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# Subordinates' perceptions of the need-supportive, need-thwarting, and need-indifferent behaviors used by their supervisors: A person-centered investigation

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## Abstract

Adopting a recent tripartite operationalization of subordinates' perceptions of their supervisors' behaviors, anchored in self-determination theory (SDT), this person-centered study considers the co-existence of subordinates' perceptions of their supervisors' need-supportive, need-thwarting, and need-indifferent behaviors. Moreover, we also consider how these various combinations (or profiles) of perceived supervisor behaviors relate to subordinates' levels of work motivation, well-being, attitudes, behaviors, and work-home functioning. A sample of 596 French employees ( $M_{\text{age}} = 31.22$ ; 73.5% women) participated in this study. Our results revealed six profiles of subordinates characterized by distinct configurations of perceived need-related behaviors from supervisors (*globally unfavorable*, *globally favorable and supportive*, *moderate-indifferent*, *moderately favorable and involved*, *moderately unfavorable*, and *moderately favorable*). Consistent with our

Tiphaine Huyghebaert-Zouaghi and Alexandre J.S. Morin contributed equally to the work and should thus both be considered as a first author.

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expectations, these profiles displayed well-differentiated patterns of associations with all of the outcomes considered in this study. These findings underscored the key role of subordinates' specific perceptions of need-supportive, need-thwarting, and need-indifferent behaviors, over and above their global perceptions of their supervisors' behaviors, in determining how beneficial or harmful supervisory profiles are. In particular, our results also highlighted the critical role played by need-indifferent behaviors, which prove to be a very important, and yet typically neglected, component of subordinates' perceptions of their supervisors' behaviors.

#### KEYWORDS

leadership, need-indifferent behaviors, need-supportive behaviors, need-thwarting behaviors, person-centered, profiles, self-determination theory, supervisor behaviors, tripartite

## INTRODUCTION

Decades of research anchored in self-determination theory (SDT; Ryan & Deci, 2017) have shown the needs for competence (a feeling of mastery), autonomy (an experience of volition), and relatedness (a feeling of belongingness) to be universal and equally important for all human beings across all life contexts (Ryan & Deci, 2017; Vansteenkiste et al., 2020). Just like plants need water, sunlight, and soil to grow, SDT suggests that individuals require the satisfaction of their three needs for autonomy, competence, and relatedness to experience healthy development, integrity, and well-being (Deci & Ryan, 2000). SDT research has also documented that people in a position of authority or expertise (e.g., teachers, supervisors, and coaches) play a key role in shaping the psychological need experiences of those they guide (e.g., students, subordinates, and or athletes). Indeed, need-supportive behaviors have been found to be associated with a variety of adaptive outcomes, whereas need-thwarting behaviors rather predict maladaptive outcomes (Gillet et al., 2012; Slemp et al., 2018).

If we focus specifically on the work context, research has focused primarily on autonomy supportive (e.g., Gillet et al., 2013; Slemp et al., 2018), followed more rarely by autonomy-thwarting, or controlling, behaviors (e.g., Gillet et al., 2012; Richer & Vallerand, 1995). More recently, however, researchers have started to highlight the equally important role of behaviors able to support or thwart the complementary needs for competence and relatedness in other life areas (Bhavsar et al., 2019; Rocchi et al., 2017; Tóth-Király et al., 2022). Thus far, only three studies have tried to understand the role played by behaviors likely to support or thwart each of the three psychological needs (Huyghebaert-Zouaghi et al., 2021, 2022, 2023). Perhaps more importantly, two of these studies have highlighted the importance of considering a third category of behaviors, characterized by an indifference, or lack of attention, to subordinates' basic psychological needs.

Indeed, across life domains, research has recently supported a tripartite conceptualization of need-related behaviors by showing that the consideration of this third type of behaviors (need-indifferent behaviors) afforded a more accurate understanding of the role played by supervisors or other individuals occupying a similar position in other life domains, such as coaches or teachers (Bhavsar et al., 2019; Huyghebaert-Zouaghi et al., 2022, 2023). In the work domain more specifically, research has recently supported the distinctiveness and unique predictive value of supervisors' need-indifferent behaviors, over and above their need-supportive and need-thwarting behaviors (Huyghebaert-Zouaghi et al., 2022, 2023). Interestingly, this tripartite representation echoes the three central (authoritarian, democratic, and laissez-faire) leadership styles introduced in Lewin et al.'s (1939) seminal work and has been shown to provide a solid integrative alternative (Huyghebaert-Zouaghi et al., 2023; Ntoumanis, 2023) to the current piecemeal approach to leadership research.

Indeed, leadership studies typically tend to focus on isolated negative or positive leadership behaviors which, no matter their value, remain focused on one specific type of behavior that can be used (or should not be) by supervisors to achieve specific outcomes. For instance, although servant leadership (Eva et al., 2019; Gui et al., 2021; Liden et al., 2008) shares a similarity with need-supportive behaviors, in that servant supervisors place the needs of their employees before their own, these behaviors primarily seek to support the growth of their employees in a way that will eventually support that of the organization. In contrast, the tripartite conceptualization of need-related supervisory behaviors seeks to consider the whole range of behaviors that can possibly be used by supervisors to support the needs for autonomy, competence, and relatedness of their employees (assumed to be critical according to SDT), without relying on any assumption regarding the end goal of these behaviors in terms of organizational effectiveness. In fact, this conceptualization does not even assume that supervisors are necessarily consciously trying to influence the satisfaction of these needs when engaging in these behaviors. It simply focuses on the occurrence of behaviors likely to influence these needs, from the perspective of subordinates. Moreover, it goes beyond need support to also consider the range of supervisory behaviors likely to thwart employees' basic psychological needs, as well as those that simply show an indifference to these needs, once again without any assumptions regarding the end goal of these behaviors.

