. I mean, at least consider it, think about it, and evaluate it. But you can also express your own opinion to a doctor.” (Beatrice, 53 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 63)

This pluralistic orientation was also evident in how parents assessed the health of their children as validation of their choices. The everyday observation of children's well-being — whether they were frequently ill, resilient to common infections, or developing in line with expectations — was mobilized as embodied proof of the soundness of non-standard vaccination decisions.

“In any case, I am happy with my choice [not to vaccinate] because he/she is a very healthy child and never gets sick. He/She is very strong, and I can see that he/she is in good health. With my first two children [who were vaccinated], I used to think that illness was an almost daily occurrence, a fact of life. With him/her, however, I have realized that it is possible to be healthy in this world.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – 13-17)

“We have seen that they have grown up very well, they are also in very good health and are very strong. Therefore, we did not consider it appropriate to carry out this type of vaccination with regard to mandatory vaccines. So this was our decision, and we have stuck to it so far.” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 21)

“Now my children are 10 and 6 years old and haven't had anything so far. Nothing at all. And I was right, in short, about the health path I took with my children. [...] now it's been ten years, even my relatives have seen that the

children are alive and well, as I told you, bursting with health. They have two days of cold a year, they [relatives] don't say anything anymore, of course. Because they understand that vaccines have not been decisive for my children's health." (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 26-28)

In this framing, the child's body became both a diagnostic tool and a moral indicator, sustaining parental conviction against external pressures and institutional skepticism. Health was not abstractly defined but made tangible through everyday vitality, diet, and resilience, further reinforcing the authority of experiential knowledge.

A further dimension of these parental epistemologies is their reflexive character. Parents did not simply accumulate observations but actively interrogated them, comparing biomedical recommendations with peer testimonies, holistic practices, and their own ongoing monitoring of children's responses. Reflexivity here meant a willingness to question, to recalibrate, and to integrate diverse sources of knowledge rather than uncritically adopting a single perspective. This process was often described as demanding and at times burdensome, but it was also framed as a moral responsibility inherent to parenting.

"And this applies to everything, from school to justice to medicine. [...] I always tell my children: remember that it's your interest, you have to manage it yourself and that's it, don't delegate it to anyone else. In order not to delegate it, you have to take responsibility. To make decisions and take responsibility, you have to know what you're doing. Do you have to work hard? Yes! Do you have to stay up all night reading? Yes! That's how it is. Or you delegate it to others and they say, 'Well, what can I say? That's how it is. I'm sorry for you, but it happened to you; it could have happened to me'. But it is a different story if I inform myself and say, 'No, look, I inform myself and I don't do certain things'." (Nicholas, 53 y.o., 2 children, unvaccinated – Pos. 27)

Through reflexive vigilance, parents positioned themselves as epistemic agents who continuously evaluated the credibility of information, the

trustworthiness of experts, and the consistency of embodied evidence. Reflexivity thus transformed everyday decision-making into a site of epistemic labor, underscoring that knowledge in practice was not passive reception but an active, situated negotiation of authority.

These narratives reveal how personal experience functions as both an epistemic and moral foundation. Parents validated their positions through the embodied vitality of their children, through memories of medical encounters, and through the relational recognition of peers and alternative practitioners. Biomedical knowledge was not denied but repositioned: stripped of its monopoly and re-situated within a plural landscape where experience, reflexivity, and responsibility were paramount. In practice, this meant that parental epistemologies were less about rejecting science than about recalibrating the hierarchy of knowledge, placing lived reality on equal or greater footing with institutional authority.

In this light, knowledge in practice emerges as a dynamic process of negotiation, in which health is not defined by universal categories but by situated judgments. Parents' insistence on the validity of embodied experience challenges the boundaries of what counts as legitimate knowledge, expanding them to include the everyday, the relational, and the holistic. This epistemological stance not only redefines vaccination but also contests the very terms on which biomedical knowledge is authorized. As the next section shows, these practices of validation are further shaped by how science is mediated, politicized, and communicated in the public sphere.

6.4. Reconfiguring trust: Science and the mediation of knowledge in parental epistemologies

The parental epistemologies discussed in the previous section were grounded in embodied experience, biographical narratives, and everyday practices of care. Yet these forms of knowledge never operated in isolation: they constantly intersected with, and were measured against, representations of science and scientific authority. Parents positioned themselves in a field where biomedical expertise was both indispensable and contested, where science could serve as a resource of reassurance but also as a site of disappointment, exclusion, or mistrust. Understanding how these parents talked about science thus requires shifting from a binary framework of “trust” versus “distrust” to what Trench (2025) has described as a more situated and plural configuration of trust relations. In this view, trust emerges not as an on–off switch but as a dynamic orientation, differentiated across domains, institutions, and situations.

Section 6.4 explores this process of reconfiguration, showing how science was assessed, criticized, or reimagined by parents in *Vaccinare Informati*. Their narratives illuminate how trust is mediated by evaluations of scientific method, by perceptions of the scientific community as a social group, by competing visions of what constitutes “real” or “independent” science, and by how dissent and authority are portrayed in the public sphere. In this sense, the mediation of science is central not only to how parents interpret biomedical recommendations but also to how they legitimize their own epistemologies and health decisions.

6.4.1. Reliability and the scientific community: Between solid method and failed practice

Parents' accounts revealed a complex balancing act between recognition of science's potential and criticism of its perceived distortions in practice. Science was rarely dismissed as an illegitimate form of knowledge; rather, its authority was differentiated, parsed, and subjected to ongoing scrutiny. Many interviewees expressed a baseline respect for science as a method — an enterprise oriented toward rigorous testing, reproducibility, and cumulative learning. In this framing, science in its “pure” form remained a resource of trust, a horizon of credibility that could, in principle, generate reliable knowledge.

Crucially, parents articulated clear criteria for what they considered scientifically solid and for when “the method” was being properly followed. Doubts as guiding science and scientific research, continuous inquiry, openness to debate and confrontation, rigorous procedures, transparency about potential conflicts of interest, are among the most cited principles that scientists should follow.

“[Trust in science] But in science understood precisely as experimentation and in-depth study. And reliable and therefore transparent results, which can be compared, of course I have faith in that. That is, in science understood in this sense. Perhaps less so in cases where certain analyses are known to have been conducted by pharmaceutical companies.” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 85)

“There have been several people, some more qualified than others, who have tried to say, ‘Let's sit down around a table, discuss it, we've noticed certain things, let's try to compare notes, let's try to understand,’ and there has always been total resistance. This is anti-science because science should thrive on doubt and comparison. [...] there should be a discussion between peers who are familiar with the subject in order to determine which hypothesis is the most likely or, based on the same data, try to draw conclusions together and, if possible, with different perspectives to encourage discussion.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 63)

“Science is actually constantly evolving. But I'll state the obvious: science, by its very nature, is radically linked to the process of continuous discovery, of constantly questioning what has been discovered, of achieving new results that may include previous ones or completely overturn them.” (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 29)

These principles are then transposed in the vaccination-science, pointing to (i) long-term, adequately powered studies capable of detecting delayed or rare outcomes; (ii) appropriate comparators and controls (not only active comparators but placebo controls where ethical and feasible); (iii) independent replication and open access to protocols, raw data, and analytic choices; (iv) transparent pharmacovigilance, including active follow-up and willingness to investigate suspected AEFI rather than dismiss them; (v) clear conflict-of-interest disclosures and public or arm's-length funding; and (vi) explicit communication of uncertainty and study limitations, instead of definitive claims from provisional evidence. When these elements were present — along with time for scrutiny and peer debate — parents said science “looked like science,” and they were more inclined to treat its outputs as credible and decision-relevant.

This discrepancy between the ideal and the real contributed to fueling elements of mistrust. Parents did not simply accuse mainstream science of failure; they described a gap between how science ought to work and how they perceived it to be practiced around vaccines. They cited short follow-up windows, narrow inclusion criteria, absence of robust controls, and limited transparency in trial reporting as signs that institutional practices did not meet the method's own standards. These were not read as technical footnotes but as indicators that the evidentiary system was ill-equipped to register embodied realities they observed in children and adults. In that light, what some called a “failure of method” did not just undermine specific findings, but it raised doubts about the integrity of the overall apparatus charged with demonstrating safety and effectiveness.

“Analyses were requested to see if there were any correlations. And we are not asking this because we No-Vaxxers [ironic] say ‘no, vaccines are bad’. That's not why we are asking. Requests have been made repeatedly, on various fronts, to carry out studies and analyses to understand whether there

is actually a correlation between adverse reactions and the vaccine drug. And the response has always been either to have the studies carried out by non-third-party bodies — and therefore by bodies that were actually the pharmaceutical companies themselves, the pharmaceutical manufacturers — or not to carry them out at all, or perhaps to block those that had been initiated by third-party bodies.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 27)

“So science, the scientific community, is no longer credible, no longer reliable, because they can manipulate and bring out the results of a study, the results they want. If many cases come to light that would invalidate the study, they find a way to exclude them with any excuse. They exclude these cases to obtain ‘valid’ results.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 109)

The scientific community, as described by interviewees, was therefore not a neutral arena of inquiry but a social body marked by power dynamics. Several parents distinguished scientists they admired — those perceived as pursuing knowledge “for truth,” disclosing uncertainty, and accepting debate — from the broader “mainstream,” which they saw as constrained by funding structures, reputational risks, and career hierarchies. Trust, then, was personalized and selective: extended to individuals or small groups perceived as sincere and method-faithful but withheld from the collective when it seemed to reward conformity. Narratives of dissenting voices being marginalized or stigmatized reinforced the impression that the community operated less as an open forum than as a hierarchical field in which alternative analyses or cautionary results struggled to circulate.

“Why, excuse me, are the other doctors [with different views] not scientists? [...] No, they are not part of the community. If there had been only one, I would say, OK, he's the only one, he's crazy, that's it. But there have been others, all over the world, not just in Italy. They said Montagnier [Luc Montagnier, biologist and virologist, Nobel laureate, director at the Pasteur Institute in Paris] was senile, that he was no longer thinking straight. And he was also awarded a [Nobel] prize. No, now he was no longer thinking straight.” (Nora, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 23)

“But it depends on how we look at the scientific community: if we include Loretta Bolgan [researcher, she was part of the Parliamentary Commission of Inquiry into the effects of the use of depleted uranium] in this scientific community, then yes, of course, why not? For example, she is one of many who have spoken out. Yes, yes, certainly science, the scientific method itself, is a valid method, and there are people who are using it. It is the contamination of this with economic and speculative factors that is not good. But if only there were pure science.” (Michele, 48 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 55)

The COVID-19 pandemic amplified these concerns. Parents contrasted emergency authorizations and rapidly shifting guidance with their expectation that high-stakes interventions should be anchored in long-horizon, transparent evidence. Updates on masks, boosters, age indications, or contraindications were not interpreted as routine self-correction but, for many, as signs of institutional volatility and political pressure. Reports of AEFI they felt were downplayed or dismissed echoed earlier experiences with childhood vaccines, crystallizing a view that when urgency and governance imperatives rise, epistemic safeguards (long follow-up, open data, plural debate) recede. The pandemic thus became a prism through which prior doubts were consolidated and reinterpreted.

“And with the pandemic, I would expect an in-depth study at the [national] level, given that they have so many figures. But I don't think they'll draw conclusions until the not-too-distant future, I don't know. I would like that [the issue of adverse effects] to be viewed from a scientific rather than a political perspective. So scientifically, what do I say? I try something, if it doesn't work, I retrace my steps and try another way. Not politically, ‘this is how it is, this is how it's done, and this is what I've decided’.” (Chiara, 38 y.o., 3 children, vaccinated – Pos. 25)

“I don't trust anymore, it's not an easy life, it's not an easy life. I don't [blindly] trust anyone anymore. And I know that, with a lack of prevention, treatments that are perhaps unnecessary or have uncontrolled side effects, etc., there are a lot of people who probably, hopefully not too many fatally, are affected by this, and no one takes responsibility for it. [...] When I see a doctor I know,

whom I know to be a person of great professional ethics, great rigor, and great medical knowledge, being struck off simply because he committed a crime of opinion, I can no longer trust! It's no longer possible! We've gone too far. [...] In fact, I work so that my children grow up with doubt and never have that blind trust, ever. Because you have to protect yourself from these people. And if, after COVID, you do what you did, you only confirm the doubts I have had for years. Revealing them in such a way that it means the game has become so heavy that you don't even bother to hide anymore." (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 19-21)

What emerges is not a binary rejection of science but a selective and conditional trust, allocated according to context, actor, and practice. Parents drew fine-grained distinctions: between science-as-ideal and science-as-institution, between individual scientists and the collective community, and between methodological rigor and structural compromise.

This conditional trust aligns with reflexive vigilance: claims and institutions are not discarded, but they are kept under review and must earn credibility by meeting the method's own standards.

"Well, it depends on what we mean by science, obviously [laughs]. Yes, I have absolute faith in science, yes. So much so that I don't rush to accept these catastrophic views of what will happen and how the adverse effects will degenerate. I mean, we need to gather some material in order to take a position. So, I absolutely trust science as it is in theory. The problem is that we know very well that it can easily be bent to suit various interests. As Einstein said: if you torture data long enough, it will tell you anything. And so perhaps I don't have as much faith in scientists as I do in science itself." (Matilde, 43 y.o., 2 children, vaccinated and partially vaccinated – Pos. 43)

"[Trust in science] It must be weighed up, it must be weighed up. That is, not a priori, not because it is a scientist speaking. That is, I have to understand who that scientist is: I look at their resume, I try to understand what kind of research they do, where their research group gets its funding, to understand how independently they speak, how truly independent their research is from the funding they receive." (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 64)

These judgments had practical consequences. Where parents perceived claims as grounded in the kind of “solid method” outlined above, they weighed them seriously — even if cautiously — in decisions about their children and themselves. Conversely, where methods appeared compromised, this justified privileging embodied knowledge, medical histories, AEFI narratives, and peer testimonies over official recommendations. Under pandemic pressure, many leaned more heavily on experiential epistemologies, validating choices through ongoing monitoring of health and resilience. Trust thus functioned not as an abstract orientation but as an operational filter, shaping which kinds of evidence were considered actionable in everyday care and prevention.

In sum, parents’ evaluations of scientific reliability rested on a careful calibration between the ideal and the compromised, between methodological rigor and institutional failure. Trust in science was not abandoned but redistributed, contingent upon the perceived integrity of processes, actors, and contexts. The COVID-19 pandemic sharpened these distinctions, reinforcing the sense that official science was vulnerable to political and economic pressures, while “real science” — transparent, cautious, and methodologically robust — remained a reference point, albeit one seldom encountered in practice. Yet, beyond questions of method and practice, parents’ critiques reached deeper: to the cultural authority of science itself, its perceived dogmatism, its fusion with political power, and its tendency to silence dissenting voices. If section 6.4.1 has shown how parents assessed science’s reliability, the next section examines how they questioned its boundaries and humility, and how these critiques reconfigured science’s legitimacy as the dominant arbiter of truth in public life.

6.4.2. Questioning the boundaries of science: Scientism, dogmatism, and silenced voices

If methodological shortcomings prompted parents to recalibrate their trust in scientific claims, even more profound critiques emerged when they reflected on the cultural authority of science in society. Here, interviewees shifted from

evaluating the reliability of procedures to questioning the scope, humility, and legitimacy of science as the ultimate arbiter of truth. In line with what was previously highlighted, their accounts reveal not a wholesale rejection of science but a sustained interrogation of its boundaries — of when, how, and under what conditions science should speak, and whose voices it excludes.

A recurrent theme was the accusation of scientism, understood as the extension of scientific authority beyond its legitimate domain. Parents described moments when science appeared to present itself not as one interpretative framework among others, but as an all-encompassing worldview that left little space for moral, experiential, or plural epistemologies.

“But then again, we live in a scientistic society. But why only science? Politics should not be guided by science; there are values. Even if science tells me so, some things must come first, and in the society that is to come, I believe these will be put first. [...] So science is fine, but it must not be the only thing.”
(Clara, 37 y.o., 3 children, vaccinated)

“In the discourse that has taken place in recent years, science has been presented as something incontrovertible. And the whole aspect of how science is influenced by politics, society, economics, even just common sense, has never been considered, never been highlighted. And I believe that scientists themselves have, in many cases, been victims of this, of this thing.”
(Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 29)

This overreach was seen as flattening the complexity of health and child-rearing, reducing them to what could be measured in trials or quantified in risk assessments. For parents, such scientism clashed with the lived realities of caring for children, where uncertainty, individuality, and embodied observation demanded attention. Rather than supporting parental reflexivity, scientism was interpreted as an ideological posture that foreclosed dialogue and delegitimized other ways of knowing.

Closely tied to these concerns was the perception of dogmatism. Parents frequently described science as functioning less as an open-ended inquiry and more as a closed system resistant to challenge. This was especially evident in

the vaccine domain, where questioning official narratives was seen as immediately pathologized — critics were branded anti-scientific, irresponsible, or conspiratorial. For parents, such discursive closure was antithetical to the very principles of scientific inquiry.

“But a free science is a non-dogmatic science. Because this isn't science, it's faith that this thing [the vaccine] is good for you, and woe betide anyone who speaks ill of it. That's dogma, it's faith, it's not science. [...] Instead, no, we must continue with ‘paracetamol and watchful waiting’ [the standard protocol during the pandemic], woe betide anyone who changes it, woe betide anyone who gives treatment... [...] So for me, this is not science: it is dogma. And so we're back to the days of witch hunts, when if you said you didn't believe in the Virgin Mary, they burned you at the stake. It's the same thing now: if you don't believe in the vaccine, you can't work anymore, and you're excluded from society, end of story. They don't kill you, that's a bit of an improvement. But in the end, you're confined to your home and you can't do anything else.” (Giorgio, 62 y.o., 3 children, Vaccinated, partially vaccinated, and unvaccinated – Pos. 31)

“And we continue with this narrative [about vaccines]: this is the Bible written many years ago, and the issue cannot be touched upon. Science is not like this. This is what I disagree with. And as soon as you try to discuss it or raise your doubts with the pediatrician or the vaccinating doctor [you encounter resistance], I don't know if it's because they don't know how to answer you...” (Chiara, 38 y.o., 3 children, vaccinated – Pos. 25)

“Because science has always been based on doubt, otherwise it becomes dogma. If a theory is simply accepted as fact, then it is dogma, no longer scientific. Doubt, on the other hand, is what has driven science forward from Kepler to the present day, with all those great scientists. Without doubt, there is no science; it stops there and ultimately becomes a religion.” (Edoardo, 64 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 51)

Instead of exemplifying skepticism and a willingness to revise claims in light of new evidence, institutional science was depicted as defending predetermined conclusions. Several interviewees contrasted this rigidity with their

own epistemic stance, which they described as reflexive and provisional: open to reconsideration but unwilling to silence doubts in the name of consensus.

The sense of silenced voices added further weight to these critiques. Parents recounted how dissenting experts, alternative hypotheses, or even cautious recommendations from within the scientific community rarely reached the public arena. They interpreted this absence not as a lack of debate, but as a symptom of systematic exclusion: journals reluctant to publish controversial findings, media unwilling to platform critical voices, institutions punishing researchers who strayed from orthodoxy.

“Every now and then they invited someone [with different views], but they didn't let them speak, they attacked them, they... but no, well, information, that is, there was an increase in censorship [during the pandemic] that was frightening.” (Carlo, 51 y.o., 1 child, partially vaccinated – Pos. 115)

“Because there was no listening: [...] even the research of independent doctors with reliable data was completely excluded from any real debate.” (Alice, 44 y.o., 2 children, unvaccinated – Pos. 91)

“The scientific publications that did exist [...] in which the authors did not question the vaccine but nevertheless warned against simplifying the issue as ‘the vaccine is only good’ or ‘only bad’ were swept under the carpet — especially by the mainstream media. Doctors who wanted to say something were even struck off first. Incidentally, the timing was very suspicious, because the first suspensions took place in the summer of 2017, shortly before the Lorenzin decree was approved. All this was accompanied by big headlines in the newspapers, so as to punish one person in order to educate many. In other words, it was truly dictatorial in style. [...] And then the final suspensions [...] were carried out, again with adequate publicity, shortly before the news came out that the COVID vaccines were working. So even there, it's no coincidence [...]. It's not a question of being a conspiracy theorist; it's a question of looking at the contingency of events.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 19)

Importantly, those perceived as being silenced were not only scientists but also lay actors — parents themselves — whose experiential testimonies about

adverse events or individualized risk were dismissed as “anecdotal” rather than recognized as epistemically meaningful. For many interviewees, this pattern mirrored their clinical encounters and reinforced the idea that science operated as a hierarchical system aligned with political and economic imperatives rather than as a plural forum for inquiry.

The tensions that surfaced during COVID-19 did not remain confined to the pandemic context but reverberated back onto parents’ understandings of childhood vaccination. The experience of rapidly shifting recommendations, contested expertise, and silenced dissent deepened pre-existing doubts about the transparency and openness of vaccine science more broadly.

“That is, the approach was the same, the communication was exactly the same [with childhood vaccination requirements and with the pandemic]. [...] Because [with the pandemic] the impact was obviously totally different, but I realize that the communication was the same. [...] It was the same. Information was built up gradually, as was the case with measles [in 2017]. There too, it started with ‘there are cases’, there is concern, there is an individual case in hospital, and gradually we moved on to how many cases there are in Italy, how effective the vaccine can be, how it costs nothing and is effective. [...] And unfortunately, the data was also incorrect [...]” (Vittoria, 49 y.o., 2 children, unvaccinated – Pos. 69)

For many, the pandemic functioned as a magnifying lens: it made visible dynamics they believed had long shaped the governance of childhood immunization. Particularly, methodological shortcuts, suppression of alternative voices, and a narrowing of acceptable debate. Parents who already harbored concerns about adverse events or the rigidity of vaccination schedules interpreted COVID-19 as a confirmation that official science operates less as a space of open inquiry than as a system oriented toward control and conformity. Others, who had not previously questioned pediatric vaccines, reported that the pandemic’s discursive climate pushed them into a more critical stance, encouraging them to re-examine the evidentiary bases and cultural authority of all vaccines, not just those developed under emergency conditions. In this way, COVID-19 did not merely generate a new arena of skepticism but reinforced and

extended the epistemic critiques that parents had already articulated in relation to childhood immunization.

Together, these narratives reveal an epistemic reconfiguration of science's role in public life. Parents did not simply weigh methods and results; they scrutinized science's cultural posture, its boundary work, and its discursive strategies. Accusations of scientism, dogmatism, and silencing were not rhetorical flourishes but substantive critiques of how science interacts with society. In this sense, their stance resonates with the argument that mistrust is not the binary opposite of trust but can function as reflexive vigilance and normative critique (Trench, 2025). By questioning the boundaries of science, parents carved out a conceptual space where trust was not denied but re-specified: conditional on humility, openness, and pluralism.

This questioning also had practical consequences for vaccination choices. Parents described feeling alienated not only by institutional pressure but by the cultural climate that left little room for nuance. When the only recognized options were full compliance or stigmatized dissent, many leaned toward the latter, finding validation in alternative epistemic communities. In this way, critiques of scientism and silencing directly reinforced the plural epistemologies outlined in Section 6.3, making non-standard decisions both an act of care and a statement against the perceived monopolization of truth. In sum, the interrogation of science's boundaries extended the dynamics observed in Section 6.4.1. Where questions of method revealed tensions between ideal and practice, here parents emphasized the cultural and political dimensions of authority: science not only as a tool of knowledge but as a social institution that defines what counts as credible. The next section turns to how this tension manifested in competing visions of "real," "independent," and "mainstream" science, and how parents navigated between them to articulate their own standards of legitimacy.

6.4.3. Competing visions of science: Independence, authenticity, and institutional power

If parents' critiques of method and cultural authority revealed fractures in how they assessed science, their narratives also sketched competing visions of what science ought to be. Rather than rejecting science wholesale, interviewees articulated alternative imaginaries of "independent" or "real" science — contrasted with what they saw as compromised, politicized, or "mainstream" versions. In this sense, the boundary between trust and mistrust was drawn not along a binary line but through a differentiation of scientific forms, each carrying distinct moral and epistemic valences.

Independent science emerged as a recurring ideal. Parents frequently invoked the figure of the autonomous researcher: unbound by industry funding, political mandates, or institutional hierarchies. Such independence was associated with methodological rigor and moral integrity, precisely because it was seen as insulated from external pressures. Several interviewees described their trust in scientists who "work in the shadows", who pursue unpopular questions, or who publish in marginal venues despite professional risks. For them, independence was less about institutional location than about epistemic stance: a willingness to prioritize truth-seeking over career advancement, funding, or conformity.

"There are many independent scholars who are not published or promoted [...]." (Giacomo, 33 y.o., 2 children, unvaccinated – Pos. 83)

"If by science we mean free researchers who can write, who can document, who are not satisfied with answers, who move forward, then I agree." (Silvia, 57 y.o., 2 children, unvaccinated – Pos. 21)

"We were faced with the research carried out by a few willing doctors who may not have been funded by anyone, and those who want us to be vaccinated. And that's where we made our choice. And that's where I consciously decided and chose to believe in the person who carried out the research [...]." (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 67)

Within this frame, research funded by the public sector was often upheld as closer to the ideal of independence. Parents contrasted public funding with pharmaceutical sponsorship, arguing that when research was financed through public resources, it could, at least in principle, be more accountable to the collective good rather than private profit.

“I mean, how can science move forward if 80% of pharmaceutical research is funded by industry and only 20% by government? Where are the independent researchers who can have their say?” (Lorenzo, 43 y.o., 2 children, vaccinated – Pos. 62)

Yet even here ambivalence remained: some worried that state funding itself might be influenced by political priorities, pointing to the COVID-19 vaccination campaign as evidence that “public” did not automatically mean impartial. The reference to public funding therefore, signaled less a naïve trust in state institutions than an aspiration for a model of science genuinely oriented toward the common good, a horizon against which parents measured actual practices.

Closely linked was the notion of “real science”. Parents used this phrase to distinguish between an authentic practice of science — careful, transparent, cautious, and self-critical—and what they saw as a corrupted form dominated by political agendas or market imperatives. “Real science”, in their accounts, admitted uncertainty, reported adverse effects, and engaged with diverse perspectives. It was a moral category as much as an epistemic one, infused with expectations of honesty, humility, and benevolence. Conversely, “mainstream science” was depicted as the opposite: institutionally endorsed, oriented toward mass compliance, and intolerant of dissent. In this framing, the opposition between “real” and “mainstream” science was not simply epistemological but ethical: one oriented toward care, the other toward control.

“And unfortunately, science has many faces in my opinion, it has many consciences. They say ‘in science and conscience’, eh. If you have a conscience, you’re a scientist, but if you’re tied to your own interests, like those four clever guys on television, there’s no story.” (Edoardo, 64 y.o., 2 children, partially vaccinated and unvaccinated – Pos. 51)

“If science is ethical, it is perfect; if science is fair, there is no conflict of interest, there is truly an approach that looks at everything, but why not Madonna? Science is absolutely welcome. It has brought many good things and should be used, but it must be used well, with principles. The problem is that moral principles and ethical principles are lacking: if there are interests behind it, you do a lot of damage. [...] I believe in science, the problem is that it is not used and developed as it should be.” (Sofia, 47 y.o., 3 children, vaccinated and unvaccinated – Pos. 49)

These distinctions were further sharpened by reflections on the plurality of voices within science. Parents argued that the existence of competing interpretations of data was not a weakness but a sign of vitality. Yet they felt that institutional mechanisms — journals, funding agencies, media — systematically narrowed this plurality, privileging interpretations aligned with dominant policies. The suppression of dissenting interpretations of vaccine safety data was seen not as an isolated issue but as emblematic of a broader problem: a scientific culture that conflated consensus with truth.

“Yes, data must always be interpreted. In the sense that they speak for themselves, but only up to a certain point. And the first question to ask is: how were they collected? Because, as we said earlier, how were the data on COVID deaths calculated [referring to data recording that is not always transparent about the actual causes of death]. And then, once I accept that the data is correct, I start to think about it, but there are various interpretations. That's why there should be more people working on it, and possibly with different perspectives.” (Marco, 47 y.o., 2 children, unvaccinated – Pos. 137)

“So it is clear that there was never any attempt to seek debate; [on TV] it was always the same people speaking, it seemed like there were only three people. [...] Two or three experts who are polarized on vaccines, who push forward their information, when in fact the plurality of science is much broader.” (Lorenzo, 43 y.o., 2 children, unvaccinated – Pos. 66)

“So I believe in science, but I would like it to be different. I would like it to be balanced, I would like there to be room for everyone, and I would like there to be debate. [...] Something that has been completely lacking over the last

six years, since 2017, there has been no scientific debate whatsoever.”

(Dario, 48 y.o., 3 children, unvaccinated – Pos. 45)

For interviewees, true reliability emerged not from the uniformity of voices but from their diversity, from open debate where minority positions could be heard without stigma. This valorization of plurality resonated with the epistemological pluralism described in section 6.3: just as embodied observations and experiential accounts were mobilized alongside biomedical expertise, parents also called for scientific discourse to embrace a multiplicity of perspectives rather than enforcing closure.

