

Adolescents, new social relations and media practices: a research in the Metropolitan City of Bologna (Italy)

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Abstract

Currently almost 99% of Italian teenagers own a smartphone and with it they can enter the world of the infosphere: this fact has profoundly changed the online habits of teenagers. The pedagogical literature grafted onto Media Education has highlighted the cognitive and relational opportunities favoured by smartphones and their use by adolescents. Which are today's adolescent's online media-practices? In which terms these practices have an impact on adolescents' socialisation? This contribution intends to explore these questions and focus attention on the ways in which these devices are managed by teenagers on a personal level, offering a descriptive picture of the media practices activated in the context of the reticular society for the school and family context and consequent reflections on identity and on the sociability of adolescents.

The research involved nine upper secondary schools with different curricula in the Metropolitan City of Bologna (1657 students, age 14–19) in school year 2020/2021. The data collected through questionnaires and focus groups highlight how technologies and social media play a role of fundamental importance not only as daily mediators in the relationships of young adolescents but also as a space for negotiation of their identity. And this role was crucial for their well-being during periods of lockdown due to Covid-19.

Keywords: adolescents; identity; media technology; socialisation

1. Hybridisation and connection: the coordinates of the digital society

Digital devices – third-order technologies in Floridi's interpretation (2014) – represent real co-actors in the contemporary world, both in terms of infrastructures, hardware and software (Latour, 2005; Law, 2007). In philosophical-educational terms, this means conceiving the human being, and with it his formative horizon, as the result of interacting subjects. Moreover, ICTs (Information and Communication Technologies) are included in the category of interacting subjects, because they favour interactions, multiple connections and assemblies (Braidotti, 2014). According to Rivoltella and Rossi (2019), digital devices are homeostatic artefacts, which are capable of self-regulation and constant intra-systemic and extra-physical interaction, on the basis of their programming algorithms. According to this model, the system of reality is reconfigured into a hybrid model: physical and informational/digital together. The neologism *onlife* and the interpretation of the world as an infosphere (Floridi, 2002; 2014) exemplify the passage of information from the functional-communicative level to the ontological level (Floridi, 2010), which makes it the substratum of reality and permeates all forms of activity through digital and informational devices – within the configuration of informational structural realism (Floridi, 2008). ICTs have eroded the boundaries between diegetic information (for example, information available in a given environment) and non-diegetic information (for example, information available only outside a given environment), in favour of a trans-diegetisation of the infosphere, where information can be dynamically available inside or outside a given environment. In this sense, ICTs are blurring the distinction between reality and virtuality, modifying the interactions between human, machine and nature. The classic example that allows us to understand this paradigm shift concerns the sphere of e-Health, where ICTs allow to

¹ This contribution, fully shared by the three authors, was drawn up as follows: Elena Pacetti authored paragraphs 4 and 'Conclusions'; Alessandro Soriani authored paragraphs 3; Paolo Bonafede authored paragraphs 1 and 2.

promote disease prevention, diagnosis, treatment and monitoring and health management, using information in different contexts (human body, Electronic Health Record, common formats for the collection and management of health data, etc.).

The hybridisation of reality takes shape in the macro-social model of the networked society (Castells, 1996), which offers a description of the contemporary social tissue according to the concept of ‘network’. The organisation of society adopts a reticular setting, which tends to be horizontal, flexible, capable of adapting to changing environmental conditions (economic, cultural, symbolic and relational flows). A model that now has associated a hierarchy to the horizontal flow: the services offered on the Net and the collection of information on digital interactions are carried out by the platforms, especially the so-called Big Five oligopoly included in the acronym GAFAM (Google/Alphabet, Amazon, Facebook/Meta, Apple and Microsoft). Having a widespread control of technologies, environments and digital interactions, GAFAM significantly influence the changes in the lifestyle of individuals, which then correspond to macro-social transformations: for this reason, the network society model has been integrated by the one based on platforms. They do not cause a revolution in terms of social organisation, but they are progressively infiltrating the institutions (offline, traditional), changing the practices that structure democratic societies on an organisational level (van Dijk & Hacker, 2018). As van Dijk, Poel and de Waal argue, platforms do not reflect the social: they produce the social structures in which we live (2018). According to this consideration, it appears necessary to verify ‘from below’ the habits and interactions that adolescents develop in their digital practices and consumption.

2. From the networked society to individual practices: adolescents, relationships and digital culture

Having defined the macro-social framework (adopting the model of the networked society integrated by van Dijk’s reflections on the oligopoly of the main hi-tech platforms), the next step is to verify the digital daily experiences of individuals. In today’s context, the networked society is connected with networked individualism, an expression which means that people operate more as connected individuals than as integrated members of a group (Rainie & Wellman, 2012). The technological networks of interconnection, already the fulcrum of the macro-apparatuses, find a correspondence with the morphology of social networks, centred on single individuals. Thus, the system of weak ties (Granovetter, 1973), takes shape more and more with a greater possibility for the individuals of access and choice to different products, information and networks. This means that – at the micro-social level – there are different forms of symbiotic relationship between *anthropos* and digital *techné*, which exemplify relational interdependence (CENSIS, 2018).

First of all, reference is made at the start of a new cycle of the digital disintermediation economy (from e-commerce to home banking, from network relationships with public administrations to online sharing of products and services). The new cycle shifts the creation of values from a traditional production towards a digital one that provides answers to a plurality of needs, which are much more articulated and sophisticated than the mere need to communicate, to get informed and to entertain oneself (CENSIS, 2021). Another element to consider is the development of a digital narrative era, characterised by virtual transcription and real-time sharing of personal biographies through social networks, further exacerbated by the pandemic context (ibidem). Smartphones and social media must be understood in the dual meaning of narrative devices – which allow the propagation of narratives of the self on the network – and of social mirrors – which return feedback on themselves, thanks to the largely dominant social functions (Balbi & Magauda, 2018).

Starting from these theoretical considerations on the macro- and micro-social level, in this work, we focused on the effects that the relationship between adolescents, devices and digital environments generates in terms of practices, consumption and types of socialisation.

