

Research-Thesis: The Role of Managers in Promoting Relatedness and Psychological Well-Being Among Early-Career Employees.

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THE ROLE OF MANAGERS IN PROMOTING RELATEDNESS AND PSYCHOLOGICAL WELL-BEING AMONG EARLY-CAREER EMPLOYEES

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EXECUTIVE SUMMARY

Early-career employees enter the labor market with various needs and expectations that should be met in order to facilitate their integration within the organization and the development of their professional identity. While the literature recognizes managers' support as an important resource that promotes relatedness, as well as relatedness' importance during the early career, the literature has not investigated how exactly managers can fulfill early-career employees' relatedness, nor how such relatedness impacts their psychological well-being.

Therefore, this master's thesis analyzed how five managerial practices (i.e. autonomy, feedback, learning opportunities, recognition, work-life balance) could influence early-career employees' relatedness, and the indirect impact on their psychological well-being (i.e. engagement and exhaustion). A total of 2,231 individuals responded to an online quantitative questionnaire, but 276 respondents were included in the final sample after data cleaning. Mediation analyses were performed on the final sample, comprising individual mediations for each practice, and global mediations studying all practices at once—with and without control variables.

Results showed that relatedness represents a powerful mechanism to promote early-career employees' psychological well-being. While all managerial practices were relevant in individual mediation tests, their impact became statistically non-significant when studied in global models. Post-hoc tests finally showed that combining all practices into an overall measure of managerial support had a positive effect on relatedness and psychological well-being.

In conclusion, this master's thesis highlighted the relevancy of studying managers as a potential antecedent to relatedness, and of considering relatedness as a resource for early-career employees' psychological well-being. However, this masters' thesis also underlined the complexity of adequately measuring managerial practices. Further research is necessary to investigate how managers' implication should be conceptualized and measured in the context of early career. Future research should also consider potential mediators that could influence how managerial support can promote early-career employees' relatedness.

KEYWORDS: early career, manager, managerial practice, managerial support, relatedness, psychological well-being.

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List of abbreviations

COR	Conservation of Resources
Gen Y	Generation Y
Gen Z	Generation Z
HRIS	Human Resource Information System
JCM	Job Characteristics Model
JD-R	Job Demand-Resources
SDT	Self-Determination Theory

Introduction

Today's world is characterized by a strong globalization, constant technological advances, ecological crises, and improvements in communication means that lead the labor market to constantly evolve (da Vieira et al., 2024). Those global transformations favored the development of new ways of working (e.g., teleworking, activity-based workplace; Lai et al., 2021; Mustajab, 2024), new work arrangements (e.g., zero-hours contracts, flextime; Bolino et al., 2021; McBride & Smith, 2022), or new human resources management practices (e.g., AI selection, online recruitment, digitalized and algorithmic management; Charlwood & Guenole, 2022; Koch-Bayram & Kaibel, 2024). With the emergence of such practices, the labor market is no longer limited by geographical constraints, which strengthens the competition among job seekers (Gogoi, 2023) and intensifies the worldwide war of talents between organizations (Dowling et al., 2013a). Within such context, the retention of employees has become a crucial topic for organizations: while nowadays' turnover rates among organizations' workforce are higher than ever (Xueyun et al., 2023), turnover rates are particularly high for early-career employees (Van der Baan et al., 2025).

Recent studies regarding early-career employees—and more specifically, the Generation Z (or 'Gen Z') that now enters the labor market—tend to link this important turnover rate to the various expectations they have regarding their first job. While they look for jobs which promotes their work-life balance and ensures satisfaction, they also seek learning and training opportunities that encourage professional development (da Vieira et al., 2024). Gen Z employees also put a greater emphasis on their well-being at the workplace, with organizations that promote well-being benefiting from an improved employer branding and attractiveness among new entrants (Lis, 2012). According to those results, meeting early-career employees' expectations is thus crucial as organizations that fails to meet such expectations see their turnover increase among those new labor market entrants (Van der Baan et al., 2025).

Moreover, studies regarding the integration of new employees within an organization—independently of their professional experience—showed that they go through a socialization process within the organization they have joined. During their first months upon organizational entry, they continuously learn how to correctly perform their tasks and develop an understanding of the social environment, eventually allowing them to become fully adjusted to their new work environment (Bauer et al., 2007). New entrants express various needs during this socialization process: they desire to understand their job role, to be able to perform their job tasks, and to be accepted and integrated within the team and organization (Feldman, 1981). Specifically during the socialization period, not only was social integration consistently demonstrated as having a large influence on new entrants' integration, but it was also the most influential element compared to role clarity and task mastery (Bauer et al., 2025). Based on those elements, fulfilling early-career employees' needs, and especially their need for relatedness with their team and their organization, can thus be beneficial in order to reap positive outcomes and smoothen their entry on the labor market.

Managers represent good candidates to fulfil this need for relatedness as they have a central role during the early-career stage of employees. For instance, a higher relationship quality between new entrants and managers was found to facilitate organizational socialization and to reduce burnout through a reduction of role stress (Thomas & Lankau, 2009). Beyond the first stage of organizational socialization, managers can provide early-career employees with relevant feedback, recognize the work they achieved, offer opportunities for professional development, as well as provide formal or informal support thanks to their position (Saks & Gruman, 2018).

Managers were also found to act as important social resources that increased early-career employees' feelings of relatedness, which led to various positive outcomes as a consequence—including work engagement and organizational effectiveness, but more specifically the well-being (Bauer et al., 2025; Saks & Gruman, 2018) that is sought by current labor market entrants (da Vieira et al., 2024). It is therefore important to understand how managers can contribute to the sense of relatedness of employees during their early-career stage in order to create and maintain their well-being.

However, the current literature on early-career employees shows several gaps. First, studies mainly focused on the socialization process which is limited to the first months upon organizational entry. Although it is a part of the early career, this phase should be studied as a complete career stage on its own. Indeed, the early-career stage is associated with other challenges for new entrants such as discovering their professional identity, identifying their career goals, and building up their professional ambitions (Akkermans et al., 2021). Therefore, the narrow focus on socialization provides information on mechanisms that are limited within this process, which does not allow to consider the broader and more complex psychological mechanisms that occur throughout the early-career stage.

Second, the literature remains too individual-centric or focused on the organizations' strategies at integrating employees. Therefore, although some studies assumed the two-way interaction between managers and new entrants, this interaction has not been studied directly (Bauer et al., 2025). Managers have not been placed as a key actor during the early-career stage of new entrants, as they are instead assimilated within organizational socialization tactics or considered a passive source of information for new labor market entrants (Kammeyer-Mueller et al., 2013).

Third, among the few studies that analyzed the role of the manager during the early-career stage, none investigated which managerial practices can actually support new entrants who join a new organization (Sluss & Thompson, 2012). As a consequence, not only is the information regarding managerial practices during the early-career scarce and limited to a few practices (e.g. mentoring, supporting; Bauer et al., 2025), but there is also no information regarding the most efficient managerial practices in sustaining early-career employees' well-being.

Finally, although the well-being of new entrants has received a growing attention during the last decade, literature on this matter is still very limited and fragmented (Bauer et al., 2025). This is due to the broad diversity of well-being variables that have been studied, ranging from physical outcomes (e.g. stress, concentration issues, sleep issues, coping strategies) to psychological outcomes (e.g. overall mental health, emotional exhaustion, irritability). Previous studies also placed well-being either as an antecedent, a mediator, or an outcome within the early-career stage (Bauer et al., 2025): it complicates the adoption of a comprehensive view of well-being outcomes, and thus to understand how psychological well-being can be promoted among early-career employees.

Given that relatedness may have a stronger influence on early-career employees, this master's thesis aims to fill the identified gaps using the Self-Determination Theory as a theoretical basis in order to answer the following research question: *which managerial practices help develop relatedness among early-career employees and how do they influence early-career employees' psychological well-being?*

This master's thesis thus has several objectives. First, it aims to extend the literature on new labor market entrants by studying the early career as a complete stage rather than limiting it to the socialization process.

Second, it aims to provide a better understanding of the role of managers during the early career of employees, particularly by placing them as pivotal element during this stage. Managers are thus considered as social resources on their own who contribute directly to early-career employees' socialization, but also to their work identity construction on the long-term.

As new entrants' social integration was demonstrated to have a greater influence than role clarity and task mastery during the socialization process, a third objective is to analyze if this influence can be generalizable to the early-career stage and how managers can foster relatedness among their subordinates. To do so, this master's thesis aims to investigate a set of managerial practices that could have an impact on early-career employees' relatedness and psychological well-being. It also seeks to develop a list of managerial practices that are relevant in the context of early career by determining the ones that are the most influential on early-career employees' relatedness.

Finally, this master's thesis tries to develop a better understanding of how managers can indirectly promote psychological well-being among early-career employees through their feelings of relatedness.

Theoretical framework

Definition of the early career

The early career is a crucial step in the professional life of employees as it represents the period through which employees begin their working life. This period is characterized by various psychological mechanisms.

Along discovering various of their personal characteristics such as their knowledge and skills, their feelings, their values and their interests, employees also determine their motives, their goals and their vocational ambitions during this stage (Savickas, 2013). This introspection allows early-career employee to not only better know themselves (Savickas, 2013), but also to crystalize their professional identity and commitment to a specific career path (Porfeli & Lee, 2012).

Because early-career employees try to develop a career in which they are able to integrate their personal needs into their work role (Savickas & Porfeli, 2012), they constantly compare their internal needs to how the external work environment fulfills—or not—those needs. If they observe discrepancies, early-career employees “identify pathways, make plans, and implement strategies” to adapt their career choices (Savickas, 2013, p. 7), eventually allowing them to build the career that best fits their professional aspirations.

Therefore, the early career represents the first stage in employees’ working lives in which they discover their professional identity and establish the basis of their career. It entails the use of adaptative strategies that allow early-career employees to construct a satisfying professional career, but also to meet social expectations regarding their preparation and entrance on the labor market (Savickas et al., 2009). This successful adaptation during this stage leads to positive outcomes on the rest of the career as a consequence. Indeed, a meta-analysis showed that successful career adaptation leads to an increased work performance, career satisfaction, employability and promotability. The meta-analysis further highlighted links with well-being outcomes, such as life satisfaction, work engagement, and lowered job stress (Rudolph et al, 2017).

New entrants’ adaptation during socialization

The literature studying early-career employees’ adaptation to their working life during their early-career stage particularly focused on the socialization process. The socialization process occurs during the first few months upon employees’ organizational entry, independently of their previous working experience (Bauer et al., 2025). Therefore, this process concerns ‘new entrants’, which regroups early-career employees who recently entered the labor market, but also interns, employees starting a completely different job in which they have no past experience, and even experienced employees starting a similar job in another organization. This socialization process throughout which new entrants grasp their new working environment has been studied through different perspectives.

A first perspective is based on **uncertainty reduction theory** (Berger, 1979): it supposes that new entrants experience uncertainty regarding their new role, their colleagues, and the organization. A vast majority of studies thus focused on new entrant behaviors (e.g. proactivity, feedback seeking) and new entrant characteristics (e.g. core-self evaluations, big five trait personality traits) that help reducing such uncertainty (Bauer et al., 2025). Studies also focused on **organizational socialization tactics**, which represent how organizations structure the integration process and share information with new entrants to facilitate their transition to their new role by reducing uncertainty (Van Maanen & Schein, 1979). There are six organizational tactics that can be grouped into three different categories (Bauer et al., 2007). The first category is **content tactics**, which represents whether the integration is experienced individually or collectively with other new entrants, and if the integration process is rather formal or informal. The second category, called **context tactics**, determines whether the integration process has predetermined steps through which new entrants go through, and if this process follows a specific schedule. **Social tactics** form the third category, which represents the extent of help, and the level of feedback new entrants obtain from organizational insiders (e.g. colleagues, managers).

A second perspective in the socialization literature regroups **resource-based theories** that are founded on models like the Conservation of Resources Theory (COR; Hobfoll, 2001) and on the Job Demand-Resource model (JD-R; Bakker & Demerouti, 2008). This perspective emphasizes that new entrants try to develop useful resources that will allow them to cope with the uncertainty related to their onboarding. Work-related resources can be found in various elements such as job autonomy, self-efficacy, and job security among many others (Hobfoll et al., 2018), but some resources could be offered by organizational insiders. For instance, colleagues can provide relevant information regarding the organization as well as act as social resources, which have both been proven salient for newcomers' engagement and well-being (Rubenstein et al., 2020).

Finally, the **interactionist perspective** suggests that the various interactions that occur between new entrants and their environment shape their socialization process. More specifically, it emphasizes on the role of organizational insiders in creating a positive experience for new entrants throughout their integration. Colleagues and managers have been found to act as important socialization agents that allow newcomers to grasp their role within the organization, and to see the bigger picture formed by the overall organizational context (Nifadkar, 2020).

Combining those three perspectives, socialization represents an important step when new entrants enter the labor market: spanning over the first months upon organizational entry, it is characterized by the necessity of new entrants to continuously adapt in order to become fully integrated within the organization. However, despite representing a logical and crucial step upon labor market entry, literature's narrow focus on the socialization process is inadequate to fully grasp the variety of challenges early-career employees may face, as well as the various psychological processes that occur during this stage. Indeed, while the socialization implies the adaptation of the employee to one specific organization, the early career represents a larger stage in employees' professional life. As described previously, this stage is characterized by broader mechanisms such as discovering one's professional identity, as well as adapting one's behaviors and career choices to construct a career that fulfills personal needs.

Moreover, those psychological processes could lead new labor market entrants to change jobs multiple times during their early-career stage. As they enter the labor market, early-career employees assess if the reality of their first job meets their personal needs. Whether it is due to an incorrect definition of personal needs or due to a job that does not meet pre-entry expectations, new entrants who experience a misfit with their organization, their team, or with their job are likely to have increased turnover intentions or to simply quit the organization (Van der Baan et al., 2025). Despite this first inconclusive experience, early-career employees benefit from a solidified professional identity as they have a clearer idea of their needs. Therefore, with such experience, early-career employees are able to identify and start another job that could better meet their needs.

From this perspective, changing jobs or organization—and as a consequence, going through multiple organizational socialization processes—should be seen as a way for early-career employees to build up their professional aspirations, ambitions, and goals. Therefore, the socialization process is not an equivalent of the early-career stage, but rather a part of this career period that helps construct early-career employees' professional identity.

Early-career employees as members of the Generation Z

To broaden up the limits set by the socialization process, several studies adopted a generational view to better understand the needs and expectations expressed by the current early-career employees on the labor market, who are also members of the Generation Z (or 'Gen Z').

Gen Z employees are demanding of a job that offers a broad training offering and opportunities for professional growth (Xueyun et al., 2023). Regarding the workplace, they show a preference for a general flexibility, trust and empowerment, as well as a certain transparency and openness in their professional communication (Lanzányi & Bilan, 2017; Raslie & Ting, 2021; Sigaeva et al., 2022). They

also attach a great importance to finding a job that is meaningful for them. This meaningfulness can emerge from their overall contribution to the organization's success (Pandita & Kumar, 2022), or from the social values the organization aims to defend (e.g. diversity, ethics or sustainability; Rzemieniak & Wawer, 2021). For instance, Gen Z employees have a strong focus on sustainability matters, and they remain particularly sensitive to the ways the organization integrates Corporate Social Responsibility within its daily interactions with customers, governments, employees, and other stakeholders (Pandita & Khatwani, 2022). Finally, Gen Z employees have a strong desire to care for their well-being (da Vieira et al., 2024). As a way to achieve well-being in the workplace, they seek a job that provides work-life balance, opportunities for personal growth and leisure time (Raslie & Ting, 2021; da Vieira et al., 2024). Studies also underlined the importance of meeting those needs and expectations. For instance, Taibah and Ho (2023) found that meeting Gen Z employees' expectations of flexibility and empowerment led to an increased performance. On the other hand, an organization which does not fulfill the needs expressed by Gen Z may face quiet quitting (Xueyun et al., 2023) and increased turnover (Van der Baan et al., 2025).

While this approach allows to consider a larger period of time after labor market entry, the generational view shows several limitations. First, the number of generations studied vary from article to article, and the criteria used to delineate each of them have been inconsistent in the literature. Using the examples provided by Lyons & Kurons (2014), some studies have set unclear limits to each generation (e.g., "younger generations" and "older generations") while others have even defined subcategories (e.g. "early-Boomers", "middle-Boomers", "late-Boomers"). Moreover, despite authors increasingly using birth years to better delineate each generation, there still lacks a clear consensus on starting and ending years (Costanza et al., 2012). For instance, while Gen Z should gather individuals who were born between 1995 and 2010, other configurations were proposed, such as 1997-2012.