Parents drew sharp contrasts between science as practiced in medicine and other scientific domains. Medicine was frequently singled out as an epistemically fragile field, not only because of its proximity to pharmaceutical interests but also because of its very subject matter. Unlike physics or natural sciences, which were imagined as dealing with universal laws, medicine was said to face the irreducible complexity of human individuality. Many parents argued that, for this reason, medicine could never be a “science” in the strict sense: its attempt to standardize treatments through protocols and population-based trials inevitably overlooked the uniqueness of each patient. In their view, the drive to generalize in medicine — essential to its claim of scientificity — was precisely what disqualified it as a true science. What medicine needed, they suggested, was not more rigid adherence to standardized evidence but greater attention to variability, context, and personal history. This stance resonates directly with the reflexive and particularistic epistemologies described in section 6.3, where parents framed health as situated and non-replicable. By rejecting the premise that medicine can be standardized, parents both contested its authority as a science and defended their own experiential role as indispensable to health decisions.

“Medicine is not an exact science because it is practiced on human bodies, and every human body is unique. And every person, perhaps due to genetic makeup, or the type of environmental influences [...], then there are all the phenomena [...] of epigenetics, which are due to the environment [...], there is also the possibility of passing on these types of changes to children. So

every person is unique. Therefore, medicine cannot be an exact science, can it? It is a science that has general principles and must be applied to individual cases.” (Carolina, 52 y.o., 2 children, unvaccinated – Pos. 25)

“The same for everyone? No. That's not how it works; everyone has their own story. [...] And then medicine isn't even a science, it's a practice that makes use of scientific subjects. But it's a practice because what's good for me can be very bad for him. So, one plus one equals two, and that's science. But the fact that something is bad for me and good for you is not science in the strict sense.” (Martina, 63 y.o., 2 children, vaccinated – Pos. 55)

The COVID-19 pandemic served as a catalyst once again. Emergency authorizations, contested data on efficacy, and the rapid global alignment around vaccine campaigns were read as further evidence of “mainstream science’s” entanglement with political power. For parents, the sidelining of critical experts during the pandemic mirrored longer-standing dynamics around childhood vaccination, confirming that institutionalized science was less a space of plural inquiry than of coordinated messaging. At the same time, parents pointed to scientists who voiced caution or called for open debate as exemplars of “real science”— individuals who, though marginalized, embodied the virtues of independence and authenticity. Here, as in their reliance on experiential epistemologies (section 6.3), parents drew authority not from the loudest voices but from those they perceived as most sincere, most reflexive, and least compromised by institutional imperatives.

Altogether, these narratives show that trust in science was not simply eroded but re-differentiated. Parents did not position themselves against science as such but instead divided it into competing forms, aligning their trust with ideals of independence, authenticity, and benevolence, while withdrawing it from institutions seen as compromised. This selective redistribution of trust illustrates once again the dynamics of reflexive vigilance (Rowland et al., 2022): credibility was not abandoned but carefully reallocated, contingent on actors, contexts, and practices. And just as in section 6.3 parents combined biomedical and experiential forms of knowing, here too they configured science into a hierarchy, elevating “real” and “independent” science while relegating “mainstream” science

to a position of skepticism. In this way, parents' competing visions of science were not abstract ideals but lived frameworks guiding their decision-making. When "real science" appeared absent from public discourse, experiential epistemologies gained further weight; when independent voices were marginalized, trust migrated to peer networks and parental communities. Rather than depicting parents as disengaged from science, these accounts suggest they were actively re-imagining its proper form and role. This re-imagination sets the stage for the next subsection, which examines how media dynamics mediated these competing visions—amplifying some voices, silencing others, and reinforcing the polarization that shaped parental epistemologies of trust.

6.4.4. Mediated science: Polarization, dissent, and media dynamics

If the previous subsections have traced how parents evaluated the reliability of science, questioned its boundaries, and articulated alternative imaginaries of independence and authenticity, their accounts also point to another crucial arena: the mediation of science in the public sphere. Parents' orientations toward science were not formed in a vacuum but filtered through communicative ecologies shaped by media dynamics, public debate, and institutional discourses. Narratives about polarization, marginalization of dissent, and the contrast between mainstream and non-mainstream media reveal how parents experienced the public representation of science less as a transparent conversation and more as a managed spectacle in which some voices were amplified while others were silenced.

A recurrent theme was the portrayal — or absence — of dissenting voices in mainstream outlets. Parents consistently noted that critical scientists, cautious experts, or even moderate reservations rarely appeared in dominant channels of communication. When they did, these voices were often framed as marginal, irresponsible, or ideologically motivated.

“A little something has come to light. But there were always those in favor of vaccines ready to strongly oppose [critical voices]. Anyone who thought differently was ridiculed; they wanted to ridicule them. People had to be, not dumbfounded, but convinced that those who thought differently were wrong. But in a way that made them laugh at them, mock them. That's what happened. It was obvious.” (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 71)

This, according to Vaccinare Informati's parents, has also occurred with the portrayal of critical citizens, negatively labeled as “No-Vaxxers,” and the events organized to oppose the vaccination mandates both in 2017 (e.g., the Pesaro demonstration and the initiatives to protest children's exclusion) and 2020 (e.g., demonstrations against the pandemic restrictions and health pass).

“If I remember correctly, in 2017, the technique of not giving space to those who had a different opinion was adopted. So I still remember initiatives such as hanging balloons outside schools to remember excluded children, which were simply not reported. Apart from perhaps the occasional lifestyle article about how weird anti-vaccination families were.” (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 55)

“[...] we went to the demonstration in Pesaro. Unforgettable. Especially because of how it wasn't reported. I mean, I couldn't believe it. That was a turning point, a very important milestone too. Seeing that demonstration being silenced by everyone. No, that was a clear sign that something was wrong, that there was something to hide. You can't not talk openly about this, about sixty thousand people gathering there. I remember that was an important step, yes, in the growth of my conviction. That if you don't talk about it, it's because there's something to hide. There's no other explanation. I mean, denying reality is not the way to convince people. Whatever the reasons for sixty thousand people gathering there, I mean, don't they have anything better to do?” (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 41)

“But they don't let you do anything. What happened in Canada? I mean, there's no chance of changing things with protests, except to show that there are lots of people and not just a handful, that's for sure. But otherwise, they

oppose you with every means at their disposal. There were rivers and rivers of protesters during COVID in all the big cities of Europe. Even if there were rivers of people protesting, they didn't talk about it, they silenced everything and hid everything, and said it's just a handful of people, they said that there were just "a few fanatics" [Laughs]." (Valeria, 51 y.o., 2 children, unvaccinated – Pos. 36)

For many interviewees, this selective amplification confirmed that the media operated less as an open forum than as a gatekeeping apparatus aligned with political and pharmaceutical interests. The perceived lack of pluralism reinforced their conviction that official science was not only methodologically compromised (as argued in 6.4.1) and culturally dogmatic (as in 6.4.2), but also communicatively monopolized. In their eyes, dissent was not absent but actively suppressed, a diagnosis that both mirrored and reinforced their critical distance.

This perception directly influenced the public debate about vaccination, leading to increased polarization. Parents described a communicative climate where the spectrum of positions was collapsed into binaries: either one accepted the official narrative, or one was cast as being No-Vax and "anti-science".

"However, journalism, headlines, etc., thrive on the most extreme terms. "No" is a very strong term that also allows, in some way, to assign blame and polarize the choice. Because otherwise, if we come across as a group of moderate people, it's not so easy to create factions, and so in my opinion, it's a mechanism of journalism, of the media in general, to construct this [polarized] situation." (Marco, 47 y.o., 2 children, unvaccinated – Pos. 53)

"And so this beginning of segregation [in 2017], of a sort of racism that was also beginning to develop, mainly due to a disgusting media campaign, which was then repeated exactly the same way for COVID, seemed to be the initial test to see if certain things would take root with COVID. It is true that the Lorenzin law did not affect all Italians [...], so the segment of the population affected was much more limited. However, if we look at how the mainstream media encouraged racism and segregation against those who had different opinions, for example, during COVID, that was the peak. In other words, you couldn't say anything because you had no right to speak, because it was

clear that anyone who wasn't a doctor was brain-damaged.” (Dario, 48 y.o., 3 children, unvaccinated – Pos. 15)

Several recounted personal experiences of being stigmatized in conversations with peers or professionals, echoing the dynamics of social labeling analyzed in Chapter 4. For them, polarization was not only a feature of public discourse but a lived reality shaped by these framings. Indeed, these media representations also influenced how vaccine-hesitant citizens navigated their communities, workplaces, and schools.

“What I don't like about this [anti-COVID-19] vaccine is that people who have been vaccinated label you as an anti-vaxxer, and I don't understand why they do that. I think they do it because they are influenced by society, by the media, by newspaper articles that I have read, which are very aggressive towards people who don't want to be vaccinated.” (Alessandra, 42 y.o., 5 children, vaccinated and partially vaccinated – Pos. 23)

Importantly, parents linked this polarization to the very strategies of scientific communication: rather than fostering reflexivity, nuance, and debate, they argued, institutional actors resorted to persuasion campaigns and moralizing rhetoric that amplified division. The resulting communicative environment was experienced as hostile to plural epistemologies, leaving little space for middle positions or conditional trust.

“So instead of saying, ‘No, I am science, I am giving you absolutely reliable, accurate, and scientific information,’ everything was brought down to a social level. People said, ‘No, it's the No-Vaxxers, so this is rubbish,’ and unfortunately, everything was amplified in the media.” (Camilla, 45 y.o., 2 children, unvaccinated – Pos. 31)

For parents, this dynamic did not simply reflect a communication problem but a reallocation of trust. If mainstream science was perceived as tightly bound to political imperatives, then its public presentation through mainstream media was judged doubly compromised. Alternative channels — whether independent media, local associations, or informal networks — acquired credibility not because they were free of bias but because they allowed dissenting perspectives to circulate. In this sense, trust was redistributed across communicative fields:

withheld from dominant outlets seen as exclusionary, and extended conditionally to those spaces where plurality and debate seemed possible. This non-binary stance reflects the same reflexive vigilance observed in earlier sections: parents did not reject institutional communication wholesale but calibrated their reliance according to perceived openness, transparency, and responsiveness to doubt.

"[...] when you only have mainstream TV to deal with, it's hard to resist. And maybe you can do it on those alternative channels that tell you that international research says something different from what they show you on Rai news [Italian public radio and television news]. Maybe those who use the internet or follow certain groups can do it more easily. [...] But I've noticed, and others have pointed out to me, that this has also undermined the credibility of the media month after month. More and more people are getting their information from independent newspapers, including online. So they've lost credibility in this regard." (Michele, 48 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 49-51)

"Look, I'll tell you, it was enough to see a few headlines, a little information from the national media, to change channels and go looking for free, real, true information on free networks or information sites. Those not funded by political parties or other entities." (Danilo, 50 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 91)

Against this backdrop, non-mainstream media acquired particular importance. Parents turned to alternative outlets — independent newspapers, blogs, specialized websites, or association-based platforms — as spaces where dissenting perspectives could circulate. As mentioned before, these arenas were not described uncritically: parents acknowledged the risks of misinformation or ideological bias.

"Because then there's the whole other issue: on the one hand, dealing with this very loud, very alarmist, often one-sided information; and on the other, with counter-information that, in my opinion, was not always balanced either. So it was difficult for me to maintain a moderate attitude, one that was neither alarmist nor gullible, that believed everything. [...] Even now, I still don't have any answers, although I can see that many of the hypotheses put forward by those who did not believe the official media are gradually proving to be

correct or, at least, are showing themselves to be close to the truth.” (Bianca, 41 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 21)

“I watch BioBlu [non-mainstream news channel] every now and then, and sometimes I get scared and say to myself, ‘Where am I ending up here?’ [Laughs] Help [Laughs]. Because so many things are really borderline there too, they’re not quite absurd, but they’re close. You have to be careful [...]” (Gianluca, 52 y.o., 2 children, partially vaccinated – Pos. 33)

Yet, they valued them as rare sites of pluralism, where competing interpretations of data, testimonies about adverse events, or skeptical expert voices could be aired. For many, these channels provided epistemic validation, confirming that their doubts were neither isolated nor irrational but part of a broader, if marginalized, conversation. In this sense, non-mainstream media functioned as crucial infrastructures of trust, allowing parents to reconcile their experiential knowledge with alternative scientific discourses and to resist the homogenizing tendencies of mainstream narratives.

The COVID-19 pandemic further amplified these dynamics. Parents noted how media coverage oscillated between alarmism, reassurance, and moral condemnation, entrenching polarization. Shifting recommendations were often presented without context, reinforcing impressions of inconsistency, while dissenting experts who raised concerns about vaccine safety or proportionality were sidelined or delegitimized. For parents already skeptical of institutional communication, the pandemic confirmed that the mediation of science was not designed to foster informed deliberation but to secure compliance.

“[...] people have been really manipulated by the media [during the pandemic]. Very much so. They’ve been brainwashed with all those numbers [of infections and deaths], numbers, numbers, numbers, numbers, swabs, and numbers. [...] Little by little, they instilled fear in them, and inevitably they came to believe that there was only one solution [the vaccine]. That was the panacea [...]” (Nora, 47 y.o., 3 children, partially vaccinated and unvaccinated – Pos. 31)

This reading of COVID-19 communication dovetailed with earlier experiences around childhood vaccines, where they perceived campaigns as

reductive and stigmatizing. In both cases, the medium reinforced the message: science was not encountered as an open-ended practice of inquiry but as a closed system of authority, mediated through selective representation and exclusion.

At the same time, parents emphasized that the marginalization of dissent also meant the marginalization of their own testimonies. Experiences of adverse events, or careful monitoring of children's development, were rarely acknowledged in mainstream media and were thus relegated to what parents described as "invisible knowledge". In contrast, association forums, online groups, or sympathetic outlets were valued precisely because they validated these experiential accounts. Media dynamics, in this view, were not only about the visibility of experts but about the legitimacy of parental voices themselves. By recognizing experiential knowledge as worthy of circulation, alternative spaces reinforced the plural epistemologies that guided parents' health decisions, further intertwining media trust with embodied epistemic practices.

Taken together, these accounts underscore that parents' evaluations of credibility and legitimacy were as much communicative as they were epistemic. What was at stake was less the existence of scientific debate than its public accessibility and framing. By interpreting polarization and media silencing as structural features of how science was mediated, interviewees reinforced the plural epistemologies outlined in section 6.3: investing trust not in institutional narratives alone but in dialogic exchanges within alternative communities, experiential testimonies, and carefully selected experts. In this way, section 6.4.4 builds on the trajectories traced along this chapter. Where earlier subsections highlighted questions of method, boundaries, and imaginaries of science, here the focus falls on communication as a site where trust is mediated, contested, and reconfigured. For parents in *Vaccinare Informati*, media dynamics did not merely report science but actively shaped its authority, amplifying some voices while silencing others, and in doing so redrawing the very terms on which science could claim legitimacy.

Considerations

The analysis of parental accounts of science and expertise demonstrates that vaccine hesitancy is not anchored in categorical rejection of science but in a continuous reconfiguration of what counts as credible knowledge, who embodies epistemic authority, and under what conditions trust can be extended. Parents in *Vaccinare Informati* distinguish sharply between science-as-ideal—linked to independence, transparency, plurality, and humility — and science-as-institution, which they perceive as compromised by economic entanglements, political pressures, and hierarchical closure. This distinction reflects broader transformations in public trust, where confidence is not given wholesale but negotiated across domains, actors, and communicative arenas (Lewicki et al., 1998; Rowland et al., 2022; Trench, 2025). These dynamics resonate with key debates in the sociology of health on patient agency, lay expertise, and the changing definition of the “good patient.”

At the core of these dynamics lies multilayered reflexivity (Numerato et al., 2019), which operates at several levels. At the embodied level, children’s health, vitality, and biographical histories provide situated evidence that recalibrates parents’ orientation toward medical advice. At the relational level, recognition or dismissal in encounters with pediatricians and alternative practitioners becomes decisive for the attribution of credibility. At the institutional level, parents interrogate the conditions under which science is produced—conflicts of interest, selective disclosure, absence of long-term studies — and withdraw trust when these are unmet. Finally, at the mediated level, parents critically evaluate how mainstream and alternative media frame scientific debates, rewarding spaces where plural voices and experiential knowledge are visible. This layered reflexivity exemplifies what Rowland et al. (2022), building on Hendriks et al. (2016) and Van De Walle & Six (2014), call reflexive vigilance: not the absence of trust, but the active, ongoing appraisal of authority under conditions of uncertainty.

In this framework, epistemic trust (Fricker, 2007; Rowland et al., 2022) emerges as central: parents do not dismiss expert claims outright but evaluate

their trustworthiness according to markers of integrity, benevolence, competence, and openness (Lewicki et al., 1998). Trust is not a static disposition but a practice enacted in everyday parenting — through monitoring children's responses, engaging with peer testimonies, and testing complementary medical practices. These activities constitute a form of lay expertise (Wynne, 1992; Epstein, 1995), where parents transform embodied and biographical knowledge into legitimate epistemic resources. The dismissal of AEFI or biomedical uncertainties does not erase these experiences but strengthens parents' conviction that lived knowledge must be integrated into health governance.

Parents' critiques of scientism and dogmatism echo long-standing STS debates on boundary work (Gieryn, 1983; Hess, 2011): scientific authority is problematized not only for methodological shortcomings but for its attempts to police legitimate speech and exclude dissenting voices. Medicine, in particular, is recast as epistemically fragile, where standardized protocols are experienced as incompatible with the uniqueness of children's bodies—a position resonant with Mol's (2002) notion of the body multiple. Everyday fringe medicine (Vuolanto et al., 2020) functions as a mediating practice, not simply alternative but reflexively integrated into parental epistemologies, enabling parents to experiment, adapt, and recalibrate without abandoning biomedicine altogether.

The COVID-19 pandemic acted as a prism that refracted and intensified these dynamics. Protocolized treatments ("paracetamol and watchful waiting"), perceived censorship of dissenting experts, and highly visible but politically entangled media performances reinforced parents' skepticism toward institutional expertise. Yet the pandemic also expanded associative networks, diversified information sources, and solidified plural epistemologies where parents juxtaposed biomedical, experiential, and holistic repertoires.

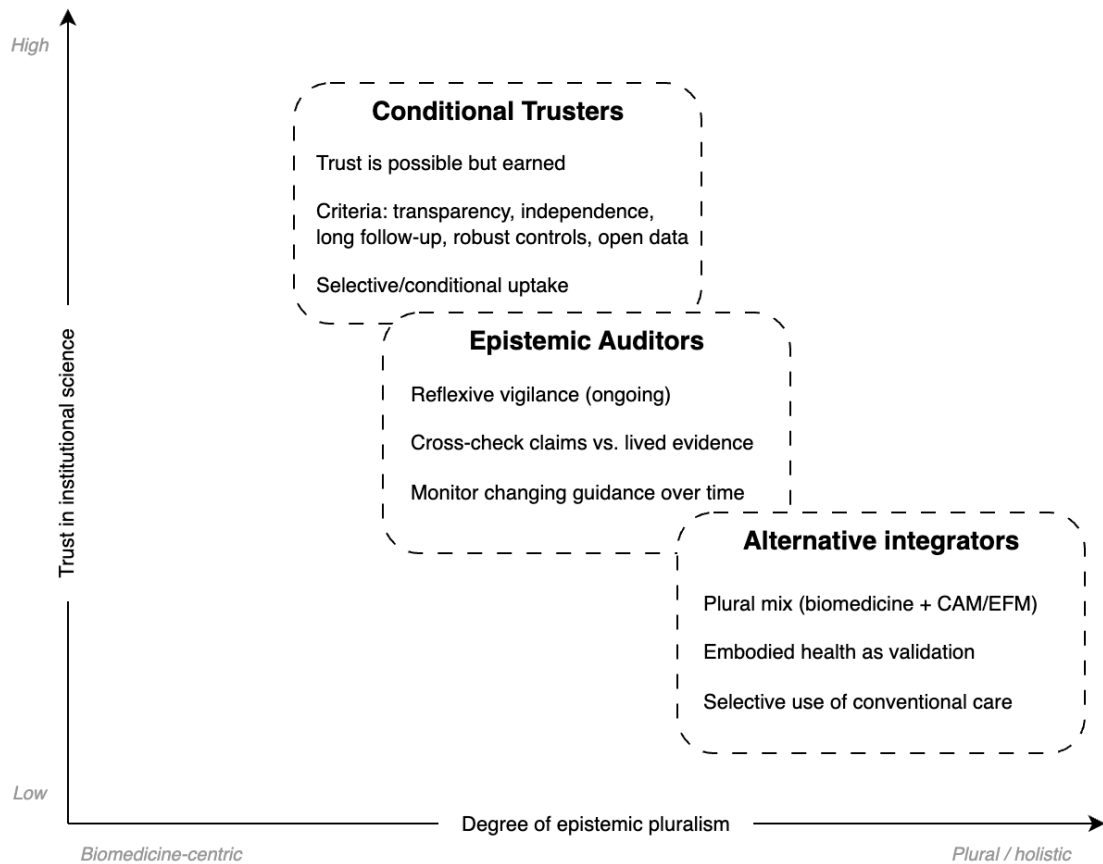
In this light, vaccine-hesitant attitudes should be understood as expressing legitimate doubts and concerns about vaccines (Dubé et al., 2021) that deserve recognition. These parents are not disengaged but rather exemplify the figure of the medically engaged patient, though not necessarily the compliant one (Gottlieb, 2016). Their continuous search for information and scrutiny of expert

claims resonates with what Carrion (2018) terms the “paradox of patient advocacy”: critiques of the social and political practice of science are valued in many health domains yet delegitimized when articulated around vaccination. This paradox highlights a broader tension in the sociology of health between compliance as the normative marker of the “good patient” and engagement as a practice of vigilance and reflexivity (Numerato et al., 2019). Parents’ advocacy thus challenges the narrow assumption that compliance is the only legitimate response to health communication strategies (Manyweathers et al., 2020), revealing the epistemic loss entailed in ignoring or misinterpreting non-compliant publics (Davis et al., 2015).

These findings advance theoretical debates on trust and expertise by showing that vaccine hesitancy is best understood as a mode of epistemic citizenship rather than a rejectionist stance. Parents enact vigilance, conditional trust, and multilayered reflexivity as part of their moral duty to protect their children. This contributes to the literature on civic epistemologies (Jasanoff, 2005), demonstrating how publics construct alternative legitimacy frameworks grounded in autonomy, recognition, and accountability. It also underscores the value of moving beyond binary models of trust/distrust (Trench, 2025) to capture the situated, differentiated, and performative ways in which parents negotiate science in everyday life.

Building on these insights, the analysis proposes a typology (Figure 34) that captures the differentiated modes through which parents orient themselves toward science.

Fig. 34 – Typology of vaccine-hesitant parents' orientations toward science.



Conditional trusters are those parents who continue to engage with biomedical science but apply explicit criteria (transparency, independence, methodological rigor) to determine credibility. Trust is possible but contingent. Parents who actively monitor and interrogate the conditions of scientific knowledge production, often drawing on personal experience and peer testimonies to audit institutional claims, are *epistemic auditors*. Their stance embodies reflexive vigilance as an ongoing practice. *Alternative integrators* are instead the vaccine-hesitant parents who more explicitly reposition biomedical science within a plural epistemic framework, combining experiential knowledge, holistic medicine, and associative networks. Rather than abandoning science, they situate it as one knowledge source among others.

These orientations are not fixed identities but fluid positions that parents may move between across contexts and life events. For instance, epistemic auditors' parents might become alternative integrators when they lean further into plural or holistic mixes after repeated disappointment with institutional communication. What unites them is a shared commitment to epistemic engagement, vigilance, and autonomy — qualities that position vaccine-hesitant parents less as passive refusers and more as active constructors of alternative epistemologies of health. This typology highlights how vaccine-hesitant parents are engaged in multilayered reflexivity (Numerato et al., 2019), where orientations toward science are continuously re-examined, recalibrated, and adapted to specific contexts. Rather than mapping onto binary categories of trust versus mistrust, these modes show how parents actively negotiate epistemic authority through situated practices of vigilance, integration, and selective reliance.

From a sociology of health perspective, this reframing is significant: it suggests that vaccine hesitancy is better understood as a form of patient engagement (Gottlieb, 2016; Carrion, 2018) that is reflexive and critical, even if non-compliant. In this sense, the “good patient” is not simply the one who complies but the one who insists on dialogue, transparency, and recognition of experiential knowledge. This has implications for how public health institutions and professionals might approach vaccine-hesitant parents — not as passive resisters, but as actors already deeply invested in practices of care and epistemic labor.

Ultimately, vaccine hesitancy emerges here not as epistemic deficiency but as a form of engaged citizenship. In this configuration, parents actively reconfigure science's authority in line with their lived commitments to care, autonomy, and accountability. At first glance, the typology presented in Figure 34 may appear to suggest fragmented or eclectic epistemic practices, characterized by selective acceptance, rejection, and ongoing renegotiation of biomedical knowledge. This reading resonates with scholarship on fringe medicine and CAM, which has emphasized bricolage and the contingent appropriation of scientific authority. This interpretation does not contradict the broader finding of coherent parental epistemologies advanced in this chapter and across the thesis. Rather,

it points to a distinction between coherence at the level of epistemic stance and moral orientation, and heterogeneity at the level of specific knowledge claims, technologies, or institutional actors. What remains consistent across parental accounts is not adherence to a closed alternative doctrine, but a stable procedural logic grounded in vigilance, child-specific reasoning, and moral responsibility. Within this coherent epistemic orientation, selective and renegotiated engagements with mainstream science emerge as ordinary and intelligible practices rather than signs of inconsistency.

FINAL CONSIDERATIONS

Vaccination is both a cornerstone of public health and a social arena where values, expertise, risk, and care are negotiated. Vaccine hesitancy, in this light, is a durable and patterned phenomenon rather than residual “noise” in uptake statistics; its meanings and practices are shaped by place, institutions, and histories. Considered this way, hesitancy offers a window into broader societal transformations — including declining deference to authority, the pluralization of expertise, and the search for meaning and control under scientific uncertainty. It is not a pathology to be corrected, but a social phenomenon to be understood, one that reveals as much about the state of scientific authority as it does about those who question it.

In contemporary Italy, vaccination is at once an institutional project that reorganizes participation and a lived practice assembled by reflexive parents under shifting constraints. As a strategic case, the Autonomous Province of Trento offers a close view of how national rules are interpreted and enacted locally: the post-2017 expansion of childhood mandates and, later, COVID-19 certification and sectoral mandates coupled health status to access in schools, workplaces, and public spaces, translating public-health goals into everyday checkpoints and documentation routines. Attending to local vaccination cultures is therefore essential (Dubé et al., 2021): it is at the regional and municipal level that mandates, media frames, and associational life crystallize into distinct moral economies and credibility regimes. The synthesis rests on an embedded, multi-method qualitative design combining sustained participant observation (2021–2024) and 46 semi-structured interviews (2022–2023) conducted in this provincial

context.⁶³ The aim is analytical generalization — i.e., clarifying mechanisms and meaning-making under mandate regimes — supported by a transparent codes-to-themes-to-claims bridge.

The thesis advances three claims that frame this synthesis — institutional regulation, parental practices, and the mediation of knowledge — to show how vaccination is both governed and lived. First, vaccination mandates are approached as social technologies: beyond coverage effects, they reorder participation and social visibility, reorganizing access to schooling and work and remaking relationships within families, workplaces, and communities (cf. co-production in policy arenas: Jasanoff, 2005; Epstein, 1996). Second, it is claimed that vaccine-hesitant parents are best understood as reflexive parents, exercising multilayered reflexivities — epistemic, moral, relational, civic — rather than as subjects of a knowledge deficit (Borkman, 1976; Leach & Fairhead, 2007; Pols, 2014; Chewning et al., 2012; Weston, 2001). Third, vaccines are approached as techno-scientific and socio-political technologies. Their authority is co-produced with infrastructures, legal architectures, and moral orders that redistribute authority, responsibility, and belonging. Publics assess credibility through culturally embedded civic epistemologies, not method alone (Jasanoff, 2005; Epstein, 1996; Hess, 2007; Leach & Scoones, 2007).

The analysis conducted in this thesis is situated at the intersection of the sociology of science and science communication, Science and Technology Studies (STS), and the sociology of health. Vaccination is thus addressed and analyzed as a socio-technical policy object — a biomedical practice whose authority is co-produced with laws, procedures, and organizations — and vaccine hesitancy is framed as situated reasoning enacted in everyday practice, rather than a knowledge deficit. In this register, the following sections trace how governance logics, associational infrastructures, and everyday care for one's own child interlock to produce conditional trust, patterned dissent, and alternative pathways of participation (see also Trench, 2025).

⁶³ Transcripts and fieldnotes were coded in MAXQDA with a 13-macro-area, 265-code codebook; a second pass after 15 days yielded $\kappa = 0.92$ (high intra-coder stability).

Revisiting the Research Questions

Building on the framing above, the analysis revisits the research questions across four planes — orientations; experience and epistemologies; pandemic reconfigurations; and trust — to show how institutional logics, associational life, and everyday care align in practice.

How are Free-Vax orientations configured? Fieldwork shows a plural constellation rather than a unitary stance. Parents converge around autonomy and responsibility in child-specific decision-making, but positions are assembled and sustained in association: information circulates through meetings and chats; credibility is brokered by recognized peers; legalist repertoires are rehearsed; mentoring reduces uncertainty for families facing exclusion or administrative scrutiny. Observing parents within a vaccine-critical group (Hobson-West, 2007) reveals a meso-level rarely captured in interview-only studies: organizational life structures how positions are formed, maintained, and revised (Brown et al., 2004; Benford & Snow, 2000; Hess, 2007). This associational vantage also clarifies why orientations persist or shift over time.