In the past decade (2010–2020), the smartphone has become the main Internet access device for pre-adolescents and adolescents, in many industrialised countries (Mascheroni & Olafsson, 2016) by offering the possibility of developing a remediation (Bolter & Grusin, 1999) of media practices in the *always-on* form (De Kerckhove, 2010) for entertainment, relational interactions, gaming (which were previously confined to television consumption), telephone conversations and face-to-face meetings. The convergence operated by the smartphone in terms of multimodal multimedia has contracted the times of relationships, languages and forms of socialisation (Jenkins, 2008). Currently, almost 99% of Italian teenagers have a smartphone, which represents the access key to enter the world of the infosphere (Gui et al., 2021).

Parallel to this technological remediation is the design of social media as dominant digital environments, capable of activating peer-to-peer social relationships (Caron & Caronia, 2007) and becoming an important ground for the constitution of participatory cultures, according to the logic of informal learning (boyd, 2014; Jenkins & Ito, 2015; Ito et al., 2019). In Italy this trend has manifested itself since 2010, with a constant growth in the use and interactions of digital environments. Among young Italians (14–29 years old) there was a further step forward in the use of the media, in general, and of online platforms, in particular – 92.3% of young Italians use WhatsApp, 82.7% YouTube, 76.5% Instagram, 65.7% Facebook, 53.5% Amazon and 41.8% video-conferencing platforms (compared to 23.4% referring to the total population), 36.8% Spotify, 34.5% TikTok, 32.9% Telegram and 24.2% Twitter (CENSIS, 2021). The ySkills research, involving more than 6,000 adolescents aged 12 to 17 years in Estonia, Finland, Germany, Italy, Poland and Portugal, in its first questionnaire analysed both functional and critical aspects in relation to four domains of skills (communication and interaction; content creation and production; information navigating and processing; technological and operational). The results evidenced that the top four daily activities are related to communication and entertainment (communicate with friends 88%; listen to music or watch videos 77%; communicate with parents and caregivers 63%; play games 57%). Gender differences are not significant in the first three activities, but playing games is reported almost twice as often by boys than by girls (75 and 39%) (Ponte, Batista, Baptista, 2022).

The pedagogical literature – grafted onto Media Education – has highlighted the cognitive and relational opportunities favoured by smartphones and their use by adolescents. Instead of the danger of the tool itself – as highlighted by other researchers (Turkle, 2011; 2015; Twenge, 2017; 2021) – this analysis focuses attention on the ways in which these devices are managed on a personal level, offering a descriptive picture of the media practices activated in the context of the networked society useful for school and family context (Pachler et al., 2010; boyd, 2014; Bachmair 2015; Rivoltella & Rossi, 2019; Gui 2021). If the phenomenon of technological mediation has been extensively investigated for childhood, especially if we consider the cognitive impacts on the learning dynamics, there are few local and specific studies on relational dynamics in adolescence (Bissaca et al., 2021). It is therefore necessary to analyse the ways in which young users of digital technologies stage themselves to digital world, according to the opportunities offered by the communicative environment generated by ICT.

The online survey and the subsequent focus groups made it possible to carry out a detailed analysis of consumption – a theoretical and methodological component of the research in Media Education (Aroldi, 2019) – giving a fundamental basis for the reflection on the implications related to media practices. In this sense we have adopted an immersive approach, comparing ourselves with adolescents to learn about social places – real and digital – the profiles of sub-cultures and the media environments they inhabit (Rivoltella, 2020).

3. The research

3.1 Objective of the research

The research objective is to investigate, from an explicative-phenomenological perspective, the influence that adolescents' online practices have on the development and the negotiation of their identity. More particularly, by online practices, we refer to those practices related to social networks interactions, online video-streaming platforms and video gaming.

To better investigate the phenomenon, two main research questions have been identified.

- Which are today's adolescent's online media-practices?
- In which terms these practices have an impact on adolescents' socialisation?

The first one aims to better understand the students' media practices and the second has the intention to delve into the influence that these practices have on adolescents' socialisation dynamics.

3.2 Research methods

Seen the complexity of the phenomenon addressed by the present phenomenological research, the methodology approach adopted was a mixed method one (Creswell, 2015). More specifically, the study has been designed by following an explanatory-sequential strategy of inquiry (Trincherò & Robasto, 2019), consisting of two main phases. The first phase, the quantitative one, aimed to obtain (with the support of an online survey) an exploratory overview of the students' point of views concerning their media practices and their relationship dynamics. The second phase, the qualitative one, was implemented through a series of online focus groups, whose objective was to dig deeper into the results of the first phase and get insights about students' answers to the surveys.

The afore-mentioned survey, distributed online in the period of January–February 2021, took around 15 minutes for its compilation and was articulated in four sections: (1) students' general information, (2) online practices and consumers' habits, (3) relationship's dynamics connected to the media practices and (4) impacts of media practices on identity.

For the second phase (April–May 2021), the researcher realised five focus groups of the duration of maximum one hour with participants composed by eight to twelve students of the same year coming from different schools on a voluntary base. The guiding questions of the focus groups were aimed to address in a deeper way the results of the questionnaires, by providing the students with a space where they could express themselves without being heard by their teachers. The focus groups were recorded, transcribed and analysed with the support of a qualitative data analysis tool (*Atlas.ti*).

The study involved 88 classes belonging to 9 upper secondary schools located in the Metropolitan City of Bologna, which took place between January and May 2021.

Within the (geographical) area identified as the Metropolitan City of Bologna, there are 43 public upper secondary schools.² The researchers used a cluster sampling approach (Cohen, et al., 2018) by randomly selecting three schools from the central area of Bologna, three schools from the immediate suburbs and three from the outer suburbs. Given the mixed (quantitative and qualitative) nature of the research, the researchers tried to limit the number of students involved to approximately 1,500. Eventually, 1,691 surveys were collected, of which 1,657 were considered valid.