Second, generations represent cohorts of individuals who have been influenced by similar events that shaped their personalities in a similar way (Costanza et al., 2012). It is thus implied that the needs and expectations expressed by Gen Z only pertain to this generation because it has been influenced differently from other generations. However, the literature offers little to no explanation regarding how—nor why—individuals should be impacted similarly by an event because they belong to one generation specifically (Ravid et al., 2025). Furthermore, despite having specific characteristics that do pertain to Gen Z only (e.g. immediate feedback; Raslie & Ting, 2021), this generation also has similarity with the previous ones. For instance, Gen Z shares several similarities with the previous generation (i.e. 'Gen Y') regarding the elements that makes an organization attractive (Roy et al., 2022). Similarly, Gen Z and Gen Y attributed a great importance to their social integration, with having a manager who is competent, honest, and who motivates the team being placed as the most important element (Bărbulescu & Vasiluță-Ștefănescu, 2021). This study also showed that both generations share almost the same lowest priorities. Therefore, Gen Z does not show fundamentally different expectations when entering the labor market, and may even display several behaviors, attitudes, and beliefs that are similar to the previous generation. In consequence, Gen Z's expectations may be met with similar strategies that were used for meeting Gen Y's expectations.

Third, the generational approach may confound with the effects linked to age (Ravid et al., 2025). Because Gen Z individuals are born roughly between 1997 and 2010, it is likely that some of them have entered the labor market a few years ago, while some others should enter the labor market in the near future. Gen Z are thus experiencing—or somewhat close to—their early-career stage. Therefore, some findings that were attributed due to a membership to the Gen Z could in fact be attributed to other reasons such as age which, by extension, can represent the current life stage. For instance, meta-analytic results showed that Gen Z had slightly more intentions to turnover than older generations (Ravid et al., 2025). If this result seems to pertain to Gen Z, it could also be linked to the fact that Gen Z individuals are also early-career employees, who might leave their job to find another that better matches their professional identity. Moreover, Gen Z employees' expectations for immediate feedback may be linked to their lack of working experience, while the more experienced Gen Y employees understand that obtaining feedback from their manager may take a while (Raslie & Ting, 2021).

These three limitations thus underline that, alongside lacking a strong scientific and theoretical basis, the generational view might not be relevant to study the early-career stage of new labor market entrants. This approach overlooks that the early-career stage may be experienced similarly by all new labor market entrants despite the existence of divergent generational characteristics, while also being individualized enough to be experienced uniquely by each early-career employees who belong to the same generation.

Insights from both perspectives

Because the socialization process and the generational approach are seen as inadequate to study the early-career stage, another approach has been adopted in this master's thesis. Early-career employees are defined as having less than five years of working experience, whether they have built up this experience within the same organization or within different organizations. The selection of working experience to delineate early-career employees from more experienced employees allows to avoid focusing on one specific generation only, while also representing a more reliable predictor. Indeed, meta-analytic results showed that age and organizational tenure were linked to several job attitudes to varying extent. To cite a few examples, they were related to an increased job involvement, satisfaction with the supervisor and interpersonal trust, while also being related to a lowered emotional exhaustion and interpersonal conflicts at work (Ng & Feldman, 2010). Moreover, using five years as a cutoff also allows to analyze the early-career stage, rather than focusing simply on the labor market entry through the socialization lens—which focuses only on the first months upon organizational entry.

Despite those two approaches being inadequate to study the early-career stage, it is worth noting that they still bring relevant information and empirical data that guide this master's thesis. On the one hand, the socialization literature showed that new entrants naturally seek information to grasp their work environment, understand social cues, and develop the relevant skills to correctly perform their job (Bauer et al., 2025). On the other hand, studies focusing on Gen Z showed that new entrants have needs and expectations which, if they are not satisfied, could lead to an increased turnover for organizations (Van der Baan, 2024).

In conclusion, they both underline the importance of considering new labor market entrants' expectations and fulfilling their needs to promote positive outcomes during their early career. To better understand the link between early-career employees' needs and such outcomes, this master's thesis draws upon the Self-Determination Theory.

Self-Determination Theory as a theoretical basis

The **Self-Determination Theory** (SDT; Deci et al., 2017) is a meta-theory on employee performance and well-being at the workplace. The global idea behind this theory is that elements from the workplace influence the type of motivation employees experience, which impacts their overall work performance and well-being.

On the one hand, **intrinsic motivation** implies a natural interest, a strong engagement, and the willingness to perform specific tasks. It is prompted by internal elements: employees feel thus rewarded by the satisfaction and enjoyment they draw from performing their job, and not from external outcomes or rewards. When employees are intrinsically motivated, the quality of their work and their overall well-being greatly improve on the long-term (Deci et al., 2017). On the other hand, **extrinsic motivation** implies performing a task in order to reach a specific outcome. It is linked to external elements that prompt the employee to perform specific task, such as rewards (e.g. bonuses or promotion) or threats (e.g. disapproval from manager). The enjoyment is thus drawn from the obtention of the reward or the avoidance of the threat, rather than from performing the task in itself. When employees are extrinsically motivated, the performance observed remains on the short-term (i.e., until reward obtention or threat avoidance), and well-being may start to decline on the long-term (Deci et al., 2017).

A sub-theory of SDT, namely the **Basic Need Theory** (BNT), posits that when the three basic psychological needs of employees are fulfilled, they are likely to experience intrinsic motivation, and develop an improved performance and well-being as a consequence (Ryan & Deci, 2017, as cited in Vansteenkiste et al., 2020).

First, the **need for autonomy** represents employees' ability to choose behaviors and goals, and their perception of those choices as originating from themselves (Deci et al., 2017). This need can be satisfied by providing employees with freedom to take their own initiatives and make their own choices regarding their work, have responsibilities, obtain a meaningful justification when asked to do a specific task, and have room to express their feelings (Slomp et al., 2024). However, autonomy can be thwarted by external rewards or punishments, deadlines, imposed goals, or other forms control (Cook & Artino, 2016). Second, the **need for competence** represents employees' belief in their capabilities to achieve their job tasks (Deci et al., 2017). This need can be satisfied through feedback, the clarification of goals and expectations, providing consistent guidelines to follow, matching the job tasks with employee's competences, and acknowledging employee's evolution (Slomp et al., 2024). On the other hand, negative feedback and too challenging work tasks can undermine employees' need for competence (Cook & Artino, 2016). Third, the **need for relatedness** represents how employees desire to interact, feel valued and connected with others (Baumeister & Leary, 1995). This need can be satisfied through emotional support, interest and concern for the employee, but also by helping resolve conflicts, expressing friendliness, or simply spending time with the employee (Slomp et al., 2024). Conversely, competition, criticism, and traditions can represent barriers to fulfilling employees' need for relatedness (Cook & Artino, 2016).

The fulfillment of these basic psychological needs is likely to lead to employees' intrinsic motivation, which can in turn lead to several positive outcomes. Intrinsic motivation was found to increase work satisfaction (Richer et al., 2002), knowledge sharing (Foss et al., 2009), work performance (Kuvaas, 2009), and work commitment (Fernet et al., 2012). Furthermore, it was found to decrease burnout (Fernet et al., 2010), emotional exhaustion and turnover intentions (Richer et al., 2002), as well as the stress experienced by employees in workplaces characterized by high job demands (Trépanier et al., 2013). On the contrary, extrinsic motivation has "tended to show opposite results" (Deci et al., 2017, p.25).

The fulfillment of the basic psychological needs can also directly lead to positive outcomes. Fulfilling psychological needs were found to increase the enjoyment drawn from work (Andreassen et al., 2010), as well as the effort exerted (De Cooman et al., 2013) and the overall well-being of the employee (Gillet et al., 2012). Moreover, fulfilling psychological needs was found to reduce exhaustion (Van den Broeck et al., 2008) and organizational deviance behaviors (Lian et al., 2012) among employees. Conversely, need frustration—the act of thwarting psychological needs—can have deleterious effects, such as increasing employees' exhaustion (Vander Elst et al., 2012).

Following SDT and BNT, fulfilling early-career employees' basic psychological needs is essential to reap such positive outcomes. For instance, a meta-analysis showed that creating role clarity, task mastery, and social acceptance during the socialization process allowed new entrants to be satisfied with their job, have an increased organizational commitment, performance and well-being, while having reduced turnover intentions (Bauer et al., 2025).

However, the existing literature suggests that fulfilling the need for relatedness might be more important in order to smoothen new entrants' early-career stage. From a socialization perspective, not only was social acceptance consistently demonstrated as having a large influence on the outcomes presented hereinabove, but it was also the most influential compared to role clarity and task mastery (Bauer et al., 2025). Other studies examining the impact of organizational socialization tactics found similar results, with social tactics (i.e. help and feedback from organizational insiders) being the strongest predictor of new entrants' socialization outcomes (Saks et al., 2007). From the generational perspective, results showed that Gen Z generally focus on and desire to develop strong interpersonal relationships based on trust (Lazányi & Bilan, 2017). Moreover, Gen Z employees mentioned that having

a positive and supportive work environment (Xueyun et al., 2023), good relationship with colleagues, and a motivating manager (Bărbulescu & Vasiliuță-Ștefănescu, 2021) were among the most preferred elements regarding employer's attractiveness.

Therefore, the greater effects and the relative importance of social integration informed this master's thesis, which thus focuses on how fulfilling this specific need for relatedness among early-career employees can influence their well-being.

Managers' role during the early career

Managers have a pivotal role within organizations: they not only welcome and guide new entrants during their first months upon organizational entry, but they are also likely to accompany them and nurture their development through their first years of working experience. Thanks to their specific position and past experience, managers are able to offer feedback that clarifies early-career employees' role, recognition of the work achieved, opportunities for professional development, as well as formal or informal support (Saks & Gruman, 2018). Managers have also been found to act as important socialization agents that allow new entrants to grasp their role within the organization and to see the bigger picture formed by the overall organizational context (Nifadkar, 2020).

From early-career employees' point of view, managers represent an essential factor that can maintain their motivation and engagement. Early-career employees desire to have a manager that provides constant and instantaneous feedback, who respects their work-life balance (Raslie & Ting, 2021), and who creates an environment in which they can thrive personally and professionally (Pandita & Kumar, 2022). They also long for a manager who is honest, competent, and who recognizes and values employees' achievements (Bărbulescu & Vasiliuță-Ștefănescu, 2021).

If those results highlight the subjective importance of the manager in the eyes of early-career employees themselves, other empirical results showed that managers are indeed crucial during the early-career stage. For instance, managers who provide flexibility and empowerment, and who increase new entrants' self-efficacy and organizational identification were found to improve their performance and engagement while limiting their turnover intentions (Gaan & Shin, 2023; Taibah & Ho, 2023). Other results further showed that managers are also able to influence early-career employees' feeling of social integration. For instance, while managerial support was linked to engagement and motivation (Pandita & Kumar, 2022), it was also linked to new entrants' social acceptance during socialization (Bauer et al., 2025). Furthermore, managerial mentoring was shown to increase early-career employees' social self-efficacy, which in turn promoted their social integration (Deng et al., 2022). A similar result was found with managers who provided feedback regarding the social environment of the organization and early-career employees' social integration (Ellis et al., 2017; Morrison, 1993). Managers thus represent great candidates to fulfill early-career employees' need for relatedness on the long-term, which could in turn favor their engagement and limit their exhaustion.

Despite those elements hinting at the importance of managers during the early-career stage, their influence during this stage remains understudied. Indeed, the literature greatly focused on how new entrant behaviors, characteristics, and organizational socialization tactics could influence the socialization process of new entrants. However, as explained previously, this focus on the socialization process does not allow to consider the broader mechanisms at play during the early-career stage.

Furthermore, studies considered managers either as a passive source of information, or as being assimilated within organizational tactics aimed at integrating new employees (Kammeyer-Mueller et al., 2013). Therefore, the effects of the interactions between managers and early-career employees have not been studied directly and remain unclear (Bauer et al., 2025).

Additionally, based on the literature review realized by Bauer et al. (2025), the few managerial practices studied were 'mentoring' and 'managerial support'. The literature thus offers little information regarding how exactly managers can fulfill early-career employees' needs, nor which managerial practices are the most efficient in sustaining their well-being during the early-career stage.

Finally, while some studies investigated which styles of leadership were preferred among early-career employees (for an example, see Sigaeva et al., 2022), using leadership styles has shown several limitations. According to Antonakis et al. (2010), methodological or statistical threats to the validity of the results are often not addressed in the leadership literature. Therefore, the authors claim that overlooking those limitations lead to question the overall validity of the results of leadership studies, and in consequence, the validity of the existing empirical evidence regarding leadership styles.

Regarding leadership styles, they usually define a pattern of leader behaviors that causes specific outcomes on individual-, team-, or organizational-levels (Fischer & Sitkin, 2023). However, the definition of some leadership styles requires more than the leader's behaviors only. For instance, ethical leadership relies not only on the leader's promotion of ethical conduct, but also on the leader's positive intentions to promote such conducts. In consequence, defining leadership styles is a complex task, which leads to a general confusion among scholars (Fischer & Sitkin, 2023).

This complexity causes two main issues. First, it leads to the proliferation of a large number of leadership styles. However, this abundance increases the probability of finding two leadership styles—or more—that could overlap due to a low discriminant validity (e.g., transformational leadership and charismatic leadership; Van Knippenberg & Sitkin, 2013). Second, the complexity of the leadership styles' definitions also complicates their measurement. This is especially true for leadership styles that includes the leader's intentions, competences in applying specific behaviors, and the expected outcomes of such behaviors. Because of this combination of elements, it is impossible to determine causal relationships, as well as to infer if the observed outcomes are caused by the studied leadership style or by other factors (Fischer & Sitkin, 2023).

Finally, in the scope of this master's thesis, adopting a leadership style approach would imply studying if managers exhibit specific patterns of behaviors, and how these patterns influence early-career employees. However, this approach does not allow to understand which exact behaviors have an impact on early-career employees and to determine the most relevant ones in the context of early-career stage, which is one of the objectives of this study.

Based on those elements, this master's thesis investigates several managerial practices—independent of leadership styles—to develop a better understanding of how managers can directly support the early-career stage of employees. Moreover, it investigates managerial practices that were not considered being potential broader forms of support for early-career employees before. The framework depicted in *Figure 1* has thus been developed in order to analyze the impact of managerial practices on early-career employees' relatedness, as well as their indirect effect on early-career employees' psychological well-being.

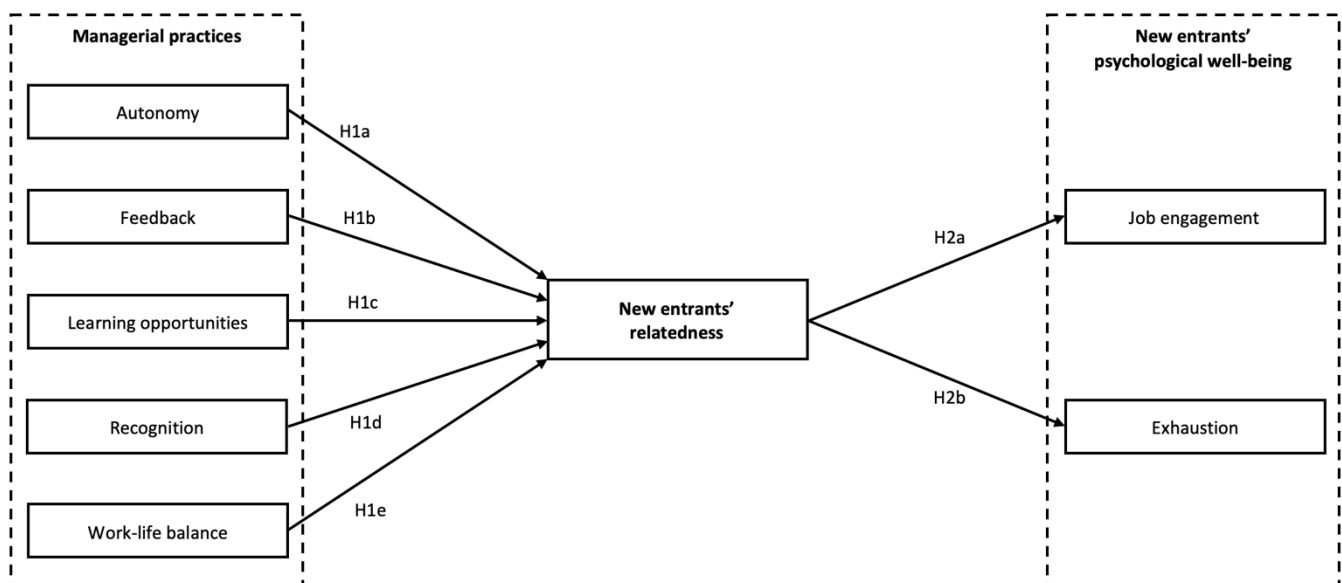


Figure 1 — Proposed theoretical framework

Managerial practices and early-career employees' relatedness

Autonomy represents the extent to which employees have freedom in determining key aspects of their work (i.e. schedule, decision-making, means used to achieve a task; Morgeson & Humphrey, 2006), and has been identified as an important determinant of employee motivation (Hackman & Oldman, 1976). Managers can further extend employees' autonomy in various ways, such as providing more options, including employees in larger decision-making that could influence their work situation, and empower employees in taking more initiatives in their job.