How do experience and epistemologies matter? Experiential evidence — suspected or recognized Adverse Events Following Immunization (AEFI), family medical histories, pregnancy/childbirth encounters, and day-to-day observation of a child's vitality — recalibrates risk and anchors judgment. Experience orients information-seeking, filters sources for credibility, and legitimizes particularistic reasoning ("this child, at this time"), even when it departs from standard schedules (Leach & Fairhead, 2007). Parents assemble plural epistemologies by combining biomedical knowledge, embodied evidence, and associative expertise; the labor is iterative, revisable, and strategic in social terms, as parents manage the visibility of their stance to preserve key relationships at home, in schools, and at work (Rowland et al., 2022; Hendriks et al., 2016; Van de Walle & Six, 2014; Beck, 1992; Douglas & Wildavsky, 1982; Goldenberg, 2016, 2021). These patterned practices set the stage for how policy shifts are read and acted upon.

How did COVID-19 reconfigure the landscape? For families socialized by Law 119/2017, the pandemic was experienced less as a rupture than as a continuity and escalation. Sectoral mandates, the Green Pass/Super Green Pass, and rapidly iterated decrees extended the coupling between health status and participation from the school gate to workplaces and public space, normalizing documentation checks and tightening decision timelines. In this context, many vaccine-hesitant parents consolidated alternative educational arrangements and support networks rather than severing ties with biomedicine. These compressed horizons and new checkpoints also altered where and to whom credibility was granted.

Where does trust in science and expertise stand? Trust appears conditional and differentiated, not binary nor stable. Parents distinguish science-as-ideal (transparent method, open debate, pharmacovigilance that investigates) from science-as-institution (perceived conflicts of interest, compressed timelines, communicative closure). Trust accrues where clinicians acknowledge uncertainty, tailor care, and make time for dialogue; it retracts when encounters feel paternalistic or moralizing. Pandemic mediation amplified polarization yet did not entail wholesale rejection of biomedicine; rather, trust was reallocated toward actors and fora seen to embody inquiry and care (Trench, 2025; Lewicki et al., 1998). In this thesis, “reallocation” names three linked shifts: (i) credibility moves from centralized authorities to relational settings (trusted clinicians, associative peers); (ii) authority and responsibility migrate from impersonal procedures to negotiated, child-specific arrangements; and (iii) attention/visibility shift from aggregate compliance to administrative checkpoints that sort families differently. Taken together, these shifts specify the mechanisms that connect lived practice to the theoretical reframing, showing how mandate regimes configure conditional trust and reflexive vigilance.

In sum, governance logics set conditions of action; associational infrastructures make positions practicable; and reflexive parenting performs the epistemic and moral work that connects bodies, data, and decisions. In this configuration, mandates appear as social technologies, parents as reflexive agents, and vaccines as techno-scientific and socio-political objects — a frame

that explains both compliance under pressure and the persistence of principled dissent (Goffman, 1963; Link & Phelan, 2001; 2006). The empirical answers just outlined motivate the contributions that follow: how mandates reorder participation through administrative visibility; how decision-making unfolds as an iterative process rather than a fixed stance; how associational infrastructures translate macro rules into actionable routines; how labels sediment into stigma and provoke boundary-work from below; how individualist parenting structures a moral economy of responsibility; and how embodied knowledge sustains plural care that repositions — rather than rejects — biomedicine. The next section distills these layers into a set of empirical contributions that anchor the thesis's theoretical claims.

Empirical contributions: From governance routines to plural care

This subsection distills the empirical layers that underpin the theoretical reframing, moving from mandates as social technologies through decision-making as process, associational infrastructures, labelling and stigma, the moral economy of responsibility, and, finally, embodied knowledge and plural care.

Across Law No. 119/2017 — which increased the number of childhood mandatory vaccines and introduced sanctions for non-compliance — and the pandemic Green Pass/sectoral mandates, vaccination policy is lived not simply as a device to lift uptake, but as a social technology that reorders everyday participation. Compliance is coupled to access — first to early childhood education (exclusion/fines), later to workplaces and public space (certification checks). The rules arrive through administrative routines — certificates, deadlines, letters, scanners — that render vaccination status visible in schools and employment, with downstream effects on childcare, timetables, and household income. Parents narrate a sharp “before/after” around 2017 and,

during COVID-19, an arc of continuity–escalation. In STS terms, this is co-production: policy does not merely communicate science but rather it embeds biomedical rationales in legal and organizational routines, thereby reordering authority and social relations (Jasanoff, 2005; Epstein, 1996).

Against this regulatory background, decision-making appears as a process rather than a stance. Parents do not sit at fixed poles; they work through decisions iteratively — by searching, sorting, and testing information across clinicians, peers, association resources, and selected scientific sources; recalibrating as technologies or constraints shift. Outcomes span full adherence, delayed/partial schedules, selective acceptance, and refusal. In the analyzed sample, children's COVID-19 vaccination is uniformly rejected, while one adult vaccinated under strong work/social pressure — underlining role- and life-stage specificity. The pandemic narrowed deliberative time without extinguishing it; families reopened deliberation by reconfiguring practices (e.g., schooling) or renegotiating clinical encounters. Within the prevailing moral economy of parenting, legitimacy attaches less to which decision is reached than to how — whether the process is informed, dialogic, and particularistic to “this child” (Faircloth, 2014; Reich, 2016; Leach & Fairhead, 2007).

A distinctive vantage point is offered by the view from inside Vaccinare Informati association, which operates as an associational knowledge-and-care infrastructure. Credibility is brokered by recognized peers; information circulates via meetings, chat channels, and archives; rights-based legal repertoires (e.g., informed refusal under Law No. 119/2017, document handling for schools) are shared and rehearsed; mutual-aid (mentoring, emotional scaffolding, solidarity funds) helps families withstand exclusion or sanctions. This meso-level clarifies how individual orientations are assembled and stabilized in practice, and how the organization strategically pivots toward legalism post-pandemic. Empirically, this instantiates civic epistemologies and lay expertise — publics building and vetting knowledge collectively under institutional controversy (Jasanoff, 2005; Wynne, 1992; Epstein, 1995, 1996; Hess, 2007) — and shows how associations translate macro rules into actionable routines.

These dynamics unfold within a classificatory environment where labels travel between media and administration. Public and bureaucratic markers — “No-Vax” in politics/journalism, “non conforme” in (pre-)schooling — do not merely describe; they produce positions as morally suspect and administratively deviant. Parents report changed tones in institutional encounters, strains in school/work relationships, and a diffuse sense of being watched. Yet labelling is contested: some reframe it as “Free-Vax” to anchor autonomy; others refuse labels or practice strategic non-disclosure to protect relationships. The movement from label to stigma to boundary-work aligns with classic theory — stigma as relational visibility and status loss — and shows how media tropes and bureaucratic categories sediment into everyday life, where they are also worked around (Goffman, 1963; Link & Phelan, 2001, 2006).

Threaded through is a moral economy of responsibility keyed to individualist parenting norms. Being a “good parent” is narrated as knowing this specific child, owning the process, and bearing responsibility even under pressure. Parents differentiate convinced vaccinators (respected for informed agency) from blind conformists (criticized for delegating responsibility) and recognize constrained and “repented” vaccinators. The decisive boundary is procedural: is the decision dialogic, tailored, and accountable to the child’s biography? This links parenting and risk — particularistic reasoning about this child’s body and history — rather than a generic pro/anti ideology (Leach & Fairhead, 2007; Faircloth, 2014; Reich, 2016; Pols, 2014).

Finally, the analysis shows how embodied and experiential knowledge becomes an epistemic anchor for everyday care. Parents observe sleep, appetite, behavior, recovery; they test low-risk everyday fringe medicine (homeopathic remedies, detox practices, diet) while continuing to use biomedical services (Vuolanto et al., 2020). Trust in clinicians persists where encounters are time-rich, uncertainty-aware, and tailored; where this is missing, families cultivate selective reliance on non-institutional providers or peer-recommended professionals. The resulting plural care repertoire repositions biomedicine rather than rejecting it — an articulation of lay expertise and enacted bodies (Wynne, 1992; Epstein, 1995, 1996; Mol, 2002; Goldenberg, 2016, 2021). Reflexive

vigilance operates as epistemic auditing — evaluating claims and reallocating trust across settings (Rowland et al., 2022; Hendriks et al., 2016; Van de Walle & Six, 2014; Lewicki et al., 1998; Trench, 2025).

Altogether, these elements — i.e., mandates as social technologies; decisions as iterative, child-specific labor; associations translating macro rules; labels sedimenting into stigma and being worked around; and a moral economy that legitimates particularistic risk — call for reframing core theoretical terms rather than reaffirming binaries. This is not a mere reaction to policy but the co-production of social order as biomedical rationales are embedded in legal and organizational routines (Jasanoff, 2005; Epstein, 1996). Parents' practices are sites of knowledge, not departures from it (Wynne, 1992; Epstein, 1995, 1996), and boundary tensions around who counts as a credible knower become visible in practice (Gieryn, 1999; Mol, 2002).

Theoretical contributions: Reflexive parents, conditional trust, and vaccines as socio-technical objects

Vaccine-hesitant parents are studied as reflexive parents who mobilize epistemic, moral, relational, and civic reflexivities. Empirically, this appears in continuous seeking and cross-checking; in a procedural ethic of “knowing your child”; and in calibrated disclosure across family, school, and workplace. Conceptually, this extends work on individualized parenting and responsible choice (Faircloth, 2014; Reich, 2016) by specifying how reflexivity is enacted under mandates and controversy, and links to classic accounts of experiential knowledge and lay expertise (Borkman, 1976; Wynne, 1992; Epstein, 1995; 1996). In STS terms, parents act as situated knowers whose claims are assembled at the intersection of embodied evidence, peer infrastructures, and selective engagement with biomedicine (Jasanoff, 2005; Gieryn, 1999; Mol, 2002).

Importantly, this reflexivity does not imply fragmented or incoherent epistemic positions. Across the thesis, parents' engagements with science are shown to be plural and selective at the level of sources and claims, yet coherent at the level of procedural orientation. This orientation is defined by vigilance, child-specific reasoning, and moral responsibility. In this sense, epistemic plurality emerges not as inconsistency, but as the ordinary mode through which parental coherence is maintained in conditions of uncertainty and institutional mistrust.

Rather than a scalar trust/distrust axis, parents practice conditional trust: differentiated, revisable expectations toward professionals, agencies, data sources, and media, reallocating credibility as circumstances and evidence shift. This dynamic is best read as reflexive vigilance — monitoring how knowledge is produced, communicated, and backed by accountable actors (Lewicki et al., 1998; Rowland et al., 2022; Hendriks et al., 2016; Van de Walle & Six, 2014; Trench, 2025). Vigilance tightens under compressed timelines and communicative closure, yet does not entail exit from science; trust is re-specified toward contexts perceived to embody transparency, independence, and dialogic care.

Vaccines are theorized as socio-technical policy objects whose authority is co-produced with legal, organizational, and moral orders. In Italy's trajectory from Law No. 119/2017 to COVID-era certification, vaccination status becomes a condition of participation, linking biomedical rationales to access rules for schooling, work, and public space. Families experience mandates as life-reordering social technologies; dissent often entails building parallel infrastructures (alternative schooling, legal repertoires). Controversies thus travel through administrative routines — forms, QR-code checks, compliance timelines — as much as through evidence debates (Jasanoff, 2005; Epstein, 1996; Hess, 2007; Mol, 2002; Bucchi & Neresini, 2006).

Boundary-work unfolds from below. Parents contrast science-as-ideal (transparent, plural, independent) with science-as-institution (hierarchical, politicized, time-compressed), redrawing who counts as a credible knower in practice. Associational settings like *Vaccinare Informati* operate as civic

epistemology in miniature: forums where credibility standards are debated, repertoires rehearsed (e.g., informed refusal under Law No. 119/2017), and peer testimony stabilized as evidence. This extends lay-expertise and health-movement scholarship by specifying the meso-mechanisms — mentoring, archiving, rights-based legalism — through which dissent persists without exit from biomedicine (Wynne, 1992; Epstein, 1995; 1996). Stigma and labelling are treated as administrative and relational technologies shaping the visibility of dissent and triggering strategic non-disclosure and counter-labelling (Goffman, 1963; Link & Phelan, 2001, 2006).

To consolidate the theoretical moves and render them usable beyond this case, the analysis distils the observed patterns into a typology that sits directly on the empirical findings and travels to comparative settings. It names three positions (not identities) that parents may occupy and move between across contexts and life events:

Conditional Trusters engage biomedical science while applying criteria of transparency, independence, and rigor; trust is possible but contingent, and reallocates if those criteria are not met.

Epistemic Auditors actively interrogate how knowledge is produced and warranted, triangulating institutional claims with embodied experience and peer testimony; vigilance is an ongoing practice rather than an endpoint.

Alternative Integrators reposition biomedicine within a plural epistemic framework, combining experiential knowledge, everyday fringe medicine, and associative networks; science is one valued source among others.

Across these orientations, two threads recur: sustained engagement with knowledge and a determined claim to decision-making authority for the child at hand. Taken together, these practices cast hesitancy as a form of epistemic citizenship — i.e., participation in how knowledge and care are organized — rather than simple rejectionism (Jasanoff, 2005; Wynne, 1992). Analytically, the typology clarifies how conditional trust is enacted and where it fractures; methodologically, it supplies categories that invite comparative and mixed-

methods testing; practically, it points to segmentation in policy design and clinical communication without presuming a single route to compliance. If parents differ in how they allocate trust and weave heterogeneous knowledges, governance, clinic, and engagement should meet these patterned orientations with procedural fairness, timing flexibility, and dialogic care.

These contributions locate parental vaccine hesitancy at the intersection of co-production (embedding science in governance), reflexive agency (multilayered reflexivities), and conditional trust (vigilance as normative practice). They extend STS by grounding civic epistemologies, boundary-work, and lay expertise in the granular routines of family life and association, and they enrich the sociology of health by showing how moral economies of parenting legitimate particularistic reasoning while repositioning rather than abandoning biomedicine.

Implications for policy, clinical communication, and public engagement

Addressing vaccine hesitancy is not about devising sharper levers of compliance; it is a project of understanding, recognition, and negotiated coexistence. Parents act as reflexive agents/patients, assembling biomedical, experiential, and associative knowledge to care for “this” child in “this” context (Faircloth, 2014; Reich, 2016; Leach & Fairhead, 2007; Pols, 2014). Trust is conditional and differentiated, reallocating in response to how institutions and professionals handle evidence, uncertainty, and care (Lewicki et al., 1998; Trench, 2025). The practical task is to mend relationships: reduce the social externalities of regulation, open dialogic spaces where doubts are treated with respect, and craft workable compromises that keep families within institutional life even when they diverge from standard schedules.

Policy and governance: Mitigating social externalities and building procedural trust

Italy's recent trajectory shows how vaccination policy can couple health status to participation in schooling, work, and public space. The concern is not about mandates per se, but about the neglected social consequences when administrative visibility and access rules produce institutional detachment (e.g., exit from public education) and erosion of trust. A governance response consistent with co-production (Jasanoff, 2005) centers on reducing unintended harms and strengthening procedural fairness as trust-building features. Concretely, wherever vaccination status is checked, visibility-minimizing design should be employed by default: neutral terminology in records (avoiding stigmatic markers like “non conforme”), discreet workflows in schools and workplaces, and safeguards against relational spillovers (Goffman, 1963; Link & Phelan, 2001; 2006). Due process — clear notices, accessible clarification/appeal channels, and predictable timelines — signals respect for agency under uncertainty. Pharmacovigilance that investigates — conducting follow-up, building longitudinal evidence, ensuring independent oversight — speaks directly to experiential sources of mistrust. Law-anchored pathways for consent/refusal (e.g., Law 219/2017) and rights-based navigation support keep families within the institutional fold.

Importantly, tight coercive coupling not only risks producing non-uptake; it can alienate hesitant parents, harden identities, and, for some, escalate toward radicalization, with spillovers beyond vaccination into care pathways, schooling choices, media diets, and civic trust. The vaccination case thus becomes a window on wider health-governance dynamics. Repairing relationships here is a precondition for constructive engagement in other spheres.

Clinical practice and communication: Co-reasoning with reflexive patients

In the clinic, the task is to shift from outcome-centric persuasion to process quality. Vaccine-hesitant parents should be approached as reflexive patients, whose doubts are recognized as epistemic work rather than defects to be corrected (Pols, 2014; Faircloth, 2014; Reich, 2016). That stance reorients encounters toward time-rich, biography-first consultations in which clinicians acknowledge uncertainty where it exists, situate risk in the child's history, and treat suspected AEFI as epistemic events that warrant visible follow-up. It is in these conditions that conditional trust is most often won and sustained (Trench, 2025; Lewicki et al., 1998).

Vaccination choices also sit within wider health and life decisions — diet and daily routines, schooling and work constraints, caregiving arrangements. Care therefore, needs to meet families where they live: where clinically acceptable, allow timing flexibility (for example, revisiting at a later date or discussing formulation options); and coordinate respectfully with families' plural care practices rather than dismissing them, thereby keeping dialogue open and continuity intact (Leach & Fairhead, 2007).

Because parents differ in how they allocate trust and integrate knowledges, communication should be keyed to orientation: some will seek governance and method detail; others will value careful coordination across biomedical and non-biomedical practices. Across these variants, the ethos is constant — co-reasoning, not conversion: working toward a shared problem definition, explicit uncertainties, and a provisional plan with review points, rather than a preselected outcome.

Public engagement and media: Dialogue, recognition, and de-stigmatization

Public engagement should mirror what parents respond to: openness (transparent rationales and uncertainty statements), independence (arm's-length oversight with conflict-of-interest rules), and dialogic care (two-way deliberation accommodating timing and child-specific concerns). It should move beyond broadcast persuasion toward deliberative fora with real stakes — citizen panels or juries where experiential testimony and dissenting expertise are heard and whose outputs (e.g., pharmacovigilance follow-up recommendations) feed into procedures (Wynne, 1992; Epstein, 1995; 1996; Jasanoff, 2005). This also constitutes a science-communication shift — from persuasion to dialogue to participation (Bucchi & Trench, 2025) under plural epistemologies.

In this landscape, Associations such as Vaccinare Informati are pivotal interlocutors (Fattorini, 2023). In line with Ceva's (2013) call to reconcile minority dissent, they reach citizens with doubts, translate institutional language, and support families through practical, legal, and emotional scaffolding. Bringing such associations into institutional discussions is not endorsement; it is recognition. In practical terms, public agencies and civil-society partners can take three steps: co-design information materials, clarify lawful pathways (e.g., under Law No. 119/2017), and pilot rights-based navigation clinics — small, co-run help desks (in person or online) offering neutral assistance with documentation, consent/refusal, school requirements, and AEFI reporting, staffed jointly by institutional personnel and trained civil-society mediators.

In reporting on vaccination and hesitancy, coverage should shift from label-based framing to process reporting of parental deliberation. That means showing how families make decisions — who is involved, what information is weighed, which institutional constraints (e.g., documentation checks, deadlines) shape options, and how uncertainty and follow-up are handled — not only what decision is reached. In this vein, retire umbrella tags such as “No-Vax” and use descriptive, situation-specific language; doing so interrupts stigma cascades and dampens polarization that thrives on binaries (Goffman, 1963; Link & Phelan, 2001, 2006;

Ward et al., 2022). In practice, write in person-first terms and avoid moralizing headlines or images that mark difference; situate accounts within the relevant administrative and temporal conditions; keep uncertainty visible by returning to pharmacovigilance investigations so audiences can see how evidence is made; and platform dissenting viewpoints responsibly — centering reasoning and lived practice while maintaining accuracy and avoiding false equivalence. Taken together, these practices widen discursive space for conditional trust and model the dialogic, independence-valuing stance documented in this study.

Across policy, clinic, and public arenas, the aim is not to engineer conformity with the national vaccination schedule, but to understand complex reasons, recognize the legitimacy of parental perspectives even when they diverge from law, and seek compromises closer to families' values — bearing in mind that many would vaccinate on a different timeline, whereas coercive coupling often produces refusal, alienation, and for some, radicalization. Durable participation rests on fair processes, epistemic openness, and room for negotiated timing (Lewicki et al., 1998; Leach & Fairhead, 2007).

Limitations of the study

The analysis is anchored in a specific provincial context in Trentino, chosen as an emblematic setting at the intersection of a mandate turn (Law No. 119/2017), COVID-19 certification, a dense associational landscape, and visible administrative routines. A single-site design narrows the scope but enables close examination of how policies are lived in families' daily arrangements and institutional encounters. Claims are advanced as mechanisms and patterned meanings (not prevalence estimates) and situated within Italy's policy trajectory for careful transferability.

The interview sample (n=46) is female-skewed (31 women, 15 men), relatively well educated, with high complementary and alternative medicine

(CAM) orientation (93.5%) and organic food use (97.8%). It is not representative of the association or of all hesitant parents; more mobilized or health-attentive voices may be over-captured. Balancing strategies included sustained participant observation (2021–2024) across diverse events, deliberate intra-group variation (full/delayed/partial/refusal; “constrained” vaccinators), and longitudinal re-interviews with ten parents first interviewed in 2018 to trace processual change. These steps clarify that the corpus speaks most directly to the organization and maintenance of dissent among engaged parents.

Asymmetric triangulation is a further constraint to consider. Parents’ narratives are primary; perspectives of clinicians, school administrators, and implementers appear indirectly or textually (laws, circulars). Some bureaucratic frictions are reconstructed “from one side of the counter”. Mitigations included policy/process tracing, observation of front-desk interactions when visible, and explicit bracketing where only one vantage was available. The gain is an emic account of governance as experienced; the cost is limited granularity on organizational constraints faced by officials.

The temporal window spans the aftermath of the 2017 reform and the tail of COVID-19 regulation into its immediate post-emergency phase. The materials cannot determine whether the continuity–escalation arc stabilizes, attenuates, or reverses. Process tracing across the two junctures and the longitudinal component document near-term dynamics (reopened deliberation, schooling/work reconfiguration, renegotiated clinical relationships) but cannot substitute for longer follow-up.

As in qualitative work generally, dependence on interpretive judgement is a risk. The design addresses this through an auditable infrastructure: a 13-macro-area, 265-code codebook with definitions and inclusion/exclusion criteria; a second coding pass after 15 days ($\kappa = 0.92$); and a reflexive memo trail documenting merges/splits, negative-case considerations, and decision rules. Together, these underpin a codes-themes-claims bridge that keeps interpretive moves traceable.

Concerns about reactivity and social desirability are salient. Although interviews occurred in settings chosen by participants (homes, public places, cafés), association membership can encourage identity work that smooths ambivalence. Prolonged engagement, assurances of anonymity, longitudinal re-interviews, and cross-checks with observed practice (e.g., disclosure management at events) surface tensions and revisions. These steps moderate, but do not eliminate, presentation effects; the analysis treats coherence claims with caution and attends to hesitations, repairs, and inconsistencies.

Finally, transferability is conditional. Mechanisms are embedded in Italian legal-administrative forms and a particular associational field. However, to support comparison, the thesis provides an analytic scaffold: macro-areas align with core inquiry domains, and fine-grained subcodes can be adapted to different regimes and labelling practices (retain macro-areas, localize subcodes/exemplars, document adjustments). Locality is acknowledged, while operational tools are made available for adaptation and cumulative synthesis.

Future research

Comparative inquiry should test portability across regions and countries with different mandate architectures, associational ecologies, and media environments. Studies should explicitly contrast settings where access to schooling/work is tightly versus loosely coupled to vaccination, to identify when mandates function primarily as public-health instruments and when they act as social technologies with pronounced externalities. Multi-sited ethnography paired with policy tracing should map how labels and checks sediment — or fail to — under different institutional grammars.

To track mechanisms over time, researchers should conduct longitudinal and mixed-methods follow-ups. Concretely, teams should (i) establish a family panel to document revisions in decisions, clinical relationships, schooling trajectories, and use of associative resources; (ii) field mixed-methods surveys to validate and refine the parental-orientation and trust-orientation typologies; and

(iii) negotiate linkage with administrative/pharmacovigilance datasets — prioritizing transparent follow-up of suspected AEFI — to test whether “pharmacovigilance that investigates” shifts trust and continuity of care.

Co-produced intervention research should evaluate practices aligned with the relational stance. Investigators should pilot deliberative panels with real stakes (with outputs formally feeding procedures) and rights-based navigation supports (joint help desks clarifying documentation, consent/refusal under Law 219/2017, school requirements, AEFI reporting), and pre-specify outcomes such as continuity within institutions, perceived procedural fairness, grievance, and trust trajectories. The aim should not be to engineer compliance but to assess whether procedural clarity and dialogic care reduce alienation and hardening of positions.

To rebalance triangulation, future projects should bring frontline clinicians, school administrators, and implementers into view as full interlocutors and should extend observation to platform/media ecologies that shape information flows. Doing so will sharpen analyses of boundary-work from the institutional side, identify organizational levers for visibility minimization and due process, and refine repair strategies at institutional pinch-points.

Beyond vaccination: Implications for health governance, STS, and the sociology of health

Read through an STS lens, vaccination becomes a window on health governance when scientific claims, legal architectures, economic interests, and cultural values are densely entangled — what Bucchi and Neresini (2006) describe as the hybrid character of vaccines in public debate. This helps explain why risk is felt as well as calculated (Slovic & Peters, 2006) and why information is filtered through cultural predispositions (Kahan et al., 2009; 2013), especially when adverse events and media coverage interact with pharmacovigilance to

shape perceptions (WHO SAGE, 2014; Bucchi & Saracino, 2021; Vogel & Kupferschmidt, 2021; Gauna et al., 2025).

When mandates are used, their effects extend beyond uptake: absent attention to procedural fairness and social externalities, policies risk institutional detachment, worsening mistrust, and deepening polarization (Tomasì, 2017b; Ward et al., 2022; Fattorini & Balazka, 2025). Comparative policy reviews, therefore, caution that increasing coercion does not translate in a simple, proportional way into higher coverage: effects can plateau or backfire (Omer et al., 2019). Over the long term, they recommend flexible, dialogic, multi-component strategies — for example, improving convenience and access, pairing transparent risk/uncertainty communication with trusted-clinician counselling, strengthening responsive pharmacovigilance, and targeting supports to underserved groups (Odone et al., 2021; Jarrett et al., 2015; Attwell et al., 2021). Against deficit framings, communication should take heterogeneous moral logics seriously and address distrust in institutions — not only “misinformation” — as a primary driver of stance (Dubé et al., 2015; Pertwee et al., 2022).

Conceptually, the thesis brings together co-production (how claims acquire force via administrative routines), boundary-work, and lay expertise to show how parental epistemologies are assembled and defended in practice (Jasanoff, 2005; Gieryn, 1999; Wynne, 1992; Epstein, 1995, 1996; Mol, 2002). It extends “reflexive patient” literature by specifying multi-layered reflexivity — epistemic, moral, relational, civic — under mandate and controversy (Martin, 2008; Numerato et al., 2019; Kaufman, 2010; Beck, 1992; Douglas, 2005). It also connects the sociology of parenting and moral responsibility (Faircloth, 2014; Reich, 2016; Leach & Fairhead, 2007) with scholarship on the politicization of vaccination and corporate power (Colgrove, 2006; Blume, 2017; Conis, 2015), situating parents’ particularistic reasoning within broader civic epistemologies. Finally, it reframes associations such as *Vaccinare Informati* as democratic interlocutors in the reconciliation of minority dissent (Ceva, 2013), consistent with calls to give voice to vaccine concerns in constructive dialogue (Heyerdahl et al., 2022).

Taken together, the study argues for institutions that can recognize, negotiate, and sustain disagreement without expulsion — so that public health is not only effective, but also legitimately shared.

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Appendix A – Interview guide

Original interview guide (translated into English) used during semi-structured interviews conducted with members of Vaccinare Informati association (2022–2023). The sequence and phrasing of questions were indicative and adapted by the interviewee to follow the conversational context and explore relevant themes.

Topic	Questions
Demographics	Can you briefly tell me what kind of work you do? What is your level of education? How many children do you have?
Vaccination Decisions	Did you decide to fully vaccinate, partially vaccinate, or not vaccinate your children? What motivated this decision, and when did you make it? In 2020, the pandemic began. Did you decide to get vaccinated or to vaccinate your children? For what reasons?
COVID	Did you or your children get COVID? And what about your relatives?
Health & Lifestyle	Have you made any particular lifestyle choices, for example in relation to food or health?
The Association	When did you decide to join the association? What led you to make this choice?
Adverse Events	Have you had direct experiences with vaccine adverse events (COVID or childhood vaccines)? How severe were they?
Political Institutions	What do you think about how institutions handled the issue of childhood vaccinations in 2017? How do you think political institutions handled the issue of COVID-19 vaccines for adults? (e.g., mandates, work-related requirements)

Educational Institutions	Regarding educational services, were your children excluded from preschool/kindergarten due to vaccination issues? How did you manage the situation? Did you find alternative solutions? How do you think childhood vaccine mandates were managed in your children's schools? COVID vaccines were not mandatory for children, but the government strongly recommended them. How was this handled in your children's schools?
Healthcare Institutions	With the introduction of childhood vaccine mandates, pre-vaccination interviews were offered at local health agencies (ASL) for parents who chose not to vaccinate. Did you attend? How was the experience? How is your relationship with your general practitioner or your children's pediatrician? How did your doctor approach the topic of vaccination, if at all?
Media	What do you think about how local and national media handled the issue of childhood vaccinations? And how do you think they handled the coverage of COVID vaccines?
Labels	In 2017, with the introduction of the Lorenzin law, the term "no-vax" became widespread. What do you think about it? During the pandemic, this label became even more common. What do you think about it? Have you noticed changes in your relationships with other parents based on your vaccination choices?
Science	What do you think about how science has handled the issue of childhood vaccines in Italy? What is your opinion of the scientists who publicly spoke about it? How do you think science handled the issue of COVID-19 vaccines, first for children and then more broadly? What do you think of scientists' interventions in the media during the pandemic, especially regarding vaccines?