Indeed, when it comes to the purpose of these behaviors, it is important to keep in mind that the main focus of SDT is to understand how to promote self-determined motivation and individual well-being (Ryan & Deci, 2017). SDT considers that human beings are inherently inclined to be active, intrinsically motivated, and oriented toward psychological growth, and suggests that for these natural tendencies to operate, individuals need psychological nutrients (i.e., the satisfaction of their needs for autonomy, competence, and relatedness; Ryan & Deci, 2017). Importantly, SDT posits that these natural tendencies and psychological nutrients are affected by the social context, which can promote these natural processes or get in their way. This is where supervisors come into play: SDT considers supervisors as components of the social context who can, through their more or less conscious interpersonal behaviors (Huyghebaert-Zouaghi et al., 2023; Slemp et al., 2021), affect these natural tendencies in their subordinates. As such, when considering supervisors' interpersonal behaviors through the lens of SDT, the focus is not on supervisors' intentions or purpose but on the way the behaviors enacted by supervisors, irrespective of their motives, are perceived by subordinates as influencing the satisfaction of their psychological needs. This perspective does not assume that supervisors do not have an end goal in sight or that they are not explicitly trying to support the needs of their subordinates; it simply considers that these underlying motives are not required to

assess and monitor the influence of these behaviors on subordinates. We refer readers interested in this recent conceptualization of leadership, and in its added-value relative to other conceptualizations of leadership, to Huyghebaert-Zouaghi et al. (2023). Building upon this recent conceptualization, the goal of the present research was to contribute to this tripartite understanding of supervisory behaviors via the identification of distinct profiles of supervisors relying on different combinations of behaviors.

Indeed, the rare studies (Huyghebaert-Zouaghi et al., 2022, 2023) that have considered the role played by the whole range of supervisors' positive and negative need-related interpersonal behaviors for employees' functioning have done so through the lens of variable-centered methodologies, consistent with previous research focusing solely on autonomy-supportive and autonomy-thwarting behaviors (e.g., Gillet et al., 2012; Slemp et al., 2018). Yet, this approach ignores the fact that supervisors typically rely on a combination of behaviors and that this combination is likely, in and of itself, to determine the effects of these behaviors (e.g., Leo et al., 2022). Indeed, variable-centered research typically studies the main effects of isolated behaviors, or the possible interactive effects occurring between pairs of behaviors, while assuming that the nature of these effects will generalize to the whole sample under investigation.

Conversely, person-centered methodologies make it possible to consider the role played by unique configurations of supervisors' behaviors to which employees are being exposed. For this reason, person-centered approaches have recently been advocated as a promising way forward to better capture the holistic effects of supervisors' behaviors (Chénard-Poirier et al., 2017, 2022; Gillet et al., 2022; Hancock et al., 2023; Tian et al., 2023). By allowing the identification of these distinctive configurations of supervisors' behaviors, person-centered methodologies are aligned with employers' and practitioners' tendency to think of individuals in terms of categories. Despite the appeal of person-centered approaches, prior person-centered studies on need-related behaviors have, within SDT, been conducted outside of the work setting while also neglecting need-indifferent behaviors (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014). Likewise, previous person-centered research conducted in the field of leadership has typically focused on a limited set of supervisory behaviors (e.g., Chénard-Poirier et al., 2017, 2022; Gillet et al., 2022; Tian et al., 2023). In fact, only two person-centered studies have thus far considered a wider range of leadership behaviors (Doucet et al., 2015; Hancock et al., 2023) but without conducting a thorough investigation of the multidimensionality of subordinates' perceptions of these behaviors. The present study was designed to contribute to research on SDT and leadership research more generally, by considering how subordinates' perceptions of their work supervisors' need-supportive, need-thwarting, and need-indifferent behaviors combine in distinct profiles, all while rigorously modeling the multidimensionality of these perceptions.

Moreover, beyond simply investigating the nature of these profiles, we also consider their implications for employees' work motivation, well-being, attitudes, behaviors, and work-home functioning. The present study was thus also designed to contribute to the research literature by extending the nomological network of perceived supervisory behaviors profiles and going beyond the limited set of consequences examined in previous person-centered research conducted in the work area (Doucet et al., 2015; Hancock et al., 2023; Huyghebaert-Zouaghi et al., 2022, 2023) and other domains (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014). In doing so, this research will also directly contribute to SDT, as previous investigations of the tripartite conceptualization of supervisors' behaviors have thus far have only considered a limited set of outcomes reflecting employees' psychological well- and ill-being (Huyghebaert-Zouaghi et al., 2022, 2023). By uncovering the associations between profile membership and a wide range of outcomes, this study holds theoretical value as it will shed

light on the psychological implications of complex combinations of perceived supervisory behaviors, and thus provides a finer-grained, and more realistic, perspective than that provided by variable-centered results. This second contribution is particularly important on a practical level, that is, to help design person-centered interventions for supervisors to promote the behaviors encompassed in the most beneficial profiles.

## A tripartite representation of supervisors' need-related behaviors

Within SDT (Ryan & Deci, 2017), a novel tripartite representation of supervisors' need-related behaviors (e.g., Huyghebaert-Zouaghi et al., 2022, 2023) highlights the need to differentiate supervisors' behaviors according to their need-supportive, need-thwarting, and need-indifferent nature. When adopting need-supportive behaviors, supervisors promote subordinates' needs satisfaction, for instance, by displaying understanding (autonomy), encouragement (competence), and appreciation (relatedness). Supervisors relying on need-thwarting behaviors contribute to the frustration of subordinates' needs, for instance, by imposing pressure (autonomy), non-constructive criticism (competence), and rejection (relatedness). When expressing need-indifferent behaviors, supervisors neglect subordinates' needs by failing to provide clear instructions or a clear rationale to support task engagement (autonomy), by demonstrating a lack of organization or simply a lack of availability when needed (competence), and by neglecting the well-being of their subordinates or being inattentive to the quality of the supervisor-subordinate relationship (relatedness).