The influence of the autonomy provided by managers on SDT need satisfaction has largely been studied and proved: a meta-analysis of 768 studies reported strong evidence of autonomy-supportive behaviors' positive impact on employees' need for autonomy, competence, and relatedness (Slomp et al., 2024). Conversely, the lack of autonomy has a detrimental influence on employees: Seltzer and Numerof (1988) showed that the more a manager engaged in structure-initiating behaviors, the more employees were likely to report higher scores of burnout due to their reduced autonomy.

However, it is worth noting that autonomy-supportive behaviors are more likely to satisfy new entrants' need for autonomy rather than their need for relatedness. For instance, Baard et al. (2004) showed that employees who perceived their managers as supportive of their autonomy was related to a greater satisfaction of their need for relatedness, but it represented the smallest correlation among the three basic needs.

Despite its weaker influence on relatedness, it is posited that autonomy can still represent a valuable resource that helps early-career employees develop relatedness through higher-quality relationships. Indeed, manager-employee relationships characterized by trust, commitment, loyalty and support have been found to lead to an increased satisfaction with the manager (Dulebohn et al., 2012) as well as a better adjustment of new entrants (Thomas & Lankau, 2009). Thus, it could be possible that managers who are autonomy-supportive improve the quality of their relationship with early-career employees while enhancing their experienced relatedness, perhaps because providing autonomy might signal a certain trust of the manager towards the employee. Therefore, the following hypothesis is proposed:

Hypothesis 1a (H1a): the autonomy provided by the manager will be positively related to early-career employees' relatedness, such that greater autonomy will be associated with higher levels of relatedness.

Feedback has been defined as the extent to which executing a specific job task generates clear and direct information regarding the employee's job performance (Hackman & Oldman, 1976). Feedback can emerge from the job task in itself (e.g. customer satisfaction represents positive feedback regarding the employee's good performance), or it can be provided by the manager or colleagues. Managers can indeed provide information regarding an employee's performance, as well as potential solutions and pieces of advice in case improvements are necessary (Heslin et al., 2006).

The feedback provided by the manager is extremely relevant for early-career employees. During the socialization process, managers act as a role model who help new entrants grasp their role and its expectations by providing continuous feedback that supports them in learning how to successfully realize their work tasks (Ostroff & Kozlowski, 1992). The way in which managers provide feedback also seems to matter more than its nature: providing feedback—whether it is positive or negative—in a constructive, respectful and thoughtful manner enhances new entrants' acceptance of feedback and encourages them to engage in feedback-seeking behaviors, which eventually increase new entrants' social identification with their manager (Young & Steelman, 2014). Feedback can thus indirectly develop relatedness among early-career employees by helping them improve their performance on their work tasks and clarifying their role within the organization.

However, feedback can develop early-career employees' relatedness in a direct way. *Social feedback* offers information regarding the social environment, organizational culture, expected and desirable role behaviors (Ellis et al., 2017; Morrison, 1993). It confirms early-career employees' behavior adequacy with the organization's norms and expectations and allows them to adapt their behaviors if

necessary, eventually strengthening early-career employees' social inclusion. New labor market entrants would then mostly rely on social feedback rather than practical information to build meaningful relationships (Fisher, 1985, as cited in Lee, 2024). Studies demonstrated that managers' social feedback can act as a resource which fosters new entrants' social integration within the organization (Ellis et al., 2017; Morrison, 1993). More specifically, a study showed that new entrants who received positive and consistent social feedback from their managers had a higher engagement in their socialization process, which eventually increased their organizational identification (Smith et al., 2013). Therefore, the following hypothesis is proposed:

Hypothesis 1b (H1b): the feedback provided by the manager will be positively related to early-career employees' relatedness, such that higher levels of feedback will be associated with higher levels of relatedness.

Recent studies showed that current early-career employees are motivated by high career aspirations and they are greatly driven to learn by undertaking new tasks or difficult challenges (Pandita, 2022). Organizations which fail to provide development opportunities may face increased turnover rates among early-career employees (Van der Baan et al., 2025) as a consequence of their inability to fulfill their desire to learn. Creating **learning opportunities** is thus crucial in order to improve their retention. Studies specifically examining the role of learning opportunities during the early career remain scarce, but the existing literature focused on the more global concept of career mentoring instead. **Career mentoring** represents an active engagement of the mentor who takes action to directly support early-career employees' career (Haggard et al., 2011; Yip & Kram, 2017), and it gathers behaviors such as "coaching, sponsorship, exposure and visibility, protection, and the provision of challenging assignments" (Yip & Kram, 2017, p. 89).

Managers find themselves in a good position to provide such career mentoring. Contrary to colleagues, managers' hierarchical position provides them with formal power that allows them to better sponsor early-career employees, and to increase their visibility and exposure within the company (Haggard et al., 2021). Moreover, managers usually have experience and knowledge regarding the job, as well as a greater awareness on organizational goals than early-career employees colleagues. Therefore, managers are likely to provide relevant training and missions that not only develop the skills necessary to fulfill the job (Son, 2016), but that are also aligned with the organization's objectives (Raabe & Beehr, 2003). Such alignments between early-career employees' skills, job requirements and organizational objectives greatly increases their chances for future career promotions (Raabe & Beehr, 2003). Several studies found positive results between managers' career mentoring and new entrants' socialization. For instance, managers who spent time and energy in mentoring new entrants were likely to promote new entrants' socialization (Cai et al., 2021). To explain this relation, Deng et al. (2024) showed that career mentoring was strongly related to new entrants' expectations of possible internal career advancements, which increased their proactivity in their socialization process. More specifically in relation with relatedness, Deng et al. (2022) demonstrated that mentoring behaviors increased new entrants' social self-efficacy which favored their social integration within the organization. According to this result, it could be possible that career mentoring—or in this case, providing learning opportunities—represents a resource that acts as a form of managerial support that is positively related to early-career employees' relatedness. Therefore, the following hypothesis is proposed:

Hypothesis 1c (H1c): the learning opportunities provided by the manager will be positively related to early-career employees' relatedness, such that greater learning opportunities will be associated with higher levels of relatedness.

Recognition represents a form of non-financial reward (Luthans, 2000) that acknowledges and values an employees' efforts and performance (Saks & Gruman, 2012). Those non-financial incentives are also called 'intrinsic' rewards because they were found to boost employees' intrinsic motivation (Deci et al., 2017). Managers can thus improve early-career employees' motivation by showing recognition in

different ways: they can highlight the quality of the employee's work, publicly acknowledge their high performance, or even organize collective celebration moments (Graham & Unruh, 1990).

Alongside intrinsic motivation, recognition provided by managers have been found to improve employees' perception of organizational support, the quality of their relationship with their manager (Wayne et al., 2002), and their work engagement (Crawford et al., 2010), while also reducing their turnover intentions (Apostel et al., 2018; Chênevert et al., 2021). Despite its overall importance, recognition might be especially relevant for early-career employees (Saks & Gruman, 2014) as it might act as a social cue that help them understand their new work environment and adjust their behavior in order to socially integrate within the organization.

Despite the lack of studies analyzing the impact of recognition provided by managers during the early-career stage, recognition might still fulfill early-career employees' need for relatedness in several ways. First, recognition can be used by managers to express their trust and liking towards early-career employees (Scherbaum et al., 2022). From their perspective, employees could interpret such recognition as a confirmation of their manager's respect of their person as a whole (Brun & Dugas, 2008), and in turn increase the quality of their relationship. Second, managers can recognize and appreciate the work achieved or approve the work behaviors demonstrated by early-career employees. In that sense, recognition represents an informal mechanism that not only validates the early-career employees as a competent and capable employee, but also as a valued and appreciated employee within the organization (Scherbaum et al., 2022). Third, recognition can also be directed at appreciating early-career employees' individual qualities or uniqueness of their work style. Such appreciation might directly highlight how they contribute to the work or to the team as an individual (Brun & Dugas, 2008), and thus their importance and value as an integrated team member.

As proposed by Gardner et al. (2022), recognition provided by managers thus confirms early-career employees' perceptions of being liked, accepted, and valued within the organization, which eventually strengthens their feelings of relatedness. This is line with the results of their study, which showed that recognition and rewards were positively linked to new entrants' feelings of social acceptance. Therefore, the following hypothesis is proposed:

Hypothesis 1d (H1d): the recognition provided by the manager will be positively related to early-career employees' relatedness, such that higher levels of recognition will be associated with higher levels of relatedness.

Finally, recent studies emphasize that early-career employees consider work-life balance as a mean to ensure their long-term well-being. Work-life balance has in fact positive effects on employees' well-being—including a lower emotional exhaustion, distress, and burnout—but also on employees' work-related outcomes—including job satisfaction, organizational commitment, and career development (Sirgy & Lee, 2018).

Work-life balance encompasses all practices that allow employees to conciliate their working life with their private life's obligations and responsibilities. Organizations can promote employees' work-life balance by allowing them to choose when their workday starts and ends within a determined range, providing them with help to find day care for their children, or even by offering the possibility to leave their job to take care of their children or elderly person (Anderson et al., 2002). However, if the organization does not offer such arrangements, managers can still informally provide them through individual negotiations with each of their subordinates, and offer them as-needed flexibility (Scandura & Lankau, 1997). Managers are thus able to improve employees' work-life balance by drawing a particular attention and support to employees' private life (Sturges & Guest, 2004), and by demonstrating fairness and respect when handling work-life conflicts (Judge & Colquitt, 2004).

Managers' consideration of employees' needs of work-life balance can in turn help managers develop trusting relationships with their subordinates. For instance, employees tend to trust managers who promote work-life balance because they believe these managers are more capable of understanding how their work-life conflicts negatively impact their performance at work (Siegel et al., 2005) as well as helping them manage or solve those conflicts (Gordon et al., 2014). In consequence, those trust-

based relationships between employees and their manager lower the level of work-life conflict experienced by employees (Sturges & Guest, 2004). A potential explanation for this association is that managers who promote work-life balance perhaps encourage employees to confide in them in case of work-life conflicts, and are thus able to identify possible solutions to conciliate their working life with their private life.

The effect of managers promoting work-life balance should be consistent—if not stronger—for early-career employees, who are still adjusting to their new work environment and constructing their professional identity. In this context, managers are key in helping early-career employees determine how to balance their new job with their private life, which may strengthen the social bond managers have with early-career employees by creating trust. Therefore, the following hypothesis is proposed:

Hypothesis 1e (H1e): the work-life balance provided by the manager will be positively related to early-career employees' relatedness, such that a greater work-life balance will be associated with higher levels of relatedness.

Early-career employees' relatedness and their psychological well-being

In the scope of this master's thesis, psychological well-being is conceptualized with both engagement and exhaustion. On the one hand, **engagement** has been described by Schaufeli et al. (2002) as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p.74). The authors described **vigor** as the energy an employee inputs in their work, **dedication** as the significance and enthusiasm experienced regarding their work, and **absorption** as an intense concentration on the task at hand. Engagement has been found to lead to outcomes such as increased individual performance, team performance, customer satisfaction, innovative work behaviors and organizational citizenship behaviors (Bailey et al., 2017). Engagement was also associated with overall well-being (Freeney & Fellenz, 2013), positive affect (Sonnentag et al., 2008), a higher life satisfaction and a lower perceived stress (Extremera et al., 2012). Engagement thus represents a positive aspect of employees' psychological well-being.

In a meta-analysis regarding the impact of specific behaviors in supporting SDT's basic needs, managerial behaviors supporting relatedness had a strong significant correlation with employees' satisfaction of their need for relatedness, as well as with employees' subjective well-being (i.e. higher positive affect and life satisfaction, and lower negative affect; Slemp et al., 2024). More specifically, it was found that supervisory support (Freeney & Fellenz, 2013) and supervisory coaching (Xanthopoulou et al., 2007) acted as organizational resources for employees, which were then translated into a positive correlation with their work engagement. Moreover, employees who reported that their manager fulfilled their basic needs experienced a greater relationship quality and a higher work engagement than those who reported a lack of managerial support (McIlroy et al., 2021). Therefore, the following hypothesis is proposed:

Hypothesis 2a (H2a): relatedness will be positively related to early-career employees' engagement, such that higher levels of relatedness will be associated with higher levels of engagement, and will mediate the positive relationship between managerial practices and engagement.

On the other hand, **exhaustion** represents one dimension of burnout (alongside depersonalization and the lack of personal accomplishment), and is defined as the strain experienced following the depletion of physical and emotional resources (Schaufeli et al., 2002). Exhaustion has been found to have deleterious impact on job performance, job satisfaction and organizational commitment, while increasing turnover intentions for sales employees (Edmondson et al., 2019). A meta-analysis of longitudinal studies examining the outcomes of burnout found that burnout was associated with negative psychological impacts (e.g. depressive symptoms, insomnia) as well as with negative physical impacts (e.g. musculoskeletal pain, headaches, and mortality; Salvagioni et al., 2017). A longitudinal study showed that emotional exhaustion at the first moment of measure was a significant predictor of

a reduced job satisfaction at the second moment of measure (Lizano & Mor Barak, 2015). Another study revealed that emotional exhaustion increased job demands, which further worsened employees' emotional exhaustion (Demerouti et al., 2009), eventually creating a spiral of resource loss. Exhaustion thus represents a negative aspect of employees' psychological well-being.

In a meta-analysis examining antecedents and outcomes of emotional exhaustion, both supervisory support and perceived organizational support had a direct negative relationship with emotional exhaustion (Edmondson et al., 2019). Xanthopoulou et al. (2007) found that social support and supervisory coaching constituted important personal resources for employees, which indirectly helped them cope with their emotional exhaustion. Furthermore, some studies directly highlighted the positive influence of managers answering employees' SDT basic needs on their emotional exhaustion. While McIlroy et al. (2021) observed that employees who reported fulfilled basic needs had lower levels of emotional exhaustion than those who reported unmet needs, Fernet et al. (2013) showed that employees' perceptions of relatedness had a mediating role between managers' social support and emotional exhaustion—such that increased social support led to greater relatedness perceptions and decreased emotional exhaustion. Therefore, the following hypothesis is proposed:

Hypothesis 2b (H2b): relatedness will be negatively related to early-career employees' exhaustion, such that higher levels of relatedness will be associated with lower levels of exhaustion, and will mediate the negative relationship between managerial practices and exhaustion.

Methodology

Sample and procedure

This study focuses on early-career employees on the labor market among French-speaking Belgians, i.e. individuals with less than 5 years of working experience at the time of data collection. Data collection relied on the use of an online questionnaire which was diffused between November 2025 and March 2026.

Multiple channels were used in order to increase visibility, reach as many new entrants as possible, and collect enough data for analysis. First, online publications were made on social media (i.e. Facebook, LinkedIn) using the personal account, as well as the institutional accounts of the LENTIC, HEC Alumni Network, ULiège Alumni, and HELMo Alumni. Those platforms are favorable for large scale diffusion of the questionnaire, enabling users to repost or directly share the study through their personal networks. Second, the newsletters of both HEC Liège Alumni and Le Groupe pour HEC were used to reach a broad pool of individuals who could easily share the questionnaire within their team or organization. Third, direct contacts were made with different organizations that showed interest in the study, proposing a beneficial exchange of analyses, reports, and presentations of the results for an internal diffusion of the questionnaire among their employees. Finally, students following a course of quantitative data treatment at UCLouvain were invited to share the questionnaire within their personal network or directly to individuals who corresponded to the inclusion criteria of the study.

Before beginning the questionnaire, participants were informed about the objectives and analyses realized in the scope of this research. They were also presented with information regarding their personal data treatment and their right to withdraw their consent at any time during the realization of the study, and participants were ensured anonymity and confidentiality of their personal information. Individuals who agreed to participate were then asked to fill out the questionnaire, which had a duration estimated between 15 and 20 minutes.

A total of 2,231 participants responded to the questionnaire. Some respondents were removed from this sample due to various reasons. Participants who were not employed, who were students or interns at the time of data collection were not kept for further statistical analyses. To ensure a certain response rate to the various items and ensure the quality of analysis, data of participants who responded to less than fifteen percent of the questionnaire were dropped. Manual corrections were brought to questions where participants had to type their answer (e.g. birthdate, tenure with the organization, employment sector, etc.) to ensure a correct and consistent format of the data. Finally, the procedure used for data collection made it possible for individuals outside of the target audience to complete the questionnaire. To ascertain that the final sample comprised only early-career employees as defined in this master's thesis, the data of participants who had more than 5 years of working experience or no experience at all were dropped. Similarly, participants who had more than 5 years or no year of tenure within the organization or with their manager were excluded, as well as participants who graduated 8 years ago or more, or who were 36 years old or more.

Following those modifications, the final sample thus comprised a total of 276 participants, on whom the statistical analyses were performed (see *Table 1* for the descriptives of the sample). The sample comprised 177 women (64.1%), 97 men (35.1%), and two individuals (0.7%) who did not mention their gender. The mean age of the population was 26.06 years ($SD = 2.80$), and a majority of the sample had graduated with a master's degree (47.8%). The mean number of years since graduation was 2.90 years ($SD = 1.52$), and the mean number of years since work was 2.80 ($SD = 1.39$). Tenure within the organization was of 2.17 years ($SD = 1.25$) while tenure with the manager was of 1.89 years ($SD = 1.11$). A majority of the sample worked at a full-time position (83.7%), and about half of the sample had a permanent contract (53.3%).