² Data obtained by Italian Ministry of Education's website, 'Scuola in Chiaro'. VET centres have not been included in the research to limit the numbers: https://cercalatuascuola.istruzione.it/cercalatuascuola/ricerca/risultati?indirizzoRiferimento=Bologna%2C+Metropolitan+City+of+Bologna%2C+Italy&latIndirizzoRiferimento=44.494887&lngIndirizzoRiferimento=11.3426163&raggio=10&codiceOrdine=4&checkStatale=S&codiceTipologiaStataleNuovoOrdinamento=&radioBiennioTriennio=Biennio&tipoRicerca=VICINO_A_TE&gidf=1 (Last access: 12/07/2022)

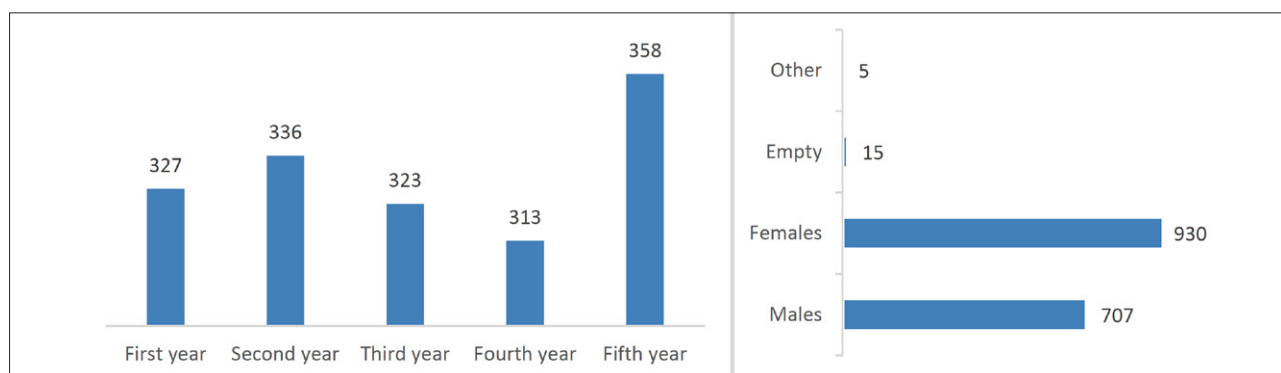


Fig. 1. Surveys collected per school year and per gender

3.3 Data analysis

Online practices and consumers' habits

In graphics 2 and 3, it is possible to observe the students' online practices concerning various entertainment platforms organised, respectively, per gender (Fig. 2) and school year (Fig. 3).

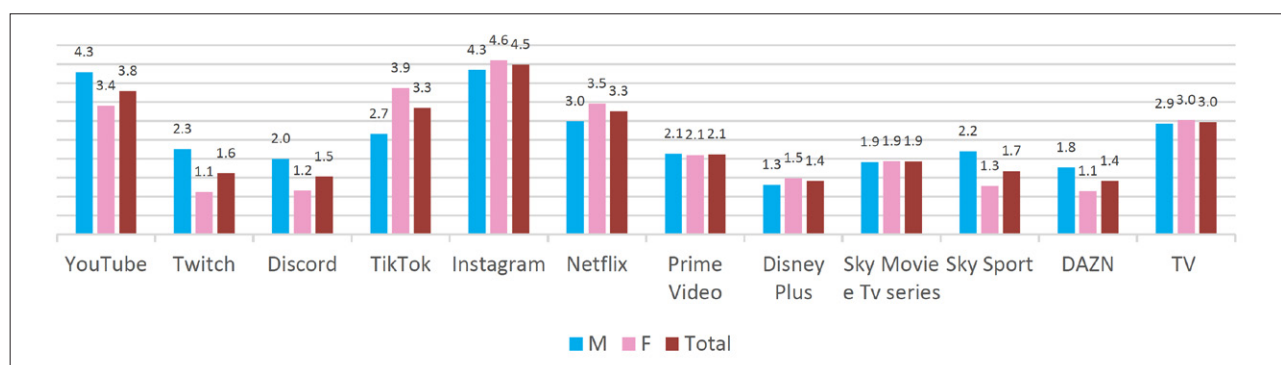


Fig. 2. Students' practices related to different entertainment platforms (presented per gender) – Likert scale: 1 (min.)–5 (max.)

As it is possible to see, Instagram (Likert value = 4.5), YouTube (3.8), TikTok (3.3), Netflix (3.3) and regular Television (3.0) cover the range of the most preferred entertainment platforms.

Gender-wise it is observable that, while platforms more related to the world of entertainment videos (YouTube), video games (Twitch, Discord) and sports (Sky Sport and DAZN) are those more preferred by males, platforms more related to the world of other adolescents and influencers (TikTok, Instagram) are likely to be preferred by females.

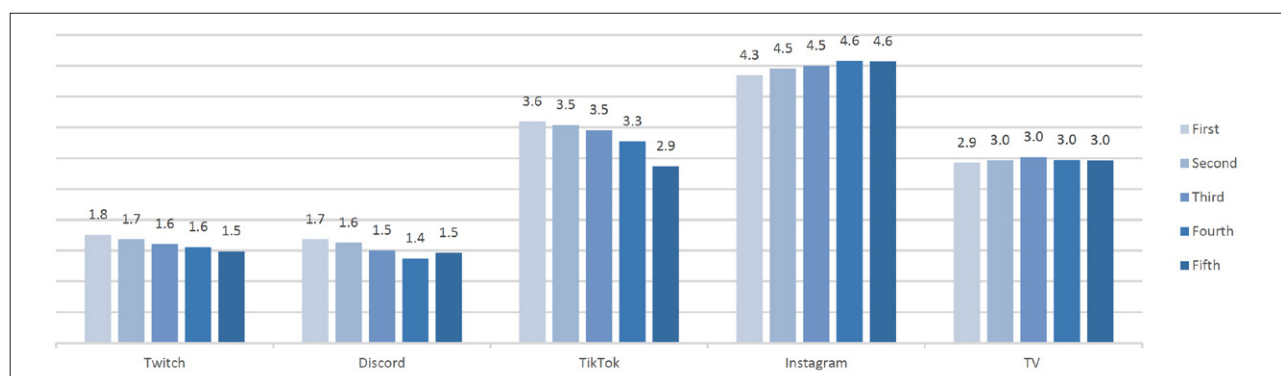


Fig. 3. Students' practices related to different entertainment platforms (presented per school year) – Likert scale: 1 (min.)–5 (max.)