## A person-centered approach of supervisors' behaviors

Leadership research has long acknowledged the fact that individual supervisors typically adopt a variety of behaviors, consistent with more than one style of leadership when interacting with their subordinates (e.g., Bass, 1985; House, 1996). The tripartite representation of supervisors' need-related behaviors is consistent with this perspective (Huyghebaert-Zouaghi et al., 2022, 2023). For instance, when interacting with their subordinates, it is not impossible for supervisors to be simultaneously emotionally available and caring (relatedness support), while also using rewards and coercive strategies (autonomy thwarting), and lacking organization or structure (competence indifference). These behavioral combinations are ultimately reflected in employees' perceptions of their supervisors' behaviors and can be directly captured by a person-centered approach.

In the education (Amoura et al., 2015; Haerens et al., 2018) and sports (e.g., Matosic & Cox, 2014) areas, person-centered studies have demonstrated that autonomy-supportive and autonomy-thwarting behaviors tended to co-occur according to four main combinations: (1) a supportive profile (high autonomy support and low autonomy thwarting), (2) a thwarting profile (low autonomy support and high autonomy thwarting), (3) a mixed profile (high autonomy support and high autonomy thwarting), and (4) a low profile (low autonomy support and low autonomy thwarting) that is indirectly suggestive of indifference, which was not directly measured in these studies. To the best of our knowledge, only one person-centered study, conducted in the physical education area, has investigated the combined role of behaviors able to support or thwart all three needs (Leo et al., 2022). Despite this more complete operationalization, Leo et al. (2022) converged on the same set of profiles.

Despite their interest, these studies are not directly relevant to the work domain and have neglected the potentially important complementary role of need-indifferent behaviors (Huyghebaert-Zouaghi et al., 2023). In fact, even leadership research relying on different operationalizations of supervisors' behaviors presents the same limitation, given the dearth of person-centered studies conducted in this area of research. More precisely, the rare person-centered studies conducted in this research area have typically focused solely on desirable types of behaviors (e.g., transformational leadership: Tian et al., 2023; leader-member exchange: Gillet et al., 2022; empowering behaviors: Chénard-Poirier et al., 2017); or on a specific pair of behaviors (e.g., petty tyranny and transformational leadership: Chénard-Poirier et al., 2022). These studies therefore failed to address the unique configurations (or profiles) taken by the full range of positive, negative, and passive forms of supervisors' behaviors. To the best of our knowledge, only two person-centered studies have thus far considered a wider range of leadership behaviors (Doucet et al., 2015; Hancock et al., 2023).

Doucet et al. (2015) uncovered six profiles based on supervisors' transformational, transactional, and corrective-avoidant leadership behaviors among two samples of Canadian employees from the finance industry. They labeled these profiles as follows: (1) the super leader (very high transformational and transactional leadership and low corrective-avoidant leadership), (2) the transactor (higher transactional leadership than the other two types of leadership), (3) the distant-punitive leader (high corrective-avoidant leadership, low transformational and transactional leadership), (4) the distant-visionary leader (higher transformational and corrective-avoidant leadership than transactional leadership), (5) the distant-rewarding leader (high corrective avoidant leadership coupled with higher transactional than transformational leadership), and (6) the moderate leader (average levels of all three types of leadership). More recently, Hancock et al. (2023) considered six types of leadership (abusive supervision, transformational leadership, contingent reward, passive and active management-by-exception, and laissez-faire/avoidant) among multiple samples of employees from various industries. However, despite considering a broader range of leadership behaviors, they only identified three distinct profiles: (1) constructive (higher scores on transformational leadership and contingent reward than on the other styles), (2) passive-abusive (higher scores on the passive styles and abusive supervision than on the other styles), and (3) passive (higher scores on the passive styles than on the other styles). This high discrepancy in results clearly highlights the need for future studies in this area and particularly for studies anchored in an overarching theoretical framework such as SDT. Indeed, the types of leadership considered by Hancock et al. (2023) stem from distinct theoretical frameworks and are thus hardly comparable or overlapping, and may thus provide a poor reflection of the reality under study. The SDT-based approach provides a solid alternative to this suboptimal situation, by offering a conceptual and methodological perspective anchored in the currently dominant theoretical framework on employee motivation and well-being. Thus, this approach provides clear guidance regarding the motivational and health implications of supervisors' behaviors for subordinates and does so without having to infer any intentionality on the part of the supervisor.

## Methodological considerations

All of the previously described person-centered studies conducted either in the educational and sport areas (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014) or in the work area (Doucet et al., 2015; Hancock et al., 2023) share a common limitation. None of

these studies relied on a thorough preliminary investigation of the construct-relevant psychometric multidimensionality of their measures of supervisory behaviors. Yet, it is important to acknowledge that recent psychometric research conducted within SDT has supported the relevance of relying on a bifactor operationalization of need-related behaviors (i.e., Huyghebaert-Zouaghi et al., 2023; Tóth-Király et al., 2022), matching that advocated for other types of leadership measures (Gillet et al., 2022). More precisely, this approach disaggregates employees' ratings of their supervisors into two components. First, a global factor (G-factor) captures employees' globally favorable to unfavorable view of their supervisors' interpersonal style across all behaviors. Second, specific factors (S-factors) capture dimension-specific levels of need-supportive, need-indifferent, and need-thwarting behaviors left unexplained by the G-factor. We therefore rely on this approach in this study to provide a rigorous examination of the multidimensionality of employees' perceptions of their supervisors' behaviors.