Table 1 — Participant characteristics (n = 276)

	Number	%
Gender		
Women	177	64.1
Men	97	35.1
Other	2	0.7
Age range		
18-21 years old	9	3.3
22-25 years old	110	40.4
26-29 years old	124	45.6
30-35 years old	29	10.7
Education level		
Lower secondary school	5	1.8
Upper secondary school	40	14.5
Bachelor's degree or similar	97	35.1
Master's degree or similar	132	47.8
Doctorate's degree	2	0.7
Marital status		
Single or divorced	134	48.6
Married	50	18.1
In a relationship	50	18.1
Cohabitant	42	15.2
Years since graduation		
1 year	62	22.5
2 – 3 years	122	44.2
4 – 5 years	79	28.6
6 – 7 years	13	4.7
Years since labor market entry		
1 year	67	24.3
2 – 3 years	117	42.4
4 – 5 years	92	33.3
Number of jobs occupied		
1 job	182	66.2
2 jobs	58	21.1
3 jobs or more	35	12.7
Organizational tenure		
1 year	115	41.7
2 – 3 years	116	42.0
4 – 5 years	45	16.3
Tenure with the manager		
1 year	136	49.3
2 – 3 years	110	39.9
4 – 5 years	30	10.9
Work regime		
Less than half-time	4	1.4
Half-time or more	41	14.9
Full-time	231	83.7
Contract type		
Temporary short (weeks, months)	70	25.4
Temporary long (years)	59	21.4
Permanent	147	53.3

Table 1 (continued)

	Number	%
Sector		
Private	137	49.6
Public	136	49.3
Other (non-profitable organizations)	3	1.1
Organization size		
Less than 50 people	104	37.8
50 – 499 people	77	28.0
500 – 4,999 people	46	16.7
5,000 people or more	48	17.5
Number of interactions with the manager (per week)		
No interaction	13	5.4
Less than 1 interaction	2	0.8
1 to 3 interactions	100	41.7
4 to 5 interactions	52	21.7
More than 5 interactions	73	30.4

Finally, it is important that the final sample's data follows a normal distribution as normality represents an important prerequisite to construct reliable measures of the studied variables (Christmann & Van Aelst, 2006). The *skewness* and the *kurtosis* are two statistical measures that allow to evaluate if the normality of the data, with values of skewness and kurtosis that should be between -2.0 and 2.0 for each item of the questionnaire. With values ranging between -1.27 and 0.26 for skewness, and between -1.35 and 0.98 for kurtosis, it can be concluded that the final sample followed a normal distribution.

Questionnaire and measures

The questionnaire has been constructed within the scope of a PhD research which analyzes a larger framework than the one presented in this master's thesis. Because the present framework is fully integrated within the PhD research, the same questionnaire was used despite its inclusion of variables that are not studied in this master's thesis.

The selection of the scales measuring the studied variables was based on several elements. First, their relevance to the research context was considered. For instance, the used scales were constructed and tested in a similar context (i.e. analyzing labor market entrants instead of new organization entrants or interns). Second, scales were also selected based on their number of citations on Google Scholar. Indeed, cited scales are more likely to have been tested and validated by a larger number of authors, and thus to have an increased content validity. Third, because the PhD research measures numerous variables, smaller scales were prioritized to avoid extending the length of the final questionnaire.

Most of the selected scales were originally in English. To reach as many potential participants as possible and increase response rate, translation-back translation method was used (Brislin, 1981). This method consists of translating the selected items into French by a native French speaker, then translating them back into English by a native English speaker. All discrepancies were discussed between the researchers and the native speaker to reach a final solution, and thus construct the final version of the questionnaire (see *Appendix 1*).

Eventually, this method provides an accurate translation of the various scales into the target language while maintaining their intended meaning, which preserves the validity of the scales and of the obtained results despite being in another language (Klotz et al., 2023).

Independent variables

Autonomy. The Work Design Questionnaire ($\alpha = 0.94$; Morgeson & Humphrey, 2006) was used to evaluate the extent of the autonomy provided by the manager. Three items from the “Work Scheduling Autonomy” dimension, three items from the “Decision-Making Autonomy” dimension, and three items from the “Work Methods Autonomy” dimension were selected from the original scale. Responses for the retained items ranged on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Examples of items for each dimension are “the job allows me to make my own decisions about how to schedule my work” (work scheduling autonomy; $\alpha = 0.86$), “the job allows me to make a lot of decisions on my own” (decision-making autonomy; $\alpha = 0.89$), and “the job allows me to make decisions about what methods I use to complete my work” (work methods autonomy; $\alpha = 0.90$).

Feedback. The Employee Coaching measure ($\alpha = 0.93$; Heslin et al., 2006) was used to evaluate the quality of feedback provided by managers. Four items from the ‘Guidance’ dimension, three items from the ‘Facilitation’ dimension, and three items from the ‘Inspiration’ dimension were selected. Responses for the retained items ranged on a five-point Likert scale from 1 (not at all) to 5 (to a very great extent). Examples of items for each dimension are “to what extent does the person to whom you are providing feedback: provide constructive feedback regarding areas for improvement?” (guidance; $\alpha = 0.88$), “encourage you to explore and try out new alternatives?” (facilitation; $\alpha = 0.87$), “encourage you to continuously develop and improve?” (inspiration; $\alpha = 0.89$).

Learning opportunities. Four items of the Mentorship Scale (Scandura & Ragins, 1993) were used to evaluate to which extent managers provide learning opportunities to new entrants. The selected items were from the ‘Learning and development opportunities’ dimension ($\alpha = 0.83$) and ranged on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). An example of item is “My manager advised me about promotional opportunities”.

Recognition. Three items of the COPSOQ III Questionnaire (Llorens et al., 2019) were used to evaluate recognition expressed by managers towards new entrants. The selected items were from the ‘Recognition’ dimension ($\alpha = 0.83$) and ranged on a five-point Likert scale from 1 (to a very small extent) to 5 (to a very large extent). An example of item is “are you treated fairly at your workplace?”.

Work-life balance. Items from the Manager Support ($\alpha = 0.88$; Anderson et al., 2002) were used to evaluate managers’ consideration of new entrants’ work-life balance. Five out of the six items were selected. Responses for the retained items ranged on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). An example of item is “my supervisor really cares about the effects that work demands have on my personal and family life”.

Dependent variables

Engagement. The Utrecht Work Engagement Scale ($\alpha = 0.94$; Schaufeli et al., 2006) was used to evaluate the engagement of new entrants. The complete scale was selected, encompassing three items from the ‘vigor’ dimension, three items from the ‘dedication’ dimension, and three items from the ‘absorption’ dimension. Responses for the retained items ranged on a seven-point Likert scale from 1 (never) to 7 (every day). Examples of item for each dimension are “at my work, I feel bursting with energy” (vigor; $\alpha = 0.87$), “I am enthusiastic about my job” (dedication; $\alpha = 0.90$), and “I am immersed in my work” (absorption; $\alpha = 0.84$).

Exhaustion. Five items of the Maslach Burnout Inventory (Maslach et al., 1996) were used to evaluate the emotional exhaustion expressed by new entrants. The selected items were from the ‘exhaustion’ dimension ($\alpha = 0.87$) and ranged on a seven-point Likert scale from 1 (never) to 7 (every day). An example of item is “I feel emotionally drained by my work”.

Mediator

Relatedness. Six items of the ‘Work-related Basic Need Satisfaction’ (W-BNS; Van den Broeck, 2010) scale were used to measure the level of relatedness among new entrants. The selected items were from the ‘Affiliation dimension’ ($\alpha = 0.83$) and ranged on a seven-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). An example of item is “Some people I work with are close friends of mine”.

Control variables

Other variables were used as controls if they had a significant correlation with the mediator or outcomes studied (Becker, 2005). ANOVA and t-tests were performed with those variables to further confirm their inclusion in the analyses as controls. Based on the correlation matrix, the ANOVA and t-tests, four control variables were included.

Organizational tenure was categorized into 1 year of tenure, between 2 to 3 years of tenure, and between 4 to 5 years of tenure. Organizational tenure was found to be linked to several job attitudes such as an increased satisfaction with colleagues and with the manager, trust in interpersonal interactions, and relationship quality with the manager (Ng & Feldman, 2010). Therefore, longer organizational tenure could be linked to early-career employees’ increased levels of relatedness.

Tenure with the current manager was categorized similarly: 1 year of tenure, between 2 to 3 years of tenure, and between 4 to 5 years of tenure. As explained previously, the good quality of the relationship between managers and employee is determined by trust, commitment, loyalty and support (Dulebohn et al., 2012). Because those elements are developed through time, longer tenure with the current manager could also lead to early-career employees’ increased levels of relatedness.

Work regime was categorized into full-time, half-time or more, and less than half-time. As lower work regime could limit the time early-career employees spend with their manager and colleagues, work regime might represent a constraint that slows down the development of good work relationships. Therefore, early-career employees working in full-time positions could be more likely to have an increased relatedness compared to early-career employees having a lower work regime.

Finally, the *number of interactions with the manager per week* was categorized into five categories: (1) no interaction, (2) less than one interaction, (3) one to three interactions, (4) four to five interactions, (5) more than five interactions. Indeed, the quality of the employee-manager relationship do not only depend on time, but also on the frequency of their mutual interactions among many other elements (Ferris et al., 2009). Therefore, early-career employees who reported numerous interactions with their manager per week might have a stronger sense of relatedness, compared to early-career employees whose interactions with their manager are rarer.

Statistical analyses

First, SPSS (version 30.0.0.0) was used to perform descriptive statistics regarding the final sample. Reliability analyses were then performed to evaluate the validity of the scales used in the questionnaire. Finally, mediation analyses were performed on Jamovi (version 2.6.45.0) to observe the relations between the managerial practices, the level of relatedness of early-career employees, and their psychological well-being.



Figure 2 — Example of a model without mediator

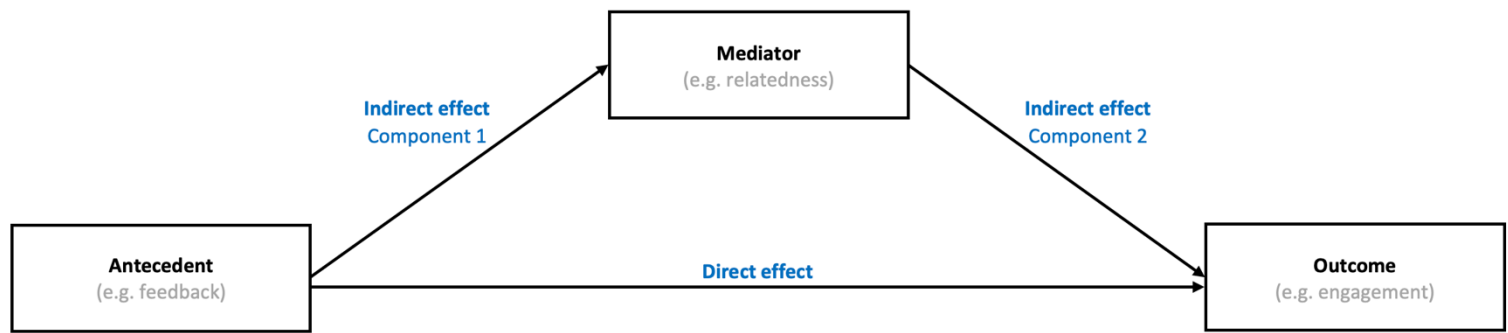


Figure 3 — Example of a model with a mediator

From a statistical standpoint, mediation analyses involve decomposing the effect of an antecedent on an outcome into direct and indirect effects (Hayes, 2017). When no mediator is included in the model (see Figure 2), the **total effect** represents the raw impact of the antecedent on the outcome (e.g., the impact of feedback on engagement). However, when a mediator is included, the total effect is divided into two different effects to analyze (see Figure 3).

The first effect is the **direct effect**, which evaluates the impact of the antecedent on the outcome while controlling for the presence of the mediator (e.g. the impact of feedback on engagement, acknowledging the existence of relatedness as a variable in the model). It allows to understand how the total effect initially found is impacted by the inclusion of the mediator in the model.

The second effect is the **indirect effect**, which is estimated through two components. The first component evaluates the impact of the antecedent on the mediator (e.g., feedback and relatedness), while the second component evaluates the impact of the mediator on the outcome (e.g., relatedness and engagement). Taken together, these two components indicate whether the antecedent influences the outcome indirectly through the mediator.

The statistical significance of the different effects is examined to determine the nature of the relationship between the studied variables (Hayes, 2017). **Mediation is not supported** when the indirect effect is non-significant. In such cases, there is no significant effect between the antecedent and the mediator nor between the mediator and the outcome (i.e. both of the component effects are non-significant). Conversely, **mediation is supported** when the indirect effect is statistically significant. In such cases, there exists a link between the antecedent and the mediator as well as between the mediator and the outcome (i.e. both of the component effects are significant). It thus explains how the antecedent can influence the outcome indirectly.

Aside from observing a significant indirect effect, the direct effect allows to determine the type of mediation that occurs. On the one hand, **partial mediation** occurs when the direct effect is also statistically significant. Partial mediations indicate that the antecedent impacts the outcome directly through their direct effect, but also indirectly through the indirect effect of the mediation. On the other hand, **total mediation** occurs when the direct effect becomes non-significant when the mediator is included in the model. Total mediations indicate that the antecedent does not impact the outcome directly, but only in an indirect way through the mediator.

While it is usually recommended to include all variables in the mediation model for analysis, the software Jamovi allows the estimation of models with only one outcome at a time. Therefore, the mediation analyses were done in three steps.

The first step encompassed ‘individual analyses’ of each managerial practice. Five models were then tested, with one managerial practice as an antecedent, relatedness as the mediator, and engagement as the main outcome. Five other models were tested similarly, but with exhaustion as the main outcome. Those individual models allow to analyze if the studied managerial practices have direct effects on relatedness, and if mediation effects occur between each managerial practice and psychological well-being outcomes.

The second step encompassed 'global analyses' of all managerial practices. The *Model 1* included all managerial practices as antecedents, relatedness as the mediator, and engagement as the main outcome. The *Model 2* was created similarly, but with exhaustion as the main outcome. Those models allow to analyze the direct effect of each managerial practice while accounting for the presence of the others, and thus to determine the most influent practices on relatedness, engagement, and exhaustion. Finally, the third step encompassed inclusion of the control variables in both *Model 1* and *Model 2* to examine whether prior significant paths remained significant after the inclusion of those variables, and thus to identify potentially confounding variables.

Results

Descriptive results

The correlation matrix is depicted in *Table 2*. All managerial practices correlated positively to relatedness, with recognition showing the highest correlation ($r = .30, p < .001$) and work-life balance showing the lowest correlation ($r = .23, p < .001$). Managerial practices also showed positive correlations to engagement and negative correlations to exhaustion ($p < .001$). Finally, relatedness correlated positively with engagement ($r = .37, p < .001$) and negatively with exhaustion ($r = -.26, p < .001$), as expected. Overall, all observed correlations were thus in line with the proposed hypotheses.

Test of hypotheses

The results of the individual mediation analyses can be found in *Appendix 2*. The results of the global mediation analyses are depicted in *Table 3* for the *Model 1* (i.e., engagement as the outcome), and in *Table 4* for *Model 2* (i.e., exhaustion as the outcome). For the mediation analyses including control variables, results are depicted in *Table 5* for the *Model 1* and in *Table 6* for the *Model 2*.

Hypotheses H1a to H1e aimed at examining the influence of each managerial practice on early-career employees' level of relatedness. The results of the individual analyses showed that each managerial practice had a significant association with early-career employees' relatedness. However, those associations became non-significant when managerial practices were studied in global analyses, even after controlling for confounding variables. Therefore, hypotheses H1a, H1b, H1c, H1d, and H1e were rejected.

Hypotheses H2a and H2b first aimed to examine the influence of early-career employees' level of relatedness on their engagement and exhaustion levels. They then aimed at exploring the potential mediating role of relatedness between managerial practices and psychological well-being outcomes. First, significant associations were observed between relatedness and engagement ($\beta = .27, p < .001$), as well as between relatedness and exhaustion ($\beta = -.20, p < .01$). The results did not change after the inclusion of control variables. Regarding the hypothesized mediation, all the indirect effects between the managerial practices and engagement were non-significant. Similarly, no significant indirect effects were observed between the managerial practices and exhaustion. The absence of significant effects remained in both models even after the inclusion of control variables, which indicates that relatedness did not act as a mediator between managerial practices and psychological well-being outcomes. Those elements thus lead to the partial support of both hypotheses H2a and H2b.

