

## RESEARCH ARTICLE

# The effect of individual, group, and shared organizational identification on job satisfaction and collective actual turnover

Lorenzo Avanzi<sup>1</sup>  | Enrico Perinelli<sup>1</sup>  | Marco Giovanni Mariani<sup>2</sup> 

<sup>1</sup>Department of Psychology and Cognitive Science, University of Trento, Rovereto, Trento, Italy

<sup>2</sup>Department of Psychology, University of Bologna, Bologna, Italy

## Correspondence

Lorenzo Avanzi, Department of Psychology and Cognitive Science, University of Trento, Corso Bettini 31, 38068 Rovereto, Trento, 38068, Italy.

Email: [lorenzo.avanzi@unitn.it](mailto:lorenzo.avanzi@unitn.it)

## Funding information

Enrico Perinelli was supported by a Research Fellowship (WeBeWo LAB n. 40600134) granted by the University of Trento and by a Starting Grant for Young Researchers ('ATENEO\_Starting Grant\_2021', Title: 'Big data and machine learning approaches in the workplace: Advancing the quality of industrial/organizational research') awarded by University of Trento.

## Abstract

Drawing on the Social Identity Approach principles, we explored the relationship between organizational identification (individual, group, and shared), job satisfaction, and collective actual turnover. We hypothesize that (a) shared identification moderates the within-person relationship between individual organizational identification and job satisfaction, namely, the effect is stronger for groups in which the level of shared organizational identification is higher; (b) group job satisfaction mediates the relationship between group organizational identification and collective actual turnover. This study was conducted in a large Italian firm ( $N = 1090$ ; sale locations = 91). Data were collected using both surveys (e.g., job satisfaction) and archive data (collective actual turnover). By means of Bayesian Multilevel Structural Equation Models, we supported the moderating role played by shared organizational identification in the relationship between individual organizational identification and job satisfaction, while no evidence was found for the mediational hypothesis. We discuss the theoretical and practical implications for management.

## KEYWORDS

collective actual turnover, job satisfaction, organizational identification, social identity approach

## 1 | INTRODUCTION

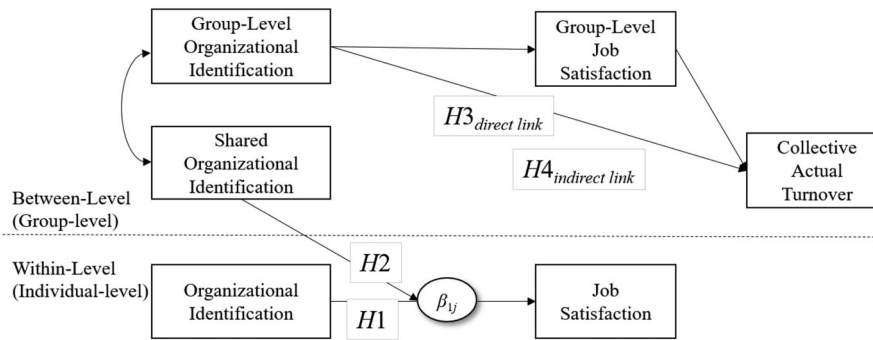
Organizational identification answers (at least partially) the question of 'Who I am' or 'Who we are' in a specific organizational context (Ashforth & Mael, 1989). In this way, it helps individuals to act on behalf of their organization and to become more aware of the meaning of their social actions. A strong organizational identification increases the sense of oneness with the organization of which one is part, and consequently, the organization's goals and aims tend to become the employees' goals and aims (Van Knippenberg & Sleebos, 2006). There is an increasing amount of empirical evidence showing the positive effect that strong organizational identification plays on many important organizational outcomes, such as job satisfaction (van Dick et al., 2004), extra-role behaviours (van Dick et al., 2006), turnover intentions (Van Knippenberg et al., 2007), and well-being (Avanzi et al., 2015; for meta-analyses, see Lee et al., 2015; Riketta, 2005; Steffens et al., 2017).

However, as recently outlined by Häusser et al. (Häusser et al., 2020; see also van Dick et al., 2018), the role of identification at a group and individual level, as well as their reciprocal interrelationships, 'have been widely neglected in earlier research' (Häusser et al., 2020, p. 722). Indeed, previous empirical research usually measured organizational identification as the individual's identification with a group (i.e., organization as a whole, workgroup, department, etc.). In this way, the 'sharedness' of a common identification for the same group ('we are in-group members') is postulated to play a crucial role, but is not measured at all. To disentangle the individual and group levels, as well as to measure how much employees within a group share the same level of identification, it is necessary to take into consideration the multilevel nature of the data.

In this article, we test some of the propositions suggested by Häusser et al. (2020) by measuring both individual and group (e.g., sale locations) levels of organizational identification, as well as the degree

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. *European Journal of Social Psychology* published by John Wiley & Sons Ltd.



**FIGURE 1** Theoretical model with hypothesized paths. Collective actual turnover was gathered 1 year after the other variables.

of shared organizational identification. In particular, in this study we simultaneously consider the role of individual and group organizational identification levels, the shared organizational identification among employees nested within the same group, as well as the interrelations between different levels of identification in predicting both individual and organizational outcomes.

With respect to the *individual level*, we hypothesized that organizational identification is positively related to job satisfaction, but that this relationship will also depend on how much employees within the same group (e.g., sale locations) share this identification (e.g., high shared organizational identification). In particular, we hypothesized that a positive and shared organizational identification at the group level may increase the relation between the individual level of organizational identification and job satisfaction. Regarding the *group level*, we hypothesized that the group organizational identification (i.e., the average individual identification of the group members within a group) should be associated with higher job satisfaction at the group level and less collective actual turnover. Finally, we tested the mediational role of group job satisfaction on the relationship between group organizational identification and collective actual turnover.

In what follows, we introduce the theoretical rationale and background of our hypotheses (see also Figure 1). In particular, we first overview the Social Identity Approach (the leading theory of this contribution), and how this theory can be refined by considering shared organizational identification. Second, we present findings on the relationship between individual versus shared organizational identification with job satisfaction, and introduce our first and second hypotheses. Third, we present current state-of-the-art research on the relationship between group organizational identification and collective actual turnover, and introduce our third hypothesis. Finally, we discuss the rationale behind our fourth hypothesis, which concerns the mediational role of group job satisfaction in the relationship between group organizational identification and collective actual turnover.

## 2 | THE SOCIAL IDENTITY APPROACH AND SHARED ORGANIZATIONAL IDENTIFICATION

According to Ashforth and Mael (1989), organizational identification represents 'the perception of oneness or belongingness to some human

aggregate' (p. 21). In this sense, organizational identification represents a particular case of social identification, where employees derive their identity (at least partially) from the organization itself (or part of it). According to the Social Identity Approach (Haslam, 2004), when employees categorize themselves as members of a specific organization, they tend to appropriate the organization's values and aims as their own, and see themselves as interchangeable with other members of the organization. Thus, assuming that employees feel a strong sense of belonging in their organization, and if this membership is psychologically relevant (salient) in a given context, they should show favouritism towards their organization, in terms of more engagement, collaboration, and extra-role behaviours (Ashforth et al., 2008; van Dick, 2001). Since organizational identification reflects the link between employees and their organization, it is 'potentially capable of explaining and predicting many important attitudes and behaviors in the workplace' (Edwards, 2005, p. 207). Identification with one's own organization, indeed, increases the likelihood that employees will show more extra-role performance, commitment, and job satisfaction among other outcomes (Lee et al., 2015; Ng & Allen, 2018; Riketta, 2005).

While in the literature, several authors have outlined the role played by a shared organizational identity ('the sense of us') in order to explain many important organizational outcomes, 'most previous empirical studies [...] have investigated these group-level effects from the individual group members' perspective' (Häusser et al., 2020, p. 722). In this sense, the 'sharedness' of an organizational membership was taken for granted. However, this may not always be the case. The sharedness reflects the degree to which the employees' perceptions of the same organization (or unit, department, and so on) are congruent across in-group members, in terms of both evaluation (positive vs. negative evaluations), and magnitude (high vs. low levels). It is reasonable to expect that the more congruent (and positive) these perceptions are, the stronger the trust and the reciprocal influence will be among in-group members (Häusser et al., 2020).