Unfortunately, although this approach has been shown to allow the identification of more accurate profiles (Morin et al., 2016, 2017), no previous research has relied on a similar approach to identify need-related behaviors profiles. In combination with the rarity of person-centered leadership studies and the inconsistency of the results obtained in previous research, this lack of evidence makes it difficult to generate hypotheses on the nature of the profiles expected to be identified in this study. However, the bulk of person-centered research reviewed thus far allows us to formulate a tentative hypothesis (e.g., Chénard-Poirier et al., 2017, 2022; Doucet et al., 2015; Gillet et al., 2022; Hancock et al., 2023). Indeed, these previous studies lead us to expect three to six profiles corresponding to at least a subset of the following configurations (*Hypothesis 1*): (1) a globally favorable need-supportive profile, (2) a globally unfavorable need-thwarting profile, (3) a globally unfavorable need-indifferent profile; (4) a globally unfavorable need-thwarting and need-indifferent profile; and (5) a globally moderate mixed profile, displaying a combination of distinct types of behaviors.

## Indices of (mal)adaptive functioning as outcomes of supervisory profiles

### Outcomes of profile membership: theoretical considerations and selection

Prior research based on the tripartite conceptualization of need-related behaviors has shown the positive consequences associated with supervisors' need-supportive behaviors, which also help protect subordinates from detrimental outcomes, whereas exposure to need-indifferent and need-thwarting behaviors tend to result in detrimental consequences for employees (Huyghebaert-Zouaghi et al. (2022, 2023). Unexpectedly, at least from the perspective of SDT, these studies also showed that exposure to need-indifferent behaviors could sometimes be more damaging for subordinates than exposure to need-thwarting behaviors (Huyghebaert-Zouaghi et al., 2022, 2023). This last observation reinforces previous reports highlighting the harmful nature of neglectful and passive types of leadership (Skogstad et al., 2007), as well as the importance of considering the unique and complementary role of need-indifferent behaviors when trying to grasp the role of need-thwarting and need-supportive behaviors (Huyghebaert-Zouaghi et al., 2023). Our reliance on a person-centered approach affords more precision, making it possible to capture the outcome implications of distinct profiles of supervisors' behaviors, each characterized by its own unique configuration.

In selecting outcomes for this study, we first selected indicators of adaptive and maladaptive functioning based on the long-standing recognition that well-being and ill-being are distinct

components of psychological functioning rather than two ends of the same continuum (Keyes, 2005; World Health Organization, 2022). Second, to achieve a more comprehensive understanding of the implications of our profiles, we decided to consider a broad range of indicators of positive and negative functioning related to subordinates' motivation, well-being, attitudes, behaviors, and work-home functioning. Our consideration of such a wide range of outcomes will allow to examine whether combinations of interpersonal behaviors perceptions trigger the same pattern of associations for this broad range of outcomes, or whether distinct profiles could be more or less desirable for specific facets of individual functioning. As a result, we will consider indicators of adaptive (work engagement, autonomous forms of motivation, civic virtue, and work-to-home enrichment) and maladaptive (amotivation and controlled forms of motivation, cyberslacking, competitiveness, devaluation, and work-to-home conflict) functioning. We now more specifically turn our attention to the theoretical underpinnings of each of these outcomes.

*Work motivation* has long been recognized as a key outcome of supervisory behaviors and an important driver of effort and performance, commitment, and turnover intentions (Gagné et al., 2015). Employees with an autonomous motivation expend effort at work because they want to and derive enjoyment from it (intrinsic motivation), or because they find it valuable (identified regulation). In contrast, for employees experiencing more controlled forms of motivation, work-related efforts are primarily driven by internal (introjected regulation: to evade feelings of guilt and shame or to enhance their ego) or external (external regulation: to obtain rewards and/or avoid losses) pressures. Lastly, amotivated employees do not see the point of investing efforts in their work. Just like supervisors' need-related behaviors, work motivation was found to be best operationalized according to two components (e.g., Blechman et al., 2023; Howard et al., 2018, 2020, 2021; Huyghebaert-Zouaghi et al., 2022): one global component factor reflecting employees' global levels of self-determination, capturing their position on the SDT motivation continuum, and a series of specific components reflecting what is unique to each distinct type of behavioral regulation.

*Work engagement* (encompassing its absorption, dedication, and vigor components; Schaufeli et al., 2019) represents a direct indicator of well-being in the workplace. Work engagement is known to be intimately associated with supervisors' behaviors, including the need-related behaviors that are the object of this study (e.g., Huyghebaert-Zouaghi et al., 2023), and to carry important benefits in terms of commitment, job performance, and reduced turnover intentions (Schaufeli et al., 2019).

In terms of behaviors, we consider *civic virtue* (i.e., participating willingly for the organization's welfare; Paillé, 2007) as an important type of organizational citizenship behavior, as well as *cyberslacking* (i.e., online procrastination at work wherein employees give the impression of working on their computers while engaging in personal activities such as online shopping, social media, or gaming; Metin et al., 2016) as an important type of counterproductive work behavior. Both are known to influence organizational effectiveness (Klotz et al., 2018) and costs (Garrett & Danzinger, 2008).

In terms of attitudes, we consider *competitiveness* (i.e., employees' perception of their work environment as competitive; Fletcher et al., 2008) and *devaluation* (i.e., a defensive form of psychological disengagement from work and a core component of moral disengagement; Lagacé et al., 2010). Both attitudes are linked to supervisors' leadership behaviors (Bonner et al., 2016; Valle et al., 2019) and share associations with undesirable outcomes for employees (e.g., Fletcher et al., 2008; Keller et al., 2016) and organizations (Huang et al., 2019).

Finally, we consider indicators of functioning beyond the boundaries of the work role (Huyghebaert-Zouaghi et al., 2022): *work-to-home conflict* (i.e., when contextual demands in the work domain deplete employees' personal resources, leading to diminished functioning at home) and *work-to-home enrichment* (i.e., when work-related contextual resources help generate personal resources which support performance in the home domain). These two variables have been found to be highly relevant to individual and organizational functioning (Li et al., 2021; McNall et al., 2010).