By observing the data about student's media practices organised per school year (Fig. 3), it can be remarked that the platform more appreciated by the younger respondents is TikTok. The Likert value for first-year students is 3.6 and it lowers until it reaches 2.9 of the fifth-year students (the same trend, with less intensity, can be observed also for the levels of appreciation of Twitch and Discord). At the same time, Instagram appears to be a platform more appreciated by older students: the lowest values can be found in first-year students (4.3) and they raise until they reach the fourth- and the fifth-year students (4.6).

This trend was confirmed by what emerged in the focus groups. TikTok is considered by students of the first year – especially the first, the second, and the third – as a platform where:

- they feel free to express themselves: *«I like it [TikTok] because I know I can post something funny to share with my friends. Even if it's something not important, I know I can put it there»* (Female, 2nd grade);
- it is possible to access to countless possibilities of entertainment: *«[...] an endless stream of stuff that we like»* (Female, 3rd grade);
- it is possible to access also to interesting contents from whom they can learn something: *«[...] but I use it also for looking for stuff that I want to learn. For instance, I used it to keep myself informed about the Zan's law proposal»* (Male, 3rd grade).

On the other hand, Facebook is considered *«the social of our parents»* (Male, 2nd grade) or *«a social for boomers»* (Female, 2nd grade): students simply refuse to be there and the reason is because they do not want to expose themselves in the same online spaces of their parents.

The graphic in Fig. 4 presents the students' answers to the question 'How much I appreciate the following contents', organised by gender.

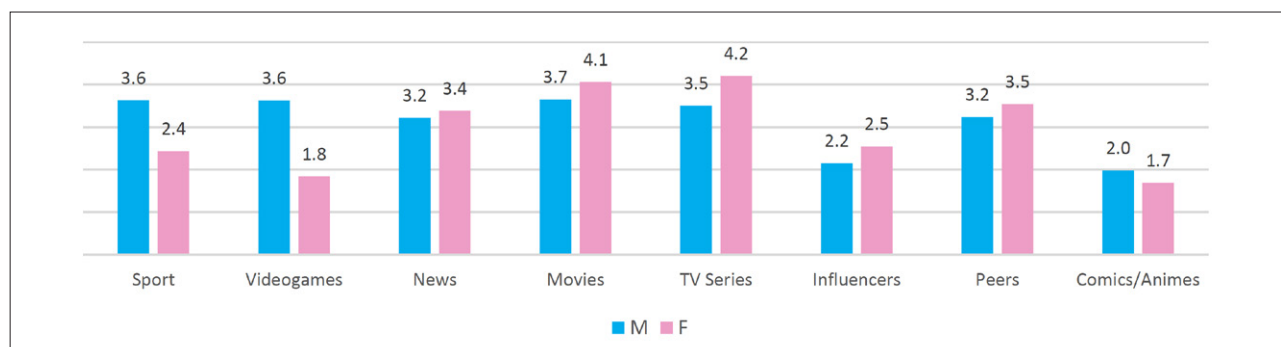


Fig. 4. Adolescents' answers to the question 'How much I appreciate the following contents' (presented per gender) – Likert scale: 1 (min.)–5 (max.)

Sports (M: 3.6 – F: 2.4) and videogames (M: 3.6 – F: 1.8) are the contents more appreciated by the students. Narrative contents like movies (M: 3.7 – F: 4.1) and TV series (M: 3.5 – F: 4.2) tend to be more preferred by females, as well as social-relational kind of contents from influencers (M: 2.2 – F: 2.5) and peers (M: 3.2 – F: 3.5).

In the graphic presented in Fig. 5, it is possible to consult more details concerning the preferred platforms in correlation to the different kinds of contents.