Appendix B – Informed Consent Form

Interviewees were asked to sign the following consent form (in Italian), which includes: (A) details of the research and a statement of willingness to participate in the project; (B) consent to the investigation and processing of sensitive data (such as health information); (C) permission for the interview to be audio recorded.

A copy of the consent form was given to the interviewees.

A)

**INFORMATIVA SUL TRATTAMENTO DEI DATI PERSONALI E PARTICOLARI
PER FINALITÀ DI RICERCA SCIENTIFICA
(ART. 13 E 14 REG. UE 2016/679)**

Vaccine hesitancy in Trentino: A case study (di seguito "Progetto"):

Gentile partecipante,
desideriamo informarla che la normativa vigente in materia di protezione dei dati, con particolare riguardo all'ambito della ricerca (Regolamento UE 2016/679 sulla protezione dei dati personali - GDPR, il D. lgs. n. 196/2003 "Codice in materia di protezione dei dati personali" come modificato dal D. lgs. 101/2018 e s.m.i., le "Regole deontologiche per i trattamenti a fini statistici o di ricerca scientifica" - Provvedimento del Garante per la protezione dei dati personali n. 515 del 19 dicembre 2018 nonché le varie Prescrizioni del Garante in materia) sancisce il diritto di ogni persona alla protezione dei dati di carattere personale che la riguardano.

In conformità alla normativa citata, il trattamento dei dati personali nell'ambito del progetto di ricerca sarà improntato al rispetto dei principi di cui all'art. 5 del GDPR e, in particolare, liceità, correttezza, trasparenza, pertinenza, non eccedenza, riservatezza ed in modo da garantire un'adeguata sicurezza dei dati stessi.

In qualità di Interessato, Le forniamo le seguenti informazioni relative al trattamento dei dati personali.

TITOLARE DEL TRATTAMENTO

Il Titolare del trattamento è l'Università degli Studi di Trento, via Calepina n. 14, 38122 Trento, email: ateneo@unitn.it; ateneo@pec.unitn.it.

DATI DI CONTATTO DEL RESPONSABILE DELLA PROTEZIONE DEI DATI

Il Responsabile della protezione dei dati (RDP) può essere contattato al seguente indirizzo email: rpd@unitn.it.

FINALITÀ E BASE GIURIDICA DEL TRATTAMENTO

Il trattamento dei dati personali è effettuato:

- nell'ambito dei compiti di interesse pubblico del Titolare, in particolare per la realizzazione delle finalità scientifiche del Progetto di ricerca: *Vaccine hesitancy in Trentino: a case study*;
- in base al consenso dell'interessato, nel caso di trattamento di dati particolari.

Il Progetto è stato redatto conformemente agli standard metodologici del settore disciplinare interessato ed è depositato e conservato per cinque anni dal termine della ricerca presso il Dipartimento di Sociologia e ricerca Sociale dell'Università degli Studi di Trento

Fonte dei dati personali e categorie di dati personali

I dati personali sono stati raccolti presso:

- l'interessato.

Nella realizzazione del Progetto verranno trattati i seguenti dati personali:

- ☒ dati anagrafici;
- ☐ dati di contatto;
- ☒ voce;
- ☐ immagini;
- ☐ dati relativi al collegamento, all'accesso e all'utilizzo dell'applicativo/software (log di accesso);
- ☐ opinioni personali espresse, se associate a dati che consentono l'identificazione della persona Fare clic o toccare qui per immettere il testo.;
- ☒ dati particolari, fra cui dati
 - ☒ relativi alla salute; ☐ biometrici; ☐ genetici; ☒ relativi a convinzioni religiose/filosofiche; ☐ relativi all'appartenenza sindacale; ☐ relativi all'origine razziale/etnica; ☒ relativi a opinioni politiche; ☐ relativi alla vita sessuale o all'orientamento sessuale;
- ☐ dati giudiziari.

MODALITÀ DEL TRATTAMENTO

Il trattamento dei Suoi dati verrà effettuato mediante i seguenti strumento informatizzati:

- ☒ piattaforme di analisi di dati, in particolare: NVivo;

e adottando le seguenti misure di sicurezza:

- ☒ pseudonimizzazione;
- ☒ archiviazione protetta.

I Suoi dati personali saranno trattati esclusivamente da soggetti autorizzati nell'ambito della realizzazione del Progetto

PERIODO DI CONSERVAZIONE DEI DATI

Al termine del Progetto i dati personali saranno anonimizzati e conservati per cinque anni dal termine del Progetto.

NATURA DEL CONFERIMENTO DEI DATI

Il conferimento dei dati per le suddette finalità di ricerca è indispensabile per la realizzazione del Progetto di ricerca ed il mancato conferimento determina l'impossibilità di parteciparvi.

DESTINATARI DEI DATI ED EVENTUALE TRASFERIMENTO ALL'ESTERO

I Suoi dati personali saranno trattati esclusivamente da soggetti autorizzati nell'ambito della realizzazione del Progetto.

I suoi dati non saranno oggetto di trasferimento verso Paesi extra SEE.

DIVULGAZIONE DEI RISULTATI DELLA RICERCA

La divulgazione dei risultati statistici e/o scientifici (ad esempio mediante pubblicazione di articoli scientifici e/o la creazione di banche dati, anche con modalità ad accesso aperto, partecipazione a convegni, ecc.) potrà avvenire soltanto in forma anonima e/o aggregata e comunque secondo modalità che non la rendano identificabile.

DIRITTI DELL'INTERESSATO

In qualità di Interessato ha diritto di chiedere in ogni momento al Titolare/RPD presso i contatti sopraindicati l'esercizio di diritti di cui agli artt. 15 e ss. del GDPR e, in particolare, l'accesso ai propri dati personali, la rettifica, l'integrazione, nonché se ricorrono i presupposti normativi, la cancellazione degli stessi, la limitazione del trattamento dei dati e il diritto di opporsi al loro trattamento. Resta salvo il diritto di proporre reclamo all'Autorità Garante per la protezione dei dati personali ai sensi dell'art. 77 del GDPR e Per informazioni relative al Progetto può rivolgersi al Responsabile scientifico del Progetto al seguente recapito: eliana.fattorini@unitn.it.

Per presa visione in caso di consegna cartacea della presente informativa

Data, li _____

Firma _____

B)

CONSENSO AL TRATTAMENTO DI DATI PARTICOLATI

Il/la sottoscritto/a _____
nato/a a _____ il _____

dopo aver preso visione ed aver compreso l'informativa che precede relativa al Progetto di ricerca dal titolo Inserire titolo progetto:

- ☐ acconsente
☐ non acconsente

al trattamento dei propri dati particolari raccolti nell'ambito del Progetto sopracitato per finalità sopraindicate.

_____ li _____ Firma _____
(Luogo) (Data)

La ringrazio per la sua partecipazione alla attività di ricerca relativa alla stesura della tesi di dottorato dal titolo *Vaccine hesitancy in Trentino: a case study*.

La informo che registrerò l'audio durante la sua intervista nell'ambito del predetto Studio.

L'intervista verterà sulle sue scelte in ambito vaccinale e sulle esperienze personali che l'hanno portata a sviluppare tali scelte.

Apprezzo il tempo che mi dedica e le ricordo che, qualora non dovesse sentirsi a proprio agio, può in qualsiasi momento interrompere l'intervista.

C)

**LIBERATORIA PER LA REGISTRAZIONE AUDIO DELL'INTERVISTA E PER LA
PUBBLICAZIONE DELLA RELATIVA TRASCRIZIONE**

Il/La sottoscritto/a _____

nato/a a _____ in data _____

in relazione alla partecipazione allo studio sopraindicato,

autorizza ed espressamente concede

all'Università degli Studi di Trento e ai suoi aventi in causa in conformità alle leggi in materia vigenti (art. 10 del Codice civile e dell'art. 96 della L. 633/1941) per la specifica finalità di ricerca sopra specificata:

☒ il diritto alla registrazione della propria voce.

Le registrazioni verranno conservate per trascrivere l'intervista e saranno poi cancellate.

☒ il diritto alla pubblicazione totale o parziale della fedele trascrizione dell'intervista per la tesi di dottorato ed eventuali pubblicazioni scientifiche;

☒ la pubblicazione potrà avvenire in forma anonima, senza l'indicazione di dati che possono consentire di identificare il/La sottoscritto/a.

La presente autorizzazione è rilasciata in forma gratuita, senza previsione di compensi e/o di oneri e vale altresì come rinuncia a qualsiasi pretesa futura.

Il/La sottoscritto/a prende atto che l'eventuale revoca della presente autorizzazione non ha effetto una volta che l'intervista sia stata già pubblicata.

_____ li _____ Firma _____
(Luogo) (Data)

Appendix C – The Codebook

Macro-Area I – Decision-Making Process and Parenting

This table includes all codes and subcodes under Macro-Area I, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
I.1 – Opinion formation	How parents form their opinions about vaccines, influenced by their children, information sources, and disease perceptions.				
I.1.1 – Knowing your children	The belief that individual knowledge of one's child is central to making vaccine decisions.	Parents use their intimate understanding of their child's health, personality, medical history, and behavior to inform their stance on vaccination.	Mentions of tailoring decisions based on the child's health, sensitivities, or reactions; references to a child being "different" or "not like others."	Generic concerns not specifically linked to the parent's own child.	"But the child is at home, playing, doing things, so you keep an extra eye on him, right? A teacher with twenty children, of course. Besides, you know your child, not the teacher."
I.1.2 – Information ecosystem	The network of sources parents use to gather and interpret information about vaccines.				
I.1.2.1 – Web and social media	Use of online platforms for vaccine-related information.	Includes Google searches, blogs, YouTube videos, Facebook groups, Instagram accounts, and Telegram channels.	References to online activity related to vaccines, such as following influencers, watching testimonial videos, or reading comments.	Offline digital content (e.g., TV replays online) or passive online behavior not related to vaccine content.	"I searched the internet and found a document that was addressed to hospitals, the Ministry of Health, the pharmaceutical company [...]."
I.1.2.2 – Healthcare professionals	The role of health providers in shaping parents' vaccine attitudes.	Includes both institutional (e.g., pediatricians) and alternative (e.g., naturopaths) healthcare professionals.	Any mention of advice, support, mistrust, confrontation, or influence from doctors, nurses, or other medical staff.	General complaints about the health system without specific professional interactions.	"But we made this decision after gathering information and consulting with several pediatricians on both sides [...]."

I.1.2.3 – Peers	Influence of personal relationships on vaccine views.	Refers to other parents, friends, acquaintances, or informal networks with whom vaccine choices are discussed.	Conversations, exchanges of opinions, or decisions influenced by peer interactions.	Influence from professionals or anonymous online actors.	“Let’s say that my doubts arose somewhat in the workplace, in the sense that two of my colleagues had told me about previous experiences with their children [...]”
I.1.2.4 – Other sources of information	Miscellaneous or less conventional sources of vaccine-related information.	Includes books, religious figures, conferences, or community leaders not captured by other subcategories.	Mentions of offline non-professional sources that influenced opinion.	Online or professional sources already covered in other subcodes.	“There was also the documentary Vaxxed, which was widely criticized, not by everyone, but certainly by the media [...]”
I.1.2.5 – Scientific publications	Direct engagement with peer-reviewed scientific literature.	Parents reference reading academic studies, looking up journal articles, or evaluating scientific data themselves.	Use of terms like “PubMed,” “research article,” or specific journal names.	Media summaries or interpretations of studies without direct access to scientific literature.	“I mean, maybe they’re not direct scientific research results, but literature reviews. So you take the literature, look at the references [...]”
I.1.2.6 – TV / radio / newspapers	Influence of traditional mass media on vaccine-related opinion formation.	Encompasses print newspapers, TV broadcasts, and radio programming with vaccine-related content.	Mentions of specific news stories, talk shows, or media coverage of vaccination.	Content accessed primarily via social media or online platforms.	“Yes, I watch TV just enough to get an idea of where we are, and that’s it.”
I.1.3 – Diseases perceptions	How parents perceive the risks and characteristics of vaccine-preventable diseases (VPDs), including comparisons with vaccine risks.				
I.1.3.1 – VPDs	Perceptions of vaccine-preventable diseases such as measles, chickenpox, or rubella.	Parents assess the severity, frequency, and implications of these diseases in relation to their vaccination decisions.	Mentions of specific VPDs and the perceived need (or lack thereof) to vaccinate against them.	References to COVID-19 or general statements without naming diseases.	“Now you don’t get measles, mumps, rubella. Rubella is harmless and you don’t have time to vaccinate.”
I.1.3.2 – SARS-CoV-2	Perceptions of COVID-19 as a disease.	How parents assess the risk, spread, severity, and relevance of COVID-19 to their vaccine decision-making.	References to COVID-19 illness, impact on children, or comparisons with other diseases.	References limited to policies or mandates without disease perception.	“However, I am aware that I should not be afraid of this disease, so I am not even considering getting the vaccine [...]”
I.1.3.3 – Risk comparison (disease vs. vaccine)	Comparative evaluations of the risks posed by disease versus vaccine side effects.	Parents weigh the potential harm from catching the disease against perceived or feared harm from the vaccine.	Explicit statements comparing these two types of risks.	Mentions of either risk alone without direct comparison.	“I’m more afraid of what could happen if he gets the vaccines than if he doesn’t.”
I.1.4 – Doubting / Starting doubting	Initial emergence of or ongoing hesitancy.	Narratives describing how and why parents began to question vaccination.	Mentions of specific events, sources, or experiences that triggered doubts.	Statements reflecting consolidated hesitancy without narrative of beginning.	“To tell you the truth, I still have doubts about some vaccines, namely those for tetanus, diphtheria, and polio.”

I.1.5 – Forming your own opinion	The process of developing an independent stance on vaccines.	Parents emphasize autonomy, critical thinking, or reflective processes in building their vaccine views.	Mentions of personal reasoning, research, or active distancing from mainstream positions.	Adoption of opinions without expressed personal involvement.	“And then knowing that if society thinks this way, you have to create your own niche [of thought] and go your own way.”
I.1.6 – Protecting children or one's own health	Framing vaccine decisions as protective acts for self or child.	Parents describe vaccine hesitancy as driven by care, protection, and health preservation motives.	Statements justifying decisions as protective or preventive for one's child or family.	Statements driven by ideology or general opposition to mandates.	“That is, if you believe in that, you put your children first. In my life, I have seen many people who have organized themselves and found a solution [...].”
I.2 – Choice implementation	How parents act upon their vaccine-related decisions, emphasizing agency, responsibility, and reflection.				
I.2.1 – Taking responsibility	Assumption of accountability for vaccine choices.	Parents describe themselves as ultimately responsible for the outcome of their decisions.	Mentions of bearing consequences, weighing risks, or making a difficult call.	Statements blaming others or shifting responsibility to authorities.	“It's harder, it's much harder to fight than to stay calm and give responsibility for your child to someone else.”
I.2.2 – Thoughtful choice	Vaccine decisions made with reflection and careful consideration.	Emphasis on a conscious, deliberate, and morally responsible decision-making process.	Claims that the choice is not impulsive but studied and reflective.	Uncritical acceptance or rejection of vaccines.	“Because it would have been easier to conform and say things are the way they are [...] and move on. And so instead, ask questions, spend sleepless nights thinking about it anyway [...].”
I.2.3 – Making an informed choice	Vaccine decisions based on information gathering and analysis.	Parents assert they informed themselves before acting, often implying better judgment than mainstream views.	References to reading, research, consultation, or data before deciding.	Implicit or intuitive decisions without information references.	“Yes, we were very well informed [...]. We make informed choices, not random ones [...]. Conscious choices, that is.”
I.3 – Choice evaluation	How parents evaluate and reflect on their past vaccine decisions, often using their child's health as a benchmark.				
I.3.1 – Healthy children	Perception that good health of unvaccinated/partially vaccinated children validates past decisions.	Used as retrospective justification of vaccine hesitancy or refusal.	Statements pointing to the current well-being of the child as proof of good decision-making.	General health statements not linked to vaccination choices.	“However, if I have to look at the choice I made for their health, now I say yes, thank you [that I didn't vaccinate them].”
I.3.2 – Openness to vaccinating	Expression of conditional or future-oriented openness to vaccination.	Parents signal that they might vaccinate under certain conditions or in the future.	Mentions of specific circumstances under which vaccination might be considered.	Firm opposition without any openness to future change.	“And we regret this because some types, such as tetanus, hepatitis [...], mumps, I would also like to have them done before he grows up [...].”

Macro-Area II – Vaccines and Vaccination Mandates

This table includes all codes and subcodes under Macro-Area II, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
II.1 – Safety of childhood or adult vaccines	Perceptions regarding the safety of vaccines, whether for children or adults, including potential side effects and adverse events.	Parents discuss their concerns or assurances about the safety of vaccines, particularly focusing on whether they believe vaccines cause harm or have long-term consequences.	Statements regarding fear of side effects, mistrust of vaccine safety, or the belief that vaccines are generally safe.	General vaccine acceptance or rejection without reference to safety specifically.	“So, they tell you they're safe, but then if you read the package insert, they have to list the side effects, and there are some.”
II.2 – Efficacy of childhood or adult vaccines	Parent beliefs about the effectiveness of vaccines in preventing disease and controlling outbreaks.	Focuses on perceptions regarding the success of vaccines in preventing both specific diseases and broader public health issues.	Comments on whether parents believe vaccines work, provide immunity, or are effective in preventing disease.	Statements unrelated to vaccine effectiveness, such as those focusing on the nature of the disease or vaccine risks.	“So for childhood vaccines, I think that given the way they are made, [...] I don't know how effective they are.”
II.3 – Traditional vaccines	Reference to established vaccines that have been in use for many years, such as those for measles, polio, and diphtheria.	Describes attitudes towards well-established childhood vaccines that have long-term safety and efficacy records.	Specific mention of classic vaccines or vaccines for diseases historically considered “preventable.”	Mention of newer vaccines or those under development (e.g., COVID-19 vaccines, mRNA vaccines).	“Let's say that traditional vaccines, the ones that existed before, had their history, and this is a very different vaccine and has its own short history, that's all.”
II.4 – Vaccination choices	Decision-making about full, partial, or no vaccination.				
II.4.1 – Vaccinated	Parents who have chosen to fully vaccinate their child(ren).	This subcode captures those who have received the full set of recommended vaccines for their child's age group.	Statements of full compliance with vaccination schedules, including positive rationales for vaccinating.	Any reference to partial vaccination or refusal to vaccinate.	“Yes, I gave my children the vaccines they told me to give them. [...] And I also gave them the optional ones [...]”

II.4.2 – Partially vaccinated	Parents who have vaccinated their child, but not according to the complete schedule.	Includes cases where parents have skipped certain vaccines, opted for delays, or selectively chosen vaccines based on personal reasons.	Statements about selective vaccination or delaying certain vaccines while others were accepted.	Statements implying complete rejection of vaccination.	“Yes, we have partially vaccinated. We administered the trivalent vaccine with boosters [...]”
II.4.3 – Unvaccinated	Parents who have chosen not to vaccinate their child(ren) at all.	This subcode captures parents who do not vaccinate their children, either in part or entirely, based on personal, philosophical, or medical reasons.	Direct mention of not vaccinating, including reasons for refusal (e.g., concerns about safety, perceived lack of need).	Parents who selectively vaccinate but are not entirely unvaccinated.	“For now, my children have not been vaccinated and will remain that way for the time being.”
II.5 – Childhood vaccination policies	Perceptions of vaccination laws and policies, including historical changes and consequences for non-compliance.				
II.5.1 – Law 210/1992	Reference to the Italian law (Law 210/1992) that governs compensation for individuals who suffer from adverse events following vaccination.	Focuses on perceptions or discussions about the law providing compensation for vaccine injuries, influencing attitudes towards vaccine safety and trust.	Mention of compensation law, concerns about vaccine injuries, or historical knowledge of this law’s existence and impact.	General discussions of vaccine safety or mandates without reference to Law 210/1992.	“Because everyone is different, so much so that if there are laws protecting those harmed by vaccines, it is true that such people exist.”
II.5.2 – Before Law 119/2017	Perceptions and practices related to vaccination policies before the enactment of Law 119/2017, which made certain vaccines mandatory in Italy.	Refers to the period prior to the stricter vaccination requirements, capturing more lenient vaccination policies and parental experiences with them.	Mentions of vaccine policies or public attitudes toward vaccination before the implementation of Law 119/2017.	Discussion about policies or laws post-2017.	“At that time, it was 2010, and the situation was very calm, meaning there was no pressure to vaccinate... In other words, it was handled in a very relaxed manner.”

II.5.3 – Law 119/2017	The Italian law passed in 2017, mandating vaccinations for children between 0 and 16 years of age with sanctions for non-compliance.	This code captures parental responses, attitudes, or actions related to the law that imposes mandatory vaccinations for children attending pre-school services and schools, including compliance, resistance, and any perception of government overreach.	Direct reference to the law, its influence on decision-making, or its role in shaping vaccination practices.	Mention of vaccination policies not related to Law 119/2017.	“So, the first doubt is the Lorenzin law, because they can't make them all mandatory and so many of them.”
II.5.4 – Sanctions for non-compliance	Penalties or repercussions for parents who fail to comply with vaccination mandates according to Law 119/2017.				
II.5.4.1 – Exclusion	The exclusion of children from pre-school services due to non-compliance with vaccination requirements (Law 119/2017).	Refers specifically to the practice of excluding children between 0 and 6 years of age from attending pre-school services due to incomplete vaccination status.	Any reference to exclusion from school or other public institutions due to vaccination status.	General discussion about vaccination refusal without mention of exclusion.	“But I'm really happy I made this choice. It was difficult because I paid the consequences. He/She was excluded from nursery school [...]”
II.5.4.2 – Economic fine	The imposition of financial penalties on parents for failing to comply with vaccination mandates (Law 119/2017).	Captures the feelings and ideas surrounding the economic fines provided for non-complying with the national vaccination schedule.	Mentions of financial penalties or fines directly related to non-vaccination or incomplete vaccination.	General references to financial consequences without direct mention of fines.	“Now there's also the matter of the fine that's coming, I'll have to go to the justice of the peace, but I honestly don't even know if I'll waste all this time.”

II.5.4.3 – Trentino's approach	The specific approach to vaccination enforcement and parental compliance (Law 119/2017) adopted in Trentino.	This subcode relates to Trentino's authorities approving resolutions that strengthened the sanctions for noncompliance already provided by national law, which is different from other parts of Italy.	Any discussion of regional differences in vaccination policies, particularly the Trentino model.	References to other countries policies.	“Then here they always want to be top of the class [...]. We are still the only province that fines parents who have unvaccinated children, and we even give them two fines [...].”

Macro-Area III – Anti-COVID-19 Vaccines

This table includes all codes and subcodes under Macro-Area III, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
III.1 – mRNA vaccines	Parent perceptions and reflections specifically related to mRNA-based COVID-19 vaccines (e.g., Pfizer-BioNTech, Moderna).	Focuses on how parents understand, interpret, and respond to the novelty and nature of mRNA vaccine technology, often comparing it to traditional vaccines.	References to mRNA as a new, untested, or experimental technology; concerns about gene modification, novelty, or long-term effects.	General concerns about COVID-19 vaccines without specifying mRNA or comparing vaccine types.	“But even with COVID, how many people have we spoken to who have had side effects from the vaccine? And now, from the outset, they've been saying that it's not a vaccine but a gene therapy, in short [...]”

III.2 – Safety of mRNA vaccines	Concerns or assurances about the safety of mRNA vaccines.	Captures anxieties or trust related to adverse events, insufficient testing, or potential long-term consequences of mRNA vaccine use.	Mentions of fears about mRNA vaccine safety, references to observed or reported side effects, or belief that safety testing was rushed.	General vaccine safety concerns not specifically tied to mRNA vaccines.	“Well, now the situation with COVID vaccines is dramatic because hospitals are filling up with people with thrombosis, myocarditis, and so on.”
III.3 – Efficacy of mRNA vaccines	Beliefs about the effectiveness of mRNA vaccines in preventing COVID-19 or reducing its severity.	Includes doubts about protection, breakthrough infections, duration of immunity, or positive assessments of mRNA vaccine performance.	Statements expressing disappointment, skepticism, or approval of vaccine performance in real-world or personal experience.	General efficacy concerns not specific to mRNA vaccines.	“Blackmail without any evidence, because everyone who was vaccinated in our country got sick.”
III.4 – COVID-19-related policies	Broader pandemic policy experiences, especially those tied to vaccination.				
III.4.1 – Anti-COVID-19 vaccination mandates	Anti-COVID-19 vaccination mandates introduced for specific populations (e.g., healthcare workers, people 50+).	Includes reactions to mandatory vaccination policies, including compliance, resistance, ethical objections, or support.	Direct reference to mandatory vaccination rules and the perceived impact or reasoning behind them.	General COVID-19 policies not related to vaccination mandates.	“Then the talk of moral blackmail at work was one of the most shocking things I’ve ever heard. They really hit a sore spot.”
III.4.2 – Non-medical interventions	Pandemic control measures unrelated to vaccination (e.g., lockdowns, masks, distancing).	Captures opinions and experiences with behavioral restrictions, school closures, and other public health measures.	Statements on the burden, justification, or effectiveness of restrictions imposed during the pandemic.	Vaccine-specific measures or sentiments.	“I never wore a mask on the street and I noticed certain looks, people who might be walking towards you and then change sides of the street [...]”
III.4.3 – Green Pass requirements	Opinions and experiences related to Italy’s Green Pass system, which linked access to services or work to vaccination or testing status.	Reflects on the pass as a policy tool, its role in coercion, discrimination, or compliance, and its social consequences.	Any mention of the Green Pass, whether practical, symbolic, or political.	General discussions of mandates or policies without explicit mention of the Green Pass.	“Just like with the Green Pass now. It worked out well for them, everyone rushing to get their Green Pass and vaccination. If you have the Green Pass, you have freedom of movement, and everyone is happy.”

III.4.4 – Job-related consequences	Effects of COVID-19 vaccination mandates on employment or professional life.	Includes job loss, suspension, or resignation due to vaccine requirements or refusal.	Narratives about having to leave a job, being suspended due to COVID-19 mandates.	Broader societal impacts or personal decisions unrelated to employment.	“Of course it was tough, I was suspended from work, my husband struggled to get by, then luckily we tested positive [...]”
III.5 – Anti-COVID-19 doses	The number of anti-COVID-19 vaccine doses received.	Captures how many doses were accepted.	Specific mention of how many COVID-19 vaccine doses the individual received.	General opposition to vaccination without dose-specific information.	
III.5.1 – None					
III.5.2 – Two					

Macro-Area IV – Vaccine-Related Attitudes

This table includes all codes and subcodes under Macro-Area IV, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Vaccine concerns	Fears, doubts, or specific reasons parents are hesitant or cautious about vaccines.				

1.1. Health concerns	Specific worries about how vaccines might negatively impact a child's or adult's health. Covers physical effects (e.g., immune response), timing, dosage, and specific conditions parents fear might result from or be exacerbated by vaccines.				
1.1.1. VPDs not as widespread	Belief that vaccine-preventable diseases (VPDs) are no longer common or threatening.	Used to justify vaccine refusal or delay due to perceived low risk of infection.	Statements suggesting diseases like measles or polio are no longer a problem.	General discussion of disease severity without reference to prevalence.	"Polio, as we know, hasn't been around in Italy for ages. So, it's not something we worry about too much, for example."
1.1.2. Pharmacovigilance	Concerns about how well adverse events following immunization (AEFI) are monitored, reported, and addressed.	May reflect distrust in surveillance systems or belief that side effects are underreported or ignored.	References to vaccine safety monitoring, underreporting, or lack of follow-up on side effects.	General concerns about safety unrelated to reporting systems.	"Pharmacovigilance is one of the problems that needs to be resolved because, as it stands, it does not reveal all cases of adverse reactions."
1.1.3. Personalized vaccination schedule	Belief that vaccination schedules should be tailored to individual children's needs.	Reflects desire for flexibility, e.g., delaying, skipping, or spreading out vaccines based on personal or medical reasons.	Requests or arguments for non-standard schedules.	General vaccine rejection without mention of personalization.	"[...] at the beginning, it was still possible to have a single tetanus shot, [...] so there is no possibility of personalizing a treatment plan."
1.1.4. Antibody tests and anamnesis	Interest in pre-vaccination testing or personalized assessments to determine vaccine necessity.	Parents argue that vaccination decisions should be informed by antibody titers or thorough health histories.	Mentions of blood tests, serology, or full anamnesis as decision tools.	Requests for information that are not medically specific.	"Then many children who were not vaccinated at the time underwent antibody testing [...] and it was found that many had antibodies for almost everything."