## Outcomes of profile membership: theoretical expectations

Based on SDT (Bhavsar et al., 2019; Ntoumanis, 2023; Ryan & Deci, 2017), as well as previous research conducted in the work area (Doucet et al., 2015; Hancock et al., 2023; Huyghebaert-Zouaghi et al., 2022, 2023) and other domains (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014), we expect the most desirable outcomes to be associated with the profile displaying the most supportive need-related behaviors (the globally favorable need-supportive profile; *Hypothesis 2*). Indeed, prior person-centered research in the work domain, relying on other leadership conceptualizations, showed that subordinates who perceived their supervisors to be predominantly transformational (i.e., supportive and worthy of respect; the *super-leader* in Doucet et al., 2015; the *optimal pattern* in Hancock et al., 2023) were more likely to report better work-related functioning in terms of well-being, attitudes, and behaviors (Doucet et al., 2015; Hancock et al., 2023), as well as better functioning outside of work (Hancock et al., 2023). For instance, membership into a profile dominated by perceptions of need-supportive behaviors could be associated with higher levels of autonomous motivation, as need-supportive supervisors provide the psychological nutrients for self-determined motivation to occur (Ryan & Deci, 2017). Similarly, such a profile could be associated with more civic virtue and work-home enrichment as these subordinates come to feel more energized to transfer this energy toward multiple targets (e.g., the organization and their loved ones; Bandura, 1969).

We also expect the least desirable outcomes to be associated with profiles dominated by undesirable leadership behaviors (globally unfavorable need-thwarting profile, globally unfavorable need-indifferent profile, and globally unfavorable need-thwarting and need-indifferent profile; *Hypothesis 3*). Indeed, prior findings from the sport and education domains showed that members of profiles dominated by need-thwarting behaviors tend to report the most maladaptive functioning (e.g., Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022). For instance, profiles dominated by perceptions of need-thwarting behaviors could be associated with more competitiveness in an effort to compensate for the pressure, criticism, and rejection of supervisors, and to prove one's value (Ryan & Deci, 2017). When facing supervisors perceived as globally unfavorable (e.g., high need-thwarting and need-indifferent behaviors, and low need-supportive behaviors), subordinates might also disengage from their work as a way to protect their self-image and to reciprocate for the perceived mistreatment (Lagacé et al., 2010). Yet, to differentiate profiles dominated by need-thwarting behaviors from those dominated by need-indifferent behaviors or dominated by both types of undesirable behaviors, we needed to rely on prior research also including passive forms of leadership. For instance, Hancock et al. (2023) found that the *passive-abusive* profile was the most detrimental for physical health, whereas the *passive* profile (i.e., passiveness without abuse) was the most damaging for well-being. Doucet et al. (2015) also found that a *distant-*

*punitive* profile was the most damaging in terms of attitudes and behaviors. Yet, because Doucet et al. (2015) did not distinguish corrective and avoidant behaviors, they could not identify profiles dominated by only one of those behaviors. In sum, these results suggest that some of the least desirable outcomes should be associated with the profile dominated by need-indifferent behaviors (globally unfavorable need-indifferent profile), leaving as an open research question whether this profile will perform better, or worst, than one dominated by both types of problematic behaviors (globally unfavorable need-thwarting and need-indifferent profile).

## METHOD

### Participants and procedure

Participants had to be working in France, for an organization located in France, and to have a supervisor. The participants were not compensated for their participation and were recruited by trained research assistants through a combination of snowball sampling and networking procedures. An email was sent to potential participants to explain our research objectives, to clarify that participation was voluntary and anonymous, and to provide them with a link to access the survey. Before completing our questionnaires, the participants were asked to sign an informed consent form.

A total of 596 participants ( $M_{\text{age}} = 31.22$ ;  $SD = 10.71$ ; 73.5% women) completed the survey. Most of them occupied a permanent (75.2%) full-time (71.6%) position and worked 34.52 h per week in average ( $SD = 10.79$ ). The participants' tenure in their job was of 5.07 years in average ( $SD = 6.57$ ) and with their supervisor was of 3.25 years in average ( $SD = 4.67$ ). Of all the participants, 24.7% held managerial positions and 76.0% worked in the private sector: 27.7% worked in non-market services, 55.5% in market services, 9.1% in industry, 2.7% in construction, .5% in agriculture, and 4.5% did not report their employment sector.

### Measures

Measures that were not already available in French (cyberslacking and competitiveness) were adapted from English with a reverse translation method (e.g., Beaton et al., 2000).

#### Supervisors' need-related behaviors

The participants completed the 22-item French version (Huyghebaert-Zouaghi et al., 2023) of the Tripartite Measure of Interpersonal Behaviors-Supervisor (TMIB-S) in relation to their interactions with their ongoing supervisor. They indicated their agreement (1–*strongly disagree*; 7–*strongly agree*) with items designed to capture the following types of behaviors: Need-supportive behaviors (eight items;  $\alpha = .94$ ; e.g., autonomy support: “Shows that he/she understands my perspective”; competence support: “Ensures that tasks are suited to my skill level”; relatedness support: “Takes interest in my welfare”); need-thwarting behaviors (eight items;  $\alpha = .94$ ; e.g., autonomy thwarting: “Tries to control everything I do”; competence thwarting: “Belittles my abilities”; relatedness thwarting: “Makes it clear that he/she doesn't like me”); and need-

indifferent behaviors (six items;  $\alpha = .87$ ; e.g., autonomy indifference: “Is unresponsive to my opinions”; competence indifference: “Can be disorganized”; relatedness indifference: “Keeps to himself/herself”).