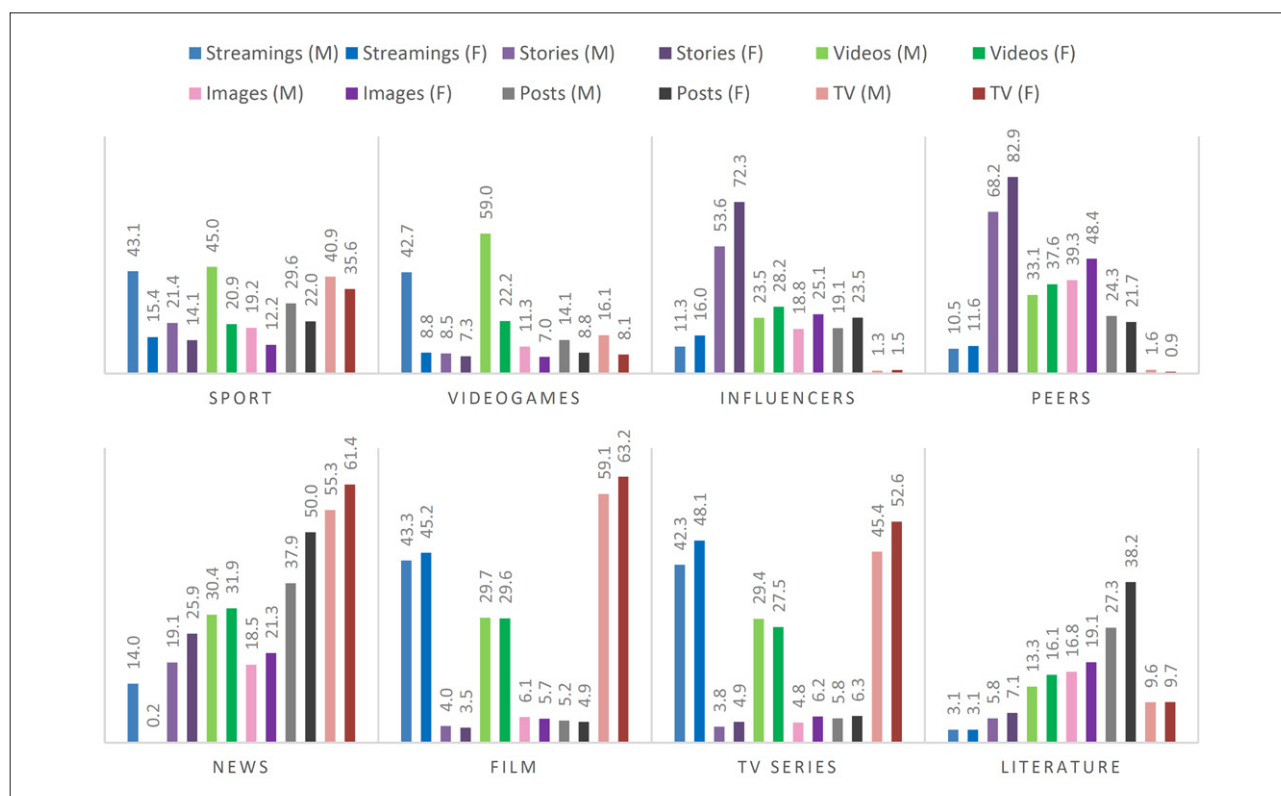


Fig. 5. Adolescents' practices to different entertainment contents (presented per gender) – data in percentage

Streaming platforms appear to be the preferred places to watch contents related to sports (M: 43.1% – F: 15.4%), video games (M: 42.7% – F: 8.8%), movies (M: 43.3% – F: 45.2%) and TV series (M: 42.3% – F: 48.1%).

Stories and Reels are the preferred channels to benefit from contents coming from influencers (M: 53.6% – F: 72.3%) and peers (M: 68.2% – F: 82.9%). Regarding these kinds of contents, during the focus groups, students conveyed that they are well aware of «[...] being somehow addicted» (Female – 4th grade) by social networks – «Sometimes I feel like I am captured by the socials' stream of contents. I can't stop scrolling.» (Female – 4th grade) – as they are somehow feared of «[...] missing contents» (Male – 4th grade).

One last important element to remark is the role of television in adolescents' practices. The classic television remains one of the most used channels to follow news (M: 55.3% – F: 61.4%), watching movies (M: 59.1% – F: 63.2%) and TV series (M: 45.4% – F: 52.6%).

Relationship dynamics related to online practices

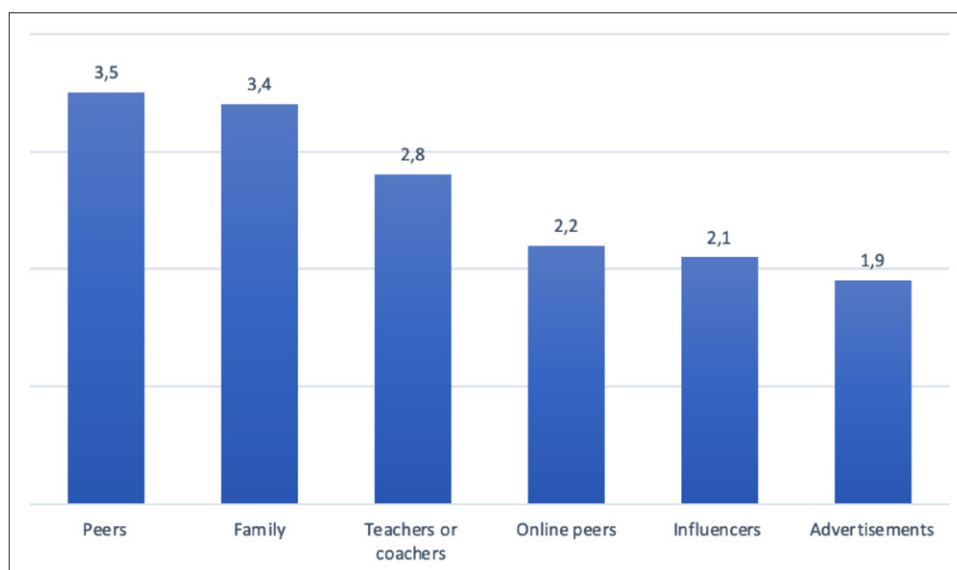


Fig. 6. Adolescents' answers to the question 'How much is important for you that a content is presented to you by...' – Likert scale: 1(min.)–5(max.)

The graphic in Fig. 6 offers a vision of the students' answers to the question 'How much is important for you that a content is presented to you by someone'. Peers (Likert: 3.7), family members (Likert: 3.4) and teachers or coaches (Likert: 2.8) are the most listened figures.

More information about these dynamics can be found in Fig.7 where students' motivations to the previous question are presented. Teachers are considered mainly because of their authority and expertise in some fields that are acknowledged as useful by the students; family members and peers are considered with more importance because they are a direct and closer contact. These groups are those with whom the adolescents share a more direct and continuous relationship: they know them personally and they have with them a stronger and longer relationships, which is also enriched by a sense of trust and respect.