1.1.5. Affecting health	Broad concerns that vaccines could harm overall health or development.	Often linked to fears of long-term impacts on growth, immune system, or general well-being.	Any perceived link between vaccination and negative health or developmental outcomes.	Concerns focused specifically on isolated AEFIs or autism.	"I saw the difference in my children compared to their classmates, when they got sick [...], they coped much better, with a different approach."
1.1.6. Immune system	Belief that vaccines may overstimulate, weaken, or negatively alter the immune system.	Includes metaphors like "too many shots weaken immunity" or that natural immunity is preferable.	Comments linking vaccines to immune system overload, imbalance, or harm.	Generic statements about health without immune system framing.	"Why do I have to give him/her the polio vaccine now? [...] I mean, he/she's not at risk, start considering it after 2 years when his/her immune system is more mature."
1.1.7. Vaccines vs. drugs	Comparison between vaccines and other pharmaceutical products, often to challenge perceived safety.	Suggests vaccines receive less scrutiny or have different safety standards than therapeutic drugs.	Statements claiming vaccines are treated differently in terms of regulation or risk.	General critique of pharma industry without drug comparison.	"[...] vaccines are preventive measures, not treatments. Many people object by saying, 'But medicines are risky too,' which is true. But with medicines, you can say, 'I'm not taking anything, at your own risk,' and you don't take them [...]."
1.1.8. Autism	Perceptions or concerns about the alleged link between vaccines and autism.	Reasoning about the incidence of autism and the vaccine practice, often linked to a request to consider or investigate the (potential) link.	Any reference to fear of autism caused by vaccines.	General developmental concerns without specific reference to autism.	"Well, it's hard to say even there, because you see, among the vaccine-damaged people I've met, there's one who was healthy before the vaccine [...] and then developed autism spectrum disorders."
1.1.9. Already have antibodies	Belief that vaccination is unnecessary due to natural immunity from previous illness.	Focuses on acquired immunity as a reason not to get vaccinated.	Statements about previous infection, antibody levels, or natural exposure.	General distrust of vaccines not linked to immunity status.	"I've seen how it is with tetanus shots, and I see my second child who hasn't had any [vaccines], not even one, and is protected."
1.1.10. Too many	Concern that children receive too many vaccines, especially in early life.	Suggests vaccine overload may be harmful or unnecessary.	Statements about excessive number of shots, spacing issues, or volume of injections.	Statements about specific vaccine types only.	"However, ten or eleven vaccines seem like a lot to me, and some of them don't make much sense."

1.1.11. Too soon	Worry that vaccines are given too early in a child's life or development.	Includes arguments that babies are not ready for vaccines or should wait until older.	Comments about inappropriate age/timing of vaccination.	Concerns about total volume rather than timing.	"[...] I looked into it further because it seemed a bit excessive to me to vaccinate a child with all these products, antigens, etc., at two and a half months."
1.1.12. Fear of AEFI	General fear of adverse events following immunization.	May include both minor and severe side effects and emotional trauma.	Statements expressing fear, anxiety, or regret due to side effects.	Claims about ineffectiveness or philosophical refusal without mention of side effects.	"Why should I be afraid? Or is it no longer acceptable to be afraid? I mean, I don't know what's hidden inside my body."
2. Technical and procedural concerns	Doubts and critiques about the formulation, approval, and delivery of vaccines. This category captures technical objections to vaccine components, production processes, and procedural transparency, often presented as rational or evidence-based critique.				
2.1. Vaccine components	Concerns about what vaccines contain.	Includes worries about adjuvants, preservatives, or other chemical/biological elements in vaccines.	Mentions of aluminum, mercury, fetal cell lines, toxins, or unknown substances.	General vaccine opposition without specific reference to components.	"Because then, while reading, I read that the aluminum in vaccines [...] vaccines cannot exist without aluminum, then there's also everything else [...]"
2.2. Monovalent vaccines	Preference for vaccines that target a single disease.	This reflects the belief that monovalent vaccines are safer, more effective, and generally preferable to multivalent formulations.	Requests for or comparisons with monovalent vaccines, or critiques of combination vaccines.	Concerns unrelated to vaccine valency.	"So, if I had to do something, I would give him/her the rubella vaccine, but finding rubella alone [monovalent] is very difficult because it no longer exists."

2.3. Request for (more) information and transparency	Expressions of a need for greater access to scientific data or procedural clarity.	It includes critiques of information withholding and calls for more and/or clearer information from health authorities regarding the risks and benefits of vaccines.	Demands for informed consent, more detailed explanations, or open scientific discussion.	Statements of general distrust without mentioning information access.	"That is, not wanting to devote time to providing information and actually helping people make choices, as they [doctors] should in their role."
2.4. Report about AEFI	Discussions about the need for better reporting and accountability regarding adverse events.	Parents may report having difficulties in filing reports or claim that reports are dismissed or ignored.	References to formal AEFI reporting, institutional reactions, or feeling silenced when reporting.	General concern about AEFIs without reference to institutional responses.	"Why don't pediatricians report [adverse effects]? Because with my second child, I wanted to file a report [...], but I couldn't follow through with the paperwork [...]. However, in my opinion, it should be a service provided by pediatricians."
2.5. Not up-to-date or not enough tested	Belief that vaccines have not been adequately tested or updated.	Includes criticism of rushed approvals (especially during COVID-19) or outdated technologies in routine childhood vaccines.	Mentions of insufficient clinical trials, fast-tracking, or obsolescence.	Safety or efficacy concerns without reference to testing or recency.	"[...] when the Lorenzin law made pediatric vaccinations mandatory, there was the hexavalent vaccine with additional monitoring, for example, and it was therefore in the fourth phase of testing."
3. Economic and governmental concerns	Critique of the role that financial or political interests play in vaccination policy and promotion. Parents may question the motives behind vaccination programs, suspecting undue influence by industry or broader social agendas.				
3.1. Part of a broader plan	Belief that vaccines are part of a larger social, economic, or political agenda.	Includes conspiratorial thinking or structured critiques (e.g., population control, social engineering).	Suggestions that vaccines are instrumentalized for purposes beyond health.	Criticism of policy without reference to intentional planning or hidden agendas.	"So there was a plan, in my opinion even at the European level. [...] In my opinion, much of it is the result of a project."

3.2. Pharmaceutical companies	Distrust in pharmaceutical companies' motives and actions.	Parents may see pharmaceutical companies as profit-driven entities influencing research, policy, or media coverage.	References to conflicts of interest, financial gain, or unethical practices by the industry.	Concerns about governments or doctors without involving pharma.	"We are talking about a system that serves other interests. And inevitably, prevention is only good when it feeds the pharmaceutical industry, because in the end, that's what the vaccine is."
3.3. Economic and political interests	Belief that public health policy is shaped more by economic or political priorities than public well-being.	Includes suspicion of lobbying, corruption, or misaligned incentives in policy-making.	Statements connecting mandates or vaccine promotion to political or financial motives.	Statements focused solely on safety, efficacy, or personal impact.	"So it seemed like they were rushing [with the COVID-19 vaccine], [...] to have as many vaccines as possible right away. [...] I don't know if there are also political or economic agreements between pharmaceutical companies, AIFA, etc."
4. Vaccine hesitancy	Describes the degree to which parents' hesitancy has changed or remained stable over time. Particularly, it captures shifts in attitudes after the onset of the COVID-19 pandemic.				
4.1. Increased post-COVID-19	Parents who became more hesitant or critical of vaccines following the pandemic.	Includes erosion of trust due to policies, perceived coercion, or vaccine development during COVID-19.	Statements like "I was neutral before, but after COVID I no longer trust vaccines."	General criticism of COVID-19 vaccines without reference to a shift in broader vaccine attitudes.	"Yes, absolutely. Let's say that with the pandemic initially [...] the criticality was certainly reinforced, and also my choice, in short [...]"
4.2. Stable post-COVID-19	Parents whose level of vaccine hesitancy did not change significantly during the pandemic.	May include individuals already hesitant or critical before COVID-19, or those whose trust remained constant.	Statements like "I didn't trust vaccines before and still don't" or "My views haven't changed."	Expressions of changed opinion.	"Well, my position has always been the same. Let's say that traditional vaccines [...] had their history [...]. But my opinion about other vaccines hasn't changed."

5. Vaccination practice	Reflections on what vaccination represents or symbolizes, beyond the clinical act. Parents frame vaccination as a social practice tied to values, ideologies, or systems of meaning.				
5.1. Reassuring	Vaccination seen as a source of security and protection.	Parents may view it as offering to other non-critical parents peace of mind or reducing anxiety about illness.	Statements about feeling reassured, calm, or protected thanks to vaccines.	General statements of trust without reference to emotional security.	"Because [...] I understand that he is an elderly man with health issues, even though I personally believe that the vaccine still carries risks, but in his case, I'd do it. Also because he was very happy to get it, he was afraid."
5.2. Business-driven	Belief that vaccination is primarily motivated by profit.	Overlaps with critiques of pharmaceutical companies but emphasizes the commodification of health.	Descriptions of vaccination as a business model or "money-making" practice.	Critiques lacking a clear economic framing.	"With four doses, COVID should just disappear when it sees you, right? But instead, the goal is clearly sales, not so much treatment."
5.3. Not the first or only prevention measure	Belief that vaccination should be one of multiple tools, not the sole preventive strategy.	May emphasize lifestyle, nutrition, hygiene, or immunity-boosting as alternatives or complements.	Statements stressing other forms of prevention as sufficient or superior.	Statements purely opposing vaccines without referring to alternatives.	"So the fact that there is now drinking water, [...] that conditions have improved in general in terms of health, etc., has meant that diseases have not disappeared completely, but almost."
5.4. As a choice	Vaccination seen as a personal, voluntary decision.	Emphasis on autonomy, informed consent, and the right to refuse or select vaccines.	Statements defending the right to choose, criticize mandates, or call for personalized decision-making.	General expressions of hesitancy or refusal without mentioning choice or rights.	"A major factor [...]. Yes, because it was a form of blackmail, as I believe that when it comes to health, everyone should be able to make their own choices."
5.5. As an act of faith	Vaccination framed as something people do without fully understanding or questioning it.	Often used critically to suggest that others vaccinate out of blind trust.	References to vaccination as a "belief," "ritual," or "dogma."	Rational critiques or scientific discussions without this metaphorical framing.	"So, vaccination is now a religious belief. Either you believe in it or you're a heretic."

5.6. As a violence	Vaccination is described as coercive, invasive, and a violation of bodily integrity.	Often linked to mandates or feelings of powerlessness, with strong emotional or ethical language.	Descriptions of vaccines or policies as “forced,” “violent,” “aggressive,” or “against our will.”	Criticism of mandates or policies without this framing of violence or violation.	“I think those who oppose the [COVID-19] vaccine are right. In my opinion, it is violence, state violence.”
5.7. Useful in specific contexts/situations	Vaccines seen as potentially useful, but only in targeted cases or particular contexts.	Conditional support based on travel, epidemic risk, or specific vulnerable populations.	Statements like “I’m not against all vaccines, but only if necessary,” or “only if traveling.”	Blanket acceptance or refusal of vaccination without nuance.	“Because if I lived in another part of the world, perhaps I could vaccinate them differently [...]”
5.8. Rushed	Concern that children are being rushed through the vaccination process.	The perception that childhood vaccinations are carried out like an assembly line.	References to vaccination practices being “rushed,” or healthcare personnel not allocating enough time.	Concerns about safety that do not reference speed.	“When someone wants to learn more, they read up on things because if they go to the vaccination center, they can ask for information [...]. But there’s this whole rush mechanism there.”
5.9. Socially desirable or prosocial	Vaccination described as a socially responsible act or moral obligation.	May appear in the interviewees’ own voice or as critique of this dominant social framing.	Mentions of vaccination being “for the good of society,” “civic duty,” or “prosocial behavior.”	Personal health decisions without reference to social norms or expectations.	“And what’s the catch? ‘Oh, but it’s for the common good, the good of the community.’ No, first you have to be well as a person.”
5.10. Habit	Vaccination understood as something people do by default, without critical thought.	Framed as cultural or social routine, sometimes unreflective or automatic.	Statements describing vaccination as “normal,” “something everyone does,” or “just how it is.”	Informed personal decisions to vaccinate.	“[...] because I think, like many others, this approach to vaccinations, which have been around for a long time, since forever, was taken a bit for granted [...]”
5.11. Mass inoculation	Vaccination as a large-scale public health campaign or mass intervention.	Often evokes negative imagery of uniformity, industrial logic, or loss of individuality.	References to “mass vaccination,” “one-size-fits-all,” or criticism of collective approaches.	References to vaccination campaigns without a critique of scale.	“Well, in general, it could also be a useful thing [the vaccine] [...]. However, it should be targeted and studied, not administered serially because each of us is different.”
5.12. Idealized	Vaccination presented as flawless, risk-free, or universally beneficial.	May be used critically to describe dominant discourses or portrayals in media/politics.	Statements like “they act like vaccines are perfect,” or critiques of exaggerated claims.	Positive but balanced views of vaccination.	“When you find yourself getting vaccinated because they convinced you, [...] they presented it to you as the best thing in the world [...]”

5.13. Undisputable	Vaccination is portrayed as beyond question or debate.	Refers to dominant narratives that silence dissent, present vaccination as infallible, and pathologize doubt.	Critiques of how debate surrounding vaccination is shut down by authorities and healthcare personnel, making it impossible to question vaccines.	Criticism of specific policies without reference to broader discursive constraints.	"We don't want a type of medicine that vaccinates you even if you have problems because you have to be vaccinated."
5.14. Throughout the life course	Vaccination is discussed as a practice that extends beyond childhood into all life stages.	Reflection on the expansion of immunization programs and the impact of mandates in various social fields and life stages (e.g., young adulthood, adulthood, elderly age, and pregnancy).	Mentions of vaccination requirements for playing sports or doing internships.	Focus strictly on childhood or COVID-19 vaccination decisions.	"So perhaps there too we think about young children [regarding vaccination], that's true. But we must remember that this is an issue that affects their whole lives."

Macro-Area V – Personal Experiences

This table includes all codes and subcodes under Macro-Area V, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Healthcare interactions	This category captures participants' experiences with healthcare professionals and services (regarding their children and/or themselves), including institutional and non-institutional actors. It reflects how the quality of communication, trust, and treatment in healthcare settings influences vaccine-related attitudes and decisions.				
1.1. Non-institutional healthcare aid	Seeking health-related support outside of the institutional healthcare system during the pandemic.	This includes alternative practitioners, informal networks offering health advice, and healthcare professionals who were suspended from work, as well as other practitioners who did not follow the protocols.	Mentions of relying on groups of healthcare professionals who were suspended or who did not follow institutional protocols to recover from SARS-CoV-2.	Interactions with general practitioners, pediatricians, or institutional staff working for the National Health System.	"Then now there are these networks of doctors, even suspended ones, who provide assistance. If I had something wrong with me, I would almost go there."
1.2. Trust in doctors	Expressions of trust or distrust in medical professionals.	Reflects how personal experience with doctors influences confidence in their vaccine-related or health-related advice.	Direct mentions of feeling reassured or disillusioned by doctors' recommendations or behavior.	General trust/distrust in the health system without reference to specific doctors or types of doctors.	"So my trust in doctors has collapsed [...]. Now I'm looking for another doctor, but I don't have one."

1.3. Lack of or inaccurate information	Personal experiences and quality of the relationship with the family's main doctors.	Focus on the emotional, communicative, and professional aspects of past or ongoing relationships with pediatricians or GPs.	Descriptions of regular doctors being supportive, dismissive, pressuring, or helpful regarding vaccination or other health-related issues.	Mentions of other healthcare staff outside the GP/pediatrician role.	"Because a doctor told me, 'Vaccines aren't drugs,' and I told him that I don't even consider a doctor who says that to be a doctor. Because it is a drug in every sense of the word, that's why."
1.4. Relationship with the paediatrician and/or GP	Personal experiences and quality of the relationship with the family's main doctors.	Focus on the emotional, communicative, and professional aspects of past or ongoing relationships with pediatricians or GPs.	Descriptions of regular doctors being supportive, dismissive, pressuring, or helpful regarding vaccination or other health-related issues.	Mentions of other healthcare staff outside the GP/pediatrician role.	"Or, for example, we were told, 'Don't worry, we'll vaccinate them when they're young because their immune systems are ready and perfect.' But then you find out that a child's immune system is still developing [...]"
1.5. Relationship with other healthcare professionals	Encounters with healthcare workers besides pediatricians/GPs.	Covers interactions with nurses, pharmacists, vaccination hub staff, or emergency personnel in relation to vaccines or other health-related issues.	Any non-GP/pediatrician healthcare worker involved in advising, administering, or discussing vaccines or other health-related issues.	Statements about about pediatricians/GPs.	"We also contacted a homeopathic pediatrician for advice, and he said, 'Actually, given your lifestyle, I would recommend the [tetanus] vaccine.'"
1.6. Experience in the vaccination hub	Description of pre-vaccination appointments at the vaccination hub.	Logistical aspects, atmosphere, communication, treatment by staff, and emotional responses at the vaccination hub, either before or after the introduction of Law 119/2017.	Descriptions of preparedness, pressure, and positive or negative experiences within vaccination settings.	General experiences with healthcare institutions that are not specific to vaccination hubs.	"But I remember that we went to this pre-vaccination meeting [...]. Anyway, what stuck with me is that we were a bit shaken up, so to speak. In short, they didn't listen to people's opinions."

2. Medical history	This category includes personal and familial health backgrounds, such as experiences with illness, adverse events, or specific medical conditions. These narratives often serve as a lens through which risks and benefits of vaccination are interpreted and weighed.				
2.1. Experience of the COVID-19 infection	Personal or familial experience with SARS-CoV-2 infection.				
2.1.1. Personal	Interviewee's own experience with COVID-19 illness.	Covers symptoms, treatment, outcomes, and perceived severity of their infection.	First-person accounts of having had COVID-19.	Accounts of others' experiences.	"When we tested positive for Covid, I had the flu for two days, but I've had much worse flu in my life years ago, many years ago."
2.1.2. Nuclear family	COVID-19 infections affecting immediate family (partners, children).	Focuses on whether and, in case, how their partner or children experienced the illness.	Statements about how a child or partner experienced COVID-19.	Mentions of more extended family or general discussions of the pandemic.	"Yes, we all [got COVID]. My husband and I."
2.1.3. Extended family	Experience of extended family members with COVID-19.	Covers grandparents, cousins, or other relatives outside the nuclear family.	Mentions of relatives contracting COVID-19 and any related consequences.	Experiences of unrelated individuals or general population-level narratives.	"My husband's family are all vaccinated, all pro-vaccine, and all against us who are not vaccinated. [...] Then they all got sick with COVID."
2.2. Personal medical history	Health history of the interviewee	Includes chronic conditions, allergies, or other health conditions that influence vaccine attitudes.	Personal health background shaping views on vaccine risk or necessity.	Family members' health history.	"In the sense that I had dermatitis, which was disappearing, and then it appeared on this hand, and I think it's linked to the vaccine. Rather than pain: headaches, [...] pains that I didn't have before, I think they're linked to that."

2.3. Children's medical history	Health background of interviewees' children.	Includes conditions such as allergies, previous vaccine reactions, or overall perceived health.	Any health issue or condition of the children that affects parental vaccine decisions.	Health of adults or relatives.	"Yes. Because after a homeopathy treatment, my child is now fine. He/She still has some residual allergies to animals, but it's much better than it was at the beginning."
2.4. Partner's and relatives' medical history	Health conditions of partner or extended family.	Often used to explain caution or concern, e.g., "my brother had dermatitis since then."	Health-related anecdotes about the partner, sibling, grandparent, cousin, etc.	Personal medical experiences.	"A brief aside, [...] still about how I developed my resistance to vaccines, it's actually how my mother died. My mother started feeling ill quite early on [...], she developed Alzheimer's."
2.5. Pregnancy and childbirth experience	Experiences during pregnancy, delivery, and early newborn care that influence one's trust in the medical system or decisions related to vaccines.	These experiences may include interventions, hospital protocols, perceived neglect, or positive support.	Narratives tied to the perinatal period that shaped views on medical institutions or health decisions.	Unrelated discussions of childbirth.	"So then when I had my first child in 2013, apart from the fact that he was also hospitalized for a few weeks, he had taken a lot of medication at birth."
2.6. Experience with AEFI (Adverse Events Following Immunization)	Experience with adverse events following immunization, whether confirmed or not, regardless of severity. This can include direct personal experiences, family-related experiences, and indirect experiences witnessed in others.				
2.6.1. Friends and acquaintances	Reports of adverse events occurring in the interviewee's social circles.	Frequently cited as evidence of vaccine risk, even if second-hand, it includes AEFI experiences from colleagues or friends.	Examples include statements such as "My neighbor's child had a reaction," "a friend's baby had seizures after vaccination."	First-hand experiences.	"But you often hear parents say, 'Oh, after the vaccine, he was sick, he had a fever. After the vaccine, he's not the same anymore,' and other things like that. I've heard them."

2.6.2. Personal and family	The experience of vaccine-related side effects from the perspective of a first-person, child, partner, or extended family member.	These emotional accounts are central to vaccine hesitancy narratives and often overlap with medical histories.	The uncle allegedly had an adverse reaction after receiving a vaccination.	Secondhand accounts.	"With the trivalent vaccine in particular, but it was certainly a process that led to physical imbalance in him/her, so even the first vaccinations certainly did not make things easy."

Macro-Area VI – Social Relationships and Consequences

This table includes all codes and subcodes under Macro-Area VI, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Partners' approach to vaccination	It captures the degree of alignment or disagreement between partners regarding vaccination decisions. It reflects how shared or conflicting beliefs within couples influence the overall decision-making process and emotional climate.				

1.1. Misaligned or initially misaligned	Situations in which partners disagreed or had differing views about vaccination at some point.	Includes couples who started with different positions but possibly reached alignment over time, or those who remained in disagreement.	Mentions of conflict, negotiation, or tension between partners regarding vaccine decisions.	General partner references without mention of disagreement or different initial positions.	"But that's when doubts began to creep in: at that moment, not being in complete agreement, we decided to go ahead with them because we had chosen this path anyway."
1.2. Aligned	Cases in which partners consistently agreed on vaccination choices.	Includes couples who shared similar views from the outset or reached shared decisions harmoniously.	Statements of mutual understanding or agreement on vaccination between partners.	Cases where alignment was reached only after conflict.	"And that's when I began to understand many things, so I decided together with my wife [...] to limit these vaccine injections as much as possible."
2. Relationships with peers, colleagues, and friends	It explores how vaccine-related attitudes and choices shaped interpersonal dynamics beyond the family. It includes both tensions and continuities in friendships, workplace relationships, and broader social circles, especially during and after the pandemic.				
2.1. Post-pandemic relationships	Descriptions of how relationships evolved after the pandemic period, due to vaccine-related attitudes or events.	Focuses on reconnections, enduring distance, or strengthened relationships after pandemic tensions.	Statements about how friendships or social connections were affected long-term by vaccination-related choices.	Tensions during the pandemic or pre-pandemic conflicts.	"The pandemic itself has greatly reduced the possibility of meeting up. But in fact, now that there is a little more movement and freedom, we see some friends much less often, that's for sure."
2.2. Tensions during the pandemic	Interpersonal conflicts that arose during the pandemic, especially over differing views on vaccines or restrictions.	Includes arguments, distancing, or social judgment experienced during the height of the pandemic.	Any conflict described as taking place during the pandemic period.	Tensions that emerged or were resolved only after the pandemic.	"Eh, it was very difficult. Also because, well, it led me to clash with others, to feel a little demotivated [...] because I saw little support, little willingness to understand personal positions."

2.3. Tensions for childhood vaccine choices	Conflicts with others regarding decisions about children's vaccinations (not specific to COVID-19).	May involve friends, colleagues, or peers questioning or criticizing parental choices on routine vaccines.	Disagreements or judgments related to childhood vaccinations.	Tensions over adult or COVID-19 vaccinations.	"Yes, tensions, this was still at the beginning when I hadn't vaccinated my child. I had arguments with two friends and then we lost touch."
2.4. Absence of tensions	Explicit mention that social relationships remained unaffected by vaccine-related issues.	Often framed as a contrast to common narratives of social division.	Statements affirming that vaccine choices did not cause conflict or tension with others.	Absence of discussion on social relationships.	"Afterwards, there was no tension among my circle of friends. This was also because during COVID, you really ended up always seeing the same people, that very, very small circle of friends."
3. Tensions with family	This category includes vaccine-related conflicts or harmony within the extended or nuclear family, encompassing both childhood and COVID-19 vaccination issues. It sheds light on how health decisions become sites of intergenerational disagreement, support, or neutrality.				
3.1. Childhood vaccine disagreements	Family tensions or disagreements about childhood vaccination choices.	It involves peers' discussions or tensions related to the COVID-19 vaccination status.	Family members expressing concern, pressure, or opposition to childhood vaccine decisions.	Disagreements about COVID-19 vaccines or measures.	"And now my mother, who trusts the authorities, trusts doctors [...]. So even with her, at first I had to explain that I hadn't vaccinated the child, why and how, and what I was going through. She didn't understand."
3.2. Anti-COVID-19 vaccine or measures disagreements	Family-level tensions over pandemic-related vaccinations or interventions.	Includes divisions around adult vaccination, lockdowns, Green Pass, and mandates.	Family disputes centered specifically on the anti-COVID-19 context.	Childhood vaccine tensions.	"But even within our family, we've had arguments with relatives, arguments and so on. But let's say that now, no, now everything has been resolved."

3.3. No family tensions	Explicit statement that vaccine choices did not cause tensions within the family.	Highlights harmony or mutual respect despite differing views.	Affirmations of peaceful coexistence or lack of disagreement in the family context.	Silence on family relationships (not coded unless clearly stated).	"Even the children's grandparents respect our choices. No, no, luckily I've never had any problems [...], I've been lucky."
4. Tensions with children's peers	It focuses on how children's social experiences—such as friendships, school participation, or group inclusion—were affected by their or their family's vaccine status or positions. It includes both reported cases of tension and explicit affirmations of its absence.				
4.1. No peer-related tension	Statements indicating that children's relationships or activities were not affected by their vaccination status.	Contrasts with reports of exclusion or stigmatization.	Affirmations that vaccination had no impact on children's friendships or school experiences.	Absence of peer-related discussion.	"In the sense that my second child never felt like he/she was different from his/her classmates because he/she wasn't vaccinated [...]. But they talked among themselves, and as classmates they had no problem with it."
4.2. COVID-19 stance tensions	Tensions related to differing positions on COVID-19 vaccines, restrictions, or beliefs within children's social environments.	May involve other parents, educators, or peer groups.	Reports of children facing isolation, judgment, or conflict due to family stances on COVID-19.	Tensions unrelated to COVID-19.	"Because there was a moment [during the pandemic] when our children logically felt a little out of place with the others. Because the others made them feel different."
4.3. Vaccination status tensions	Tensions arising specifically from children's vaccination status (routine childhood vaccines).	Includes being excluded from activities, peer judgment, or school-related consequences based on the vaccination status.	Reports of exclusion or friction based on vaccination status, not belief alone.	Tensions based on the COVID-19 vaccination status.	"[...] because, you know, in middle school they give girls the HPV vaccine. So they started saying, 'Aren't you getting it?' and other kids [...] kept telling my daughters that they were carrying diseases."

5. Social influences	This category addresses broader social dynamics that shape vaccine-related decisions, such as perceived social polarization, pressure, and judgment from others. It also includes strategies of disengagement, such as avoiding conversations, to manage the social consequences of one's stance.				
5.1. Social divide	Perceived polarization in society over vaccination or health measures.	Reflects how participants see a fractured society, often described in terms like "two factions" or "societal split."	Comments on societal division, polarization, or loss of shared ground due to vaccine attitudes.	Personal relationships unless clearly framed as reflecting a broader social split.	"It's just one of the excuses to pit people against each other. That's what it is to me. It was created specifically to create division between people."
5.2. Social pressure and judgement	Experiences or perceptions of being judged, criticized, or pressured by others regarding vaccine choices (both regarding childhood and anti-COVID-19 vaccines).	May come from peers, relatives, institutions, or broader societal norms.	Statements about having to justify decisions, feeling observed, or being negatively judged because of vaccination decisions.	Voluntary discussions or debates without felt pressure or judgment.	"Yes, it's stressful, stressful because even in relationships with other parents, other families, if the topic of vaccines comes up, there's never a discussion. You feel that there is heavy judgment against those who don't conform."
5.3. Avoidance of vaccine-related conversations	Active choice to refrain from discussing vaccination – either childhood or anti-COVID-19 vaccination – with others.	Often, this avoidance of vaccine-related discourse is seen as a strategy to preserve relationships or avoid conflict.	Statements about deliberately avoiding vaccine talk, either in-person or online.	Situations where conflict occurred despite attempts at avoidance (coded under relevant tension codes).	"Yes, because then [with the COVID issue] family relationships also come into play, because if your family, your relatives see it differently, it creates conflict. So it's better not to bring up that topic at all, otherwise you'll end up arguing."

Macro-Area VII – Social Labeling and Representations

This table includes all codes and subcodes under Macro-Area VII, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Vaccination labels	This category examines how individuals adopt, resist, or reinterpret labels such as "No-Vaxxer," "Free-Vaxxer," or "non conforme," as well as how they characterize those who vaccinate. These labels are often used to define group identities, signal critical distance from mainstream norms, or comment on others' perceived motivations and behaviors.				
1.1. Free-Vax	Use or discussion of the "Free-Vax" label.	Often claimed by interviewees to describe their stance as informed, autonomous, and not anti-vaccine.	Self-identification or description of others as "Free-Vax"; reflections on what this label means.	Use of other terms without reference to "Free-Vax."	"But here's the thing, at this moment in history, I don't like the label 'No-Vaxxer' because I am a Free-Vaxxer."
1.2. Non conforme	The use of the label "non conforme" by the Province of Trento's authorities to define children who are not aligned with the national vaccination schedule.	Passages where the use and the social/psychological implications of the label "non conforme" are discussed.	Use of "non conforme" to express difference from dominant attitudes.	Dissent expressed without this framing.	"My other child, on the other hand, who has been vaccinated for everything, [...] I think he/she was supposed to have some booster shots last year, but he/she didn't have them, so now he/she's 'non-compliant' too."