## Work motivation

The participants completed the Multidimensional Work Motivation Scale in its original French version (Gagné et al., 2015) by indicating the extent to which (1–*not at all*; 7–*completely*) several statements captured the reasons why they devoted effort to their job. This instrument encompasses: Amotivation (three items;  $\alpha = .88$ ; e.g., “I do little because I don’t think this work is worth putting efforts into”), external regulation (three items;  $\alpha = .66^1$ ; e.g., “To get others’ approval [e.g., supervisor, colleagues, family, clients...]”), introjected regulation (four items;  $\alpha = .79$ ; e.g., “Because otherwise I will feel bad about myself”), identified regulation (three items;  $\alpha = .82$ ; e.g., “Because I personally consider it important to put efforts in this job”), and intrinsic motivation (three items;  $\alpha = .75$ ; e.g., “Because I have fun doing my job”).

## Work engagement

The participants completed the three-item version of the Utrecht Work Engagement Scale, validated with one item for each of the three dimensions of work engagement (i.e., vigor, dedication, and absorption; Schaufeli et al., 2019;  $\alpha = .82$ ; e.g., vigor: “At my work, I feel bursting with energy”), using a frequency scale (1–*never* to 7–*always*).

## Cyberslacking

The participants completed four items ( $\alpha = .70$ ) developed by Metin et al. (2016) by indicating how often (1–*never*; 7–*always*) they engaged in a series of cyberslacking behaviors (e.g., “I do online shopping during working hours”).

## Civic virtue

The participants completed a three-item measure of civic virtue, originally validated in French by Paillé (2007;  $\alpha = .60$ ; e.g., “I attend work events where my attendance is encouraged but not formally required”), using a 5-point rating scale (1–*completely disagree*; 5–*completely agree*).

## Work-to-home conflict

The participants completed a three-item measure of work-to-home conflict ( $\alpha = .85$ ; e.g., “My work schedule makes it difficult for me to fulfill my domestic obligations”; Demerouti et al., 2004) using a frequency scale (1–*never* to 4–*always*).

## Work-to-home enrichment

The participants completed a five-item work-to-home enrichment measure ( $\alpha = .73$ ; e.g., “You fulfil your domestic obligations better because of the things you have learned on your job”), from the original French version of the Survey Work–Home Interaction Nijmegen (SWING-F; Lourel et al., 2005), using a frequency scale (1–*never* to 4–*always*).

## Competitiveness

The participants completed a four-item measure of competitiveness ( $\alpha = .76$ ; e.g., “Everybody is concerned with being the top performer”; Fletcher et al., 2008) using a 7-point response scale (1–*totally disagree*; 7–*totally agree*).

## Devaluation

The participants completed an eight-item measure of devaluation ( $\alpha = .65$ ; e.g., “Succeeding in my job is not one of the most important things in my life”), developed in French by Lagacé et al. (2010), using a 7-point response scale (1–*totally disagree*; 7–*totally agree*).

## ANALYSES

### Preliminary analyses

Analyses was capitalized on *Mplus 8.6's* (Muthén & Muthén, 2021) maximum likelihood robust (MLR) estimator. Full information maximum likelihood was used to handle missing responses (Enders, 2022). The psychometric properties of all multi-item measures were assessed through preliminary factor analyses. These analyses are fully described in Tables S1 to S8. We relied on factor scores taken from these preliminary analyses for all subsequent analyses (Meyer & Morin, 2016), as factor scores are partially corrected for unreliability (Skrondal & Laake, 2001).

### Latent profile analyses (LPA)

LPA were estimated using 5000 random starts, 200 optimizations, and 1000 iterations (Hipp & Bauer, 2006). We contrasted solutions incorporating one to eight profiles, defined by allowing the means and variance of the components from the need-related supervisory behaviors measure to differ across profiles (Diallo et al., 2016; Morin et al., 2011; Peugh & Fan, 2013). We selected the optimal solution by considering the meaningfulness of the profiles, their statistical adequacy, and their theoretical relevance (Muthén, 2003), while also considering a series of statistical indices (McLachlan & Peel, 2000). For the Akaike Information Criterion (AIC), the Consistent AIC (CAIC), the Bayesian Information Criterion (BIC), and the sample-size Adjusted BIC (ABIC), lower values indicate better fit. For the adjusted Lo, Mendell, and Rubin's (2001) Likelihood Ratio Test (aLMR) and the Bootstrap Likelihood Ratio Test (BLRT), statistical significance supports a model relative to a solution with less profiles. Although statistical

research has emphasized the usefulness of the BIC, ABIC, CAIC, and BLRT, it has revealed that the AIC and aLMR should not be relied upon to select the optimal solution (e.g., Diallo et al., 2016; Nylund et al., 2007; Peugh & Fan, 2013).<sup>2</sup> Because these indicators are sensitive to sample size, they often fail to converge on a specific solution (Marsh et al., 2009). For this reason, it has been recommended to rely on a graphical display (elbow plot) to identify plateau in decrease of these indicators (Morin et al., 2011).

## Outcomes

Outcomes levels were compared across profiles using a model-based approach (Lanza et al., 2013) implemented using auxiliary (DCON) (Asparouhov & Muthén, 2014). Essentially, this approach makes it possible to compare the mean-level of outcomes across profiles while retaining the probabilistic nature of the profiles (i.e., profiles corrected for classification errors). The resulting profile comparisons can be, however, interpreted like classical mean comparisons.<sup>3</sup>