It is worth noting that autonomy and feedback had significant total effects on engagement (autonomy: $\beta = .14, p < .05$; feedback: $\beta = .18, p < .05$), which became non-significant after the inclusion of control variables. It suggests that some control variables may account for variance previously attributed to these predictors, particularly organizational tenure ($\beta = .23, p < .05$) and work regime ($\beta = -.39, p < .05$). This result is further emphasized as the only indirect effect that was observed—and thus the only mediation effect—was between work regime and engagement ($\beta = -.11, p < .05$). Another element to mention is that learning opportunities had both a total effect ($\beta = .23, p < .05$) and a direct effect ($\beta = .23, p < .01$) on engagement even after the inclusion of control variables. This result thus emphasizes a more direct link between learning opportunities and engagement, rather than an influence that goes through a mediator such as relatedness. Moreover, the presence of a direct effect could signify that there exists an influence of a mediator that is not explored in the model. Finally, none of the managerial practices had a direct effect or a total effect on exhaustion, even after the inclusion of control variables. It could be possible that generally, the studied managerial practices have no link to exhaustion, and thus that managerial practices may not be relevant levers to reduce new entrants' exhaustion.

Table 2 — Correlation matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Gender	—																						
2. Age groups	-.11	—																					
3. Education level	.03	.38***	—																				
4. Marital status	.14*	.15*	.14*	—																			
5. Organizational tenure	-.06	.28***	-.06	.18**	—																		
6. Years since graduation	-.08	.37***	-.15*	.04	.59***	—																	
7. Years since labor market entry	-.03	.39***	-.13*	.12*	.66***	.80***	—																
8. Number of jobs	-.01	.13*	-.03	-.08	-.17**	.26***	.32***	—															
9. Work regime	-.19**	.06	.16**	.08	.01	.08	.02	.05	—														
10. Tenure with manager	-.04	.22***	-.07	.13*	.83***	.48***	.53***	-.22***	.00	—													
11. Contract type	-.15*	.17**	.16**	.08	.35***	.25***	.24***	-.12	.23***	.27***	—												
12. Organization size	-.06	-.07	.06	.10	-.06	-.08	-.11	.01	.17**	-.11	.10	—											
13. Employment sector	-.15*	.06	.03	-.04	-.03	.03	.00	.04	.01	.01	.15*	-.09	—										
14. Sector	-.02	-.03	-.21***	-.05	-.05	.01	.00	.04	-.04	-.01	.00	.14*	-.03	—									
15. Interactions with manager	-.06	-.02	.10	-.03	.07	.01	-.01	-.10	.01	.09	.17*	-.09	.15*	-.03	—								
16. Autonomy	.08	.02	.16**	.06	.01	-.10	-.01	-.10	-.02	.01	.14*	-.03	.00	.00	.18**	—							
17. Feedback	-.10	-.08	.06	.02	-.12*	-.09	-.08	-.03	.11	-.10	.09	.13*	-.07	.04	.32***	.40***	—						
18. Learning opportunities	-.07	-.11	.04	-.08	-.09	-.11	-.08	-.04	.08	-.03	.04	.04	-.02	.08	.25***	.47***	.72***	—					
19. Recognition	-.05	-.01	.10	-.02	-.12	-.15*	-.07	-.04	.03	-.09	-.01	.00	-.01	-.03	.32***	.51***	.67***	.61***	—				
20. Work-life balance	-.02	-.02	.06	.09	-.07	-.08	-.07	-.02	-.02	-.03	.07	.03	.02	-.02	.28***	.50***	.62***	.66***	.64***	—			
21. Relatedness	.01	.01	.11	.01	.15*	-.04	.04	-.18**	-.01	.13*	.14*	.03	-.03	.03	.12	.26***	.28***	.25***	.30***	.23***	—		
22. Engagement	-.04	-.02	.06	-.10	-.02	-.04	.02	-.04	.15*	.02	.09	.03	-.11	.06	.23***	.32***	.40***	.42***	.37***	.27***	.37***	—	
23. Exhaustion	.06	-.02	-.09	-.01	.10	.10	.09	.03	-.01	.08	-.01	-.06	.04	-.01	-.13*	-.21***	-.31***	-.32***	-.33***	-.32***	-.26***	-.36***	—

Note. * p < .05, ** p < .01, *** p < .001

Table 3 — Mediation analysis, with engagement as the outcome

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Autonomy $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.05	0.03	0.00	0.15	0.03	1.80	0.073
	Feedback $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.05	0.03	-0.02	0.14	0.04	1.45	0.146
	Learning opportunities $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.01	0.03	-0.06	0.07	0.00	0.15	0.879
	Recognition $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.05	0.03	-0.03	0.13	0.04	1.55	0.121
	Work-life balance $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	-0.01	0.03	-0.07	0.06	0.00	-0.22	0.823
Component	Autonomy $\Rightarrow$ Relatedness	0.12	0.06	-0.03	0.27	0.14	1.95	0.051
	Feedback $\Rightarrow$ Relatedness	0.12	0.08	-0.06	0.29	0.14	1.53	0.125
	Learning opportunities $\Rightarrow$ Relatedness	0.01	0.08	-0.14	0.17	0.01	0.15	0.879
	Recognition $\Rightarrow$ Relatedness	0.12	0.07	-0.07	0.31	0.14	1.65	0.099
	Work-life balance $\Rightarrow$ Relatedness	-0.02	0.08	-0.16	0.16	0.02	-0.22	0.823
Direct	Relatedness $\Rightarrow$ Engagement	0.41	0.09	0.23	0.60	0.25	4.59	<.001***
	Autonomy $\Rightarrow$ Engagement	0.15	0.09	-0.05	0.37	0.10	1.64	0.100
	Feedback $\Rightarrow$ Engagement	0.20	0.12	-0.04	0.42	0.14	1.75	0.081
	Learning opportunities $\Rightarrow$ Engagement	0.35	0.12	0.12	0.57	0.25	3.04	0.002**
	Recognition $\Rightarrow$ Engagement	0.12	0.11	-0.13	0.39	0.09	1.12	0.263
Total	Work-life balance $\Rightarrow$ Engagement	-0.21	0.11	-0.43	0.03	-0.14	-1.87	0.061
	Autonomy $\Rightarrow$ Engagement	0.20	0.10	-0.03	0.43	0.14	2.11	0.035*
	Feedback $\Rightarrow$ Engagement	0.25	0.12	0.00	0.49	0.18	2.10	0.036*
	Learning opportunities $\Rightarrow$ Engagement	0.36	0.12	0.13	0.59	0.25	2.98	0.003**
	Recognition $\Rightarrow$ Engagement	0.17	0.11	-0.10	0.42	0.12	1.52	0.129
	Work-life balance $\Rightarrow$ Engagement	-0.21	0.12	-0.45	0.05	-0.15	-1.86	0.063

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4 — Mediation analysis, with exhaustion as the outcome

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Autonomy $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.18	0.11	-0.53	0.00	-0.02	-1.60	0.109
	Feedback $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.17	0.13	-0.58	0.03	-0.02	-1.35	0.179
	Learning opportunities $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.02	0.12	-0.31	0.20	0.00	-0.15	0.879
	Recognition $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.17	0.12	-0.60	0.07	-0.02	-1.42	0.155
	Work-life balance $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	0.02	0.11	-0.18	0.33	0.00	0.22	0.823
Component	Autonomy $\Rightarrow$ Relatedness	0.12	0.06	-0.02	0.26	0.14	1.95	0.051
	Feedback $\Rightarrow$ Relatedness	0.12	0.08	-0.04	0.30	0.14	1.53	0.125
	Learning opportunities $\Rightarrow$ Relatedness	0.01	0.08	-0.14	0.17	0.02	0.15	0.879
	Recognition $\Rightarrow$ Relatedness	0.12	0.07	-0.08	0.32	0.14	1.65	0.099
	Work-life balance $\Rightarrow$ Relatedness	-0.02	0.08	-0.18	0.14	-0.02	-0.22	0.823
Direct	Relatedness $\Rightarrow$ Exhaustion	-1.45	0.52	-2.39	-0.37	-0.17	-2.81	0.005**
	Autonomy $\Rightarrow$ Exhaustion	0.16	0.54	-0.96	1.39	0.02	0.29	0.770
	Feedback $\Rightarrow$ Exhaustion	-0.14	0.67	-1.43	1.12	-0.02	-0.21	0.837
	Learning opportunities $\Rightarrow$ Exhaustion	-0.94	0.67	-2.19	0.67	-0.12	-1.42	0.157
	Recognition $\Rightarrow$ Exhaustion	-0.91	0.62	-2.49	0.58	-0.12	-1.46	0.145
Total	Work-life balance $\Rightarrow$ Exhaustion	-0.92	0.64	-2.32	0.38	-0.12	-1.44	0.149
	Autonomy $\Rightarrow$ Exhaustion	-0.02	0.55	-1.13	1.09	0.00	-0.05	0.972
	Feedback $\Rightarrow$ Exhaustion	-0.31	0.68	-1.68	0.97	-0.04	-0.46	0.647
	Learning opportunities $\Rightarrow$ Exhaustion	-0.96	0.68	-2.43	0.52	-0.13	-1.42	0.156
	Recognition $\Rightarrow$ Exhaustion	-1.08	0.63	-2.55	0.54	-0.15	-1.72	0.086
	Work-life balance $\Rightarrow$ Exhaustion	-0.90	0.65	-2.25	0.56	-0.12	-1.38	0.167

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5 — Mediation analysis with control variables, with engagement as the outcome

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Autonomy $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.05	0.03	-0.02	0.15	0.03	1.59	0.111
	Feedback $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.06	0.04	-0.02	0.16	0.04	1.41	0.160
	Learning opportunities $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.00	0.04	-0.09	0.08	0.00	-0.04	0.968
	Recognition $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.06	0.04	-0.03	0.16	0.04	1.54	0.125
	Work-life balance $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	-0.01	0.04	-0.10	0.07	-0.01	-0.29	0.773
Component	Autonomy $\Rightarrow$ Relatedness	0.11	0.07	-0.05	0.26	0.13	1.69	0.091
	Feedback $\Rightarrow$ Relatedness	0.12	0.08	-0.07	0.29	0.14	1.47	0.142
	Learning opportunities $\Rightarrow$ Relatedness	0.00	0.08	-0.18	0.16	0.00	-0.04	0.968
	Recognition $\Rightarrow$ Relatedness	0.12	0.08	-0.08	0.32	0.15	1.62	0.105
	Work-life balance $\Rightarrow$ Relatedness	-0.02	0.08	-0.20	0.15	-0.03	-0.29	0.773
Direct	Relatedness $\Rightarrow$ Engagement	0.47	0.10	0.26	0.70	0.28	4.79	<.001***
	Autonomy $\Rightarrow$ Engagement	0.15	0.10	-0.11	0.38	0.10	1.51	0.131
	Feedback $\Rightarrow$ Engagement	0.18	0.12	-0.09	0.41	0.12	1.44	0.150
	Learning opportunities $\Rightarrow$ Engagement	0.33	0.12	0.13	0.55	0.23	2.71	0.007**
	Recognition $\Rightarrow$ Engagement	0.09	0.11	-0.17	0.37	0.06	0.78	0.437
Total	Work-life balance $\Rightarrow$ Engagement	-0.20	0.12	-0.44	0.06	-0.13	-1.66	0.098
	Autonomy $\Rightarrow$ Engagement	0.20	0.10	-0.08	0.42	0.13	1.94	0.052
	Feedback $\Rightarrow$ Engagement	0.23	0.13	-0.07	0.47	0.16	1.82	0.069
	Learning opportunities $\Rightarrow$ Engagement	0.33	0.13	0.10	0.56	0.23	2.58	0.010*
	Recognition $\Rightarrow$ Engagement	0.15	0.12	-0.12	0.39	0.10	1.22	0.222
	Work-life balance $\Rightarrow$ Engagement	-0.21	0.13	-0.51	0.04	-0.14	-1.67	0.096

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6 — Mediation analysis with control variables, with exhaustion as the outcome

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Autonomy $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.20	0.13	-0.63	0.06	-0.03	-1.50	0.134
	Feedback $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.21	0.16	-0.73	0.05	-0.03	-1.34	0.181
	Learning opportunities $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	0.01	0.15	-0.35	0.34	0.00	0.04	0.968
	Recognition $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.22	0.15	-0.79	0.09	-0.03	-1.45	0.147
	Work-life balance $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	0.04	0.14	-0.23	0.51	0.01	0.29	0.774
Component	Autonomy $\Rightarrow$ Relatedness	0.11	0.07	-0.05	0.26	0.13	1.69	0.091
	Feedback $\Rightarrow$ Relatedness	0.12	0.08	-0.05	0.30	0.14	1.47	0.142
	Learning opportunities $\Rightarrow$ Relatedness	0.00	0.08	-0.18	0.17	0.00	-0.04	0.968
	Recognition $\Rightarrow$ Relatedness	0.12	0.08	-0.08	0.32	0.15	1.62	0.105
	Work-life balance $\Rightarrow$ Relatedness	-0.02	0.08	-0.21	0.14	-0.03	-0.29	0.773
Direct	Relatedness $\Rightarrow$ Exhaustion	-1.78	0.55	-2.97	-0.60	-0.20	-3.23	0.001**
	Autonomy $\Rightarrow$ Exhaustion	0.21	0.56	-1.02	1.49	0.03	0.38	0.703
	Feedback $\Rightarrow$ Exhaustion	-0.38	0.70	-1.73	1.05	-0.05	-0.54	0.586
	Learning opportunities $\Rightarrow$ Exhaustion	-1.08	0.70	-2.65	0.74	-0.14	-1.55	0.122
	Recognition $\Rightarrow$ Exhaustion	-0.97	0.65	-2.59	0.66	-0.13	-1.50	0.134
Total	Work-life balance $\Rightarrow$ Exhaustion	-0.76	0.68	-2.14	0.87	-0.10	-1.12	0.263
	Autonomy $\Rightarrow$ Exhaustion	0.02	0.57	-1.02	1.50	0.00	0.03	0.976
	Feedback $\Rightarrow$ Exhaustion	-0.60	0.71	-1.95	0.90	-0.08	-0.83	0.404
	Learning opportunities $\Rightarrow$ Exhaustion	-1.07	0.72	-2.53	0.71	-0.14	-1.50	0.133
	Recognition $\Rightarrow$ Exhaustion	-1.19	0.66	-2.85	0.43	-0.16	-1.80	0.071
	Work-life balance $\Rightarrow$ Exhaustion	-0.72	0.69	-2.14	0.84	-0.09	-1.03	0.301

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Post-hoc tests

Due to the results obtained when testing the hypotheses, additional tests were performed. They encompassed mediation tests that aimed to examine the influence of the overall 'managerial support' on relatedness and psychological well-being outcomes. 'Managerial support' was computed by aggregating the average scores obtained for each managerial practice into a single score. A first model thus placed managerial support as an antecedent, relatedness as the mediator, and engagement as the outcome. A second model was created similarly, but with exhaustion as the outcome. The results of those two post-hoc tests can be found in *Appendix 3*.

Those tests showed that all the analyzed effects (i.e. total, direct, indirect) were significant for both engagement and exhaustion. Overall managerial support was found to have an influence on early-career employees' relatedness ($\beta = .33, p < .001$). Relatedness also significantly predicted engagement ($\beta = .26, p < .001$) and exhaustion ($\beta = -.15, p < .01$). Finally, although effects were rather small, relatedness acted as a mediator between general managerial support and engagement ($\beta = .08, p < .001$) as well as with exhaustion ($\beta = -.05, p < .05$).

Discussion

This master's thesis aimed to extend the early-career stage beyond the socialization process by focusing on the first years on the labor market. More specifically, it proposed a theoretical framework that regroups several antecedents, a mediator, and two outcomes to investigate the role of managers during employees' early career. The objective of this framework was to better understand which managerial practices promote the relatedness of early-career employees, and in turn, how this relatedness could improve their psychological well-being. Another objective was to determine the most relevant managerial practices in promoting early-career employees' relatedness.

To do so, this master's thesis relied on a questionnaire that allowed to evaluate early-career employees' perceptions of managerial practice, and the practices' potential impact on the relatedness and the psychological well-being of early-career employees. Considering the obtained results, this master's thesis highlighted three key areas of discussion: (1) the importance of relatedness in the early-career context, (2) how managers can fulfill the need for relatedness, and (3) the influence of other potential moderators. These elements are discussed in detail hereunder.

Importance of relatedness in the early-career context

The results showed that relatedness increased early-career employees' engagement and reduced their exhaustion, thereby improving their overall psychological well-being. The positive influence of relatedness on psychological well-being was expected as it has been largely proven in the literature: a meta-analysis showed that satisfying the need for relatedness was linked with overall employees' subjective well-being (Slomp et al., 2024). However, this master's study allows to extend this result to the more specific population of early-career employees.