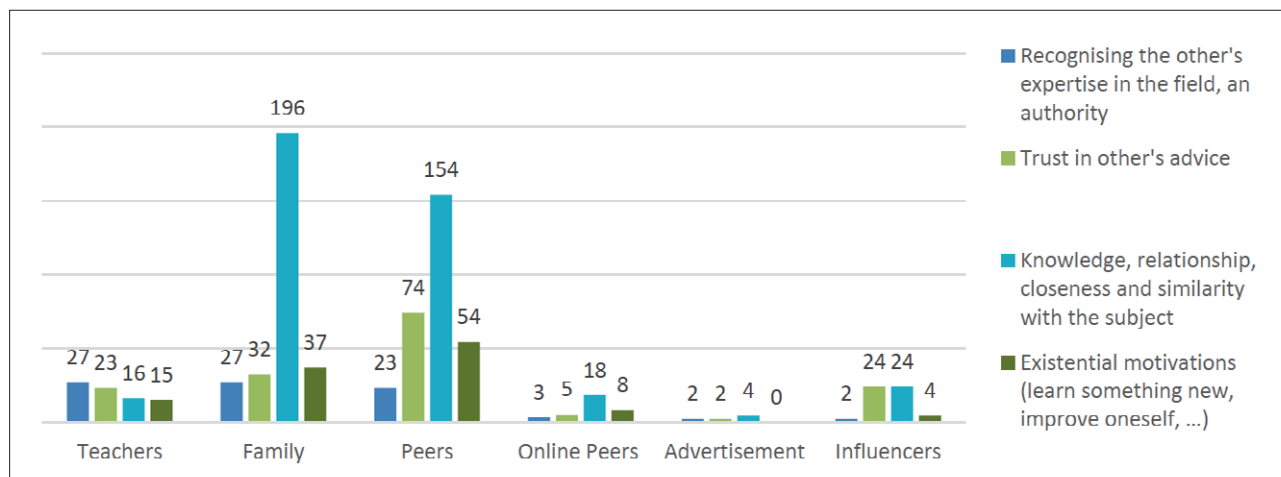


Fig. 7. Adolescents' motivations to the question 'How much is important for you that a content is presented to you by someone' organised in categories

One element of interest is represented by the motivations behind the answers involving the figure of influencers. ‘Trust’ and ‘Close relationship and sense of similarity’ are among the most recurrent motivations (24 answers each). From both the surveys and the focus groups emerge strongly that trust and closeness is not present only towards peers and friends but also towards influencers. These figures are considered as friends who can be trusted and with whom students have a feeling of close relationship.

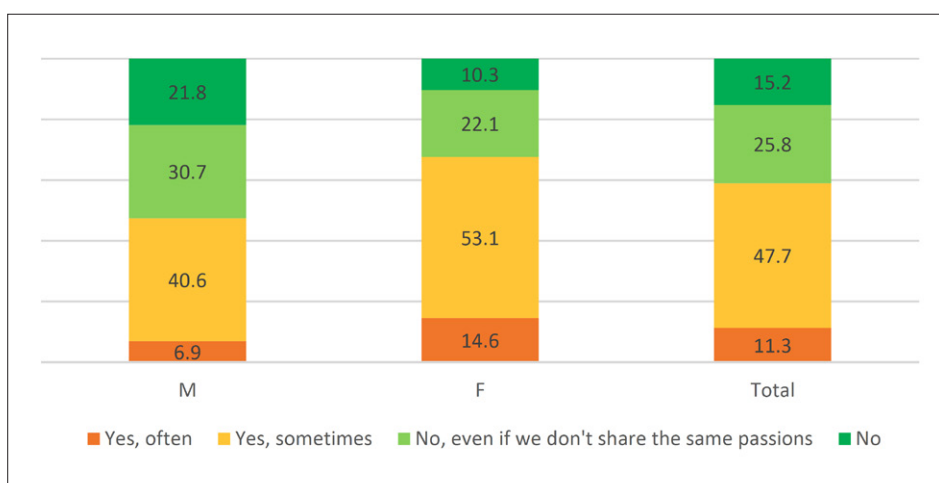


Fig. 8. Students' answers to the question 'Have you ever felt excluded from a group because you didn't know what media content they were looking at?' – data in percentage

Fig. 8 contains a graphical representation of the answers to the question if students ever felt excluded from a group because of their media practices.

It is possible to observe that the percentage of students who answered positively ('yes, often' and 'yes, sometimes') is 59%: the majority of them. This is of particular interest because the females' percentage is remarkably higher than the males' (respectively 67.7% and 47.5%).

The five focus groups held with the students offered useful insights about the motivations behind these answers. The presence of so many students who feel excluded by their peers is likely to be explained by the simultaneous presence of different peers' sub-groups. Thanks to social networks, these groups are in constant contact. This phenomenon contributes to creating, on one hand, a stronger sense of belonging and friendship and, on the other hand, relevant dynamics of exclusion between peers.

From the focus groups emerged, among those who answered positively, three possible categorisations of students:

- Those who are shy and not too much part of the class's social life: these adolescents do not share the same media practices of the majority of their peers and tend to have their niches where they feel listened to, appreciated and comfortable;
- Those who feel excluded by certain conversation topics and who believe that they need to «catch up» (*Male, 1st grade*) in order to participate in their peers' lives;
- Those who trust their friends but who also feel sometimes excluded by certain conversation topics: these young students know that having different interests is enriching and that is not representing too much of a problem for their participation in their communities.

4. Discussion

Regarding the platform used by the adolescent part of the research, we can state that younger students tend to prefer TikTok over Instagram: this tendency is corroborated by the data emerged in the focus groups and by marketing research, which show a continuous growth of TikTok³ numbers over other social networks like Instagram and Facebook. Video-streaming platforms (like YouTube, Twitch, Sky sport, DAZN, Netflix and Disney plus) are, generally, the preferred platforms for following content related to sports, video games (especially by males), movies and TV series. Instagram stories and TikTok Reels are more likely to be the preferred channels to watch contents from influencers and other peers (with a majority of females). The large use of these social networks is accompanied by a remarkable awareness, reported by the students, of being, in a certain measure, 'addicted' and 'captured' by their contents.

Surprisingly, the classic television remains one of the most preferred platforms (both by females and males) to watch contents related to news, movies and TV series: this element must not be underestimated because it is the signal of a certain use of technology that still orbits around the big screen, and that does not exclude the compresence of other portable devices used simultaneously.