## RESULTS

### Preliminary analyses

In line with recent recommendations and procedures (e.g., Blechman et al., 2023; Howard et al., 2018, 2021; Huyghebaert-Zouaghi et al., 2023), we first contrasted several confirmatory factor analytic (CFA) and exploratory structural equation modeling (ESEM) measurement solutions, as well as their bifactor counterparts, for the multidimensional instruments (i.e., interpersonal behaviors and work motivation) included in the study. Results from these preliminary analyses are reported in Tables S1–S3). As indicated in Table S1, these results supported a bifactor-ESEM solution for the measure of need-related behaviors consistent with that advocated by Huyghebaert-Zouaghi et al. (2023). In this solution, one G-factor captured employees' global levels of psychological need experiences, whereas three S-factors captured their specific experiences of need-supportive, need-thwarting, and need-indifferent behaviors. The parameter estimates from this solution all supported the factor definition (i.e., strong loadings and weaker cross-loadings) and composite reliability of these global and specific factors (see Table S2). Because the G-factor was defined by negative loadings from the need-supportive items and by positive loadings from need-indifferent and need-thwarting items, this G-factor will, from now on, be referred to as depicting subordinates' perceptions of their supervisor's global *need-hampering* behaviors, in line with prior findings and recommendations (Huyghebaert-Zouaghi et al., 2023). In other words, this global factor reflects subordinates' general impression of their supervisor as a “rather bad, relative to good, supervisor,” with higher scores on this G-factor reflecting an impression of being exposed to supervisory behaviors primarily seen as interfering with the fulfillment of one's basic psychological needs. In contrast, lower scores on this factor reflect an impression of being exposed to supervisory behaviors primarily seen as contributing to the fulfillment of one's basic psychological needs. It is important to keep in mind that in a bifactor model, the S-factors cannot be interpreted as one would interpret a typical first-order factor. Rather, these S-factors reflect the extent to which subordinates' perceptions of each specific interpersonal style (supportive, thwarting, and indifferent) deviate

from their global perception of their supervisors' interpersonal behaviors. In other words, S-factors reflect what is unique to each interpersonal style, over and above subordinates' global perception of their supervisors' interpersonal behaviors. Thus, the G-factor reflects global perceptions of the supervisor, seen as globally bad, average, or good, whereas the S-factors indicate whether each style is likely to occur in a way that deviates from this global perception. When interpreting the profiles, this global and specific distinction implies that a supervisor might be perceived as generally nurturing (e.g., low levels of global need-hampering behaviors) and yet also be perceived as occasionally relying on specific need-thwarting or need-indifferent behaviors (e.g., a globally good supervisor that sometimes displays indifference).

Work motivation was also found to be best represented by a bifactor-ESEM solution, consistent with previous theoretical (Howard et al., 2020) and empirical (Blechman et al., 2023; Howard et al., 2018, 2021) recommendations. Indeed, recent research has shown that ratings of work motivation anchored in SDT are best represented by being disaggregated into a G-factor reflecting employees' global levels of self-determination and a series of S-factor reflecting what is unique to employees' unique motivational orientation, once their global levels of self-determination are taken into account (e.g., Blechman et al., 2023; Howard et al., 2018, 2021). The retained bifactor-ESEM solution included one global self-determination G-factor and five S-factors reflecting intrinsic motivation, identified regulation, introjected regulation, external regulation, and amotivation. Parameter estimates and composite reliability coefficients supported the adequacy of this solution and of the measurement models of all the other unidimensional constructs included in this study (see Table S3).

## LPA

The model fit indicators associated with the solutions including different numbers of profiles are reported in Table 1, and graphically illustrated in Figure S1 (elbow plots). The seven-profile solution displayed the lowest BIC value, the six-profile solution had the lowest CAIC value, and the ABIC kept on decreasing. The elbow plot suggested a plateau after the four- or five-profile solutions. We therefore inspected more thoroughly solutions including four, five, and six profiles. Each new profile had a meaningful contribution up to six profiles. In contrast, the seventh profile only resulted in the separation of a profile already identified in the previous solution into smaller profiles with similar configurations. As such, we retained the six-profile solution, which is represented in Figure 1 (see Tables S4 and S5 for exact parameter estimates). This solution supported Hypothesis 1 in terms of the number of identified profiles but partially supported it in terms of their nature. As shown in Table S5, this solution had a high classification accuracy (from 80.4% to 96.7% across profiles), consistent with its high entropy (.846).

Profile 1 represented subordinates feeling exposed to very high global need-hampering behaviors, moderately high specific need-thwarting and need-supportive behaviors, and moderately low specific need-indifferent behaviors. This *Globally Unfavorable* profile was the smallest, representing 6.26% of the sample. Profile 2 represented subordinates feeling exposed to low global need-hampering behaviors, moderately low specific need-indifferent behaviors, average specific need-thwarting behaviors, and moderately high specific need-supportive behaviors. This *Globally Favorable and Supportive* profile represented 9.67% of the sample. Profile 3 represented subordinates feeling exposed to close to average global need-hampering behaviors and specific need-supportive behaviors, moderately low specific need-thwarting behaviors, and moderately high specific need-indifferent behaviors. This *Moderate-Indifferent* profile

TABLE 1 Results from the latent profile analysis models.

Model	LL	#fp	Scaling	AIC	CAIC	BIC	ABIC	Entropy	aLMR	BLRT
1 profile	-3067.421	8	1.161	6150.843	6193.965	6185.965	6160.567			
2 profiles	-2681.722	17	1.157	5397.444	5489.078	5472.078	5418.108	.882	< .001	< .001
3 profiles	-2524.974	26	1.166	5101.947	5242.094	5216.094	5133.551	.850	< .001	< .001
4 profiles	-2426.062	35	1.506	4922.123	5110.782	5075.782	4964.667	.856	.365	< .001
5 profiles	-2381.054	44	1.470	4850.108	5087.279	5043.279	4903.592	.861	.640	< .001
6 profiles	-2347.593	53	1.236	4801.185	5086.868	5033.868	4865.609	.846	.159	< .001
7 profiles	-2317.325	62	1.171	4758.651	5092.846	5030.846	4834.014	.858	.234	< .001
8 profiles	-2297.665	71	1.177	4737.330	5120.037	5049.037	4823.633	.837	.352	< .001

Note: LL = model loglikelihood; #fp = number of free parameters; Scaling = scaling factor associated with MLR loglikelihood estimates; AIC = Akaike information criterion; CAIC = constant AIC; BIC = Bayesian information criterion; ABIC = sample-size-adjusted BIC; aLMR = adjusted Lo-Mendel-Rubin likelihood ratio test; BLRT = bootstrap likelihood ratio test.