If relatedness is valuable for new entrants during their socialization process (Bauer et al., 2025), this master's thesis shows that relatedness acts as a valuable resource on a longer term—during the early-career stage—which allows employees to become more engaged in their work and less emotionally exhausted. This result is in line with the SDT, but it can also be related to other theoretical framework such as the Conservation of Resources theory and the Job Demand-Resource model. On the one hand, the **Conservation of Resources theory** (COR; Hobfoll, 2001) suggests that employees try to develop, maintain, and gain resources while protecting them from resources loss. Especially, when employees believe they have adequate resources, they are likely to invest them in order to reach growth opportunities and to socialize within the organization (Ellis et al., 2015; Hobfoll, 1989). Therefore, early-career employees experience higher levels of relatedness as a useful resource: they are more serene and comfortable within the organizational social network, which allows them to become fully engaged with their work. On the other hand, the **Job Demand-Resource model** (JD-R; Bakker & Demerouti, 2008; Demerouti et al., 2001) suggests that employees' engagement is determined by the balance between the job resources they have access to, and the job demands they face. In this model, **job demands** regroup all elements of the job that lead employees to strain (i.e. physical, psychological, or emotional) whereas **job resources** regroup all elements that can be drawn upon to face said demands (i.e. control, social support, feedback). When employees have enough job resources to face the existing job demands, they are likely to be more engaged and less exhausted, which eventually leads to an increased employee performance. In this sense, early-career employees' relatedness not only acts as a resource that allows them to build up their engagement, but also as a powerful protective barrier against job strain and emotional exhaustion.

This master's thesis thus underlines the high relevancy of the research question within an early-career context by demonstrating why developing relatedness is crucial to promote positive psychological well-being outcomes among early-career employees. It also justifies the focus made on the need for relatedness rather than the two other SDT needs.

Antecedents of relatedness

Managerial practices or managerial support?

This master's thesis aimed at better understanding the role of managers in an early-career context. More specifically, it investigated how different managerial practices could create feelings of relatedness among early-career employees. Results showed that managerial practices were associated with early-career employees' relatedness when they were studied individually, but they did not seem to predict relatedness when they were studied in global models. Additional post-hoc tests showed that the overall 'managerial support'—the combination of all managerial practices into a single measure—had an influence on early-career employees' relatedness. Therefore, those results support the idea that managers are actually able to support the development of employees' feelings of relatedness during their early-career stage, but the conceptualization of their role during this stage might be more complicated than anticipated.

From a methodological standpoint, those results lead to question how managerial practices should be studied in the future. Indeed, changing how managerial practices are studied (i.e. individually, in a global model, or as a unique measure of overall support) greatly impacted the results obtained. However, the present results seem to hint that global measures, such as the managerial support used in post-hoc tests, constitute more relevant measures. Adopting global measures would be in line with the existing literature, which seems to find significant associations between overall measures of managerial support with SDT need satisfaction (Baard et al., 2004; Bauer et al., 2025; Chong et al., 2021). Therefore, managerial support could be measured as the combination of different managerial practices.

However, the relevancy of global measures from a methodological perspective also leads to question whether managerial support should be conceptualized similarly from a theoretical or practical standpoint. In other words, if managerial support is statistically the combination of different managerial practices, this could also be true regarding how early-career employees actually perceive managerial support. It is thus proposed that early-career employees perceive managerial support as the overall involvement of their manager in their career, and define managers as 'generally supportive' or as 'generally unsupportive' based on their perceptions. Because early-career employees do not distinguish between nor show preferences for specific practices, they all have the same relative importance in the eyes of early-career employees: all practices thus simply represent different ways in which managers can express their support.

Therefore, **managerial support** is defined as the sum and the extent of resourceful practices or behaviors managers engage in towards early-career employees. Three implications can be drawn from this conceptualization of managerial support. First, the more a manager expands the number of practices they engage in, and the more they exhibit those practices, the more supportive they are for early-career employees. For instance, early-career employees might consider a manager who provide autonomy and feedback as more supportive than a manager who only provides feedback.

Second, due to early-career employees' lack of preference for specific practices, it is proposed that if two different managers engage in the same number of practices, they would be considered as equally supportive. For instance, a manager who only provides autonomy should be assessed as similarly supportive as another manager who only provides feedback.

Third, it is possible that the enactment of some managerial practices compensates for the absence of some others thanks to their additive effects. For instance, a manager who provides sufficient autonomy, learning opportunities and work-life balance, but no feedback nor recognition might still be considered as a supportive manager by early-career employees.

With such conceptualization of the managerial support, this master's thesis underlines that managers should actively engage in a lot of practices and behaviors that are deemed resourceful from early-career employees' perspective in order to fulfill their need for relatedness. Therefore, managers should

be adequately trained to demonstrate such a large set of high-quality managerial skills to fully support early-career employees during their first years on the labor market. This master's thesis also puts the emphasis on the need for future research to focus on managers' role during the early career, notably by investigating which practices could be relevant as part of the overall managerial support, and if the three proposed implications hereinabove can be proven with empirical data.

Influence of control variables

This master's thesis also included several demographic characteristics as potential control variables. Based on the correlation matrix, the ANOVA and t-tests, four control variables were included in global model. The results showed that only two of those control variables had an association with early-career employees' relatedness. While organizational tenure predicted early-career employees' relatedness, work-regime had a negative relationship with relatedness. In the context of early career, those two variables can indeed define the context in which early-career employees interact with their colleagues and manager.

Organizational tenure represents the time during which early-career employees have been working in their current organization. Yet, it could also indicate the time during which they have worked with their colleagues: the longer early-career employees remain within the organization, the more they have spent time with their colleagues. However, spending more time with colleagues multiplies the number of interactions and shared experiences through time, which allows early-career employees to develop and strengthen their social relationships with their colleagues (Baumeister & Leary, 1995). Therefore, it is suggested that an employee with a longer organizational tenure has developed more enriching relationships—and thus a strengthened relatedness—than an employee with a shorter organizational tenure. In this sense, increased organizational tenure represents a good indicator of social inclusion and relatedness.

This statement is further emphasized due to the early-career context. Early-career employees could be drawn to change jobs several times in order to find a position that will better correspond to their professional identity, that is still under development at this stage (Savickas, 2013; Van der Baan et al., 2025). Not only does changing job lead early-career employees to cumulate shorter organizational tenures in different organizations, but it especially forces them to develop relationships with their new colleagues, and thus to develop their relatedness anew. When early-career employees eventually find a job, and work within a team and an organization that fits their professional identity, they remain within the organization (Ng & Feldman, 2010), thereby increasing their organizational tenure. In that sense, organizational also represents an indicator of early-career employees' fit with the organization, the team, and the job—such that a longer organizational tenure implies a good fit.

Work-regime defines the total number of hours an employee works per week within an organization. An employee who has a part-time job is thus less often present at the workplace than an employee who has a full-time position. It would be logical to observe higher levels of relatedness among early-career employees working in full-time position due to their increased presence at the workplace, which leads to an increased number of interactions that strengthen social relationships (Baumeister & Leary, 1995). However, the present study showed a negative link between work-regime and relatedness, so that employees in full-time positions would in fact have a lower relatedness compared to part-time positions.

This negative association may thus be explained by the quality of the interactions. If a positive social environment can act as a resource, negative or toxic interactions at the workplace (e.g. bullying, discrimination, ostracism) can lead to emotional exhaustion and burnout (Maslach & Leiter, 2016). In case of a negative social environment, higher work-regimes increase early-career employees' presence at the workplace and thus their exposure to negative interactions with their colleagues, eventually reducing their relatedness.

However, the modality of these interactions is also crucial in determining early-career employees' relatedness. On the one hand, face-to-face work-regimes reinforces employees' interpersonal relationships at the workplace by promoting contacts and facilitating interactions (Mustajab, 2024), but it could also generate exhaustion as they increase exposure to a toxic social environment (Conceição & Palma-Moreira, 2025). On the other hand, while hybrid or remote work-regime may reduce the risk of exposition to such negative interactions, they can lead to employees' feelings of isolation and reduced team cohesion in case of positive work environment (Allen et al., 2024; Conceição & Palma-Moreira, 2025). Therefore, it could be possible that the negative impact of higher work-regime on early-career employees' relatedness is exacerbated by face-to-face interactions in case of a toxic workplace, or by remote working conditions in case of a positive workplace.

Future studies should then measure the quality as well as the modality early-career employees' interactions with their colleagues. They could include measures regarding remote work-regimes, work climate, or even the level of Leader-Member Exchange (i.e. the quality of the relationship with the manager; Dulebohn et al., 2012) as control variables. These additions are particularly relevant seen how early-career employees are impacted by their work relationships. Finally, organizational tenure and work-regime both underline the importance of considering the influence of other stakeholders or elements from the work environment when studying the relatedness in an early-career context. This idea is further detailed in the following section.

Influence of other potential moderators

If managers are able to promote employees' relatedness during their first years on the labor market, other factors could indeed influence how managerial practices are perceived by early-career employees, or limit the extent of managerial support. Those factors could also impact the relatedness of early-career employees in a more direct way, sometimes acting as a substitute to managerial support. Because the present model did not include any moderator, the following elements could thus represent alternative hypotheses regarding the absence of statistically significant effects of managerial practices when studied in global models.

Influence of job design

First, the design of the job itself could fulfill several functions that were attributed to managers in this master's thesis, and in consequence, limit the additive influence of managerial support in fulfilling early-career employees' need for relatedness. This element is supported by the **Job Characteristics Model** (JCM; Hackman & Oldman, 1976). The JCM defined five characteristics, among which are autonomy and feedback. In this model, **task autonomy** represents the latitude of choosing how and when to perform job tasks that is directly provided by the job, rather than the freedom of choice provided by the manager. For instance, an employee who has the latitude to organize their own work schedule benefits from a high task autonomy. Then, the JCM defined **feedback** as the extent to which executing a specific job task generates clear and direct information regarding the employee's job performance. Therefore, while feedback regarding an employee's performance may be provided by colleagues or managers, it can also emerge from realizing the task itself. For instance, customer satisfaction represents positive feedback regarding the employee's good performance.

In a study examining the impact of job design on SDT needs satisfaction, Olafsen and Halvari (2017) showed that task autonomy had a significant relationship with the need for autonomy and for competence, while positive feedback from the task was significantly linked to the need for relatedness. In the present study, this result suggests that when early-career employees have the necessary support through job design (e.g. task autonomy), they may consider that they receive enough support: as a consequence, managerial support (e.g. autonomy-supportive practices) do not enhance their perception of support, making managerial support irrelevant. This implies that managerial support can become obsolete to fulfill early-career employees' needs in case the job design provides extensive resources, but it can become highly valuable in case the job design provides too little resources.

Moreover, if the job and the manager provide the same resources, one source becomes irrelevant; otherwise, job design and managerial support can be complementary if they offer different resources to early-career employees. For instance, a job that offers autonomy can be complementary to manager's provision of feedback, while a job offering feedback may substitute to manager's feedback. This perspective can be extremely relevant for organizations, which can design the job as well as manager's responsibilities within the organization so that they become complementary rather than substitutes.

Influence of other stakeholders

The discussion regarding organizational tenure and work-regime already highlighted that promoting relatedness is not the sole responsibility of the manager. Colleagues also play an important role in integrating early-career employees within the team. During the socialization process, they act as socialization agents that allow new entrants to grasp their role and to see the bigger picture formed by the overall organizational context (Nifadkar, 2020). Colleagues also represent an important source of social resources, which has been linked to new entrants' engagement and well-being (Rubenstein et al., 2020).

It is without doubt that colleagues continue to exert an influence on early-career employees' relatedness after their organizational socialization process. Indeed, the more an employee perceives social support from their colleagues, the more they develop high-quality relationships with them (Fernet et al., 2013), alongside feeling more connected with, included within, and valued by the team (Van den Broeck et al., 2016). However, Trépanier et al. (2016) showed that an employee who experiences bullying from their colleagues were likely to have their need for relatedness thwarted over time, through isolation and social exclusion.

When comparing the different sources of support, Slemp et al. (2024) found both the support from manager and from colleagues individually had a positive impact on employees' relatedness. However, they also highlighted that when employees already have their colleagues' support, adding managerial support on top of the existing peer support led only to an extremely small but positive variation in their feeling of relatedness. This result leads to a similar conclusion than the one for the job design: colleagues' social support can be complementary to managerial support only if they provide distinct resources to early-career employees. If colleagues' support already provides extensive resources, it could restrain early-career employees' need of receiving managerial support. However, managerial support could compensate for toxic relationships with colleagues, and thus be highly valued by early-career employees. Therefore, it is important to encourage supportive behaviors among employees and managers to create a positive social environment that promotes early-career employees' feelings of relatedness.

However, it is important to note that the composition of the final sample included 23.6% of respondents who declared working in the healthcare sector, and 23.3% in education, research, or training. In consequence, employees from those sectors do not only interact with colleagues or manager, but also with other stakeholders such as patients and students. This is also the case in other sectors that interact directly with customers (e.g. retailing, food services, hospitality).

Those other stakeholders could have an influence on how early-career employees experience relatedness. Indeed, it could be possible that early-career employees could spend more time with stakeholders (i.e. customers, patients, students) rather than with their colleagues. Early-career employees' level of relatedness is thus determined by the quality of interactions they share with those stakeholders, and not their interactions with their colleagues or their manager. Therefore, and similarly to colleagues, positive interactions and experiences with those stakeholders are likely to increase the sense of relatedness of early-career employees (Baumeister & Leary, 1995), while negative interactions are likely to thwart their relatedness (Maslach & Leiter, 2016). For instance, teachers who have positive exchanges with their students are likely to have an increased fulfillment of their need for relatedness than teachers who experience negative or toxic interactions.

This example highlights that it is crucial to take into account the complete social environment in which early-career are embedded into, although it complexifies the comprehension of how relatedness can be promoted among early-career employees. Future research should therefore investigate how the influence of these stakeholders is intertwined with managerial support and colleagues' support. Following studies should focus on determining if the different groups of stakeholders have different impacts on early-career employees' relatedness, and if their effects can be substitutable or additive. Moreover, it is possible that the overrepresentation of those sectors have influenced the results, as their relatedness could be impacted by other stakeholders that were not taken into account.

Organizational factors and processes

There are also organizational factors or processes that could replace the managers' influence on some aspects. A well-known example is the role of 'clan' organizational cultures. Clan cultures rely on informal communication, on collaboration and teamwork, and on the strong commitment of employees (Quinn & Cameron, 1983). Due to their structure, clan cultures are likely to create a decentralized control that emerges from the employees' social network and peer pressure rather than from formal control (e.g., clocking systems, KPIs, managers' direct surveillance; Casey, 1999; Dowling et al., 2013b).

Regarding the study context, some organizational processes may act as substitutes to specific managerial practices. For instance, an organization could propose a training catalog that is directly accessible for early-career employees, and from which they are able to choose a specific training and enroll themselves. In such case, early-career employees can access all the necessary information regarding training opportunities, which replaces the need for career mentoring from the manager. Oppositely, it is possible that organizations do not have a clear training catalog and leave the creation of employees' learning path to managers' discretion, thereby underlining the importance of managers' proactivity and involvement in early-career employees' career.

A second example could be performance evaluation feedback. It is possible that this responsibility is attributed to HR managers instead of managers, excluding managers from this particular process. It is even possible to remove this responsibility from HR managers thanks to Human Resource Information Systems (HRIS), which are able to automate specific functions such as providing performance feedback or determining rewards in case of good employee performance. In such case, organizations are able to delegate those practices to digital tools, eventually making managers irrelevant in these processes.

Once more, those examples highlight that the importance of managerial support is thus dependent on resources already available to early-career employees. However, they also highlight that organizational structures and resources determine the practices in which managers should engage to fully support early-career employees. Indeed, with no formalized process around human resources management, managers may have to play multiple roles at once and engage several practices that would be normally attributed to HR managers. However, managers' role becomes more and more constrained the more there are resources and formalized organizational processes.

In conclusion, the discussion first highlights the importance of caring for employees' need for relatedness as it is a strong mechanism to promote their well-being during their early career. It also sheds light on managers' crucial role in creating relatedness among early-career employees, as well as the necessity to delve further into studying managerial support to better understand how it should be conceptualized. Finally, the discussion underlines several moderators (i.e. work-regime, remote work, job design, interactions with colleagues and other stakeholders, organizational processes) that could not only influence the impact of managerial support on early-career employees' relatedness, but also how those elements could directly contribute to this relatedness. Eventually, this master's thesis further highlights the relevancy of looking into relatedness as an antecedent to employees' psychological well-being in an early-career context, and of placing managers as a pivotal element that support employees during their first years on the labor market.

Contributions and limitations

This master's thesis brings several contributions to the existing literature regarding the experience of the early-career stage of employees. It extends the early-career stage beyond the socialization of new entrants within their organizations. Indeed, this master's thesis defines the early career as the first step in employees' working lives, which is characterized by the development of their professional identity and the construction of the basis of their career path. It thus places socialization as a process that, when it occurs during the early career, allows employees to identify and forge their professional ambitions and goals.

Then, it is worth noting that the literature mainly focused on the link between specific mediators (e.g. task mastery, role clarity, social acceptance) and their outcomes (e.g. job satisfaction, organizational commitment, performance), but rarely on the elements that could influence those mediators in the first place (Bauer et al., 2025). Therefore, another contribution of this master's thesis lies in its investigation of a larger 'cause and effect' model. By analyzing if a set of managerial practices could contribute positively to the relatedness of early-career employees and if those practices could improve indirectly their psychological well-being, it highlighted how the antecedents, mediator, and outcomes can be linked together.