Following arguments by Häusser et al. (2020), it is necessary to distinguish between individual and group identification levels.<sup>1</sup> Individual identification represents 'the degree to which an individual identifies with a group' (p. 723). In an organizational context, this group could

<sup>1</sup> The authors also introduced the concept of 'perceived group identification', which we did not take into consideration in the current article.

be the workgroup, a department, or the organization as a whole. The degree to which an employee identifies with a group, will, for instance, determine how well she/he will correctly interpret the received support by *in-group* members (Frisch et al., 2014; Häusser et al., 2012). Group identification is defined as 'the average individual identification of the group members within a group' (p. 724). The higher this average identification, the more the members will work as a group, increasing the likelihood that *in-group* employees will act in cooperative and supportive terms. Finally, Häusser et al. (2020) hypothesized that the group- and individual-level of identifications could interact with each other, and this interaction could affect employees' attitudes and behaviours. In particular, the employees' deviations from the average group identification provide us with information about the degree of consensus (or 'sharedness') of this identification at the group level. This sharedness, in turn, could affect the relationships existing at a lower level of analysis. Indeed: 'if an individual group member strongly identifies with a group and provides support, it does not necessarily mean that the other group members feel the same and are more likely to help this individual in return' (p. 724). Thus, for example, an employee working in a certain group within her/his organization, may have a strong *individual* organizational identification, while the organizational identification at the *group* level (i.e., the mean organizational identification of all members of that group) may be low, just as the degree of organizational identification *sharedness* at the group level may also be low.

Strongly identified employees show more favouritism for their *in-group* members, and they are more prone to commit themselves to cooperative and collaborative behaviours (van Dick & Haslam, 2012). The level of identification for one's own organization should lead employees to give, receive and correctly interpret their colleagues' support and increase the likelihood of collective action in the workplace (for empirical confirmations, see: Avanzi et al., 2015; Junker et al., 2019). However, this should be particularly true when the feelings of organizational belonging are high and shared among all *in-group* members. Furthermore, a strong and shared identification at the same identity level is also important because employees have to manage multiple identities at work, and when there is no consensus among *in-group* members, this may lead to identity conflicts (Horton et al., 2014).

In a work environment, people will establish their group identity through social interactions with other group members, and the quantity and quality of these interactions will determine how much each member feels attached to the group, and in general how shared that sense of membership will be among the group members (Jans et al., 2015). Consistently, a strong group-level identity is related to more interactions among group members, and to stronger emotional bonds and interdependence (Ozeki, 2015). Indeed, through such interactions people become more aware of group norms and values and will compare them with their own, as well as with those of other *in-group* members. If there is congruence and a positive evaluation of the group identity among employees, then 'the group may increasingly become a shared reference point that influences group members' identification' (Jans et al., 2015, p. 192). A strong and shared social identification, in turn, should influence individuals' attitudes and behaviours. For

example, there is evidence that group-level organizational identification reduces the likelihood of bullying (Escartín et al., 2013), and increases team-performance, over and above individual identification (Thomas et al., 2019). On the contrary, if an employee is relatively less identified than the mean level of *in-group* identification, she/he could perceive the group's aims and norms as a potential stressor, or could see her/himself as an 'outsider', losing the benefits related to staying in a group. Steffens et al. (2017), in their meta-analytic study, found that the correlation between organizational identification and health was moderated by the standard deviation of identification at the level of primary studies, so that this link was stronger in proportion to the extent to which the sharedness was higher (i.e., low scores of standard deviation) across primary studies.

### 3 | RELATION BETWEEN INDIVIDUAL AND SHARED ORGANIZATIONAL IDENTIFICATION AND INDIVIDUAL JOB SATISFACTION

People tend to identify with a group in order to satisfy basic and fundamental human needs (Greenaway et al., 2016). Indeed, people identify themselves with a group because the group provides them with the basis for a sense of collective self-esteem (Haslam, 2004). Furthermore, social membership reduces the individual's uncertainty about her/his place in the world by providing meaning and purpose, and in general people need 'to feel a sense of belonging with a larger group' (Ashforth et al., 2008, p. 334). In an organizational context, by internalizing the organization as part of their own self-concept, employees may achieve a sense of meaningfulness and become more aware of their place in the social world. Moreover, a strong organizational identification increases the connectedness among colleagues, enhancing the likelihood that employees will attach themselves to the organization, and will be more prone to cooperate and collaborate with other organizational members (Avanzi et al., 2015; Junker et al., 2019; van Dick & Haslam, 2012).

Job satisfaction represents an internal status related to the individual employee's positive (vs. negative) evaluations concerning their own job. It represents one of the most studied attitudes at work in the organizational literature, and it is associated with many positive outcomes. For example, job satisfaction is a negative predictor of turnover intentions and actual turnover (Podsakoff et al., 2009). Furthermore, a well-documented hypothesis (happy-productive worker) argues that employees who are more satisfied with their job should also be more productive. Consistently, previous evidence shows a positive correlation between job satisfaction and job performance (Judge et al., 2001).

Since highly identified employees perceive more positive relations in the work context than less identified colleagues, in terms of less burnout and stress, and higher levels of positive affect, a strong organizational identification should be related to higher levels of job satisfaction (Haslam et al., 2005; Herrbach, 2006; Wegge et al., 2006). Consistent with this assumption, a first meta-analysis by Riketta (2005) found a high correlation between identification and both job and organizational satisfaction ( $\rho = .54$  and  $\rho = .59$ , respectively; see also Steffens et al., 2017). Accordingly, our first hypothesis is:

**H 1.** *organizational identification (individual or within-level) will be positively related to job satisfaction (individual or within-level)*

However, employees do not act in a 'social vacuum', but they are encapsulated in groups. Hence the employees' sharedness perception of those belonging to the same group (within the organization) should influence their individual attitudes and behaviours (Häusser et al., 2020). Following the argument by Rubenstein et al. (2018), people may be influenced in their attitudes by the degree of (dis)similarity perceived within their group (i.e., unit, department, and organization) or by the shared climate in their group. In particular, the homogeneity of individual perceptions within the same group could be seen as a signal that in-group members receive similar benefits and rewards from this membership. Thus, it is reasonable to expect that employees sharing a positive and strong group identification should show even more positive feelings about their job (e.g., job satisfaction). For example, an employee with high *individual* identification should show more job satisfaction, but she/he may be even more satisfied if other in-group members are strongly identified too, that is if she/he shares with her/his group colleagues a high level of identification at the group level. Indeed, a shared identification could create a recursive and positive group climate, able to foster an emotional link and group cohesion. As a consequence, this could also reduce possible nested intra-unit identity conflicts (Horton et al., 2014). Particularly important for our study, employees may see themselves as similar to or different from other colleagues regarding a certain aspect. These perceptions may be reinforced or weakened depending on the extent to which the views of other members are on average very similar (or dissimilar) to one another. Such comparisons may justify employees' attitudes and behaviours, leading them to increase or buffer the expected outcomes (Rubenstein et al., 2018).

Thus, we expected that employees with high levels of organizational identification will show greater job satisfaction, particularly when the shared group identification is high. This speculation also fits with recent methodological contributions highlighting that between-cluster differences in within-cluster variability (e.g., differences across clusters in the within-cluster standard deviation) are not due to error variance or chance, but instead, are the result of substance variability (Lester et al., 2021; McNeish, 2021; see also Chan, 1998 for similar considerations). This may be particularly true for between-cluster differences in the within-cluster variability of organizational identification, given the above reasoning on the importance of shared organization identification. Therefore, we expected a cross-level moderation by shared organizational identification on the relationship between organizational identification and job satisfaction, both measured at the individual level. Accordingly, our second hypothesis is:

**H 2.** *organizational identification (individual or within-level) will be positively related to job satisfaction (individual or within-level), especially when within the group there is a high degree of organizational identification sharedness (i.e., low scores in between-level organizational identification standard deviation)*

#### 4 | RELATION BETWEEN GROUP ORGANIZATIONAL IDENTIFICATION AND COLLECTIVE ACTUAL TURNOVER

Employees' turnover represents a significant cost for organizations. Organizations face costs in order to replace lost employees in terms of recruiting, selecting, and training new employees. Further, there are direct costs associated with turnover, related to the loss of abilities, networks, tacit knowledge, and social capital, created by employees quitting the organization. Finally, organizations are committed to retaining the best performers, and a loss of these key-employees could be very detrimental to the organization's competitiveness (Rubenstein et al., 2018).

Workers may decide to leave their organizations for many *personal* reasons, because they have alternatives in other organizations that are more interesting in terms of following their own paths of career development, or due to changes in their personal lives, or simply because they feel dissatisfied with their current job (Bakker et al., 2003). Voluntary turnover is the individual choice to leave one's own job, but at the same time, it represents an employee's exit from a social group (e.g., organization). When employees strongly identify with their organization, the organization becomes part of their self-concept, and consequently, employees will tend to partly define themselves in terms of that membership. Therefore, withdrawal from one's own organization would appear to be detrimental to one's self-concept, because leaving it would represent the loss of part of one's self (Avanzi et al., 2014; Cepale et al., 2021; Knippenberg et al., 2007). Putting together 34 independent samples, Riketta (2005) showed that the meta-analytic negative correlation between organizational identification and intention to quit was from moderate to high ( $\rho = -.48$ ).