³ Retrieved from: <https://digitalagency.network.com/tiktok-vs-instagram-who-is-winning-at-social-media/> (Last access: 12/07/2022)

Concerning the impact that media practices have on adolescents' socialisation, it emerged that the feeling of trust, of closeness and of being-alike are among the main reasons brought by students for listening to other people's advice. The most listened categories of persons are the closer ones: peers, family members and teachers or coaches. Technology, in this case, plays a relatively marginal role: the students listen to these categories of people, thanks to the possible mediation of social media and chat-groups mainly. Influencers are also listened and considered, even in less percentage, for the same reasons mentioned above: in this case, of course, technology plays a more important role as the 'relationship' is completely mediated by a digital environment. The reason for this can be explained by the construction and the presence of a para-social relationship dynamic between adolescents and their favourite influencers (Horton & Wohl, 1956).

One final consideration must be made regarding the big number of students who admitted to feeling excluded by their peers' exchanges dynamics because of their media practices: such a percentage reveals that the process of socialisation around the media practices (Caron & Caronia, 2007) still plays a fundamental role in the economy of adolescents' relationships, and it should be investigated with more attention in future research.

Conclusions

Even if the results are not generalisable, the research carried out in this first school year has highlighted how manifold adolescents between 14 and 19 are and escape the usual mainstream definitions that paint them as apathetic, incompetent and dependent on technologies. Reality is much more complex and multifaceted and gender, age, class attended and personal experiences intersect to form a dense web of opportunities, activities, fears, curiosities and skills also experienced, thanks to social media. In particular, a greater awareness emerges with respect to what the world of adults, on the contrary, liquidates as superficiality: adolescents have very clear concepts such as those of privacy, network security, marketing and mechanisms that create addiction. In fact, some adolescents, during focus groups, stated that they realise how many hours they spend scrolling videos on TikTok, so they uninstall the app when they feel they are becoming addicted.

Despite this, it is clear how much social media are mediation tools in the daily relationships between young people, capable of connecting and re-connecting them. It is, in particular, the lockdown period due to Covid-19, during the closure of schools, which has further amplified this essential role of communication and relationship through technologies: adolescents have maintained their friendships, thanks to these tools, experimenting new media practices (such as those on Clubhouse, Houseparty and Discord) to talk and listen to others and to narrate themselves, as well as deepen content to update and learn more in the most diverse fields.

Media practices therefore play an important role in the lives of adolescents, in the ways in which they behave, interact and act with their peers: they allow them to create spaces for negotiation of their own identity, creating belonging and learning. This happens even if there are few of them who use social media actively (by posting their own content, such as videos, texts or photos). Anyway, the publication of content by peers is perceived positively and an appreciation for them emerges in the focus groups: *«they are normal people expressing themselves» (Male, 5th grade)*; *«he does have a talent, I don't see why mocking him» (Male, 4th grade)*; *«if I were talented in something, I would do it!» (Male, 4th grade)*. These comments, in line with other researches (Mascheroni, Vincent, & Jimenez, 2015; Bell, 2019), also highlight the fear of appearing if you are not 'at your best': personal image and reputation are of fundamental importance in this age of change and uncertainty, and the same teenagers interviewed confirmed that when they decide to publish their images or videos, they must be perfect. It is therefore necessary to invest time and effort in researching, viewing and creating images that satisfy teenagers.

Confirming this is the fact that ephemeral contents such as those of stories, which have a limited duration in time, are more easily published. But adolescents' gaze on the media reality around them, they being followers of content creators helps to build and strengthen their cultures, belonging to the group with which to share passions, languages and memes. It is the relationship with their peers in particular, both those frequented in real life and those experienced only online, and with influencers, which helps to cultivate, train and mediate the construction of the identity of adolescents: through their media practices related to music, videogames, TV series, sports, fashion, news, street art, the tastes, interests and curiosities of young people are formed, contaminated and build their personality and their relational dynamics. This complexity and variety of media experiences is part of the informal education of adolescents and could potentially become an important factor to be valued in formal and non-formal educational contexts to give them a voice: reflecting on these activities and on the skills acquired by young people allows planning paths of media education and digital citizenship consistent with the experiences lived by adolescents. It will be necessary, for future directions, to research more deeply on adolescents' media practices and on the ones of their teachers: to investigate the topic of digital well-being and online empathy⁴ of adolescents; to support in teachers' awareness and greater closeness to the worlds and cultures inhabited by the youngest; to promote care in creating meaningful digital environments.

⁴ Empathy is considered here as the ability to 'vicariously experience another's emotions by recognising, understanding, and resonating with their emotional state' (Luberto et al., 2018, p. 708). 'Online empathy' refers to the ability to take the perspective of other Internet users as well as the ability to recognise how other users are feeling – even when they are not able to observe these other users directly (Morgan et al., 2017). Online empathy is also referenced as one of the main domains in the Council of Europe's Digital Citizenship Education vision (CoE, 2019).