The present study also allows to develop a better understanding of managers' role during the early career in several ways. First, it places managers as a central element in employees' early-career stage, which has rarely been done in the existing literature. Managers are thus not only part of the organizational socialization tactics or a passive source of information, but they are considered as social resources on their own who contribute directly to early-career employees' feelings of relatedness, and indirectly to their psychological well-being. Second, this master's thesis provides a contemporary vision of managers by proposing a list of managerial practices that were not usually considered as forms of support, instead of focusing on leadership styles measures. Therefore, it depicts a clearer vision of how exactly managers can support the early-career stage of employees, and foster positive psychological well-being outcomes as a consequence. Third, this widened list of managerial practices expands what is currently known about managers' role during the early-career stage of employees. Aside mentoring and supporting which have been more largely studied in the literature (Bauer et al., 2025), this master's thesis develops an empirical basis for five other managerial practices that were understudied in the early-career context, but in a socialization context as well.

However, this master's thesis went beyond simply understanding if those managerial practices were able to promote relatedness: it aimed to determine to what extent they were associated with relatedness and psychological well-being among early-career employees. It eventually highlighted that determining effective managerial practices may be more complicated than anticipated. The absence of results when managerial practices were studied in global models but not when they were combined into an overall measure of managerial support shows that more research is necessary to clearly comprehend managers' influence on early-career employees' relatedness. Future research should review how managers' role should be studied from a methodological standpoint, but also how it should be conceptualized from a theoretical and practical standpoint. Finally, research should investigate how other influences on a job-, team-, and organizational-level could restrict or enhance the influence of managerial support.

However, this master's thesis also has several limitations. The focus on the need for relatedness was decided based on the socialization literature, which highlighted its greater importance than other needs (Bauer et al., 2025). However, this narrow focus led to the oversight of the two other SDT needs, namely the need for autonomy and the need for competence. Their absence in the model did not allow to determine if the studied managerial practices could have an influence on those two other needs. Furthermore, their absence in the model also prevented to examine whether they represent more relevant mediators between managerial practices and early-career employees' psychological well-being than relatedness. Following studies should examine the influence of managerial support on the

three SDT needs as to analyze if managerial support can promote early-career employees' psychological well-being through other means than relatedness.

Moreover, the results highlighted individual significant effects of each managerial practice on relatedness that became non-significant when they were studied within a single model (i.e., *Model 1* and *Model 2*). Similarly, significant effects were observed when practices were combined and studied as a general measure of 'managerial support' (i.e. post-hoc tests, *Appendix 3*). This raises questions regarding the methodological approach to measure managerial practices in this study, but also regarding their conceptualization. Indeed, the discussion highlighted the possibility that early-career employees may not show preference for a specific practice over another, and instead assess their manager as being generally supportive or not. Therefore, future research should try to determine whether distinguishing different managerial practices from an overall managerial support is truly relevant in an early-career context, as well as to understand what early-career employees point as resourceful and supportive practices. From there, it will be possible to adapt how managerial practices should be conceptualized and measured in the future, and thus to better comprehend the role of managers during employees' early career.

It is worth noting that the current model also lacks crucial moderators. As detailed previously, job design, working conditions, interactions with colleagues and other stakeholders, as well as organizational processes are likely to influence the relevancy of managers' support among early-career employees. Those factors could thus complement the positive effects of managerial support on relatedness, limit this positive influence, or even replace it completely. Therefore, several elements should be studied in the future, such as the influence of remote work-regimes, work climate, job characteristics, colleagues' provision of social support, organizational culture, organizational structure and organizational resources. Creating multilevel models could also represent a relevant way to analyze the potential interplay between manager-level, team-level, and organizational-level factors in determining the fulfillment of early-career employees' need for relatedness.

Regarding the methodology used for data collection, several limitations can be pointed out. First, the use of a self-reported questionnaire is prone to bias in measuring the extent to which managers display the studied practices. Indeed, the perception of managerial practices is largely based on individuals' interpretations and subjectivity, which also explains why managers usually have a more positive evaluation of their own behaviors than their subordinates (Fischer & Sitkin, 2023). Then, the networks used to share the questionnaire may have favored the participation of white-collar employees, as those networks would gather individuals who graduated from higher education. Moreover, the use of an online questionnaire may have reinforced this issue because white-collar positions have an easy access to, or work with a computer on which they were more easily able to fill out the questionnaire. Overall, the methodology used to share the questionnaire may have influenced the sectors represented in the final sample. Almost half of the sample (46.9%) was represented by the healthcare sector, or the education sector. This overrepresentation may not only bias the obtained results, but it might also limit the generalizability to white-collar positions—if not to those two sectors only.

Finally, the cross-sectional design of the study does not allow to determine causality links, nor to observe potential changes in time. For instance, it is impossible to know if managers adapted their practices through the first years of professional experience of early-career employees or not. Therefore, future research should adopt longitudinal designs to curb this limitation, as it allows to analyze if those changes occur through time, and how exactly they occur.

Moreover, some evidence points at a potential variability in how SDT needs are satisfied or thwarted over time, even identifying need profiles and need trajectories (Vansteenkiste et al., 2020). However, the cross-sectional design of this master's thesis does not allow to observe such variations if they were to occur in an early-career context. Therefore, another interesting area of research could be to investigate if, and how, early-career employees' needs evolve during the early-career stage.

Practical implications

The results showed that managers were able to fulfill early-career employees' need for relatedness through their overall support. In turn, early-career employees' relatedness has been found to be essential to ensure their psychological well-being. Moreover, the results hint at the influence of other elements on relatedness, such as organizational tenure and work-regime, but also job design, social interactions with colleagues and other stakeholders, or organizational processes. The results obtained in this master's thesis thus allow to underline several implications for practice.

The first implication regards the importance of well-being at the workplace. Considering the intense war of talents on the labor market (Dowling et al., 2013a), it is important that organizations contribute to early-career employees' psychological well-being as to reduce the turnover rate among this specific population. Organizations should then include well-being among their top strategic priorities, especially because it can positively serve the organization's business on the long-term in two ways. First, a Gallup (2022) survey found that employees who reported poor mental health at work usually missed more days of work per year compared to employees reporting a better mental health (11.8 and 2.5 missed workdays per year, respectively). Therefore, improving employees' psychological well-being allows organizations to reduce their absenteeism rates, which eventually impacts positively the organization's business on the long-term through an increased employee performance (Neuber et al., 2022). Second, organizations which promote employee well-being are able to improve their employer branding and attractiveness: it thus allows organizations to attract talent (Lis, 2012), which represents a strong competitive advantage on a labor market that is characterized by a more and more intensified competition (Dowling et al., 2013a; Gogoi, 2023).

Alongside making well-being a top priority, organizations should constantly evaluate how organizational processes and working conditions could undermine employees' well-being, as well as identify and implement effective solutions to remove any source of strain. Additionally, organizations should also focus on creating and implementing initiatives aimed at improving employee well-being. Indeed, organizations that invest in ways to favor job satisfaction—and by extension, well-being at the workplace—can reap better organizational outcomes, such as organizations' financial performance, labor productivity, and quality of products and services (Bryson et al., 2017).

The second implication concerns the necessity to develop and maintain relatedness among early-career employees on the long-term to ensure their psychological well-being. Organizations can thus instill an organizational culture that promotes teamwork and communication between employees, but also trust, respect, and empathy (Nursalimah et al., 2025). On the one hand, negative organizational cultures usually leave room for bullying and discrimination, which causes an increased stress and exhaustion among employees (Monteiro & Joseph, 2023). This is in line with Trépanier et al. (2016) who showed that bullying could lead to the social exclusion of an employee, eventually thwarting their need for relatedness. On the other hand, creating a positive organizational culture that is characterized by good working conditions and a healthy social environment favors respect and inclusion (Monteiro & Joseph, 2023). Not only do positive cultures directly reinforce employees' well-being (i.e., increased engagement and lowered emotional exhaustion; Newman et al., 2017), but they also promote their feelings of belongingness within their work teams (Ling, 2011) through positive interactions with colleagues (Baumeister & Leary, 1995). Another study even underlined that belongingness could emerge when an employee's professional identity matched with the organization's core values (Kang et al., 2023). Therefore, positive organizational culture represents a relevant way to create enriching interactions that facilitate early-career employees' integration within the organization's social environment, but also a way to promote employee well-being on an organization-wide scale.

Another important point to mention is that organizational culture usually leads to a standardization of thoughts, feelings, and behaviors across the organization (Hofstede, 1991, as cited in Dowling et al., 2013c): it can thus favor the emergence of specific behaviors among managers. For instance, integrating feedback as part of the organizational culture signals to employees that not only should

feedback be provided frequently, but also that it represents an important element within the organization. Therefore, this integration within the organizational culture could reinforce the expectations for feedback among all employees, but it could also encourage all managers in providing feedback more regularly (Tseng & Levy, 2018).

The third implication regards the importance of managerial support in developing early-career employees' relatedness. The discussion defined managerial support as the sum and the extent of resourceful practices managers engage in towards early-career employees. The discussion thus proposed that when managers engage in more practices, and the more those practices were of high-quality, the more likely they will be considered as generally supportive. This implies that managers should be adequately trained to demonstrate a large set of high-quality skills that are deemed supportive from early-career employees' perspective. Therefore, it is paramount that organizations design their leadership training. Leadership programs should fulfill four objectives.

First, training should be used as a mean to align managers with the organization's culture and business strategy. This is because the positive influence of the organizational culture, despite its emphasis on employee relatedness and well-being, is highly dependent on managers' alignment with the culture. Indeed, employees usually envision their manager as a representative of the organization, and thus assimilate their manager's behaviors as a translation of the organization's values and intentions (Tannenbaum, 2013). Therefore, if managers do not act accordingly to the organizational culture, early-career employees may face an important gap between the organization's branding or their expectations of the organization (e.g. respect), and the reality of the field (e.g. bullying). As a consequence, this gap might increase turnover rates among early-career employees (Van der Baan, 2024). This example shows why aligning managers to the organizational culture is crucial in order to reduce this expectation-reality gap, and to avoid turnover.

Second, leadership programs should be used to ensure that managers are equipped with relevant managerial skills (e.g., providing constructive feedback, identifying needs for work-life balance). Those managerial skills increase managers' ability to provide support to early-career employees through different practices. With a diversified set of practices, managers will thus be able to adapt and individualize their support based on early-career employees' needs.

Third, training should also develop interpersonal skills among managers, such as empathy, active listening, and communication—which were found to improve employees' job satisfaction and engagement, and in turn their overall well-being (Stanislavov & Ivanov, 2014). Furthermore, interpersonal skills are likely to promote and maintain early-career employees' relatedness, as interpersonal skills allow to create positive relationships with others (Rogers & Farson, 2021).

Finally, training could be the opportunity to promote managers' proactivity and involvement in assisting early-career employees, as well as to encourage managers to adapt their practices to each employee's specific needs. For instance, managers could be trained to construct a tailored learning plan with the early-career employee, to discuss training expectations before said training, and to provide feedback during a follow-up meeting afterwards. Brinkerhoff & Montesino (1995) showed that the personalization of the learning path combined with the continuous supervision of their manager was experienced by employees as a form of individualized consideration from their manager, and by extension, a form of managerial support.

In consequence, leadership programs allow organizations to align managers with their organizational culture and business strategy. Managers are also more adequately equipped with a broad set of skills that allows them to offer high-quality support to early-career employees to a large extent. With such training and a strong alignment with the organizational culture, managers are more likely to personally emphasize on employees' work-life balance, provide them feedback and opportunities for personal or professional growth, or to redirect them towards valuable resources or relevant training programs (Monteiro & Joseph, 2023). As a consequence, early-career employees are likely to consider both their manager and the overall organization as being supportive of their needs (Eisenberger et al., 2020).

The fourth and final implications concerns the necessity to take into account existing resources within the organization. Indeed, the discussion highlighted that potential overlaps could occur between managerial support and the design of the job, the interactions with colleagues or with other stakeholders, as well as organizational processes. However, if organizations design managerial responsibilities accordingly to those elements, organizations could benefit from synergetic effects. For instance, a meta-analysis studied how the general feedback environment (i.e. organizational context), the specific context in which it is provided (i.e. manager's competence in providing high-quality feedback), and the employees' individual perceptions determined the overall impact of feedback (Katz et al., 2021). The results showed that an organizational context promoting feedback and manager's feedback quality had complementary effects that further strengthened the positive associations found between feedback and employees' job satisfaction and engagement. Similarly, both feedback conditions combined and strengthened the link between feedback and employees' trust in their manager, their perceptions of high-quality coaching behaviors from their managers, and even their work performance and their perceptions of organizational support. Finally, both feedback conditions were negatively associated with turnover intentions and burnout. Therefore, it is crucial that organizations determine managerial responsibilities, design jobs and organizational process so that they do not compensate for one another, but rather enhance each other.

In conclusion, the results of this master's thesis directly inform the design of leadership programs, organizational culture, and organizational strategy. Organizations can leverage managers' positive influence on early-career employees not only through leadership training that equip them with the relevant skills and competences, but also through the creation of a supportive organizational context. Combining both the organization's and managers' involvement, early-career employees enter the labor market in favorable conditions that create and maintain their job satisfaction, motivation, performance, and psychological well-being on the long-term. As a consequence, early-career employees are likely to develop fewer turnover intentions, while organizations are able to reduce their costs regarding recruitment, selection, and training of early-career employees (Chong et al., 2021).

Conclusion

Today's labor market is characterized by a strong competition among job seekers (Gogoi, 2023) and an intense war of talents between organizations on a worldwide scale (Dowling et al., 2013a). Organizations face an ever-increasing turnover rate among their workforce (Xueyun et al., 2023), with the retention of early-career employees that seems to represent an even more complicated challenge due to the various expectations new labor market entrants have regarding their first job (Van der Baan et al., 2025). Those turnover rates, combined with the fierce competition of the labor market, force organizations to adapt their retention strategies. Regarding new labor market entrants, promoting well-being in the workplace represents a relevant lever on which organizations can pull to attract and retain talents, especially due to its relative importance for early-career employees (Lis, 2012; Pandita & Kumar, 2022; da Vieira et al., 2024).

Managers represent good candidates to fulfill early-career employees' needs and expectations thanks to their central role in their subordinates' careers. By providing feedback, learning opportunities and recognition, managers offer valuable resources that help new entrants obtain the necessary information to smoothly integrate the organization during the socialization process (Saks & Gruman, 2018). Moreover, managers represent important social resources: through managerial skills and interpersonal skills, managers are able to promote early-career employees' feelings of relatedness and in consequence, improve employees' work engagement, organizational effectiveness, but mostly their overall well-being (Bauer et al., 2025; Katz et al., 2021; Saks & Gruman, 2018; Stanislavov & Ivanov, 2014). Because well-being represents a valuable asset from early-career employees' perspectives (da Vieira et al., 2024), and due to the importance of relatedness during the early-career stage (Bauer et al., 2025), it is therefore crucial to understand how managers can support early-career employees' feelings of relatedness, and indirectly improve their well-being.

However, several gaps have been identified (Bauer et al., 2025). Not only has the literature focused on the restrictive period of the socialization rather than the early career, but managers have not even been placed as a central element in employees' socialization process either: the interactions between managers and early-career employees have thus been largely overlooked. Furthermore, studies investigating potential antecedents to relatedness and its consequence on well-being are lacking, despite that relatedness has been proven to be an important mechanism during socialization.

Therefore, this master's thesis aimed to better understand managers' role during the early-career stage of new labor market entrants by analyzing how different managerial practices could influence early-career employees' feelings of relatedness, and how their relatedness could be associated to two psychological well-being outcomes. It also aimed to analyze the potential mediation effect of relatedness between managerial practices and early-career employees' engagement and exhaustion. Finally, this master's thesis investigated which managerial practices were the most relevant in developing relatedness in the context of early career.

The results of this master's thesis suggest that managers do have a crucial role in supporting early-career employees, notably through promoting their need for relatedness. However, the results mostly underline the complexity of determining how or what exactly managers can do to support early-career employees. Indeed, the statistical analyses revealed that the way in which managerial practices were studied influenced the results. Each managerial practice contributed positively to relatedness and psychological well-being individually, but no longer when they were studied in global models. However, when managerial practices were combined and analyzed as a form of overall support, this managerial support had significant associations with both relatedness and psychological well-being.

From a methodological standpoint, the variability of the results when modifying how managerial practices are studied raises questions regarding how managers' influence should be measured in an early-career context. The discussion proposed that investigating global measures is perhaps more

relevant. Therefore, the overall 'managerial support' is a measure that represents the sum and the extent to which managers engage in resourceful practices towards early-career employees.

The use of a global measure has also implication from a theoretical standpoint. It suggests that early-career employees are looking for generally supportive managers, but do not have any preference for particular managerial practices. Therefore, all the studied practices could be relevant to the same extent in the eyes of early-career employees, with perhaps compensating and cumulative effects with each other.