1.3. No-Vax	The use and meaning of the "No-Vax" label by media, authorities, and citizens to define people who have chosen not to follow the national immunization schedule for their children and/or to vaccinate against COVID-19.				
1.3.1. No-Vax label in 2017	References to being labeled as a No-Vaxxer during the 2017 childhood vaccination law debates.	Reflects how media, institutions, or society framed dissenting parents during the pre-pandemic period.	Specific mention of the 2017 context (e.g., Law 119/2017).	No-Vax labeling during the pandemic.	"But let's say that the worst thing was [...] being branded with this label on your back. Because by then, when you were excluded from school, everyone knew [...], it wasn't easy, not at all."
1.3.2. No-Vax label during the pandemic	Experiences of being labeled as a No-Vaxxer during the COVID-19 pandemic.	Highlights intensified social labeling, often experienced as pejorative or reductive.	Pandemic-specific instances of labeling or discussion of the term's changed meaning.	General or pre-2017 references to No-Vax.	"So those who were pro-vaccination became even more hostile because they said, 'Look, because of the No-Vaxxers, I have to come to work,' and so there was even more hostility."
1.4. People who vaccinate	Representations and evaluations of those who choose to vaccinate or are vaccinated. Captures how interviewees view the behaviors, motivations, or beliefs of people who follow official childhood or anti-COVID-19 vaccine recommendations.				
1.4.1. Blind conformists	Perception of vaccinators as blindly following norms or instructions.	Frames them as uncritical or overly compliant.	Descriptions implying passive acceptance or herd behavior.	Positive or neutral representations of vaccinators.	"Yes, maybe a little more among the general population, even though most people do what everyone else does."

1.4.2. Authority followers	View that vaccinators trust or obey authorities without question.	Emphasizes obedience to institutional directives.	Comments linking vaccine acceptance to deference to institutions or rules.	Descriptions focused on scientific reasoning.	"Yes, my mother-in-law does what the doctor says. [...] So, now she's on her second dose, she's had the second one. Yes, she'll do everything the doctor tells her to do."
1.4.3. Disinterested	Perception that vaccinators are indifferent to the vaccination issue.	Frames their vaccination as a result of apathy or convenience rather than conviction.	"They just go along with it" type comments.	Critiques of active pro-vaccine stances.	"Unfortunately, children are always the last wheel on the wagon. I mean, it's been going on for years and nobody cares. [...] But nobody has taken notice because, anyway, 'Ah, but they're just children, it's no big deal.'"
1.4.4. Afraid of questioning oneself	Views that people who vaccinate avoid self-doubt or confrontation with uncomfortable truths.	Attributes vaccination to psychological avoidance or fear of reflection.	Attributions of avoidance or denial.	Attribution to social pressure or trust.	"So I think that many [...] by not asking themselves certain questions, protect themselves from doubt. Because questioning things [...] takes away those certainties, those assurances that we humans need to live."
1.4.5. Convinced vaccinators	Acknowledgement that some people genuinely believe in and support vaccination.	May be expressed with or without judgment, as sincere or misguided.	Descriptions that portray vaccinators as ideologically or morally committed.	References to passive vaccinators.	"Yes, I think so, in the sense that my sister-in-law, for example, had her children vaccinated against tick-borne diseases and papilloma [...]. I mean, there are people who really believe in it."
1.4.6. Succumbed to the pressures	View that people decided to vaccinate or be vaccinated due to mandates-related or external pressures rather than choice.	Highlights social, professional, or institutional coercion.	"They didn't want to but had to" type of narratives.	Representations of active acceptance.	"Why impose so many restrictions? Because otherwise people would not have accepted the vaccine; people would not have accepted it if they had not been forced to..."

1.4.7. Repented	Cases where people vaccinated themselves or their children and later regretted it.	Often cited to validate concerns or support hesitation.	Stories of individuals expressing regret post-vaccination.	Concerns before vaccination without follow-up.	"Yes, yes, many. [...] But many have opened their eyes and are beginning to understand. There are many who say, 'I'm not getting the third dose,' 'I've had enough' [...]. Whereas before they were absolutely convinced [...]"
1.4.8. Not informed	Perception that vaccinators are uninformed.	Frames their vaccination as a result of a lack of information rather than conviction.	"They don't even know what vaccines their children received" type comments.	Critiques of active pro-vaccine stances.	"It's clear that not everyone bothers to find out or see why I should get vaccinated or why I shouldn't get vaccinated."
2. Negative social perceptions	This category captures participants' experiences or perceptions of being subject to hostility, stigma, exclusion, or discrimination due to their vaccine-related choices or views. It reflects how public discourse and institutional responses have contributed to feelings of social marginalization or injustice.				
2.1. Hate	Perceptions or experiences of hostility related to vaccine positions.	Includes overt aggression or verbal abuse faced by vaccine-hesitant individuals.	Use of terms like "hatred," "attacks," or "aggression."	Less intense forms of exclusion or judgment.	"The hatred! The hatred. They even wanted us to wear a badge, the hatred that was there [during the pandemic] and that is still there because it's not over yet, eh."

2.2. Stigmatization	Experiences of being marked or treated as socially inferior or morally questionable due to vaccine views.	Includes being labeled, avoided, or marginalized.	Narratives of social exclusion, public shaming, or loss of respect.	General disagreement or debate without perceived status loss.	"[...] in this case too, we found ourselves grateful for having already experienced these things in 2017 because I saw people who hadn't been through it, devastated by the realization of how quickly the social fabric can be torn apart, by the pettiness that can emerge."
2.3. Segregation	Perceptions of being physically or socially separated based on vaccination status.	Often linked to mandates, access restrictions, or public spaces.	Comments about being barred, excluded, or isolated.	Figurative segregation unless clearly articulated.	"Instead, as the mainstream encouraged racism and segregation in relation to COVID, for example, that was the worst case scenario [...]"
2.4. Discrimination	Perceived unfair treatment due to one's vaccination position.	Includes institutional, social, or professional consequences.	Reports of being denied services, work opportunities, or fair treatment.	Judgment or pressure without structural consequences.	"So no, it's all absurd: not being able to go into bars, first sitting down, then standing up, then sitting down again.[...] And then the whole argument is completely illegitimate. There shouldn't be anything that deprives you of your individual freedom, deprives you of your self-determination to decide anything [...]."

Macro-Area VIII – Communication and Information

This table includes all codes and subcodes under Macro-Area VIII, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Public vaccination debates	This category captures how participants perceive the tone, framing, and inclusivity of public discourse on childhood and COVID-19 vaccination. It reflects concerns about polarization, the exclusion of dissenting voices, and the oversimplification of complex issues in mainstream narratives.				
1.1. Childhood vaccination discourse	Reflections on how childhood vaccines are discussed in the public sphere.	Includes perceptions of dominant narratives, exclusion of alternative views, or framing strategies in political, scientific, or media discussions.	References to how society, media, or politics handle the topic of routine childhood vaccinations.	Private discussions or personal decisions without reference to public discourse.	"[...] in 2017, the technique of not giving space to those who had a different position was adopted. So I still remember the initiatives [...], they were simply not reported. Except perhaps for the occasional lifestyle article about how weird No-Vax families were."
1.2. Anti-COVID-19 vaccination discourse	Reflections on how COVID-19 vaccination was publicly debated or portrayed.	Includes perceptions of divisiveness, simplification, censorship, or intensity in public messaging during the pandemic.	Comments on the tone, content, or dynamics of public discourse around COVID-19 vaccines.	Statements focused solely on policy or individual experience without reference to broader debates.	"So in the end, the system of fear is always the one that rules, because they know that people who are gripped by fear will obey. [...] It's the same with COVID, but even there, the information is never clear."

2. Authorities' communication	This category explores participants' evaluations of how health and political authorities communicated about vaccination and pandemic-related issues. It includes perceptions of misinformation, inconsistency, manipulation, or lack of credibility, often contributing to broader mistrust.				
2.1. Misinformation or "fake news" by authorities	Accusations or perceptions that authorities spread false or misleading vaccine-related information.	Often framed as intentional deception, inconsistency, or failure to correct previous errors.	Statements about authorities spreading or not correcting misinformation.	Critiques of the tone or communication style of the media.	"Well, then in 2017 there was a comedy with Lorenzin saying that Gardaland [amusement park] was closing because there were cases of measles, she said that there had been deaths [from measles] in England and it wasn't true."
2.2. Communication by health authorities	Evaluations of how health authorities communicated about vaccines and public health.	Includes tone, clarity, frequency, credibility, and perceived intention of their communication.	Comments specifically about institutions like the Ministry of Health, public health bodies, or scientific committees.	Critiques of media or politicians.	"[The health authorities] showed us a graph that was accurate but presented in such a way as to suggest that people no longer died from measles because of the vaccine, when in fact this is not the case."
2.3. Communication by political authorities	Evaluations of how political actors communicated about vaccination or pandemic management.	Includes perceived instrumentalization, or contradictions between political and scientific voices.	Comments about government figures, parties, or elected officials.	Health authority or media-related critiques.	"The government [...] ran a frenzied information campaign, the likes of which we have never seen before. On all networks, in all newspapers, let's call them mainstream, the same exact idea was broadcast for two years."

3. Media's communication	This category addresses how traditional and alternative media outlets were perceived to frame, support, or distort vaccine-related issues. It includes critiques of fear-based messaging, misinformation, marginalization of dissent, and the role of the media in deepening societal divides.				
3.1. Support for vaccination mandates or policies	Perception that media promoted or reinforced pro-mandate positions.	Includes claims of bias, lack of pluralism, or framing vaccination as a moral duty.	Descriptions of media campaigns or reporting in favor of mandates or restrictions.	Neutral reporting or personal media use without mention of framing.	"The media were totally biased. Perhaps not totally, some pulled out, I hope it was because they wanted to provide free and open information."
3.2. Emphasizing fear of contagion	Perceptions that media communication fostered fear to drive vaccination or compliance.	Often involves critique of alarmist or emotionally charged messaging.	Comments about media using fear, anxiety, or emergency rhetoric.	Descriptions of public fear without attributing it to media influence.	"But what did they do? They showed frightening things on television: nursing homes covered in plastic sheeting, people dressed in protective gear, [...] military vehicles carrying away the dead. And even then you could see that it was disproportionate, just to scare people."
3.3. Lack of transparency	Accusations that media failed to provide complete, accurate, or balanced information.	Includes claims of omission, manipulation, or selective reporting.	Statements about incomplete coverage, silencing dissent, or hidden agendas.	Trust or distrust in media in general, without specific reference to transparency.	"So they gave out information that was either wrong or easily misinterpreted, creating instability and confusion, without any real basis in what the disease actually is [...]."

3.4. Misinformation or "fake news" by the media	Claims that media disseminated false or manipulated information.	May refer to factually incorrect content, biased narratives, or lack of correction.	Statements alleging factual inaccuracy or deception by mainstream media outlets.	Bias or tone complaints without mention of truth/falsity.	"Then, honestly, I never showed my parents any kind of news program or anything because [...] I mean, you watch the news if it's true, so it's useless."
3.5. Portrayals of dissent or critical voices	Reflections on how dissenting views were represented or marginalized by media.	Includes feelings of being caricatured, delegitimized, or silenced.	Comments about how vaccine-critical individuals or groups were covered by the press.	Absence of dissent coverage without comments on how they were portrayed.	"More or less, I think they tried to frame people by cornering them as individuals who are potentially uninformed, misinformed by unreliable sources, or extremists."
3.6. Marginalization of dissenting views	Perceptions that media systematically excluded or discredited alternative opinions.	Often described as censorship, propaganda, or narrowing of acceptable discourse.	Explicit complaints about being excluded from media narratives or platforms.	General social marginalization without reference to media.	"I mean, down there [Pesaro demonstration] there were fifty or sixty thousand of us, eh. Did you hear about it in the newspaper or on the news?"
3.7. Polarization of the debate	Perception that media amplified divisions and framed the vaccine debate in binary terms.	Includes frustration with oversimplification, labeling, or lack of nuance.	Statements about the media turning a complex issue into a two-sided conflict.	Perceptions of societal polarization without mentioning media's role.	"Unfortunately, we see it, it's become a bit of a media dynamic, hasn't it? [...] So there are the No-Vaxxers, the anti-Green Pass, the anti-this, the anti-that, and by doing so, [...] you're also contributing to increasing the level of social conflict and dampening the nuances."
3.8. Mainstream and non-mainstream media	Reflections on the distinction between traditional and alternative media sources.	May involve trust/distrust, media use, or comparative evaluations of their credibility and openness.	Mentions of different types of media and participants' media choices.	Media critiques that do not distinguish between source types.	"Honestly, we used to watch something on television, maybe Rai3 [...] which has now become unreliable... There is also this great opportunity now, which means that, within certain limits, you can also find alternative information."

Macro-Area IX – Political and Health Institutions

This table includes all codes and subcodes under Macro-Area IX, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Trust in institutions	This section captures how vaccine-hesitant parents perceive their relationship with political and health institutions, including trust, responsiveness, and fairness in policy-making. It also reflects how authority is distributed across different levels—local, national, and international—in regulating both routine vaccination and pandemic responses.				
1.1. Trust in the political institutions	Expressions of trust or distrust toward political institutions regarding vaccine-related decisions.	Includes references to government bodies, elected officials (e.g., the Ministry of Health), or political decision-making at large, particularly in relation to perceived motivations, transparency, and accountability.	Mentions of trust/distrust in politics, government actions, or political agendas behind vaccine policies.	References focused solely on health institutions or individual politicians as medical figures.	“Zero trust, absolutely zero. I wouldn't know who to vote for anymore because once they're there, I think they have to follow orders.”
1.2. Trust in the health institutions	Expressions of trust or distrust toward health institutions.	Refers to organizations like the WHO, local health authorities, or medical agencies and how they are perceived in managing public health and vaccination campaigns.	Comments on credibility, intentions, competence, or responsiveness of institutional health bodies.	Critiques of political actors.	“No. No, I don't trust it anymore. If I had little faith in conventional medicine before, now I have even less. Apart from the pandemic, my mistrust also arose after my experiences in hospitals with various doctors. I've heard all sorts of things...”

2. Parent–institution relationships	It explores how parents perceive their inclusion or exclusion in institutional processes related to vaccination. It highlights tensions between vaccine-hesitant parents and institutions, ranging from perceived neglect or marginalization to occasional opportunities for dialogue and institutional responsiveness.				
2.1. Perceived neglect or exclusion	Perception that institutions failed to listen to, acknowledge, or include parents who questioned vaccination.	Includes feelings of being ignored, misrepresented, excluded from decisions, or denied a voice in institutional processes.	Narratives of institutional distance, marginalization, or lack of consultation.	Interpersonal healthcare experiences or generalized distrust without mention of exclusion.	“So it’s clear that the institutions have closed their doors to families.”
2.2. Dialogues and forms of institutional responsiveness	Positive or open interactions with institutions that suggest dialogue, listening, or responsiveness.	May include local efforts, public forums, or interactions that recognize vaccine-hesitant parents’ concerns and foster engagement.	Experiences of constructive dialogue or policy adjustment based on parent input.	Perceived neglect, hostility, or non-institutional engagement (e.g., peer groups).	“Because, to be honest, I also found opportunities for discussion, even if unfortunately they did not result in stopping the approval of this law.”
3. Regulation of childhood vaccination mandates	This category focuses on how mandates for childhood vaccination are shaped and enforced by different levels of governance – local, national, and international. It captures parents’ views on the legitimacy, fairness, and implementation of these mandates across various institutional contexts.				

3.1. Local authorities	Comments on the role of local governments or health offices in enforcing or interpreting childhood vaccine mandates.	Includes regional differences, discretionary approaches, or locally specific experiences with mandate implementation.	References to municipalities, regions, local health offices, or schools' interactions with mandates.	National or international authorities.	"[...] they followed what was said in Rome, what was said at the Ministry of Health level, in short, all the lobbying and pressure behind the institutional circles."
3.2. National authorities	Perceptions of national-level decision-making regarding childhood vaccination mandates.	Includes legislative actions (e.g., Law 119/2017), national health policies, or public health campaigns led by central authorities.	Mentions of national laws, ministries, or the national government's vaccine strategies.	Local applications or global/international influences.	"They gradually arrived at the 2017 decision. Ultimately, these are all political and economic decisions that have nothing to do with healthcare. Unfortunately, that's how it is."
3.3. International authorities	Perceptions of international institutions' role in shaping vaccination policies or influencing national decisions.	Includes references to organizations such as the WHO or the EU, often linked to perceived global agendas or harmonization efforts.	Mentions of international health governance, coordination, or pressure.	Domestic authorities or abstract references to "outside pressure" with no institutional attribution.	"The WHO itself cannot be said to be an independent body. But from the top down, it cascades down everywhere."
4. Regulating the pandemic	This category examines how parents evaluate the pandemic-related decisions made by local, national, and international authorities. It includes perceptions of proportionality, trustworthiness, and institutional competence in managing COVID-19 policies and restrictions.				

4.1. National authorities during COVID-19	Perceptions of how national political or health institutions managed the COVID-19 pandemic.	Includes evaluations of lockdowns, mandates, messaging, and vaccination policy decisions during the health crisis.	Comments about state-level responses and decision-makers.	Local variations or international organizations' role.	"There were things during this period [...] but also simple things, without looking at the interests of multinationals or governments or this or that minister. They did things that were absurd. Suddenly, you could go to a bar: you didn't need a mask when standing, but you did when sitting. Three months later, it was the other way around."
4.2. Local authorities during COVID-19	Perceptions of how local institutions managed the pandemic.	Includes municipal, regional, or school-level adaptations, enforcement, or communication.	Mentions of local responsiveness, enforcement, or conflict during COVID-19.	National-level pandemic policies.	"In my opinion, Covid has really exposed the lack of value of those who govern us at the local and national levels. [...] It seemed more like a competition to see who could come up with the most absurd laws."
4.3. International authorities during COVID-19	Evaluations of the role played by international actors during the pandemic.	Includes references to WHO guidelines, EU decisions, or broader geopolitical influences on pandemic management.	Any comment referencing the global governance of the pandemic.	Local or national regulation not linked to international bodies.	"And 90% of the EMA is funded by the companies that make the drugs. How can the EMA say this drug is no good? They're the ones paying, and it works for them."

Macro-Area X – Mobilizing

This table includes all codes and subcodes under Macro-Area X, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Engagement with other associations	Participation in or interaction with other associations (different from Vaccinare Informati) not necessarily involving health-related stances.	Includes collaboration, shared goals, joint events, or support across organized groups, even beyond one's own primary association.	Mentions of alliances, cooperation, or contact with other collectives.	Participation in Vaccinare Informati's activities.	"[...] during the pandemic, I took part in all the Saturday demonstrations [organized by another association, against distance learning and the Green Pass], I started participating in all of them, etc., and then I also went on strike at work."
2. Advocate the cause	Individual or collective efforts to raise awareness or advocate for vaccine-related positions.	Includes communication campaigns, public statements, social media engagement, or talking to others about perceived vaccine risks or rights.	Descriptions of actions intended to influence others or public discourse.	Personal opinion expression not aimed at broader advocacy.	"If you want to try to change something [...], try to achieve a result, [...] it's not that you have to give up because we've found something else and that's fine."
3. Association	This category examines the perceived role of Vaccinare Informati, the interviewees' participation in the association's activities, and the reasons that lead them to support it becoming a member.				
3.1. Losing members	Descriptions of Vaccinare Informati's members withdrawing or distancing themselves.	Includes reasons for leaving, internal tensions, or the impact of changing political or social climates on membership.	Statements about dwindling participation or fragmentation within an association.	General reflections on associations without mention of loss or turnover.	"Why do people divide themselves into many small groups and fail to form a single group that involves everyone, with unity of thought and action?"

3.2. Becoming a member	Descriptions of joining the Vaccinare Informati association.	Includes motivations, processes, and expectations when affiliating with the association.	Narratives of when or why a participant became involved in an association.	Informal group involvement or non-associative support.	"And speaking of these things, in my opinion, it was [...] the year when Lorenzin and others started talking about it. There was Vaccinare Informati, I heard good things about it, so I said, okay, I'll go and hear what they have to say. And from there, I became a member and I'm still a member."
3.3. Association's activities	Descriptions of specific actions or initiatives carried out by Vaccinare Informati.	Includes organizing events, providing legal support, hosting meetings, or producing informational materials.	Statements about what Vaccinare Informati does or has done.	Descriptions focused only on structure or membership without reference to actions.	"We have been to the Province more than once [...], and we have been trying to talk to Ruscitti and Segnana [local policymakers] about the fines for months now."
3.4. Association's role	Perceptions of what Vaccinare Informati represents or accomplishes within the broader vaccine-related landscape.	Includes reflections on the association's significance, legitimacy, mission, or social impact.	Evaluative or reflective statements about Vaccinare Informati's purpose or symbolic role.	Factual descriptions of activities or membership.	"And so this aspect, the issue of the fine, is a bit annoying. Fortunately, we have the association behind us, because in any case there has to be someone technical, a lawyer, who studies the process and tells us what to do."
4. Mutual support	Informal support systems between individuals or families sharing vaccine-critical positions.	Includes emotional, logistical, or informational support within a community of like-minded individuals.	Narratives of solidarity, caregiving, or practical help among peers, whether Vaccinare Informati's members or not.	Support provided by professionals.	"[...] which, despite the misfortune, turned out well in the end. You always find someone who thinks like you, so you support each other... and that's how it is."

5. Networking	The perceived importance of establishing and maintaining connections between individuals, groups, or associations.	May refer to efforts to broaden collective influence, share resources, or exchange strategies to build social and political connections, both formally (coalitions, collaborations) and informally (friendship, mutual learning), across geographic and ideological spaces.	Statements about building alliances or maintaining ties with other peers or actors in the field.	Individual socializing.	“So we got through this period thanks to a network that helped us a lot. Then, of course, we surrounded ourselves with like-minded people, and so we came out of it pretty much unscathed [...]”

Macro-Area XI – Educational Services

This table includes all codes and subcodes under Macro-Area XI, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Pre-school services and staff	This category captures parents' experiences and perceptions of pre-school institutions and personnel, especially in relation to vaccination and pandemic-related rules. It reflects how early childhood settings mediate institutional policies, communicate with families, and influence everyday decision-making.				
1.1. Experiences with pre-school services	Personal accounts of interactions with pre-school institutions and staff.	Includes satisfaction or dissatisfaction with the quality of care, trust in staff, and how pre-schools handle health-related matters.	Specific experiences at daycare centers, kindergartens, or similar early-childhood institutions.	Experiences in primary or secondary school settings.	"But I found the teachers to be the coldest. [...] It's not so much about finding a solution, because obviously what can the teacher do? [...] But even on an empathetic level... even just expressing sympathy for these children [...]."
1.2. Pre-school-level management of vaccination rules	Descriptions of how pre-schools implement and enforce vaccination-related mandates.	Includes communication with families, enforcement of access restrictions, and flexibility or rigidity in applying legal norms.	Concrete examples of how vaccine mandates are handled by pre-school institutions.	Policy-level reflections unrelated to lived experience or cases outside pre-school settings.	"No, we did enroll him/her, but they basically kicked him/her out. He/She did her first year of preschool and then they wouldn't take him/her back because he/she wasn't up to date with the vaccinations."

1.3. Pre-school services' implementation of pandemic regulations	Experiences related to how pre-schools implemented COVID-19-related rules and precautions.	Includes mask mandates, distancing rules, closures, or staff attitudes toward regulations during the pandemic.	Narratives about how pre-schools responded to government or health authority guidelines during COVID-19.	Pandemic experiences involving older children or primary/secondary schools.	"My third child won't be going to nursery here either. Why? Because these teachers wearing masks don't... I don't know how other parents feel about it, but for me it's really harmful for children of that age to spend six or seven hours a day with someone they can't see properly."
2. Schools and teachers	This category focuses on interactions with primary and secondary schools, including teachers' roles in managing health-related measures. It includes evaluations of how schools implement vaccination rules, handle pandemic protocols, and support or challenge parental positions.				
2.1. Experiences with primary/secondary schools	Personal accounts of interactions with school staff, policies, or environments beyond pre-school level.	Includes trust in teachers, supportiveness, conflict, or any notable incidents.	Experiences involving elementary, middle, or high schools.	Early education institutions or general attitudes without experience-based content.	"Now that my child is doing well and the teachers are good, in the sense that they are tolerant and moderate, I will try to keep him/her in public school. Then when it's time for middle school, we'll decide."

2.2. School-level management of vaccination rules	How primary/secondary schools interpret or apply childhood vaccination mandates.	Includes issues like documentation requirements, school access restrictions, or informal handling of rules.	Practical examples of rule enforcement or communication about vaccination at the school level.	Policy opinions without reference to specific experiences.	"I don't even know if all the teachers knew who was vaccinated and who wasn't, but I must say that fortunately there was no such widespread breach of privacy. So I haven't had any reports of inappropriate situations."
2.3. COVID-19 experiences with primary/secondary schools	Personal experiences of how schools responded to the COVID-19 pandemic.	Includes children's experiences during the pandemic (e.g., distancing rules, hygiene protocols, closures, staff interactions) or their adaptation to changing circumstances.	First-hand experiences in managing the pandemic within school environments.	Experiences from pre-schools or non-educational settings.	"However, I must say that even though it was a public school, and therefore the teachers were rightly required to comply with certain regulations, they handled it in a gentle manner."
2.4. Distance learning and digital schooling	Reflections on remote schooling practices introduced during the pandemic.	Includes accessibility, impact on children and families, digital infrastructure, or pedagogical effectiveness.	Comments on technological, social, or educational aspects of distance learning.	General COVID-19 schooling experiences not specific to online or remote education.	"As for distance learning, let's not even go there. That's another tragedy."
2.5. Schools' implementation of pandemic regulations	Evaluations of how schools applied governmental or health authority guidelines during the pandemic.	Includes compliance, enforcement practices, communication with parents, and perceived fairness or rigidity.	Stories about how schools handled regulations like masking, quarantines, or sanitation measures.	Pre-school-focused experiences or opinions about state policy outside school implementation.	"The big problem is that when she started first grade, COVID was around. [...] I probably had a harder time with it because of the mask issue. [...] Because at first, for two or three months, they only had to wear them in the hallway, then they could take them off in class. Then in November, they switched to FFP2 masks."

Macro-Area XII – Lifestyles

This table includes all codes and subcodes under Macro-Area XII, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Educational choices	This category captures how parents make schooling decisions that reflect their values, especially regarding autonomy, institutional trust, and alignment with their views on health and vaccination. It includes both the use of public schools and various alternative educational paths.				
1.1. Public pre-school services / school	Use of public educational institutions despite concerns or hesitancy or advantages/disadvantages of public education.	Includes decisions to enroll children in state-run schools, often weighed against personal beliefs or practical constraints.	Statements about attending or choosing public education services.	Critique of alternatives educational choices.	"Well, I think public schools are important to accommodate everyone. But unfortunately, in my opinion, the public sector is poorly managed."
1.2. Alternative options	Parents describe seeking or creating alternatives to mainstream education, often as a response to vaccination mandates or to pursue pedagogical models they perceive as more respectful, natural, or community-based.	These options include homeschooling, forest schools, educational farms, and informal parent-led networks.			

1.2.1. The need for alternative options	Need to seek out non-mainstream educational paths, also due to the exclusion of children between 0 and 6 years of age (Law 119/2017)	Includes motivations such as avoiding mandates, pursuing different values, or escaping social pressure.	Reflections on why public options are insufficient or incompatible.	Descriptions of specific alternatives without mention of the motivating need.	"Many alternative realities have emerged because those who are excluded, those who experience injustice, need to find allies, dialogue, and other people to help them."
1.2.2. Parents' associations	Participation in, creation of, or reliance on organized groups advocating for or facilitating alternative education options.	Includes co-organized educational initiatives or alternative school projects.	Mentions of collective parental efforts to create schooling options.	Informal groups of parents.	"When it was time for our second child to go to kindergarten, things had become a little more organized. We now send her/him [...] to the [name] association, which is a cultural association that offers services for children, where vaccinations are not required..."
1.2.3. Informal groups of parents	Less structured networks formed to manage educational or care needs.	May involve shared homeschooling responsibilities, mutual aid, or informal learning environments.	Descriptions of peer-organized, non-institutional education support.	Formal or legally recognized associations or schools.	"They kept them at home [the excluded children]. The mothers helped each other out, some looked after them in the morning, others in the afternoon, and those who worked took turns or left them with their grandparents [...]"
1.2.4. Kindergarten / school in the woods	Use of outdoor or nature-based education settings.	Nature-based educational options and approaches that integrate outdoor learning experiences that do not require vaccination. It can also reflect ecological or alternative pedagogical values.	Mentions of schools in the woods or similar initiatives.	Mainstream outdoor activities within standard schools.	"Look, in the end we had a peaceful time. Because where she went, she was surrounded by nature, she had a lot of fun, she learned a lot."