While most of the literature has typically focused on the link between individual identification and individual turnover, Hausknecht and Trevor (2011) have outlined that 'for conceptual and methodological reasons, relationships that are well established at the individual level will not necessarily hold at higher levels' (p. 359; see also Chen et al., 2005). In this research, we concern ourselves with group organizational identification and its relation to the collective turnover, defined as 'the aggregate levels of employee departures that occur within groups, work units, or organizations' (Hausknecht & Trevor, 2011, p. 353). From a theoretical point of view, collective turnover can be seen from a social capital perspective (Dess & Show, 2001). We can define social capital as 'a resource reflecting the character of social relations within the organization' (Leana & Van Buren, 1999, p. 540). This social resource is related to the collective employees' orientation to organizational goals and aims, together with the shared trust and ties among them. In this sense, the focus is not on the individual resources, but on relationships among employees within the same group (i.e., organization as a whole, unit, department, and so on). These relationships combine the abilities, knowledge, and individual characteristics in a unique way, increasing the competitive advantages of the organization (Dess & Show, 2001). The rate of turnover in a group or organization can undermine this social resource, with

detrimental effects on overall organizational efficacy and performance (Hausknecht & Trevor, 2011). In this sense, the cohesiveness and strengths of the relationships between employees nested in the same group should facilitate cooperation, information sharing, and professional networking, increasing the values of this social capital, but at the same time, maximizing the negative consequences of a possible collective turnover (Dess & Show, 2001).

In their review on the causes and consequences of collective turnover, Heavey et al. (2013) identified several categories of contextual factors potentially able to explain group or organizational turnover rate. Within these categories, Heavey et al. (2013) identified, for example, the quality of the work group and HRM investments. Particularly important for the present study, potential antecedents of collective turnover are shared attitudes towards the job and organization. Among these attitudes, Heavey et al. (2013) take into consideration the collective level of employees' job satisfaction, commitment, turnover intentions, and so on. Employees who decide to leave their organization may see themselves, and be perceived by other colleagues, as 'outsiders' in a certain way. On the contrary, a strong organizational identification at the group level should help employees to see themselves as in the 'right group', reinforcing the perceptions of similarity among colleagues, and as a consequence, reducing the likelihood of exiting from that group. Therefore, when the mean organizational identification is high within a group, we expect the mean rate of collective turnover in that group to be low.

Most studies have measured turnover intentions, instead (or as a proxy) of actual turnover. This option is reasonable, to the extent that the intentions to engage oneself in a certain behaviour may be the best predictor of that behaviour. Consistently, a recent meta-analysis found that the correlation between turnover intentions and actual turnover was large ( $\rho = .56$ ; Rubenstein et al., 2018). However, there is still a high degree of non-shared variance between intentions and behaviours given that workers may not have the real opportunity to leave their current job because of lack of alternatives or due to a particular family condition. Indeed, the same authors of this meta-analysis, in order to further the literature on turnover, recommended that 'researchers must measure turnover behavior *qua* turnover behavior' (Rubenstein et al., 2018; p. 52). Following these recommendations, we used actual turnover, and hypothesize that:

**H 3.** *Group organizational identification (group or between-level organizational identification) will be negatively associated with collective actual turnover.*

## 5 | GROUP JOB SATISFACTION AS MEDIATOR BETWEEN GROUP ORGANIZATIONAL IDENTIFICATION AND COLLECTIVE ACTUAL TURNOVER

Many authors and empirical evidence argue that some employees' attitudes may play an important role in predicting employee turnover (Griffeth et al., 2000; Podsakoff et al., 2007). For example, in a first

meta-analysis on turnover, Steel and Ovalle (1984) found that turnover intentions were the best predictor of actual turnover, followed by organizational commitment and work satisfaction (Steel & Ovalle, 1984; for similar results, see Griffeth et al., 2000). Podsakoff et al. (2007), using a meta-analytic strategy, tested a model in which actual turnover was predicted by both proximal (e.g., turnover intentions) and more distal (e.g., organizational commitment, job satisfaction, and strains) job predictors.

The relationship between attitudes and turnover has also been tested within a higher level of analysis (Whitman et al., 2010). By aggregating employees' individual evaluations at the group level, researchers are able to measure the *collective* attitudes. The aggregation of *individual* job satisfaction at the group level is reasonable, because job conditions are important antecedents of job satisfaction, and employees working in the same group or unit will tend to share many work circumstances, in particular being coordinated by the same direct supervisor. Furthermore, they will share 'a common workspace; the same practices, rules, and policies; the same coworkers; and the same technologies' (Whitman et al., 2010, p. 46). This means that employees working in the same unit or workgroup may be exposed to a similar environment, and consequently they may show similar evaluations about their environment. Strong (and positive) evaluations concerning their job (i.e., group job satisfaction) should in turn discourage employees from quitting their organization. For example, in a multilevel scenario, Liu et al. (2012) found that the more overall satisfaction in the group increased over time, the fewer employees quit their jobs (actual turnover). These results are also confirmed by meta-analytic empirical evidence (Heavey et al., 2013; Whitman et al., 2010).

Thus, we hypothesized:

**H 4.** *Group job satisfaction (group or between-level) will mediate the relationship between group organizational identification (group or between-level) and collective actual turnover.*

In order to facilitate the interpretation of our hypothesized paths, Figure 1 provides a multilevel representation of our model.

## 6 | METHOD

### 6.1 | Participants

We tested our hypotheses in a sample of employees from a large firm in Italy. The firm is involved in the plumbing and heating market in Italy for the distribution of materials and services. The organization has several dozen sale locations throughout Italy. The questionnaire was sent to all employees in all sale locations across Italy and responses were collected in a box for each location.<sup>2</sup> The study assured respondents about anonymity and confidentiality. The questionnaire included

<sup>2</sup> The sale location represents the clustering variable. This means that the sale locations are groups in which individuals are nested.



a statement regarding personal data treatment, in accordance with Italian privacy law.

A total of 1090 employees participated in the survey (78.3% response rate). Participants' tenure distribution was as follows: up to one year = 14.2%, from 2 to 7 years = 46.7%, from 8 to 14 years = 16.9% and 15 or more years = 16.9% (5.3% missing data). Employees' status ranged from: 8.2% supervisor/1st level, 39.1% 2nd-3rd levels, 43.1% 4th-5th levels and 2% 6th-7th levels (7.6% missing data). Information about gender and age were not requested, in order to avoid possible problems with the anonymity of participants. For the same reasons, the firm did not allow us to collect individual data about actual turnover. The employees were clustered in 91 sale locations ( $M = 12$ ,  $SD = 9.38$ ), however we removed one cluster containing only one employee. Thus, our final sample consisted of 90 sale locations, ranging from 4 to 64 employees per cluster. We asked the organization to collect archive data about actual turnover across each location in the subsequent year of the survey. We obtained turnover data for only 52 sale locations.

## 6.2 | Measures

### 6.2.1 | Organizational identification

We measured organizational identification using Mael and Ashforth's (1992) 6-item scale in the Italian version by Bergami and Bagozzi (2000). Responses were given on a 5-point scale, ranging from 'totally disagree' (1) to 'totally agree' (5). Sample item: 'I say "we" rather than "they" when talking about my organization' ( $\omega_{\text{within}} = 0.889$ ,  $\omega_{\text{between}} = 0.986$ ).<sup>3</sup>

### 6.2.2 | Job satisfaction

We assessed job satisfaction using the 8-item multifaceted scale by Cortese (2001). Responses were given on a 5-point scale, ranging from 'not at all' (1) to 'very much' (5). Sample items include: 'How satisfied are you with relations with your superiors?', 'How satisfied are you with the definition of tasks and responsibilities?', 'How satisfied are you with the career opportunities?' ( $\omega_{\text{within}} = 0.870$ ,  $\omega_{\text{between}} = 0.958$ ).

### 6.2.3 | Collective actual turnover

Turnover was measured by the ratio of total number of leavers to group size, and represents the rate of turnover for each group. It was gathered 1 year after the self-report assessment. All cases of turnover were voluntary, and none of them were obliged by layoff, firings, or legal actions.

### 6.2.4 | Control variables

We controlled for several variables that may affect the proposed relationships but that were not of direct theoretical interest. In particular, we controlled for leadership style (supportive), respondents' contractual status, tenure, type of job at within-level, and group size at between-level.

Leadership is crucial for the functioning of each organizational system, for the pursuit of organizational aims and goals, as well as to strategically adapting the organization towards necessary changes. Leaders' behaviours strongly affect many employees' attitudes and behaviours. Indeed, leaders provide resources and feedback, reward and punishment and represent a role model for employees. Efficacious leaders are also important in order to create a positive climate in the organization, to promote group cohesion, and create a supportive environment (van Dick et al., 2007). There is abundant evidence on the role played by employees' perception of their leader in terms of employees' motivation, health, and job satisfaction, among others (see e.g., Judge & Piccolo, 2004; Kuoppala et al., 2008). We measured leadership style using the 6-item scale by D'Amato and Majer (2005), which focuses on supportive leadership (House, 1996) based on a good relationship. Responses were given on a 5-point scale, ranging from 'totally false' (1) to 'totally true' (5). Sample items include: 'My supervisors keep me regularly informed about the operation of the sale location', 'Work relationships with my supervisors are friendly', 'My supervisors are not interested in my professional development [reversed]' ( $\omega_{\text{within}} = 0.788$ ).