References

- Aroldi, P. (2019). Analisi dei consumi. In Rivoltella, P.C., Rossi, P.G. (eds.). *Tecnologie per l'educazione*. Milano: Pearson, 140-151.
- Bachmair, B. (2015). Editorial - Digital mobility. Media educational endeavour in our disparate cultural development. In *Med. Media Education*, 6 (2), I-VI.
- Balbi, G., Magaudda, P. (2018). *A history of digital media: an intermedia and global perspective*. Routledge.
- Bell, B.T. (2019). "You take fifty photos, delete forty nine and use one": A qualitative study of adolescent image-sharing practices on social media. *International Journal of Child-Computer Interaction*, Volume 20, 64-71. <https://doi.org/10.1016/j.ijcci.2019.03.002>
- Bissaca E., Cerulo, M., Scarcelli, C.M. (2021). *Giovani e social network. Emozioni, costruzioni dell'identità, media digitali*. Milano: Carocci.
- Bolter, J.D., Grusin, R. (2003). *Remediation. Competizione e integrazione tra media vecchi e nuovi*. Milano: Guerini. Original edition: 1999.
- boyd, d. (2014). *It's complicated: the social lives of networked teens*. Yale UP.
- Braidotti, R. (2014). *Il postumano: la vita oltre l'individuo, oltre la specie, oltre la morte*. DeriveApprodi.
- Caron, A.H., Caronia, L. (2007). *Moving Cultures: Mobile Communication in everyday life*. Mc Gill-Queens UP.
- Castells, M. (1996). *The Information Age, Vol. 1: The rise of network society*. Blackwell Publ.
- CENSIS (2018). *15° Rapporto sulla comunicazione, I media digitali e la fine dello star system*. Milano: Franco Angeli.
- CENSIS (2021). *17° Rapporto sulla comunicazione. I media dopo la pandemia*. Milano: Franco Angeli.
- CoE (2019). *Recommendation CM/Rec(2019)10 of the Committee of Ministers to Member States on Developing and Promoting Digital Citizenship Education*. Strasbourg: Council of Europe Committee of Ministers. Retrieved from: https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=090000168098de08.
- Cohen, L., Manion, L., Morrison, K. (2018). *Research Methods in Education (Eight edition)*. New York: Routledge
- Creswell, J. W. (2015). Revisiting Mixed Methods and Advancing Scientific Practices. In S. N. Hesse-Biber & R. B. Johnson (Eds.). *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*. Oxford.
- De Kerckhove, D. (2010). *La mente accresciuta*. Milano: 40k editore.
- Floridi, L. (2002). *Infosfera*. Milano: Il Sole24Ore Libri.
- Floridi, L. (2008). *A Defense of Informational Structural Realism*. Retrieved from: <https://ssrn.com/abstract=3844384> or <http://dx.doi.org/10.2139/ssrn.3844384>
- Floridi, L. (2010). *Information: A Very Short Introduction*. Oxford UP.
- Floridi, L. (2014). *The fourth revolution*. Oxford UP.
- Granovetter, M. (1973). The Strength of Weak Ties. In *American Journal of Sociology*, Vol. 78, No. 6, pp. 1360-1380.
- Gui, M., Gerosa M., Vitullo, A., Losi, L. (2021). *L'età dello smartphone. Un'analisi dei predittori sociali dell'età di accesso al primo smartphone personale e delle sue possibili conseguenze nel tempo*. Report del Centro di ricerca Benessere Digitale. Università di Milano-Bicocca. Retrieved from: https://www.benesseredigitale.eu/wp-content/uploads/2021/02/Report-1_Letà-dello-smartphone.pdf.
- Jenkins, H. (2008). *Convergence culture: where old and new media collide*. New York UP.
- Jenkins, H., Ito, M., boyd, d. (2015). *Participatory Culture in a Networked Era: A Conversation on Youth, Learning, Commerce, and Politics*. Polity.
- Horton, D., Wohl, R. R. (1956). Mass Communication and Para-Social Interaction. *Psychiatry*, 19(3). <https://doi.org/10.1080/00332747.1956.11023049>
- Ito, M., Baumer, S., Bittanti, M., boyd, d., Cody, R. (2019). *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning With New Media*. MIT Press.
- Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford UP.
- Law, J. (2007). *Actor Network Theory and Material Semiotics*. In *Network*, April, 1-21.
- Luberto, C. M., Shinday, N., Song, R., Philpotts, L. L., Park, E. R., Fricchione, G. L., & Yeh, G. Y. (2018). A systematic review and meta-analysis of the effects of meditation on empathy, compassion, and prosocial behaviors. In *Mindfulness*, 9(3), 708-724.
- Mascheroni, G., Ólafsson, K. (2016). The mobile Internet: Access, use, opportunities and divides among European children. In *New Media & Society*, 18(8), 1657-1679.

- Mascheroni, G., Vincent, J., & Jimenez, E. (2015). "Girls are addicted to likes so they post semi-naked selfies": Peer mediation, normativity and the construction of identity online. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 9(1), Article 5. <https://doi.org/10.5817/CP2015-1-5>
- Morgan, B., Fowers, B., & Kristjánsson, K. (2017). *Empathy and authenticity online. The roles of moral identity and moral disengagement in encouraging or discouraging empathy and authenticity online*. Retrieved from: https://www.jubileecentre.ac.uk/userfiles/jubileecentre/pdf/Research%20Reports/ParentsandMedia_EmpathyOnline.pdf
- Pachler, N., Bachmair B., Cook J., Kress G. (2010). *Mobile learning. Structure Agency, Practices*, Springer.
- Ponte, C., Batista, S., Baptista, R. (2022). News from the first wave of the ySKILLS school survey. *ySkills*. Retrieved from: <https://yskills.eu/news-from-the-first-wave-of-the-yskills-school-survey/>
- Rainie, L., Wellman, B. (2012). *Networked: The New Social Operating System*.
- Rivoltella, P.C., Rossi, P.G. (2019). *Il corpo e la macchina*. Brescia: Scholé.
- Rivoltella, P.C. (2020). *Nuovi alfabeti. Educazione e culture nella società post-mediale*. Brescia: Scholé.
- Turkle, S. (2011). *Alone Together*. Basic Books.
- Turkle, S. (2015). *Reclaiming Conversation. The Power of Talk in a Digital Age*. Penguin Press.
- Trincherò, R., & Robasto, D. (2019). *I Mixed Methods nella ricerca educativa*. Milano: Mondadori.
- Twenge, J.M. (2018). *Iperconnessi. Perché i ragazzi oggi crescono meno ribelli, più tolleranti, meno felici e del tutto impreparati a diventare adulti*, Torino: Einaudi;
- Twenge, J.M. (2021). *Worldwide increases in adolescent loneliness*. In *Journal of Adolescence* (in Press, Corrected Proof) Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0140197121000853?fbclid=IwAR2NUx4ybpFevIh08VGtbcezOKMMVlj7LpHtwrjWyF-A9cCjnortaSvv0s>.
- van Dijk, J.A.G.M., Hacker, K.L. (2018). *Internet and Democracy in the Network Society*. Taylor and Francis.
- van Dijk, J.A., Poell, T., de Waal, T. (2018). *The Platform Society: Public Values in a Connective World*. Oxford UP.