1.2.5. Home schooling or "scuola parentale"	Full or partial education organized by parents at home.	Often reflects a desire for autonomy, value alignment, or rejection of institutional curricula.	Descriptions of home-based educational practices or legal homeschooling because of disagreement with the measures adopted to contain COVID-19.	Temporary home-based learning during emergencies (e.g., COVID lockdown).	"My children are being homeschooled. We have now formed a group with other parents, so there are eight children being homeschooled. They meet with the teacher we found, and everything is much more peaceful."
1.2.6. Private kindergarten or schools	Enrollment in non-public institutions offering more flexibility or perceived alignment with values.	May reflect a desire to avoid mandates or embrace more personalized education.	Mentions of private school choices and motivations.	Public school experiences or general education reflections.	"This opportunity [to enroll our child in private school] arose because he/she will be coming here for high school. And we decided that at least for these two years, he should be able to enjoy some social life and friends."
1.2.7. Educational farms	Use of farms as alternative or supplementary educational settings.	Includes hands-on, nature-based learning connected to sustainable or holistic values. The educational farms often represent an alternative to public pre-school services.	Descriptions of children's participation in farm-based education.	Occasional visits or recreational activities without educational purpose.	"Even the children are enthusiastic because it's a different environment, it's more outdoors, there are more activities involving nature, vegetable gardens, etc."
1.3. Economic costs	Financial implications of educational choices.	Includes discussions of sacrifices, tuition, or cost-benefit decisions related to private or alternative education.	Explicit mention of economic strain or calculations.	General reflections on education without financial content.	"Yes, he/she then went to normal schools, so to speak, yes. [...] Well, if it had been possible, we would have preferred to make other choices, but financially speaking... We are already supporting the little one who was also entering an alternative kindergarten..."

1.4. Management and time-related costs	Time and organizational demands of alternative or non-mainstream choices.	Includes parents' efforts to coordinate homeschooling, co-ops, or flexible routines.	Mentions of emotional or logistical burdens.	Purely financial considerations.	"In short, it was still a considerable commitment. [...] It must be said, not only from the child's point of view but also from the family's. Because it's one thing to have a nursery near your home, a canteen, a bus, and so on. It's another thing to manage it all [...], in short, it's quite a commitment."
2. Living choices	Choices about where and how to live, based on lifestyle or value considerations.	May involve rural relocation, community living, or efforts to reduce exposure to mainstream norms.	Comments on intentional residential or environmental choices.	Comments about housing or location without value-based reasoning.	"Well, since we already lived in a small village, my husband was very used to the vegetable garden and his things, so anyway."
3. Food-related choices and attitudes	Dietary and nutritional decisions reflecting lifestyle and health beliefs.	Includes organic food, avoiding processed items, or integrating food choices into broader worldviews.	Statements about food practices connected to autonomy, purity, or child health.	Broader food-related considerations without a link to health.	"We started buying all our vegetables from a local producer, who gets them from other farms and acts as a sort of coordinator, but everything is organic and as locally sourced as possible."
4. Work choices	Employment decisions influenced by values around parenting, autonomy, flexibility, or resistance to workplace mandates.	Includes career changes to allow more parenting, flexible jobs, or aligning work with ethical beliefs.	Descriptions of work-life choices made to support autonomy or education.	General job-related descriptions without references to values, lifestyle, etc.	"At the time, my wife was still at home, in the sense that we made a choice when our first child arrived: to make sure she could stay at home, partly because her work situation was not very conducive to returning [...], and so we preferred to devote ourselves to the family and make sure she could have a bit more peace of mind."

5. Medical care choices	This category reflects families' approaches to healthcare, often combining or replacing conventional medicine with complementary and alternative methods. It highlights trust in holistic or individualized care and, at times, includes the use of homeopathic vaccines in place of standard immunization.				
5.1. CAM	Use of non-conventional medical practices for prevention or care.	Includes homeopathy, naturopathy, acupuncture, and other alternative systems.	Statements about relying on or valuing CAM approaches.	Only mentioning the use of conventional medicine.	"Bear in mind that we have never even given our children paracetamol. [...] So I have a very different idea of what constitutes treatment."
5.2. Conventional medicine	Use or partial use of mainstream medical services and interventions.	May reflect pragmatic decisions, selective trust, or coexistence with alternative approaches.	Descriptions of positive or mixed engagement with the public health system.	Only talking about the use of CAM.	"We use natural medicine to help us, basically. Then, I don't know, last year the fever wouldn't go away, so one of my children took antibiotics. It's not that we're against them... But they're not the first thing we give either."
5.3. Homeopathic vaccines	Use of homeopathic preparations as an alternative or a supplement to conventional vaccines.	Reflects attempts to reconcile preventive intent with skepticism toward standard vaccination.	Mentions of choosing or promoting homeopathic vaccines.	General CAM usage without reference to vaccine substitutes or supplements.	"That's right, we did the mandatory ones. And we were unsure whether to do them or not. We also did homeopathic prophylaxis both before and after, and in fact they didn't caused any particular problems."

Macro-Area XIII – Science and Experts

This table includes all codes and subcodes under Macro-Area XIII, with their definition, description, inclusion and exclusion criteria, and examples of coding.

Code Name	Definition	Description	Inclusion Criteria	Exclusion Criteria	Example from Data
1. Expert–lay people boundaries	This category explores the perceived divide between institutional scientific expertise and lay or experiential knowledge. It captures both the empowerment of personal experience as a legitimate epistemic resource and the frustration with the marginalization of non-expert voices.				
1.1. Empowerment of personal experience or knowledge	Elevation of personal experience, intuition, or lay knowledge as valid or superior to expert claims.	Participants describe relying on firsthand observations, critical research, or “common sense” over institutional expertise.	Statements valuing non-expert knowledge as legitimate in health or vaccine-related decisions.	General distrust in experts without emphasis on lay knowledge.	“And then, of course, my attention goes to supporting my thesis, but precisely because I experience it firsthand. These aren't just things I say; I can show you the pediatric booklet and point out the difference between my two children.”

1.2. Dismissal of lay knowledge or concerns	Perceived marginalization or invalidation of concerns raised by non-experts.	Includes frustration over being patronized, ignored, or labeled irrational by health or scientific authorities.	Narratives of exclusion from dialogue or knowledge production.	Critique of experts without mention of the participant's own knowledge or experience.	"[...] science should listen a little more to those who have experience, in the sense that you can't tell a mother that there's nothing wrong, that it's not due to the vaccine, when the day before my child was like this, and two days later, or three days later, or one day later, my child no longer looks at me, no longer touches me."
2. Scientific method	This code focuses on how participants assess the reliability and transparency of scientific processes. It includes both critiques of flawed methodologies and instances where science is acknowledged as rigorous or trustworthy.				
2.1. Failure of method	Critiques of how scientific processes have failed to ensure safety, transparency, or reliability.	Includes perceived methodological flaws, bias in research, or concerns about manipulated or selective data.	Specific criticisms of how science has been conducted or misused.	General distrust in science or institutions without reference to method.	"When the news came that there would be no autopsies, alarm bells started ringing for me. How can there be no autopsies? That's the first thing doctors do to understand how to treat patients and what caused their deaths... No autopsies, just burning the bodies straight away? No, I said, that's not right."

2.2. Scientifically solid	Recognition of valid or trustworthy scientific practices or evidence.	Participants acknowledge examples of rigorous, transparent, or independent research that earns their trust.	Positive evaluations of science based on perceived integrity or methodology.	Praise of individual experts without mention of scientific process.	"[...] science is constantly evolving. It proceeds by hypothesis, deduction, and then experiments that may or may not be successful [...]."
3. Scientific experts and their institutions	Participants reflect on the credibility and independence of scientists and the institutions they represent. This includes concerns about external pressures, conflicts of interest, and the perceived failure of experts to act or speak freely.				
3.1. Perceived constraints or pressures	Beliefs that scientists are limited in what they can say or do due to political, economic, or institutional pressures. Includes claims that experts avoid criticizing vaccine policies or ignore alternatives out of fear or self-interest.				
3.1.1. Not contesting vaccination mandates	Scientists are perceived as avoiding public criticism of vaccination mandates.	This code captures narratives where participants believe scientists may disagree with mandates but choose not to speak out due to fear, institutional loyalty, or reputational risk.	Mentions of scientists not expressing dissent, or suggestions that they are silenced or self-censor regarding mandates.	Critiques of mandates not connected to scientists' perceived silence or complicity.	"So, a kind of respectability, which is all the more serious the greater the role that a scientist plays in the academic or medical world, or in the medical-scientific world, in short. So yes, total alignment and not addressing the issue, in short."

3.1.2. Not considering alternatives	Scientists are seen as unwilling to explore or validate alternatives – also within conventional medicine – to mainstream vaccination practices.	Participants express frustration with the scientific community's lack of openness toward cures, alternative treatments, personalized medicine, or holistic approaches.	Statements about alternative health options being dismissed or unresearched by scientists.	General critiques of alternatives without mentioning scientists' role or attitudes.	"If general practitioners were allowed to treat people [with COVID] with existing drugs instead of applying those absurd protocols, we wouldn't have had any of this in the first place."
3.1.3. Under pressure	Scientists are believed to be constrained by political, economic, or institutional forces in what they can research or publicly say.	This code captures the idea that scientific actors are not fully independent, often working under implicit or explicit pressure that shapes their behavior or limits dissent.	Mentions of scientists facing censorship, losing jobs, or conforming due to funding, authority, or reputational concerns.	General expressions of mistrust in science without linking it to perceived external pressure.	"No, there are more sensitive general practitioners who try to challenge it or do so, but they are afraid. They are afraid because they are excluded, because they lose their jobs, because they are suspended, silenced, and so on."
3.2. Trust and credibility issues	Doubts about the honesty, neutrality, or integrity of scientists or institutions. Includes concerns about bias, vested interests, media performance, or incompetence.				
3.2.1. Conflict of interests	Concerns that scientists' judgment is compromised by financial or institutional relationships, particularly with the pharmaceutical industry.	Participants question the objectivity of experts due to funding sources, affiliations, or undisclosed ties that could bias research or recommendations.	Allegations or implications of scientists being financially influenced, especially through industry ties.	Generic mistrust without reference to conflicts of interest.	"Returning to the subject of science, science is made up of human beings, who are fallible and corruptible. And unfortunately, here too [...] attention is shifting more towards this than towards people's skills [...]."

3.2.2. Media-facing scientists	Reactions to scientists who frequently appear in media or public discourse.	This code captures both admiration and criticism of high-profile scientific figures, often related to their communication style, consistency, or perceived alignment with political narratives.	Commentary on named or well-known scientists, especially regarding trustworthiness, performance, or visibility.	Mentions of experts without a media or public-facing role.	"And those who spoke on TV all had the same things to say, and those who didn't say the same things weren't invited on TV."
3.2.3. Hiding or altering information	Belief that scientists or institutions conceal, manipulate, or selectively present data.	Participants express concern that scientific information is deliberately misrepresented or suppressed, often for political or economic gain.	Specific claims about omission, distortion, or withholding of scientific evidence.	Accusations directed only at media or government actors, without linking them to scientists.	"In my opinion, the only one was a study in Puglia, if I remember correctly, on active pharmacovigilance, which didn't last long. It produced results that we already expected, and then the whole thing was buried and that was that."
3.2.4. Dubious advice	Perception that experts have given inconsistent, untrustworthy, or confusing public health guidance.	This code includes frustration with shifting recommendations or advice that appears to lack scientific grounding. It is often related to the COVID-19 situation.	Critique of advice from scientists seen as misleading or contradictory (e.g., regarding the protocols to cure the people infected by SARS-CoV-2).	Criticism focused solely on politicians or the media.	"[...] masks yes, masks no, they're good, they're bad, ah, one dose of the vaccine is enough, no, now you need two and then three, now you need a booster, the coverage lasts a year, lasts six months, lasts three months."
3.2.5. Unprepared	View that scientists lacked sufficient knowledge or readiness during the pandemic or vaccine rollout.	Participants comment on perceived gaps in expertise, slow responses, or failure to anticipate and address public health challenges or parents' concerns effectively.	Statements that characterize scientific actors or institutions as ill-equipped or unqualified in key moments.	Critiques of government response or logistics not directed at scientific expertise.	"I have all my papers here, I printed them out because I discussed them with doctors and other medical professionals who were unable to provide me with any information whatsoever. In fact, I often had to give them the information myself."

4. Science and scientific knowledge	This category addresses broader views on the role, authority, and trustworthiness of science as a system of knowledge. It includes critiques of scientism and dogmatism, as well as reflections on the need for pluralism, transparency, and independence in scientific discourse.				
4.1. Critique of science's role	Questioning the authority, values, or scope of science in society. Highlights perceived overreach, inflexibility, or dogmatism in scientific discourse.				
4.1.1. Scientific knowledge changes	Recognition that scientific knowledge evolves over time.	Participants describe science as a process subject to revision, which can be seen as either a strength (flexibility) or a source of uncertainty.	References to scientific conclusions being updated, new data overturning previous consensus.	Expressions of distrust unrelated to the evolving nature of science.	"But science must be based on doubt. [...] in Italy there was radioactive water [...], and the advertisements said, 'We have the most radioactive water ever. And it's good for you [...]' . Maybe that's true, maybe when you first drink it, it's great for you, you feel like a superhero, you're on top of the world. Too bad that twenty years later you get cancer."

4.1.2. Dogmatism	Science is viewed as rigid or closed to alternative perspectives.	This code includes perceptions that science has become doctrinaire, suppressing dissent or resisting paradigm shifts.	Claims that science or scientists behave inflexibly or dogmatically.	Critiques of scientific errors without suggesting dogmatism.	"If I tell you, 'Look, I got the vaccine and this happened to me,' you say, 'No, no.' But what do you mean, no?! Look first. This is not scientific behavior; you are dogmatic."
4.1.3. Scientism	The belief that science is treated as the only valid way to produce knowledge.	Participants criticize an over-reliance on scientific reasoning to the exclusion of other epistemologies, such as experiential or traditional knowledge.	References to science being inappropriately elevated above other forms of knowing.	General critiques of science without mention of epistemological dominance.	"Then there is scientific research, but even there, we live in a scientific society: but why only science?"
4.1.4. Silencing / not considering other voices	The perception that alternative views or critical voices are ignored or excluded by mainstream science.	Participants express concern that differing opinions, especially from minority experts, are actively suppressed.	Statements about censorship or exclusion of dissenting scientific or experiential voices (e.g., a doctor being disbarred for questioning vaccine requirements).	Discussion of ignored public concerns not specifically about scientific discourse.	"I mean, I know a doctor from [Italian city] called Dr. [name], I know him personally. And he received a gold medal after fifty years of honest service, and then the following year he said something that wasn't right, 'Be careful,' and so they struck him off the register."
4.2. Trust and epistemic authority	Reflections on whether science deserves to be trusted as a knowledge source. Captures both doubts and support for science as an authority in public decision-making.				

4.2.1. Competing data interpretation	Questioning of how scientific data are analyzed and communicated.	This code reflects doubts about biases in interpreting findings or framing results to support predetermined conclusions.	Comments on data being “massaged,” selectively presented, or misinterpreted.	Criticism of data collection methods without reference to interpretation.	“But of course we had discussions with doctors from the local health authority, but obviously they tended to always say ‘No, well, no, it’s not relevant’ or at least provide studies... because unfortunately in medical literature there is one study that says one thing and another that says the opposite [...]”
4.2.2. Funded by the public sector	Emphasis on the importance of public funding for trustworthy science.	Participants argue that science should be free from corporate influence and supported by public institutions to ensure objectivity and public interest.	Appeals for or praise of publicly funded research.	Criticism of private funding without valuing public sector alternatives.	“Oh my goodness. I mean, it would be better if the government, like it used to, provided medicine and so on.”
4.2.3. Independent science	Ideal of science conducted autonomously, without external pressures.	This code captures aspirations for science to be guided by curiosity, ethics, and societal good, not by vested interests.	Mentions of independence as a desired or respected quality in scientific practice.	Critiques of dependence without explicit reference to the concept of scientific independence.	“No, but we have always found that doctors who conduct their own research are at least critical or have different approaches, whereas those who simply follow the diktat have an approach based on what is written in medical textbooks.”

4.2.4. Real science	Appeals to an authentic, rigorous, or morally sound version of science.	Participants distinguish between "real" science and what they perceive as corrupted, biased, or politicized science.	Use of terms like "true science," "real research"	General mistrust without positive references to a better or purer form of science.	"But even there, in truth, there is serious science behind it that conducts studies [...]. That is, they don't tell you about it on TV, they don't even mention it. And so in that science there is real science that is done by doctors, but also pro-vaccine doctors [...]. But it seems that no one looks at this part."
4.2.5. Mainstream science	Reference to dominant or institutionally endorsed scientific narratives.	This code reflects critiques of widely accepted scientific positions, often contrasted with marginalized or alternative views.	References to consensus science, dominant paradigms, or institutional authority.	General references to "science" without comparison to alternative perspectives.	"But high-level science, if you can call it science, because they are bureaucrats rather than scientists, come on, you can't call them scientists."
4.2.6. Trust in science	Expressions of confidence or doubt in science as a system.	Participants reflect on whether they consider science reliable and worthy of guiding health decisions, either affirmatively or skeptically.	Explicit mentions of trust or distrust in "science" as a concept or system.	Trust issues targeting specific scientists or institutions without reference to the broader idea of science.	"I don't have enough confidence in medical science to agree to be inoculated with a product that has gone through an emergency procedure."
4.6.7. Plurality of voices	Calls for inclusivity and diversity within scientific discourse.	Participants express the need for science to engage with a wider range of perspectives, disciplines, or knowledge systems.	Statements advocating for interdisciplinary research or inclusion of non-mainstream experts.	Generic calls for inclusivity unrelated to science or expertise.	"Why, excuse me, are other doctors not scientists? The ones who tell you, 'Look, we've noticed blood clotting [...], [...].' I mean, no, they're not part of the scientific community."

4.6.8. Benevolence / malevolence	Science is seen as acting in the public's best interest or against it.	This code explores perceptions of scientists' and institutions' intentions, ranging from altruism to malice or self-interest.	Attributions of moral character to scientific actors or systems.	Critiques of outcomes or processes without speculation about intentions.	"I mean, thank goodness science exists. [...] Yes, thankfully it exists for things that are useful, in short. But using it to create, for example, the COVID vaccine to harm us, then that's not okay."
4.6.9. Medicine vs. other sciences	Contrasts drawn between medicine and other scientific fields.	Participants may argue that medical science is not "a real science", cannot be generalized, or is more politicized than other disciplines.	Comparisons of credibility or methodological soundness between medicine and fields like physics, biology, or chemistry.	Criticism of healthcare personnel.	"Medicine is not an exact science because you practice it on human bodies, and every human body is unique [...]."
4.6.10. Scientific community	Perceptions of the collective body of scientists as a social group.	This code reflects how participants view the ethics, communication practices, and internal dynamics of the broader scientific community.	Comments about how scientists behave collectively, including culture, ethics, and openness.	Focused critiques of individual scientists or single institutions.	"It's hard to say because it's difficult to understand who the scientific community is. I mean, there are a lot of independent scholars, but they don't get published, they don't get publicity [...]."

Appendix D – Intracoder Stability and Descriptive Statistics

Intracoder stability

The Cohen's Kappa coefficient of 0.92 indicates a strong stability in the application of codes (see Appendix C).

		Coder 1		
		1	0	
Coder 2	1	a = 17968	b = 382	18350
	0	c = 1210	0	1210
		19178	382	19560

$$P(\text{observed}) = P_o = a / (a + b + c) = 0.92$$

$$P(\text{chance}) = P_c = 1 / \text{Number of codes} = 1 / 203 = 0.00$$

$$\text{Kappa} = (P_o - P_c) / (1 - P_c) = 0.92$$

If there is an unequal number of codes per segment or if only one code is to be evaluated:

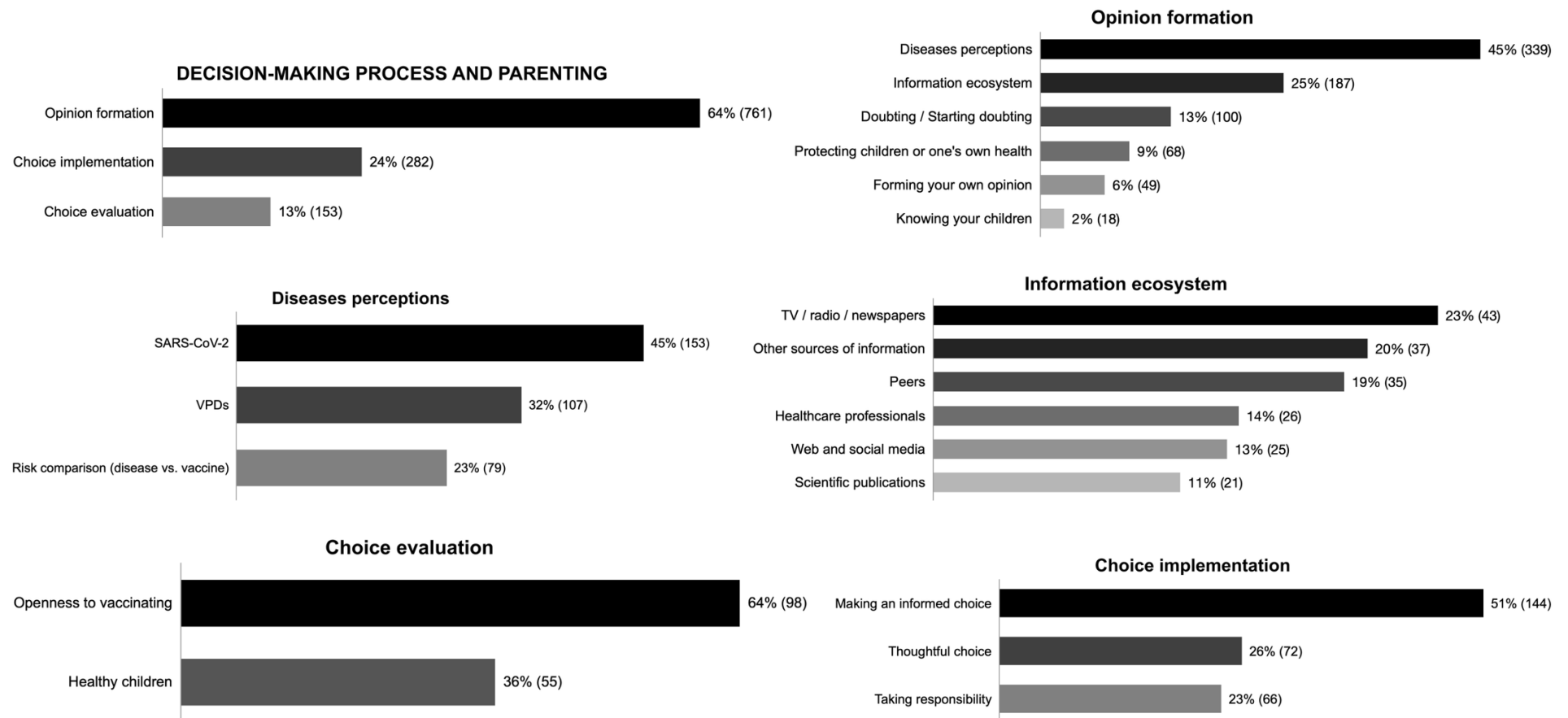
$$P(\text{chance}) = P_c = \text{Number of codes} / (\text{Number of codes} + 1)^2 = 0.00$$

$$\text{Kappa} = (P_o - P_c) / (1 - P_c) = 0.92$$

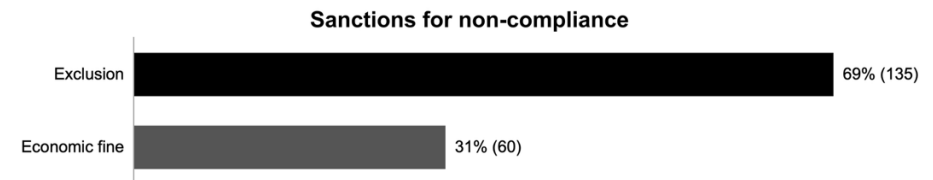
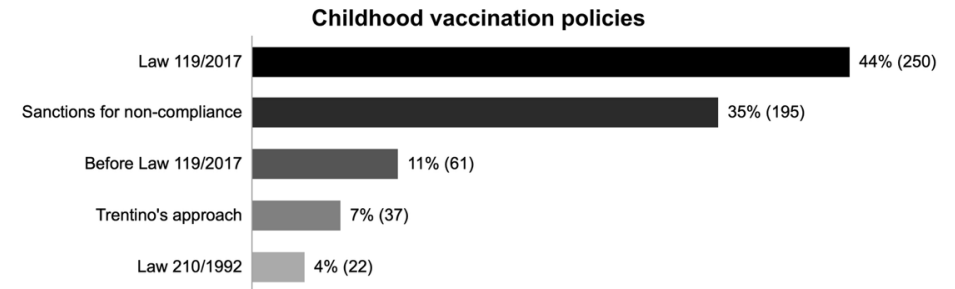
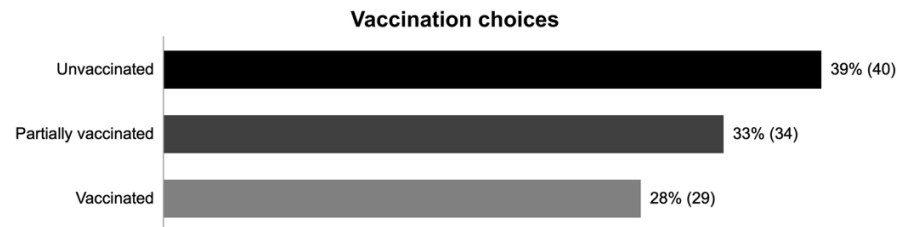
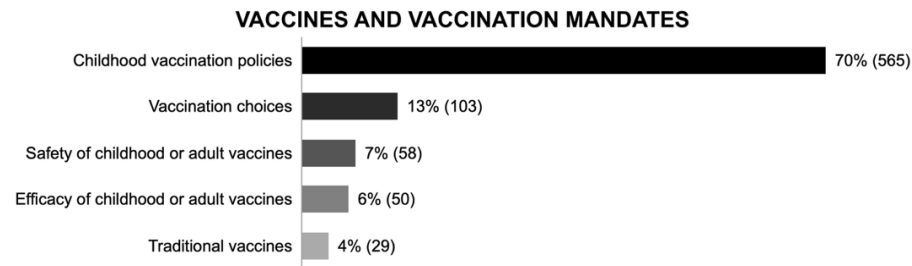
Descriptive statistics

The final code system (Appendix C) comprised 13 top-level macro-areas. Across the 46 interviews, a total of 10,194 coded segments were assigned. Below is a full overview of the distribution of the coded segments for each macro-area.