The effect of tenure was taken into account because it was found to be a significant predictor of job satisfaction, even more than age (Bedeian et al., 1992). Hence, tenure was included in our model by means of an ordinal variable ranging from 1 (*up to 1 year*) to 4 ( $\geq 15$  years). Finally, contractual status and type of job represent two important aspects that may affect job characteristics in general, and as a consequence also job satisfaction. Contractual status was assessed by means of an ordinal variable ranging from 1 (*low level*) to 4 (*high level*), whereas type of job consisted of the different job positions, such as sales, administrative, or warehouse. For this reason, the effect of type of job was assessed by means of a dummy variable that assumed the value 0 for sales, administrative, and warehouse, and the value 1 for others. Finally, at the between-level, we controlled for the effect of group size. A larger group size may be related to greater difficulty in coordination among in-group members and inefficiencies that, in turn, could discourage some employees, leading them to quit the organization (Hausknecht & Trevor, 2011).

## 6.3 | Data analyses

Analyses were conducted with three software: data wrangling was done in SPSS; the statistical open source software R (Version 4.0.2; R Core Team, 2020) was used for computing hierarchical descriptive statistics, hierarchical computation of correlations, hierarchical reliability analyses, and plotting interactions

<sup>3</sup>  $\omega_{\text{within}}$  and  $\omega_{\text{between}}$  were computed through the omegaSEM() function from the multilevel-Tools package in R (Version 4.0.2; R Core Team, 2020). We preferred to report within-cluster omega and between-cluster omega instead of within-cluster alpha and between-cluster alpha because omega values have been shown to outperform alpha values under most conditions in the simulation study by Geldhof et al. (2014); the exception was in dyadic data, which is not our case (see Geldhof et al., 2014).

(see Supplementary Material 1 for R script); finally, *Mplus* (Version 8.4; Muthén & Muthén, 1998–2017) was used for computing ICC parameters (for job satisfaction and organizational identification), and for estimating parameters of our hypothesized multilevel model (see Supplementary Material 2 for *Mplus* syntax).

Our data analytic strategy proceeded as follows. We first built composite scores of multi-item measures (e.g., organizational identification and job satisfaction) by computing the mean of their corresponding items. For organizational identification (OI) we also computed two between-level composite scores: OI\_mean (between-level variability in cluster mean) and OI\_sd (between-level variability in cluster standard deviation); both were computed starting from the OI composite score. In this way, we operationalized both the mean-level and the variation of OI within each cluster (i.e., sale location).

Second, for measures used at both Level-1 and Level-2 (e.g., organizational identification, job satisfaction), we calculated the Intraclass Correlation (ICC) to obtain the percentage of variance due to groups: values above 0.10 would support the need for disentangling between and within variance.

Third, we estimated a multilevel model (Model 1) in which (a) at the within-level (Level-1) job satisfaction was affected by organizational identification; (b) at the between-level (Level-2) turnover was affected by job satisfaction random intercept and OI\_mean; and (c) at the between-level (Level-2) job satisfaction random intercept was affected by both OI\_mean and OI\_sd, while random slope (see  $\beta_{1j}$ ) was affected by OI\_sd (cross-level interaction). Then, we estimated a second model (Model 2) in which we added several control variables, in order to control for potential confounding effects. As control variables, we controlled for the effect of supportive leadership style, contractual status, tenure, and type of job at the within-level, while we controlled for the effect of group size at the between-level.

Multilevel models were performed using a Bayesian estimator<sup>4</sup> with uninformative priors, given that it has been recently shown to outperform classical maximum likelihood estimators in some conditions (Asparouhov & Muthén, 2021).

## 7 | RESULTS

Descriptive statistics and correlations between study variables (separated for between- and within level) are reported in Table 1 and Table 2, respectively.<sup>5</sup> Concerning issues of power, our sample size is consistent with suggestions in the literature, given that we have more than 50 clusters and more than 1000 observations (e.g., Hox et al.,

2012; McNeish, 2017). The ICC for organizational identification and job satisfaction was acceptable (0.104 and 0.110, respectively), and thus justifies the examination of their variance at the between-level.

Before running our hypothesized multilevel model, all within-level predictor variables were group-mean centred, while all between-level predictor variables were grand-mean centred (Hamaker & Muthén, 2020). Moreover, we first ran a basic model in which at the within-level organizational identification predicted job satisfaction, and the intercept and slope of this relationship were examined at the between-level, in order to ascertain that random intercept and random slope had a significant degree of mean and variance. We found that: mean was significant for both random intercept ( $\gamma_{00} = 3.415$ , 95% CI = 3.335, 3.500) and random slope ( $\gamma_{10} = 0.422$ , 95% CI = 0.382, 0.471; this supports Hypothesis 1); variance was significant for both random intercept ( $\tau_{00} = 0.107$ , 95% CI = 0.067, 0.157) and random slope ( $\tau_{11} = 0.013$ , 95% CI = 0.005, 0.032); covariance between random slope and random intercept was not significant ( $\tau_{01} = 0.009$ , 95% CI = -0.013, 0.030); and finally, we found that at the within-level organizational identification explained 25.5% of job satisfaction variance (Within-Level R-Square Averaged Across Clusters = 0.255, 95% CI = 0.216, 0.300).

We then performed the hypothesized model reported in Figure 1. The parameters are reported in Table 3. As can be seen, at the between-level we found that OI\_sd had a cross-level effect in the within-level relationship between organizational identification and job satisfaction. This is attested by the significance of the effect exerted by OI\_sd on the random slope (see parameter 2 in Table 3;  $\beta = -0.248$ , 95% CI = -0.463, -0.047). The plot of the simple slopes for high (+1 standard deviation) and low (-1 standard deviation) levels of OI\_sd is reported in Figure 2. More specifically, we found that the within-person effect of organizational identification on job satisfaction was  $\beta = 0.509$  (95% CI = 0.419, 0.604) for low levels of OI\_sd (see parameter 18 in Table 3) and  $\beta = 0.374$  (95% CI = 0.315, 0.433) for high levels of OI\_sd (see parameter 19 in Table 3). This means that the more employees report similar values of organizational identification in their group (low OI\_sd), the more, at the individual level, organizational identification impacts on job satisfaction. The above findings support Hypothesis 2.

Moreover, Hypothesis 3 (i.e., the direct positive effect of group organizational identification on collective actual turnover) was also supported. Indeed, we found that group organizational identification negatively and significantly affected collective actual turnover ( $\beta = -0.288$ , 95% CI = -0.543, -0.051; see parameter 5 in Table 3). Hence, as the average level of organizational identification in sale locations increases, then the average collective actual turnover is less likely to occur.

Finally, Hypothesis 4 (i.e., the mediated effect of group job satisfaction in the between-level relationship between group organizational identification and collective actual turnover) was not supported, given that the effect of group job satisfaction on collective actual turnover was not significant ( $\beta = 0.184$ , 95% CI = -0.227, 0.653; see parameter 6 in Table 3).

With regard to explained variance, we found that the model explained 25.8% of job satisfaction variance at the within-level ( $R^2 = 0.258$ , 95% CI = 0.218, 0.299), 70.7% of job satisfaction variance at the between-level ( $R^2 = 0.707$ , 95% CI = 0.506, 0.856),

<sup>4</sup> Bayesian Multilevel Structural Equation Modelling combines the advantages of multilevel modeling, structural equation modelling, and Bayesian methods. Indeed, the complexities of Multilevel SEM is often associated to a loss of accuracy of parameter estimation and to a decline in convergence rates, due to the limitations of traditional frequentist estimation methods (e.g., Maximum Likelihood). Thus, in our context, the Bayesian estimator provided by *Mplus* was chosen because it is recommended for scenarios like this, as it can overcome the above problems. Given that the details on Bayesian Multilevel Structural Equation Modelling are beyond the scope of this contribution, we suggest reading Chapter 7 in Depaoli (2021) for an introduction.

<sup>5</sup> These statistics were computed by means of the `statsBy()` function of the `psych` package in R (Version 4.0.2; R Core Team, 2020).