The results also highlighted the potential presence of other factors that could limit the influence of managerial support, or even act as a substitute to some managerial practices. Namely, the discussion pointed the work-regime, the possibility of remote work, the job design, the interactions with colleagues and other stakeholders, as well as organizational process or resources as factors outside of managers' control that could impact the relevancy of managerial support in promoting early-career employees' relatedness.

This master's thesis highlighted several implications for organizations as well. Organizations should support relatedness and well-being at an organization-wide scale, notably by including both into the organization's business strategy. To ensure a positive work environment that further promotes relatedness and well-being, organizations should develop an organizational culture based on respect and teamwork, and design leadership training to not only align managers on the organizational culture, but also to equip them with relevant managerial and interpersonal skills that support early-career employees. Organizations can also benefit from synergetic effects if they design managers' responsibilities and organizational processes so that they complement and strengthen each other.

Finally, this master's thesis showed that studying managers' influence on early-career employees' relatedness and well-being is relevant, and contributes to the understanding of managers' role within the early-career context. Future research should delve deeper into this issue by analyzing how managerial support should be conceptualized and measured. To do so, research should determine if global measures of managerial support are more relevant than analyzing the effects of individual practices, especially in the context of early-career stage. Studies should also identify if other managerial practices are important from early-career employees' perspective: this allows to analyze if other practices can improve early-career employees' relatedness and well-being, whether those practices are studied individually or as a part of a larger managerial support. Lastly, research should include more contextual elements when studying the influence of managers on early-career employees' relatedness and psychological well-being. Several mediators have been proposed as potentially determining how managers are able to fulfill early-career employees' relatedness and should thus be investigated in the future.

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Appendices

Appendix 1 – complete questionnaire

Table A1 — Complete questionnaire

Variable	English (original version)	French
Autonomy (<i>Morgenson & Humphrey, 2006</i>)		
	My manager allows me to make my own decisions about how to schedule my work	Mon/ma manager me permet de prendre mes propres décisions sur la façon de programmer mon travail
	My manager allows me to decide on the order in which things are done on the job	Mon/ma manager me permet de décider de l'ordre d'exécution des tâches
	My manager allows me to plan how I do my work	Mon/ma manager me permet de planifier mon travail comme je le veux
	My manager gives me a chance to use my personal initiative or judgment in carrying out the work	Mon/ma manager me donne la possibilité d'utiliser mon initiative ou jugement personnel dans l'exécution du travail
	My manager allows me to make a lot of decisions on my own	Mon/ma manager me permet de prendre beaucoup de décisions par moi-même
	My manager provides me with significant autonomy in making decisions	Mon/ma manager m'offre une grande autonomie dans la prise de décisions
	My manager allows me to make decisions about what methods I use to complete my work	Mon/ma manager me permet de prendre des décisions sur les méthodes que j'utilise pour accomplir mon travail
	My manager gives me considerable opportunity for independence and freedom in how I do the work	Mon/ma manager me donne une grande possibilité d'interdépendance et de liberté dans la façon de faire mon travail
	My manager allows me to decide on my own how to go about doing my work	Mon/ma manager me permet de décider par moi-même comment m'y prendre pour faire mon travail
Feedback (<i>Heslin et al., 2006</i>)		
	To what extent does your manager... Provide guidance regarding performance expectations?	Dans quelle mesure votre manager... Fournit des conseils concernant les attentes en matière de performance ?
	Help you to analyze your performance? Provide constructive feedback regarding areas for improvement?	Vous aide à analyser votre performance ? Fournit des feedbacks constructifs sur les points à améliorer ?
	Offer useful suggestions regarding how you can improve your performance? Act as a sounding board for you to develop your ideas?	Propose des suggestions utiles à propos de la manière d'améliorer votre performance ? Agit comme une caisse de résonance pour développer vos idées ?
	Facilitate creative thinking to help solve problems?	Facilite la pensée créative pour aider à résoudre des problèmes ?
	Encourage you to explore and try out new alternatives? Express confidence that you can develop and improve?	Vous encourage à explorer et tester de nouvelles alternatives ? Exprime sa confiance en votre capacité à vous développer et à vous améliorer ?
	Encourage you to continuously develop and improve?	Vous encourage à vous développer et à vous améliorer continuellement ?
	Support you in taking on new challenges?	Vous soutient lorsque vous relevez de nouveaux défis ?
Learning opportunities (<i>Scandura & Ragins, 1993</i>)		
	My manager takes a personal interest in my career My manager has placed me in important assignments My manager advised me about promotional opportunities	Mon/ma manager s'intéresse personnellement à ma carrière Mon/ma manager m'a confié des missions importantes Mon/ma manager m'a conseillé-e sur les opportunités de promotion
	My manager has devoted special time and consideration to my career	Mon/ma manager a consacré du temps et une attention particulière à ma carrière
Recognition (<i>Llorens et al., 2019</i>)		
	Is your work recognized and appreciated by the management?	Votre travail est-il reconnu et apprécié par votre manager ?
	Does the management at your workplace respect you?	Votre manager vous respecte-t-il/elle ?
	Are you treated fairly at your workplace?	Êtes-vous traité-e équitablement sur votre lieu de travail ?

Table A1 — Complete questionnaire (*continued*)

Variable	English (original version)	French
Work-life balance (<i>Anderson et al., 2002</i>)		
	My supervisor is fair and doesn't show favoritism in responding to employees' personal or family needs	Mon/ma manager est juste et ne fait pas preuve de favoritisme lorsqu'il/elle répond aux besoins personnels ou familiaux des employés
	My supervisor accommodates me when I have family or personal business to take care of—for example, medical appointments, meeting with child's teacher, etc.	Mon/ma manager s'adapte à moi lorsque je dois m'occuper d'obligations personnelles—par exemple, rendez-vous médicaux, rencontre avec le/la professeur-e de mon enfant, etc.
	My supervisor is supportive when I have a work problem	Mon/ma manager me soutient lorsque j'ai un problème professionnel
	My supervisor is understanding when I talk about personal or family issues that affect my work	Mon/ma manager fait preuve de compréhension lorsque je parle de problèmes personnels ou familiaux qui affectent mon travail
	I feel comfortable bringing up personal or family issues with my supervisor	Je me sens à l'aise d'évoquer des problèmes personnels ou familiaux avec mon/ma manager
	My supervisor really cares about the effects that work demands have on my personal and family life	Mon/ma manager se soucie réellement des effets que les exigences du travail ont sur ma vie personnelle et familiale
Relatedness (<i>Van den Broeck et al., 2010</i>)		
	I don't really feel connected with other people at my job	Je ne me sens pas vraiment liée-e aux autres personnes au travail
	At work, I feel part of a group	J'ai le sentiment de faire partie du groupe au travail
	I don't really mix with other people at my job	Je n'ai pas vraiment de contact avec les autres à mon travail
	At work, I can talk with people about things that really matter to me	Je peux parler avec d'autres au travail de ce que je trouve vraiment important
	I often feel alone when I am with my colleagues	Je me sens souvent seul-e lorsque nous sommes entre collègues
	Some people I work with are close friends of mine	Quelques personnes à mon travail sont de vrais amis
Engagement (<i>Schaufeli et al., 2006</i>)		
	At my work, I feel bursting with energy	Je déborde d'énergie pour mon travail
	At my job, I feel strong and vigorous	Je me sens fort-e et vigoureux-se pour faire ce métier
	I am enthusiastic about my job	Je suis passionnée-e par mon travail
	My job inspires me	Faire ce métier est stimulant
	When I get up in the morning, I feel like going to work	Lorsque je me lève le matin, j'ai envie d'aller travailler
	I feel happy when I am working intensely	Je suis content-e lorsque je suis captivé par mon activité
	I am proud of the work that I do	Je suis fier/fière du travail que je fais
	I am immersed in my work	Je suis littéralement plongé-e dans mon travail
	I get carried away when I'm working	Je suis complètement absorbé-e par mon travail
Exhaustion (<i>Maslach et al., 1996</i>)		
	I feel emotionally drained by my work	Je me sens vidé-e affectivement par mon travail
	I feel used up at the end of the workday	Je me sens épuisé-e à la fin de ma journée de travail
	I feel tired when I get up in the morning and have to face another day on the job	Je me sens fatigué-e lorsque je me lève le matin et que j'ai à affronter une journée de travail
	Working (with people) all day is really a strain for me	Travailler toute la journée est vraiment pénible pour moi
	I feel burned out from my work	Je me sens usé-e à force de travailler

Appendix 2 – individual analyses

Table A2.1 — Mediation analysis between autonomy and engagement

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Autonomy $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.122	0.035	0.054	0.190	0.082	3.494	<.001***
Component	Autonomy $\Rightarrow$ Relatedness	0.237	0.053	0.133	0.340	0.262	4.485	<.001***
	Relatedness $\Rightarrow$ Engagement	0.515	0.092	0.334	0.697	0.314	5.573	<.001***
Direct	Autonomy $\Rightarrow$ Engagement	0.347	0.084	0.183	0.511	0.233	4.147	<.001***
Total	Autonomy $\Rightarrow$ Engagement	0.469	0.085	0.302	0.637	0.315	5.493	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.2 — Mediation analysis between feedback and engagement

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Feedback $\Rightarrow$ Engagement	0.114	0.032	0.051	0.177	0.081	3.559	<.001***
Component	Feedback $\Rightarrow$ Relatedness	0.245	0.049	0.148	0.342	0.286	4.952	<.001***
	Relatedness $\Rightarrow$ Engagement	0.465	0.091	0.287	0.643	0.282	5.119	<.001***
Indirect	Feedback $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.446	0.078	0.294	0.599	0.317	5.742	<.001***
Total	Feedback $\Rightarrow$ Engagement	0.560	0.078	0.407	0.713	0.398	7.173	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.3 — Mediation analysis between learning opportunities and engagement

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Learning Op. $\Rightarrow$ Engagement	0.103	0.031	0.043	0.163	0.073	3.361	<.001***
Component	Learning Op. $\Rightarrow$ Relatedness	0.220	0.050	0.121	0.318	0.255	4.354	<.001***
	Relatedness $\Rightarrow$ Engagement	0.469	0.089	0.295	0.642	0.286	5.288	<.001***
Indirect	Learning Op. $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.492	0.076	0.343	0.642	0.349	6.447	<.001***
Total	Learning Op. $\Rightarrow$ Engagement	0.595	0.078	0.443	0.747	0.421	7.663	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.4 — Mediation analysis between recognition and engagement

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Recognition $\Rightarrow$ Engagement	0.119	0.033	0.055	0.183	0.086	3.653	<.001***
Component	Recognition $\Rightarrow$ Relatedness	0.252	0.048	0.157	0.346	0.300	5.214	<.001***
	Relatedness $\Rightarrow$ Engagement	0.473	0.092	0.292	0.653	0.287	5.121	<.001***
Indirect	Recognition $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.397	0.077	0.245	0.549	0.287	5.128	<.001***
Total	Recognition $\Rightarrow$ Engagement	0.516	0.077	0.364	0.668	0.373	6.663	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.5 — Mediation analysis between work-life balance and engagement

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Work-life balance $\Rightarrow$ Engagement	0.112	0.034	0.046	0.179	0.078	3.313	<.001***
Component	Work-life balance $\Rightarrow$ Relatedness	0.208	0.052	0.107	0.309	0.237	4.029	<.001***
	Relatedness $\Rightarrow$ Engagement	0.540	0.093	0.358	0.721	0.328	5.820	<.001***
Indirect	Work-life balance $\Rightarrow$ Relatedness $\Rightarrow$ Engagemen	0.284	0.082	0.124	0.443	0.196	3.477	<.001***
Total	Work-life balance $\Rightarrow$ Engagement	0.396	0.084	0.231	0.561	0.274	4.704	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.6 — Mediation analysis between autonomy and exhaustion

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Autonomy $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.456	0.160	-0.770	-0.142	-0.057	-2.844	0.004**
Component	Autonomy $\Rightarrow$ Relatedness	0.236	0.053	0.133	0.340	0.260	4.473	<.001***
	Relatedness $\Rightarrow$ Exhaustion	-1.929	0.523	-2.955	-0.903	-0.220	-3.685	<.001***
Direct	Autonomy $\Rightarrow$ Exhaustion	-1.237	0.475	-2.167	-0.307	-0.155	-2.606	0.009**
Total	Autonomy $\Rightarrow$ Exhaustion	-1.692	0.470	-2.614	-0.771	-0.212	-3.598	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.7 — Mediation analysis between feedback and exhaustion

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Feedback $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.396	0.149	-0.688	-0.104	-0.052	-2.655	0.008**
Component	Feedback $\Rightarrow$ Relatedness	0.242	0.049	0.145	0.339	0.283	4.897	<.001***
	Relatedness $\Rightarrow$ Exhaustion	-1.635	0.517	-2.649	-0.621	-0.185	-3.160	0.002**
Direct	Feedback $\Rightarrow$ Exhaustion	-1.940	0.443	-2.809	-1.072	-0.257	-4.378	<.001***
Total	Feedback $\Rightarrow$ Exhaustion	-2.336	0.433	-3.186	-1.486	-0.309	-5.390	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.8 — Mediation analysis between learning opportunities and exhaustion

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Learning Op. $\Rightarrow$ Exhaustion	-0.364	0.139	-0.637	-0.092	-0.048	-2.623	0.009**
Component	Learning Op. $\Rightarrow$ Relatedness	0.216	0.050	0.118	0.315	0.251	4.292	<.001***
	Relatedness $\Rightarrow$ Exhaustion	-1.684	0.508	-2.680	-0.688	-0.192	-3.314	<.001***
Indirect	Learning Op. $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-2.084	0.438	-2.943	-1.226	-0.275	-4.758	<.001***
Total	Learning Op. $\Rightarrow$ Exhaustion	-2.448	0.433	-3.298	-1.599	-0.324	-5.652	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.9 — Mediation analysis between recognition and exhaustion

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Recognition $\Rightarrow$ Exhaustion	-0.385	0.149	-0.678	-0.093	-0.052	-2.582	0.010*
Component	Recognition $\Rightarrow$ Relatedness	0.250	0.048	0.156	0.345	0.298	5.186	<.001***
	Relatedness $\Rightarrow$ Exhaustion	-1.538	0.517	-2.551	-0.525	-0.174	-2.977	0.003**
Indirect	Recognition $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-2.080	0.434	-2.932	-1.229	-0.280	-4.790	<.001***
Total	Recognition $\Rightarrow$ Exhaustion	-2.466	0.422	-3.293	-1.639	-0.332	-5.843	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A2.10 — Mediation analysis between work-life balance and exhaustion

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Direct	Work-life balance $\Rightarrow$ Exhaustion	-0.354	0.137	-0.622	-0.086	-0.046	-2.587	0.010*
Component	Work-life balance $\Rightarrow$ Relatedness	0.206	0.052	0.105	0.307	0.234	3.992	<.001***
	Relatedness $\Rightarrow$ Exhaustion	-1.716	0.505	-2.707	-0.726	-0.195	-3.396	<.001***
Indirect	Work-life balance $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-2.138	0.445	-3.010	-1.265	-0.276	-4.802	<.001***
Total	Work-life balance $\Rightarrow$ Exhaustion	-2.492	0.443	-3.359	-1.624	-0.322	-5.629	<.001***

Note. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix 3 – Post-hoc tests

Table A3.1 — Mediation analysis between managerial support and engagement

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Managerial support $\Rightarrow$ Relatedness $\Rightarrow$ Engagement	0.147	0.041	0.067	0.227	0.084	3.617	<.001***
Component	Managerial support $\Rightarrow$ Relatedness	0.347	0.060	0.229	0.465	0.327	5.742	<.001***
	Relatedness $\Rightarrow$ Engagement	0.423	0.091	0.245	0.602	0.257	4.657	<.001***
Direct	Managerial support $\Rightarrow$ Engagement	0.619	0.096	0.430	0.808	0.355	6.421	<.001***
Total	Managerial support $\Rightarrow$ Engagement	0.766	0.095	0.580	0.952	0.439	8.080	<.001***

Note. Managerial support represents the combination of all five managerial practices into an aggregated score. Confidence intervals computed with bias corrected bootstrap. Betas are completely standardized effect sizes.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A3.2 — Mediation analysis between managerial support and exhaustion

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Managerial support $\Rightarrow$ Relatedness $\Rightarrow$ Exhaustion	-0.467	0.195	-0.849	-0.084	-0.050	-2.390	0.017*
Component	Managerial support $\Rightarrow$ Relatedness	0.344	0.060	0.226	0.462	0.324	5.690	<.001***
	Relatedness $\Rightarrow$ Exhaustion	-1.356	0.515	-2.366	-0.347	-0.154	-2.634	0.008**
Direct	Managerial support $\Rightarrow$ Exhaustion	-3.011	0.547	-4.083	-1.940	-0.321	-5.508	<.001***
Total	Managerial support $\Rightarrow$ Exhaustion	-3.478	0.525	-4.506	-2.450	-0.371	-6.629	<.001***

Note. Managerial support represents the combination of all five managerial practices into an aggregated score. Confidence intervals

* $p < .05$, ** $p < .01$, *** $p < .001$