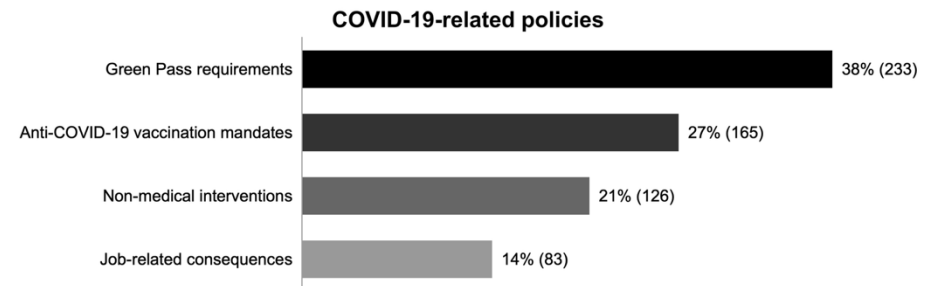
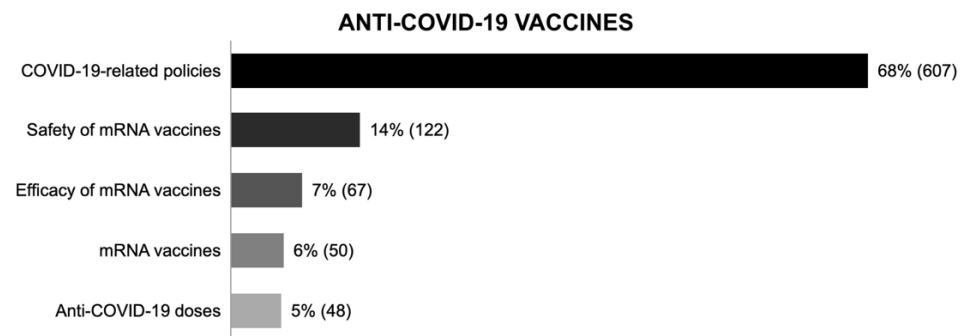
Macro-Area I – Decision-Making Process and Parenting

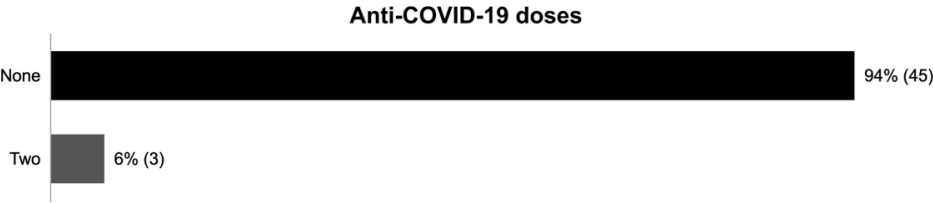


Macro-Area II – Vaccines and Vaccination Mandates

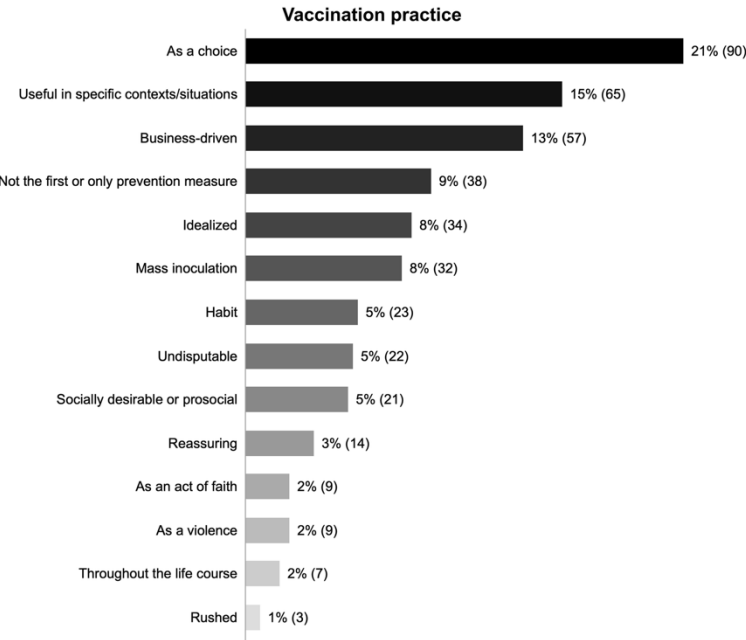
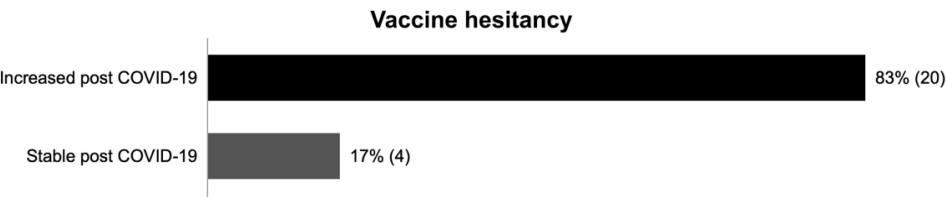
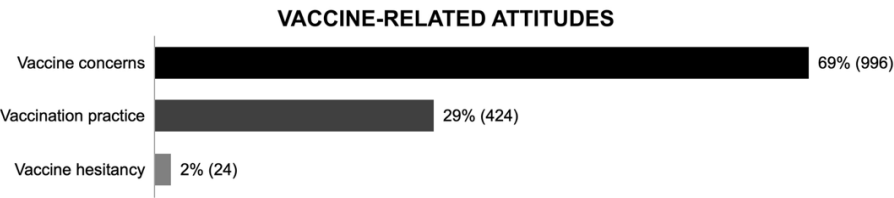


Macro-Area III – Anti-COVID-19 Vaccines

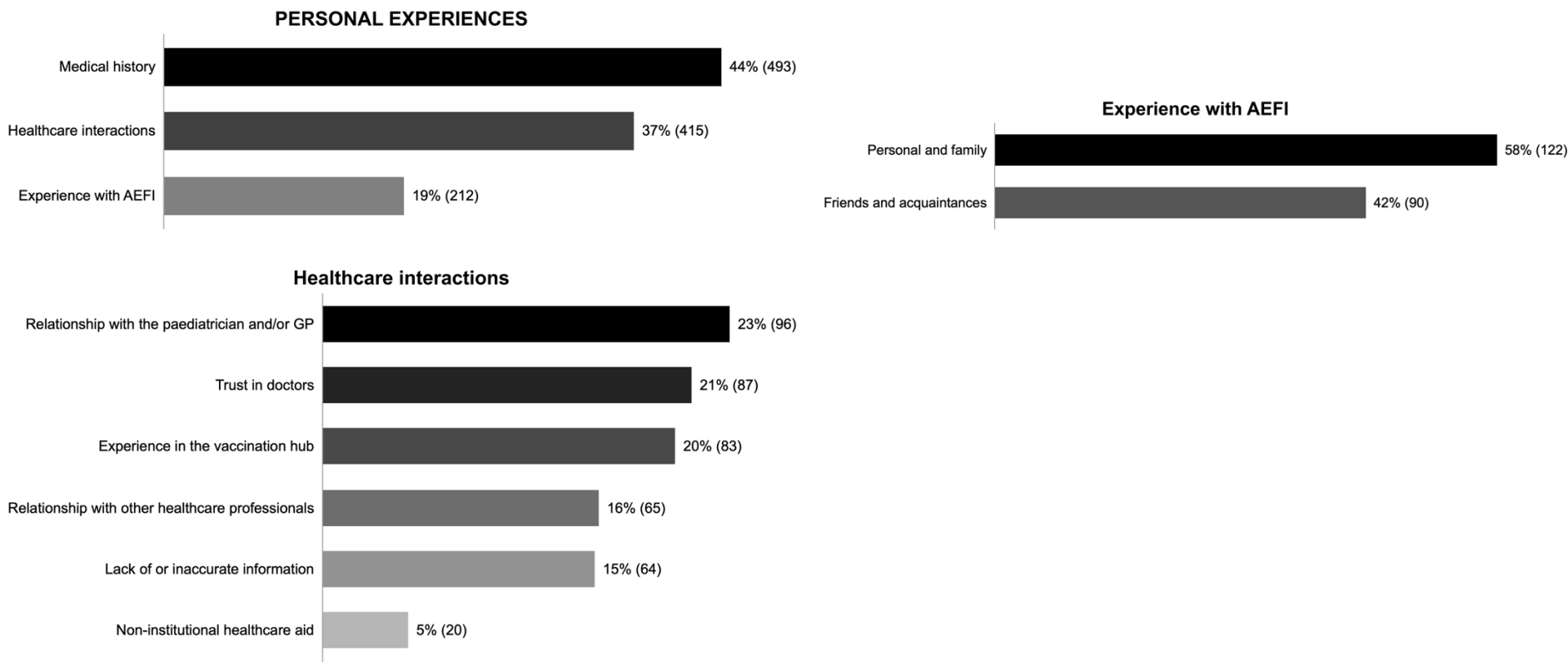




Macro-Area IV – Vaccine-Related Attitudes

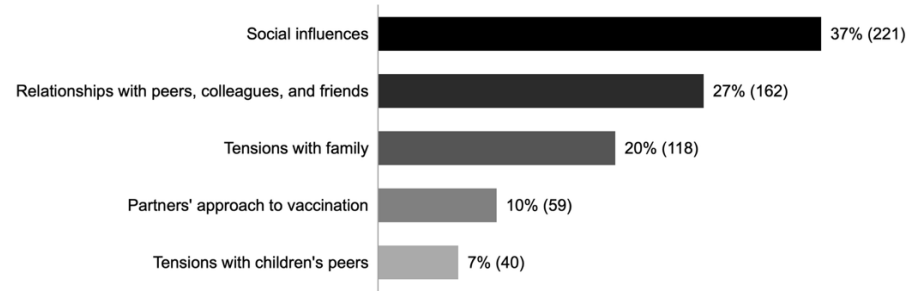


Macro-Area V – Personal Experiences

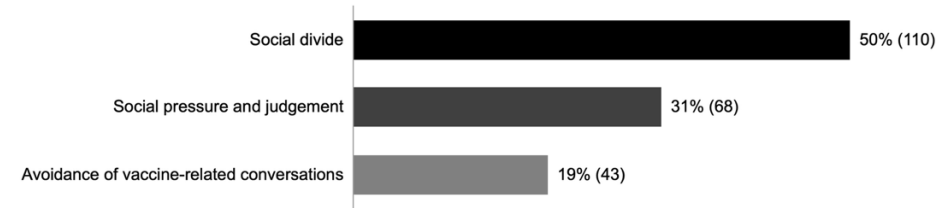


Macro-Area VI – Social Relationships and Consequences

SOCIAL RELATIONSHIPS AND CONSEQUENCES



Social influences



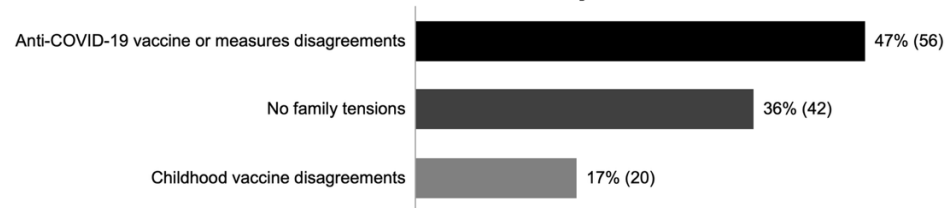
Partners' approach to vaccination



Relationships with peers, colleagues, and friends



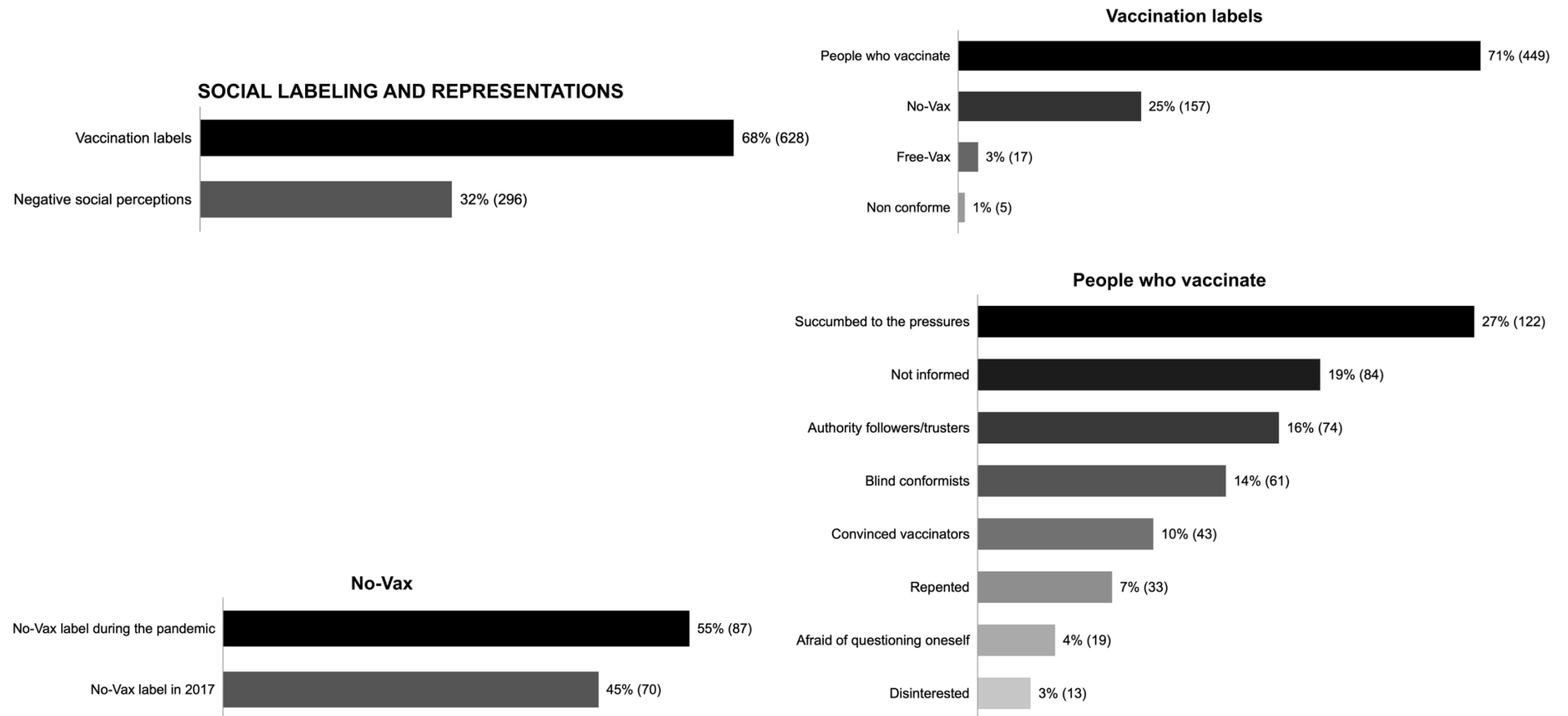
Tensions with family



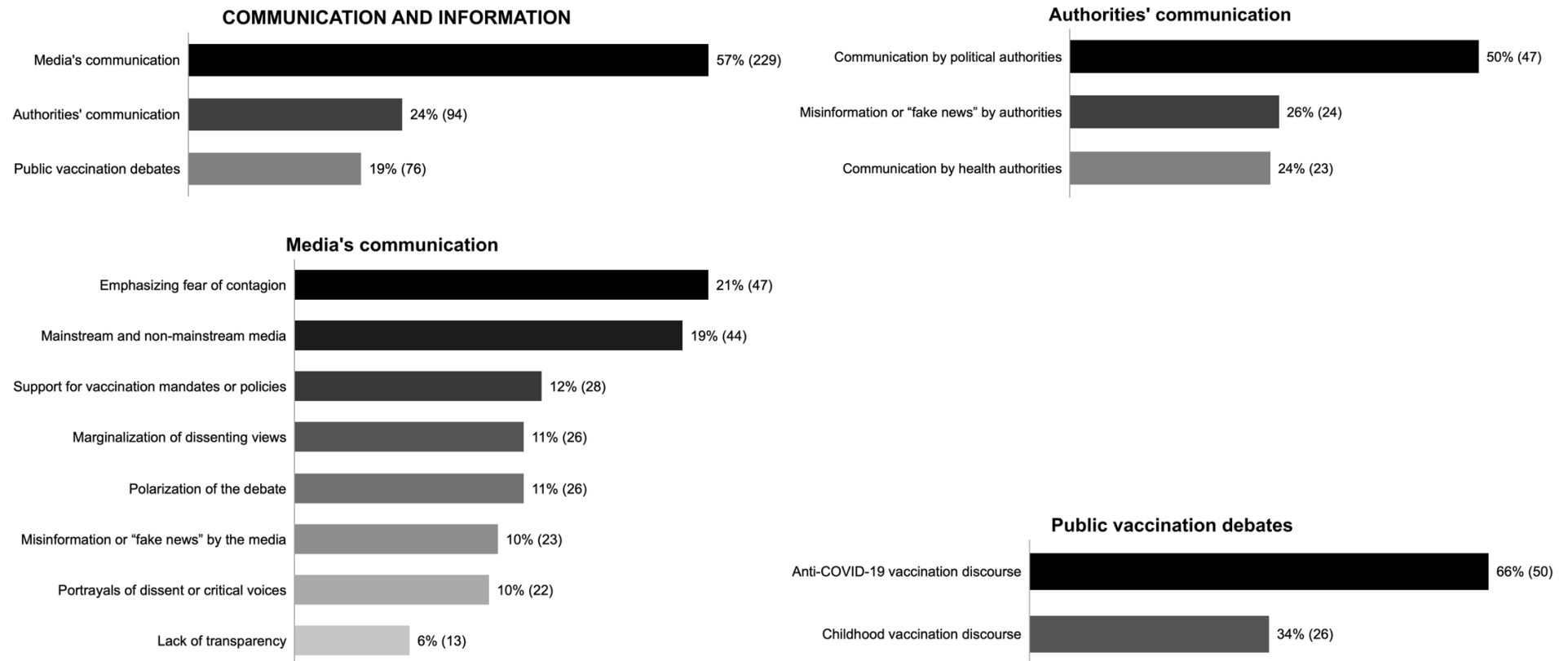
Tensions with children's peers



Macro-Area VII – Social Labeling and Representations

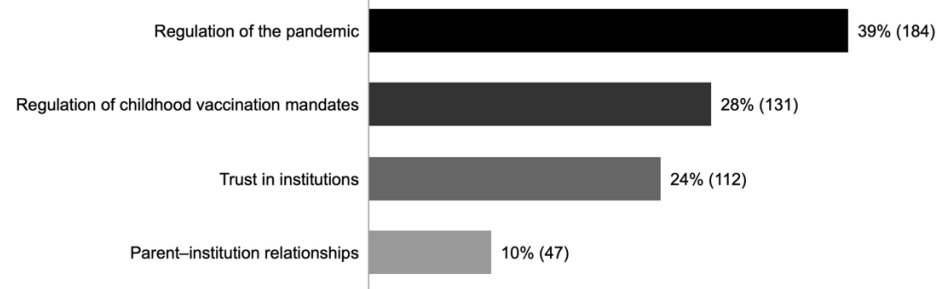


Macro-Area VIII – Communication and Information

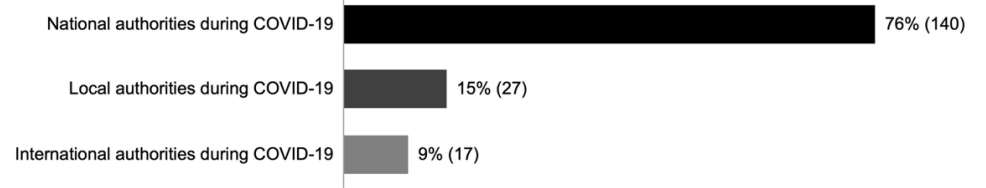


Macro-Area IX – Political and Health Institutions

POLITICAL AND HEALTH INSTITUTIONS



Regulation of the pandemic



Regulation of childhood vaccination mandates



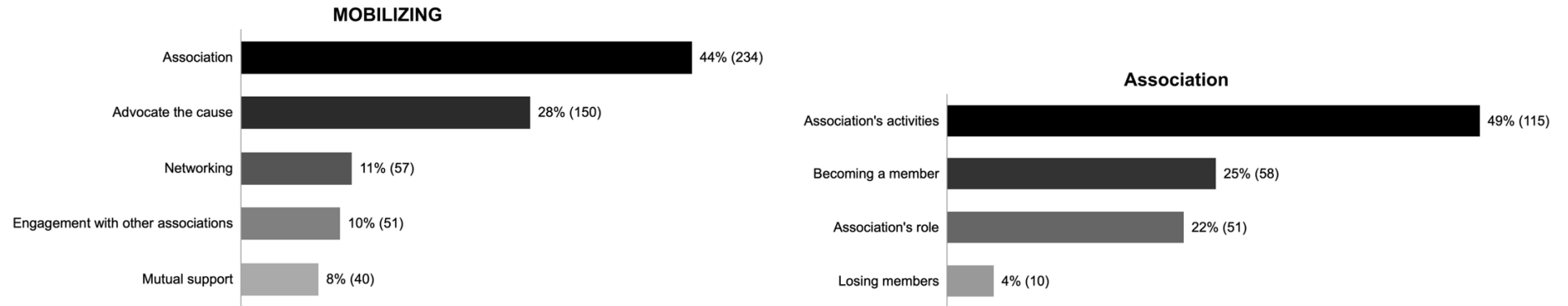
Trust in institutions



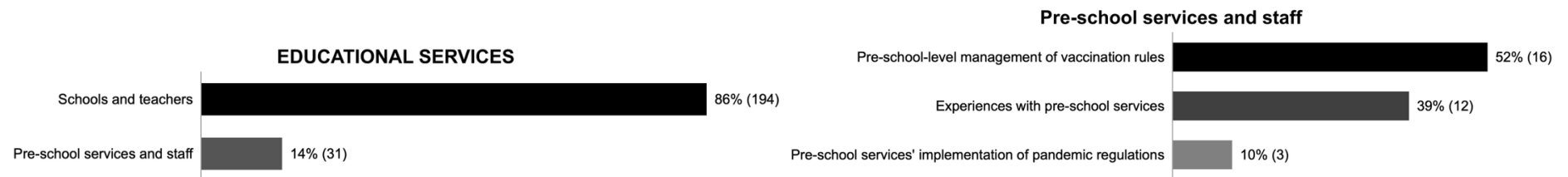
Parent–institution relationships



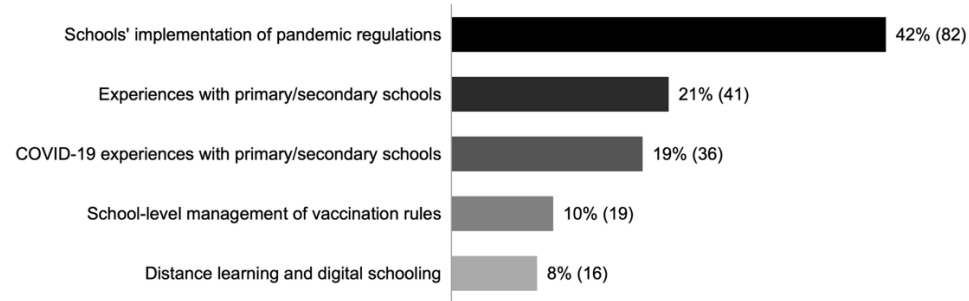
Macro-Area X – Mobilizing



Macro-Area XI – Educational Services

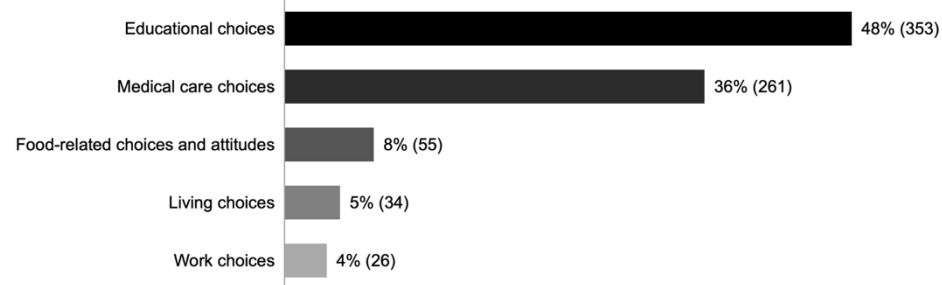


Schools and teachers

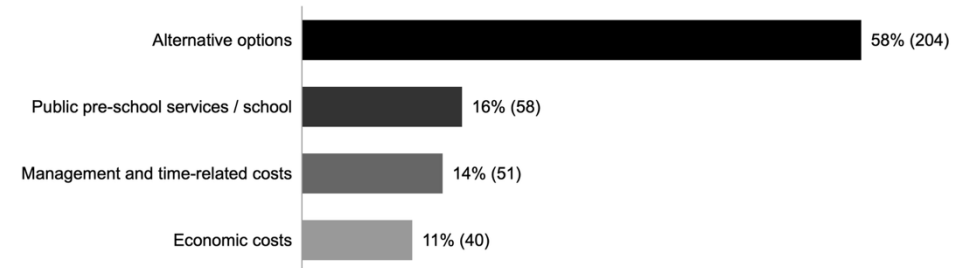


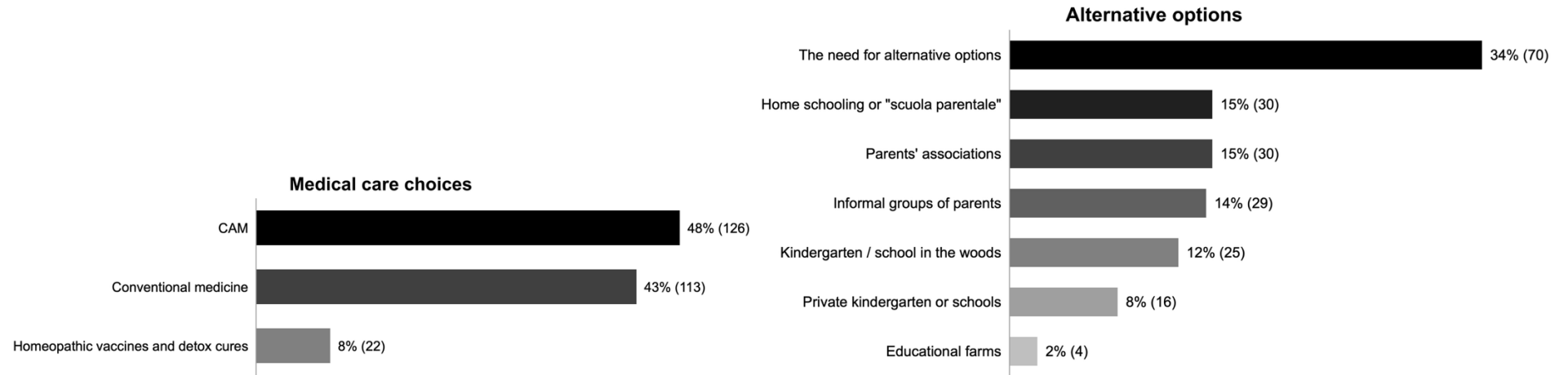
Macro-Area XII – Lifestyles

LIFESTYLES

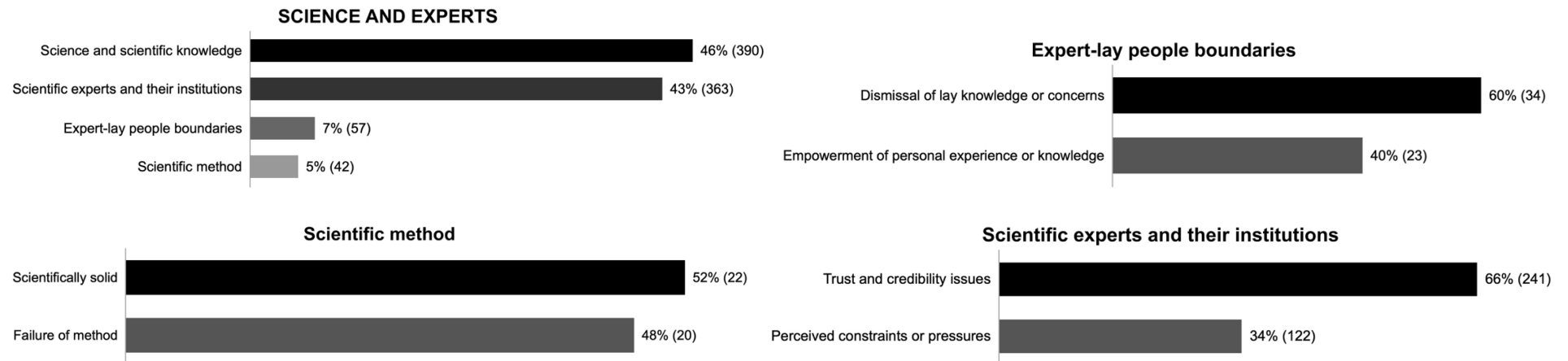


Educational choices





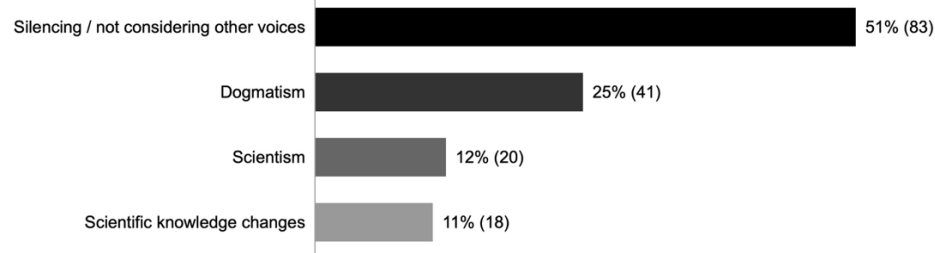
Macro-Area XIII – Science and Experts



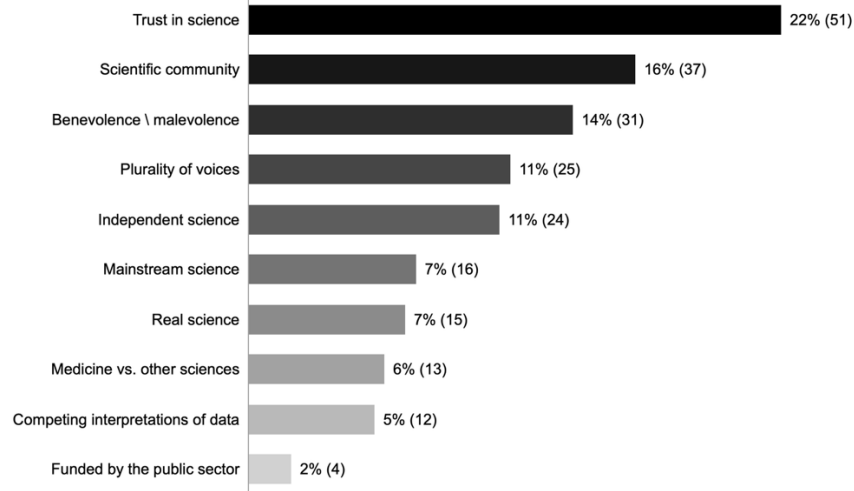
Perceived constraints or pressures



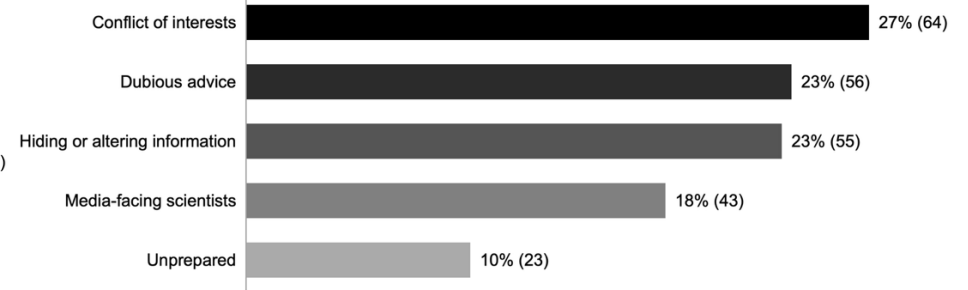
Critique of science's role



Trust and epistemic authority



Trust and credibility issues



Science and scientific knowledge