**TABLE 1** Descriptive statistics for study variables

Level	Variable	n	M	SD	Skewness	Kurtosis
Within	Organizational identification	1090	3.54	1.05	-0.64	-0.31
	Organizational identification SD <sup>a</sup>	1089	0.97	0.23	-0.02	0.71
	Job satisfaction	1086	3.37	0.81	-0.26	-0.24
	Turnover	523	0.19	0.18	1.79	4.02
	Supportive leadership	1089	3.62	0.94	-0.53	-0.25
	Contractual status	1010	2.43	0.70	-0.21	-0.03
	Tenure	1032	2.38	0.95	0.43	-0.75
	Type of job	1045	0.07	0.26	3.29	8.81
Between	Organizational identification	92	3.55	0.49	-0.83	0.90
	Organizational identification SD <sup>a</sup>	91	0.95	0.28	0.07	0.24
	Job satisfaction	88	3.42	0.39	-0.09	0.07
	Turnover	52	0.20	0.22	1.77	3.20
	Supportive leadership	91	3.69	0.49	-0.33	0.31
	Contractual status	44	2.41	0.28	0.32	-0.42
	Tenure	57	2.20	0.48	0.51	0.79
	Type of job	63	0.09	0.14	4.46	26.36
	Group size	92	11.85	9.40	2.97	11.28

aStandard deviation of organizational identification computed within each cluster (this represents the operationalization of shared organizational identification).

**TABLE 2** Correlations between study variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Organizational identification	1	-	.53**	-	.34**	-.26**	.14**	.04	-
2. Organizational identification SD <sup>a</sup>	-.48**	1	-	-	.02	.00	-.03	.01	-
3. Job satisfaction	.66**	-.45**	1	-	.69**	-.16**	-.04	.01	-
4. Turnover	-.41*	.01	-.17	1	-	-	-	-	-
5. Supportive leadership	.42*	-.44**	.79**	-.15	1	.02	-.09*	.00	-
6. Contractual status	-.01	.03	-.06	-.01	-.01	1	-.36**	-.01	-
7. Tenure	-.28*	.22*	-.42**	.04	-.42**	-.25*	1	.00	-
8. Type of job	.30*	-.16	.28*	-.21*	.17	-.13	-.17	1	-
9. Group size	-.07	.07	-.29*	.06	-.36*	-.05	.44**	-.19	1

Note: Between-level (Level-2) correlations are reported below the diagonal; within-level (Level-1) correlations are reported above the diagonal.

<sup>a</sup>Standard deviation of organizational identification computed within each cluster (this represents the operationalization of shared organizational identification).

\* $p < .01$ .

\*\* $p < .001$ .

24.5% of turnover variance at the between-level ( $R^2 = 0.245$ , 95% CI = 0.067, 0.468), and 38.3% of random slope variance<sup>6</sup> ( $R^2 = 0.383$ , 95% CI = 0.018, 0.889).

<sup>6</sup> Random slope variance refers to the cluster variability of the relation between organizational identification and job satisfaction at the individual level. In Figure 1, it is represented as the variable  $\beta_{1j}$

We ran another model including several control variables (as outlined in the Section 6; Model 2). Results are reported in Table A1 in the Appendix. As can be seen, the results did not change substantially, indeed the cross-level effect of OI\_sd was still significant (see Table A1, parameters 11, 28 and 29) and organizational identification still exerted a significant negative effect on collective actual turnover (see Table A1, parameter 14).



**TABLE 3** Estimated parameters from the Bayesian multilevel model (Model 1)

Level	Parameter	PP [95% CI]
Within	1. <i>ResVar</i> (Job satisfaction)	0.418 [0.382, 0.457]*
Between	2. $\beta(\text{OI\_sd} \rightarrow \beta_{1j})$	-0.248 [-0.463, -0.047]*
	3. $\beta(\text{OI\_sd} \rightarrow \text{Job satisfaction})$	-0.261 [-0.506, -0.007]*
	4. $\beta(\text{OI\_mean} \rightarrow \text{Job satisfaction})$	0.46 [0.324, 0.595]*
	5. $\beta(\text{OI\_mean} \rightarrow \text{Turnover})$	-0.288 [-0.543, -0.051]*
	6. $\beta(\text{Job satisfaction} \rightarrow \text{Turnover})$	0.184 [-0.227, 0.653]
	7. <i>Cov</i> (OI_sd, OI_mean)	-0.059 [-0.098, -0.03]*
	8. <i>Mean</i> (OI_sd)	0 [-0.058, 0.059]
	9. <i>Mean</i> (OI_mean)	0 [-0.105, 0.108]
	10. <i>Intercept</i> (Turnover)	-0.443 [-2.07, 0.962]
	11. <i>Intercept</i> (Job satisfaction)	3.405 [3.35, 3.463]*
	12. <i>Intercept</i> ( $\beta_{1j}$ )	0.441 [0.389, 0.495]*
	13. <i>Var</i> (OI_sd)	0.079 [0.059, 0.107]*
	14. <i>Var</i> (OI_mean)	0.261 [0.197, 0.356]*
	15. <i>ResVar</i> (Turnover)	0.038 [0.025, 0.06]*
	16. <i>ResVar</i> (Job satisfaction)	0.032 [0.014, 0.059]*
	17. <i>ResVar</i> ( $\beta_{1j}$ )	0.008 [0.001, 0.026]*
	AddPar	18. $\beta(\text{OI} \rightarrow \text{Job satisfaction} \mid \text{Low OI\_sd})$
19. $\beta(\text{OI} \rightarrow \text{Job satisfaction} \mid \text{High OI\_sd})$		0.374 [0.315, 0.433]*

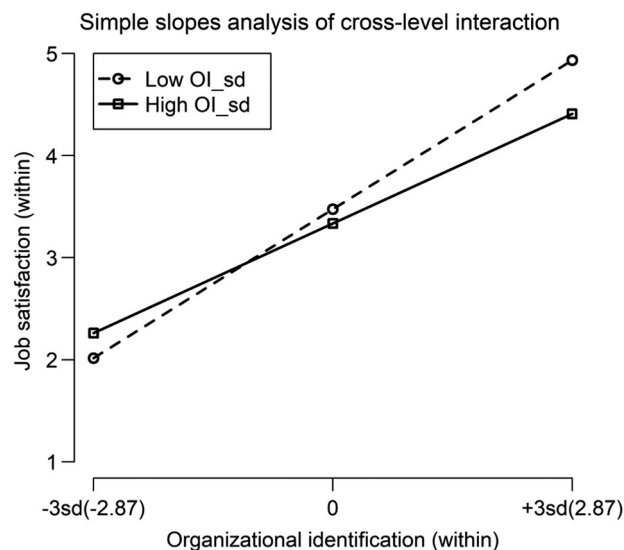
Note: Estimates are unstandardized.

AddPar, additional parameters (simple slopes); OI\_sd, Organizational Identification Standard Deviation at Between Level; OI\_mean, Organizational Identification Mean at Between Level;  $\beta_{1j}$ , random slope of the within-level relationship 'organizational identification → job satisfaction' (see also Figure 1); *ResVar*, Residual Variance;  $\beta$ , regression path; *Var*, variance; *Cov*, covariance; PP [95% CI], Posterior Parameter and 95% Credibility Interval; \* significance of the parameter (i.e., the 95% CI does not include the value of zero).

Parameters 18 and 19 represent the within-level effect of organizational identification on job satisfaction conditional to the low value of OI\_sd (hence high shared OI) and high value of OI\_sd (hence low shared OI), respectively.

## 8 | DISCUSSION

While the importance and potential impact that a strong organizational identity may have in explaining many important organizational attitudes and behaviours has already been postulated, little 'research has



**FIGURE 2** Cross-level interaction. Cross-level interaction of organizational identification within-cluster variation (expressed in standard deviation) measured at the between level (OI\_sd) in the within-level effect of organizational identification to job satisfaction. In this plot, organizational identification at the within level span from -3 standard deviation (row value = -2.87) to +3 standard deviation (row value = 2.87). Low OI\_sd = high shared organizational identification; High OI\_sd = low shared organizational identification. Parameters (also reported in Table 3) refer to Model 1 (i.e., without control variables).

looked into the effects of shared identities' (van Dick et al., 2018, p. 22). This study represents, to the best of our knowledge, one of the first attempts to measure this impact, drawing on Social Identity Theory in an organizational context. Following the theorizing by Häusser et al. (2020) and the empirical evidence from a recent meta-analysis (Steffens et al., 2017), we postulated that the more organizational identity is cohesive and shared, the stronger the impact on outcomes. Our analyses corroborated our expectations. Indeed, our findings highlight how the individual level of organizational identification was positively related to individual job satisfaction, especially for employees who are members of groups with a high degree of shared organizational identification. Group sharedness may increase the conformism to group norms and aims, improving coordination and cooperation among colleagues, and facilitating collective actions in order to cope with stressors and tasks at work.

Thus, our results highlight that employees who work in a more cohesive group tend to show more individual job satisfaction. Management should carefully consider this. Indeed, there is evidence that employees' job satisfaction is positively related to enhanced job performance (Judge et al., 2001) and customer satisfaction (Mendoza & Maldonado, 2014), and on the contrary, is related to fewer actual turnover and turnover intentions (Griffeth et al., 2000; Hancock et al., 2017). Furthermore, there is also meta-analytic evidence that the pay level (which represents a strong motivational lever in human resources management) shows only a modest and marginal relation with job satisfaction, reinforcing the possible action played by social and relational aspects of

work context in this dynamic over and above economic rewards (Judge et al., 2010). Our findings, in fact, suggest the important role played by employees' sense of belonging alongside the degree of their cohesion (sharedness) within the group.

The second aim of this study was to test the effect of attitudes measured at the higher-level of analysis (e.g., group) on collective actual turnover. Both group job satisfaction and employee attachment (i.e., commitment or identification) have been hypothesized as antecedents of collective turnover, since it is reasonable to expect that groups with a high level of identification and satisfaction should show a lower rate of turnover (Hausknecht & Trevor, 2011). Consistently, in our sample, we found that the sale locations with higher levels of organizational identification were the ones with the lowest rates of turnover. Although we found evidence for a direct link between group organizational identification and collective actual turnover, we failed to find evidence for our hypothesized mediational model. In previous meta-analytic empirical findings, at both individual and collective levels, authors showed a possible role of individual/collective attitudes (i.e., job satisfaction) as mediators or antecedents in predicting actual individual/collective turnover (Griffeth et al., 2000; Hancock et al., 2017; Heavey et al., 2013; Whitman et al., 2010; Rubenstein et al., 2018). However, in our study, the mean level of group job satisfaction did not mediate the relationship between group organizational identification and collective actual turnover. A possible explanation is that the cumulative knowledge regarding turnover may be inflated by potential methodological weaknesses, such as outliers and publication bias, that in turn may bias meta-analytic evidence (see e.g., Field et al., 2021).

In any case, the literature has shown that organizational attachment is related more strongly and consistently to turnover than job satisfaction, 'perhaps reflecting stronger ties between the target of the attitude (organization versus job) and the level of the criterion' (Hausknecht & Trevor, 2011, p. 376). Thus, we suggest that future studies should take into consideration the multilevel nature of the data in this type of analysis, but should also use more proximal and target-oriented variables to test this mediational model, such as turnover intentions rather than job satisfaction. Moreover, future studies may also take into account other possible factors able to explain turnover rate at group levels. For example, people may be influenced by the turnover rate in their group (e.g., turnover contagion) or by the 'overall job availability in the external market' (Rubenstein et al., 2018, p. 41).

However, failing to support the above mediational hypothesis does not underestimate the relevance of our findings, given that we found a significant and negative effect of group organizational identification on collective actual turnover. Indeed, in general, turnover represents a cost for organizations, in terms of recruitment and selection, as well as in terms of the time necessary to obtain the socialization and training for newcomers. Moreover, there is also evidence of a negative impact of collective turnover on economical and organizational performance, and on customer satisfaction (Hausknecht & Trevor, 2011; Heavey et al., 2013). Therefore, it is important for organizations and managers to keep in mind the crucial role that organizational identification (at the group level) plays in this dynamic. Employees in groups with a strong identification develop a cognitive and emotional bond

with each other and with their organization as a whole, and this in turn becomes important in terms of their personal and collective identities. Breaching this bond may represent a significant individual cost for employees, especially for those sharing a strong group identity, and this should discourage them from withdrawal behaviours.

## 8.1 | Limitations and future directions

Our study also has several limitations. For example, we obtained data on actual turnover only for a sub-sample of sale locations ( $N = 52$ ), thus the generalizability of our results to the full organization is questionable. Moreover, for privacy reasons, we were not able to collect individual data regarding turnover. Liu et al. (2012) showed that the group level of job satisfaction, as well as the dispersion over time of the job satisfaction trajectory, may moderate individual turnover. Even if our main hypotheses are related to a higher level of analysis (i.e., relationship between organizational identification and turnover rate at the group level), we suggest that future studies should collect data on turnover for both levels (individual and group). For the same reasons, given that a shared organizational identification at the group level moderates the relationship between identification and job satisfaction (individual level), we can hypothesize that the same finding may be found taking into consideration individual turnover as outcomes. Indeed, if employees do not share the same attitudes at the group level, this could increase in-group conflicts (Horton et al., 2014). For example, in their meta-analysis regarding the effect of group job satisfaction on group job performance, Whitman et al. (2010) found a moderation effect of consensus (i.e., sharedness) within group, so that the relationship between job satisfaction and performance was stronger at higher levels of group shared job satisfaction. It is possible that non-identified employees may be even more prone to quit their organization, if they are members of a workgroup whose members are, on the contrary, strongly identified with one another. The comparison with strongly identified in-group colleagues could highlight the dissimilarity with other in-group employees, further exacerbating her/his attitudes (see Liu et al., 2012; Rubenstein et al., 2018). Additionally, we used group job satisfaction as a mediator, but other important attitudes could also be considered, such as turnover intentions (Podsakoff et al., 2007).

Another limitation is related to the common method variance, which may have biased the correlation size in our study (Podsakoff et al., 2003). Future studies should consider collecting data at different time points, for example by temporally spacing the collection of hypothesized antecedent (i.e., organizational identification) and mediator (i.e., job satisfaction or turnover intentions) variables. Furthermore, we considered some control variables, but many others could be used, for example at the individual level, organizational commitment or justice, while at the group level, group climate. In order to test a more complex model, it would, of course, be necessary to collect data from a greater number of clusters.

A further limitation regards the way we computed shared organizational identification, namely by means of cluster-level standard

deviation. While this approach is commonly used, some recent papers have shown that the use of multilevel SEM for specifying location-scale models may be a preferred alternative (McNeish, 2021). Given that multilevel SEM location-scale specification requires a large number of clusters and individual observations (e.g., 20 or more within-group observations nested in more than 50 clusters), we were not able to use it with our dataset (see McNeish, 2021, p. 648). However, we point out that advancements in location-scale models have been introduced only in recent years in the organizational literature (Lester et al., 2021; McNeish, 2021) and the manner in which we specified team-level variation in organizational identification (i.e., calculating the within-group standard deviation) is still widely used (see Lester et al., 2021, for a review). Notwithstanding, future research with a higher number of individual observations and clusters could replicate this model using the approach suggested by McNeish (2021).

Finally, while we considered only voluntary departures, we did not have information regarding leavers' individual performance. Usually, turnover is seen as a cost for the firms, but only to the extent that employees who leave the organization represent a loss of performing human capital, while employees who voluntarily leave their organization could include high, average, or low performers. Thus, future research should also consider this aspect.

## 8.2 | Theoretical and practical implications

Despite these limitations, we believe that our article makes a useful contribution to the literature and to practice in several ways.

From a *theoretical point of view*, first, we tested an important and new theoretical proposition regarding the role played by the shared organizational identification in explaining individual outcomes, as recently proposed by Häusser et al. (2020). In particular, taking into account the common feeling of membership among employees, we measured the perception and extent to which employees really feel like 'in-group members'. In this sense, our contribution supports the logic of the 'dispersion model' (Chan, 1998), in which 'the within-group variance is used as the operationalization of the purported group-level construct' (p. 239), and thus, is not merely treated as error variance.

Second, we showed the importance of simultaneously taking into consideration different levels of identification (individual and group) in relation to both individual (i.e., job satisfaction) and group (i.e., collective actual turnover) outcomes.

Third, following recent suggestions emerging from the literature on turnover (Rubenstein et al., 2018), we provided a study on actual turnover rather than on more commonly used turnover intentions. Following considerations by Bakker et al. (2003), among the main reasons why employees may leave their organization are: (a) escape from unsatisfactory work conditions or (b) to avoid work-related stress environments. In this study, we showed that organizational identification plays a preventive role in this regard, above all for leaving because of unsatisfactory work conditions. Indeed, we showed that a strong and shared organizational identification is able to promote job satisfaction at work. Following previous evidence, organizational identification

also provides the basis for a more supportive and healthy work environment (Steffens et al., 2017). Recently, for example, Avanzi et al. (2021), using a three-wave longitudinal design, empirically demonstrated that organizational identification increased support among colleagues, which in turn decreased employees' distress over time. Therefore, increasing employees' sense of organizational belonging could simultaneously act against both of the two motivations at the basis of withdrawal behaviours (e.g., turnover). This dynamic seems to act not only at an individual level, but also at the group level.

From a *practical point of view*, our study suggests that organizations should encourage group dynamics that foster employees' sense of belonging. For example, organizations could assign employees team goals in addition to individual goals, and consistently provide group rewards and incentives, over and above individual ones (Heavey et al., 2013). In this sense, a crucial role may be played by leaders. Organizations may promote participative leadership and positive communication styles. A leader strongly identified with her/his organization should interiorize organizational values and goals, and for this reason she/he will be prone to align employees towards these same goals and values. For example, there is empirical evidence in several occupational settings suggesting that leader's organizational identification directly fosters employee's identification and indirectly effects employee's job satisfaction (van Dick et al., 2007). Moreover, management could increase identification with the organization and team cohesiveness by encouraging common initiatives, such as ceremonies and other common events. Such initiatives favour organizational socialization and increase employees' feelings of being part of a family in the workplace (Steffens et al., 2017). In turn, increasing employees' sense of belonging should lead to more cohesiveness, more job satisfaction and fewer turnover intentions.

### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

### DATA AVAILABILITY STATEMENT

Research data are not shared due to privacy restriction. However, all codes are available in Supplementary Materials ('Supplementary Material 1' for R scripts, and 'Supplementary Materials 2' for Mplus syntax).

### ETHICS STATEMENT

All procedures performed in this study involving human participants were in accordance with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

### INFORMED CONSENT

Informed consent to take part in the study was obtained from all participants.

### ORCID

Lorenzo Avanzi  <https://orcid.org/0000-0002-3892-1142>

Enrico Perinelli  <https://orcid.org/0000-0002-7168-4847>

Marco Giovanni Mariani  <https://orcid.org/0000-0003-0481-520X>

## REFERENCES

- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management*, 34(3), 325–374. <https://doi.org/10.1177/0149206308316059>
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *The Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.2307/258189>
- Asparouhov, T., & Muthén, B. (2021). Bayesian estimation of single and multilevel models with latent variable interactions. *Structural Equation Modeling: A Multidisciplinary Journal*, 28(2), 314–328. <https://doi.org/10.1080/10705511.2020.1761808>
- Avanzi, L., Fraccaroli, F., Sarchielli, G., Ullrich, J., & van Dick, R. (2014). Staying or leaving: A combined social identity and social exchange approach to predicting employee turnover intentions. *International Journal of Productivity and Performance Management*, 63, 272–289.
- Avanzi, L., Perinelli, E., Bressan, M., Balducci, C., Lombardi, L., Fraccaroli, F., & van Dick, R. (2021). The mediational effect of social support between organizational identification and employees' health: A three-wave study on the social cure model. *Anxiety, Stress, and Coping*, 34(4), 465–478. <https://doi.org/10.1080/10615806.2020.1868443>
- Avanzi, L., Schuh, S. C., Fraccaroli, F., & van Dick, R. (2015). Why does organizational identification relate to reduced employee burnout? The mediating influence of social support and collective efficacy. *Work and Stress*, 29, 1–10.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356.
- Bedeian, A. G., Ferris, G. R., & Kacmar, K. M. (1992). Age, tenure, and job satisfaction: A tale of two perspectives. *Journal of Vocational Behavior*, 40, 33–48.
- Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, 39, 555–577.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83(2), 234–246.
- Chen, G., Bliese, P. D., & Mathieu, J. E. (2005). Conceptual framework and statistical procedures for delineating and testing multilevel theories of homology. *Organizational Research Methods*, 8(4), 375–409.
- Cepale, G., Alessandri, G., Borgogni, L., Perinelli, E., Avanzi, L., Livi, S., & Coscarelli, A. (2021). Emotional efficacy beliefs at work and turnover intentions: The mediational role of organizational socialization and identification. *Journal of Career Assessment*, 29(3), 442–462. <https://doi.org/10.1177/1069072720983209>
- Cortese, C. G. (2001). Prima standardizzazione del Questionario di Soddisfazione Organizzativa (QSO) [First standardization of the Organizational Satisfaction Questionnaire]. *Risorsa Uomo*, 8(3–4), 331–349.
- D'Amato, A., & Majer, V. (2005). Il vantaggio del clima [The climate advantage]. Raffaello Cortina.
- Depaoli, S. (2021). *Bayesian structural equation modeling*. Guilford.
- Dess, G. G., & Shaw, J. D. (2001). Voluntary turnover, social capital, and organizational performance. *Academy of Management Review*, 26, 446–456.
- Edwards, M. R. (2005). Organizational identification: A conceptual and operational review. *International Journal of Management Reviews*, 7, 207–230.
- Escartín, J., Ullrich, J., Zapf, D., Schlüter, E., & van Dick, R. (2013). Individual and group level effects of social identification on workplace bullying. *European Journal of Work and Organizational Psychology*, 22, 182–193.
- Field, J. G., Bosco, F. A., & Kepes, S. (2021). How robust is our cumulative knowledge on turnover? *Journal of Business and Psychology*, 36(3), 349–365. <https://doi.org/10.1007/s10869-020-09687-3>
- Frisch, J. U., Häusser, J. A., van Dick, R., & Mojzisch, A. (2014). Making support work: The interplay between social support and social identity. *Journal of Experimental Social Psychology*, 55, 154–161. <https://doi.org/10.1016/j.jesp.2014.06.009>
- Geldhof, G. J., Preacher, K. J., & Zyphur, M. J. (2014). Reliability estimation in a multilevel confirmatory factor analysis framework. *Psychological Methods*, 19(1), 72–91. <https://doi.org/10.1037/a0032138>
- Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, 46(3), 294–307. <https://doi.org/10.1002/ejsp.2169>
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26, 463–488. <https://doi.org/10.1177/014920630002600305>
- Hamaker, E. L., & Muthén, B. (2020). The fixed versus random effects debate and how it relates to centering in multilevel modeling. *Psychological Methods*, 25(3), 365–379. <https://doi.org/10.1037/met000239>
- Hancock, J. I., Allen, D. G., & Soelberg, C. (2017). Collective turnover: An expanded meta-analytic exploration and comparison. *Human Resource Management Review*, 27, 61–86. <https://doi.org/10.1016/j.hrmr.2016.06.003>
- Haslam, S. A. (2004). *Psychology in organizations: The social identity approach*. Sage.
- Haslam, S. A., O'Brien, A. T., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, social support and the experience of stress. *British Journal of Social Psychology*, 44, 355–370.
- Hausknecht, J. P., & Trevor, C. O. (2011). Collective turnover at the group, unit, and organizational levels: Evidence, issues, and implications. *Journal of Management*, 37, 352–388.
- Häusser, J. A., Junker, N. M., & van Dick, R. (2020). The how and the when of the social cure: A conceptual model of group- and individual-level mechanisms linking social identity to health and well-being. *European Journal of Social Psychology*, 50(4), 721–732.
- Häusser, J. A., Kattenstroth, M., van Dick, R., & Mojzisch, A. (2012). “We” are not stressed: Social identity in groups buffers neuroendocrine stress reactions. *Journal of Experimental Social Psychology*, 48, 973–977. <https://doi.org/10.1016/j.jesp.2012.02.020>
- Heavey, A. L., Holwerda, J. A., & Hausknecht, J. P. (2013). Causes and consequences of collective turnover: A meta-analytic review. *Journal of Applied Psychology*, 98(3), 412–453.
- Herrbach, O. (2006). A matter of feeling? The affective tone of organizational commitment and identification. *Journal of Organizational Behavior*, 27, 629–643.
- Horton, K. E., Bayerl, P. S., & Jacobs, G. (2014). Identity conflicts at work: An integrative framework. *Journal of Organizational Behavior*, 35, S6–S22.
- Hox, J. J., van de Schoot, R., & Matthijsse, S. (2012). How few countries will do? Comparative survey analysis from a Bayesian perspective. *Survey Research Methods*, 6(2), 87–93. <https://doi.org/10.18148/srm/2012.v6i2.5033>
- House, R. J. (1996). Path – goal theory of leadership: Lessons, legacy, a reformulated theory. *The Leadership Quarterly*, 7(3), 323–353.
- Jans, L., Leach, C. W., Garcia, R. L., & Postmes, T. (2015). The development of group influence on in-group identification: A multilevel approach. *Group Processes and Intergroup Relations*, 18, 190–209.
- Judge, T. A., Bono, J. E., Thoresen, C. J., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376–402. <https://doi.org/10.1037/0033-2909.127.3.376>
- Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior*, 77, 157–167.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768.



- Junker, N. M., van Dick, R., Avanzi, L., Häusser, J. A., & Mojzisch, A. (2019). Exploring the mechanisms underlying the social identity-ill-health link: Longitudinal and experimental evidence. *British Journal of Social Psychology, 58*(4), 991–1007. <https://doi.org/10.1111/bjso.12308>
- Kuoppala, J., Lamminpää, A., Liira, J., & Vainio, H. (2008). Leadership, job well-being, and health effects—A systematic review and a meta-analysis. *Journal of Occupational and Environmental Medicine, 50*, 904–915.
- Leana, C. R., & Van Buren, H. J. III (1999). Organizational social capital and employment practices. *Academy of Management Review, 24*, 538–555.
- Lee, E. -S., Park, T. -Y., & Koo, B. (2015). Identifying organizational identification as a basis for attitudes and behaviors: A meta-analytic review. *Psychological Bulletin, 141*(5), 1049–1080. <https://doi.org/10.1037/bul0000012>
- Lester, H. F., Cullen-Lester, K. L., & Walters, R. W. (2021). From nuisance to novel research questions: Using multilevel models to predict heterogeneous variances. *Organizational Research Methods, 24*(2), 342–388.
- Liu, D., Mitchell, T. R., Lee, T. W., Holtom, B. C., & Hinkin, T. R. (2012). When employees are out of step with coworkers: How job satisfaction trajectory and dispersion influence individual- and unit-level voluntary turnover. *Academy of Management Journal, 55*(6), 1360–1380. <https://doi.org/10.5465/amj.2010.0920>
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*(2), 103–123. <https://doi.org/10.1002/job.4030130202>
- Mael, F. A., & Ashforth, B. E. (1995). Loyal from day one: Biodata, organizational identification, and turnover among newcomers. *Personnel Psychology, 48*, 309–333.
- McNeish, D. (2017). Multilevel mediation with small samples: A cautionary note on the multilevel structural equation modeling framework. *Structural Equation Modeling: A Multidisciplinary Journal, 24*(4), 609–625. <https://doi.org/10.1080/10705511.2017.1280797>
- McNeish, D. (2021). Specifying location-scale models for heterogeneous variances as multilevel SEMs. *Organizational Research Methods, 24*(3), 630–653.
- Mendoza, M. L., & Maldonado, C. O. (2014). Meta-analytic of the relationship between employee job satisfaction and customer satisfaction. *Suma de Negocios, 5*, 4–9.
- Muthén, L. K., & Muthén, B. O. (1998–2017). *Mplus user's guide* (8th ed.). Muthén & Muthén.
- Ng, T. W. H., & Allen, T. D. (2018). Organizational attachment and health. *Journal of Vocational Behavior, 107*, 1–14. <https://doi.org/10.1016/j.jvb.2018.03.003>
- Ozeki, M. (2015). Group-level group identity as a basis of a group. *Group Dynamics: Theory, Research, and Practice, 19*(3), 166–180.
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, withdrawal cognitions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology, 92*, 438–454. <https://doi.org/10.1037/0021-9010.92.2.438>
- Podsakoff, N. P., Whithing, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology, 94*, 122–141.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- R Core Team. (2020). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior, 66*, 358–384. <https://doi.org/10.1016/j.jvb.2004.05.005>
- Rubenstein, A. L., Eberly, M. B., Lee, T. W., & Mitchell, T. R. (2018). Surveying the forest: A meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology, 71*, 23–65.
- Steel, R. P., & O'valle, N. K. (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. *Journal of Applied Psychology, 69*, 673–686.
- Steffens, N. K., Haslam, S. A., Schuh, S. C., Jetten, J., & van Dick, R. (2017). A meta-analytic review of social identification and health in organizational contexts. *Personality and Social Psychology Review, 21*(4), 303–335. <https://doi.org/10.1177/1088868316656701>
- Thomas, W. E., Brown, R., Easterbrook, M. J., Vignoles, V. L., Manzi, C., D'Angelo, C., & Holt, J. J. (2019). Team level identification predicts perceived and actual team performance: Longitudinal multilevel analyses with sports teams. *British Journal of Social Psychology, 58*, 473–492.
- van Dick, R. (2001). Identification in organizational contexts: Linking theory and research from social and organizational psychology. *International Journal of Management Reviews, 3*, 265–283.
- van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., Hauptmeier, M., Höhfeld, C., Moltzen, K., & Tissington, P. A. (2004). Should I stay or should I go? Explaining turnover intentions with organizational identification and job satisfaction. *British Journal of Management, 15*, 351–360.
- van Dick, R., Ciampa, V., & Liang, S. (2018). Shared identity in organizational stress and change. *Current Opinion in Psychology, 23*, 20–25. <https://doi.org/10.1016/j.copsyc.2017.11.005>
- van Dick, R., Grojean, M. W., Christ, O., & Wieseke, J. (2006). Identity and the extra mile: Relationships between organizational identification and organizational citizenship behaviour. *British Journal of Management, 17*, 283–301.
- van Dick, R., Hirst, G., Grojean, M. W., & Wieseke, J. (2007). Relationships between leader and follower organizational identification and implications for follower attitudes and behavior. *Journal of Occupational and Organizational Psychology, 80*, 133–150.
- van Dick, R., & Haslam, S. A. (2012). Stress and well-being in the workplace: Support for key propositions from the social identity approach. In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The social cure: Identity, health, and well-being* (pp. 175–194). Psychology Press.
- Van Knippenberg, D., van Dick, R., & Tavares, S. (2007). Social identity and social exchange: Identification, support, and withdrawal from the job. *Journal of Applied Social Psychology, 37*, 457–477.
- Van Knippenberg, D., & Sleebos, E. (2006). Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *Journal of Organizational Behavior, 27*, 571–584.
- Wegge, J., van Dick, R., Fisher, G. K., Wecking, C., & Moltzen, K. (2006). Work motivation, organizational identification, and well-being in call centre work. *Work and Stress, 20*, 60–83.
- Whitman, D. S., van Rooy, D. L., & Viswesvaran, C. (2010). Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. *Personnel Psychology, 63*, 41–81.

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Avanzi, L., Perinelli, E., & Mariani, M. G. (2023). The effect of individual, group, and shared organizational identification on job satisfaction and collective actual turnover. *European Journal of Social Psychology, 53*, 956–969. <https://doi.org/10.1002/ejsp.2946>



APPENDIX

**TABLE A1** Estimated parameters from the Bayesian multilevel model with covariates (Model 2)

Level	Parameter	PP [95% CI]
Within	1. $\beta$ (Supportive leadership → Job satisfaction)	0.514 [0.474, 0.553]*
	2. $\beta$ (Contractual status → Job satisfaction)	-0.124 [-0.177, -0.073]*
	3. $\beta$ (Tenure → Job satisfaction)	-0.068 [-0.108, -0.028]*
	4. $\beta$ (Type of job → Job satisfaction)	0.029 [-0.094, 0.152]
	5. Cov(OI, Supportive leadership)	0.277 [0.226, 0.331]*
	6. Mean(Supportive leadership)	0 [-0.052, 0.052]
	7. Mean(OI)	0 [-0.06, 0.061]
	8. Var(Supportive leadership)	0.69 [0.631, 0.755]*
	9. Var(OI)	0.919 [0.843, 1.004]*
	10. ResVar(Job satisfaction)	0.234 [0.214, 0.258]*
Between	11. $\beta$ (OI_sd → $\beta_{1j}$ )	-0.195 [-0.357, -0.036]*
	12. $\beta$ (OI_sd → Job satisfaction)	-0.252 [-0.514, 0.013]
	13. $\beta$ (OI_mean → Job satisfaction)	0.458 [0.324, 0.595]*
	14. $\beta$ (OI_mean → Turnover)	-0.14 [-0.245, -0.037]*
	15. $\beta$ (Group size → Turnover)	-0.003 [-0.012, 0.005]
	16. $\beta$ (Job satisfaction → Turnover)	0 [0, 0]
	17. Cov(OI_sd, OI_mean)	-0.053 [-0.094, -0.022]*
	18. Mean(OI_sd)	0 [-0.058, 0.06]
	19. Mean(OI_mean)	0 [-0.116, 0.115]
	20. Intercept(Turnover)	0.188 [0.126, 0.249]*
	21. Intercept(Job satisfaction)	3.418 [3.354, 3.48]*
	22. Intercept( $\beta_{1j}$ )	0.28 [0.237, 0.326]*
	23. Var(OI_sd)	0.078 [0.059, 0.108]*
	24. Var(OI_mean)	0.308 [0.231, 0.423]*
	25. ResVar(Turnover)	0.044 [0.03, 0.069]*
	26. ResVar(Job satisfaction)	0.064 [0.041, 0.1]*
	27. ResVar( $\beta_{1j}$ )	0.004 [0, 0.014]*
AddPar	28. $\beta$ (OI → Job satisfaction   Low OI_sd)	0.333 [0.258, 0.408]*
	29. $\beta$ (OI → Job satisfaction   High OI_sd)	0.227 [0.18, 0.277]*

Note: Estimates are unstandardized.

AddPar, additional parameters; OI, Organizational Identification; OI\_sd, Organizational Identification Standard Deviation at Between Level; OI\_mean, Organizational Identification Mean at Between Level;  $\beta_{1j}$ , random slope of the within-level relationship ‘organizational identification → job satisfaction’ (see also Figure 1);  $\beta$ , regression path; Cov, covariance; Var, variance; ResVar, Residual Variance; PP [95% CI], Posterior Parameter and 95% Credibility Interval; \* significance of the parameter (i.e., the 95% CI does not include the value of zero).

Parameter 16  $\beta$ (Job satisfaction → Turnover) was fixed to be zero because not significant in Model 1. Parameters 28 and 29 represent the within-level effect of organizational identification on job satisfaction conditional to low value of OI\_sd (hence, high shared OI) and high value of OI\_sd (hence, low shared OI), respectively.