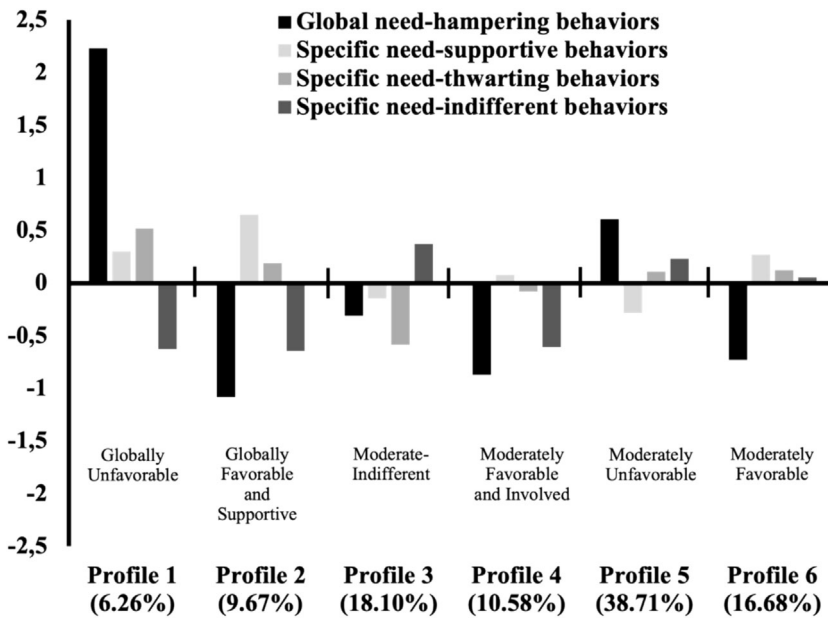


FIGURE 1 Final six-profile solution. *Note.* Profile indicators are factor scores with a mean of 0 and a standard deviation of 1.

represented 18.10% of the sample. Profile 4 represented subordinates feeling exposed to low global need-hampering behaviors, average specific need-supportive and need-thwarting behaviors, and moderately low specific indifferent behaviors. This *Globally Favorable and Involved* (“involved” was used to contrast with “indifferent”) profile represented 9.67% of the sample. Profile 5 represented subordinates feeling exposed to moderately high global need-hampering behaviors, with close to average specific need-thwarting, need-indifferent and need-supportive behaviors. This *Moderately Unfavorable* profile was the most frequent, representing 38.71% of the sample. Finally, Profile 6 portrayed employees feeling exposed to moderately low global need-hampering behaviors, together with close to average specific need-indifferent, need-thwarting, and need-supportive behaviors. This *Moderately Favorable* profile represented 16.68% of the employees.

## Outcomes of profile membership

Our results revealed a rich pattern of associations between profile membership and outcome levels, which are reported in Table 2 and supported the distinctiveness of the profiles. Profile-specific outcome levels are depicted in Figure 2 (work motivation) and in Figure 3 (other outcomes) and generally supported Hypothesis 2 and Hypothesis 3, as detailed below.

When we first consider work motivation, the participants' global self-determined work motivation was higher in the *Globally Favorable and Supportive* (2) and *Moderately Favorable and Involved* (4) profiles, which did not differ from one another. Specific levels of intrinsic motivation and identified regulation were, in contrast, lower in the *Globally Unfavorable* (1) profile than all other profiles. Specific levels of introjected regulation did not differ across profiles,

TABLE 2 Associations between profile membership and the outcomes.

Outcome	Profile 1: <i>M</i> [CI]	Profile 2: <i>M</i> [CI]	Profile 3: <i>M</i> [CI]	Profile 4: <i>M</i> [CI]	Profile 5: <i>M</i> [CI]	Profile 6: <i>M</i> [CI]	Significant diff.
Self-determination G-factor	-.422 [-1.231; .387]	.763 [.457; 1.069]	-.203 [-.526; .120]	.332 [-.087; .751]	-.178 [-.501; .145]	.051 [-.286; .388]	2 > 1 = 3 = 5 = 6; 1 = 4; 2 = 4 > 3 = 5; 4 = 6.
Intrinsic motivation S-factor	-.778 [-1.576; .020]	.226 [-.227; .679]	-.086 [-.398; .226]	.345 [-.098; .788]	-.129 [-.443; .185]	.190 [-.145; .525]	2 = 4 = 6 > 1; 1 = 3 = 5; 2 = 4 = 6 = 3 = 5.
Identified regulation S-factor	-.680 [-1.352; -.008]	.082 [-.355; .519]	-.016 [-.285; .253]	.230 [-.233; .693]	.094 [-.178; .366]	-.114 [-.428; .200]	4 = 5 > 1; 1 = 2 = 3 = 6; 1 = 2 = 3 = 4 = 5.
Introjected regulation S-factor	-.170 [-.930; .590]	-.169 [-.684; .346]	.097 [-.201; .395]	-.198 [-.729; .333]	.123 [-.175; .421]	-.073 [-.445; .299]	1 = 2 = 3 = 4 = 5 = 6
External regulation S-factor	-.138 [-.706; .430]	-.775 [-1.067; -.483]	.225 [-.022; .472]	-.547 [-.894; -.200]	.376 [.131; .621]	-.096 [-.380; .188]	5 > 6 > 2 = 4; 1 > 2; 3 = 6 > 2 = 4; 1 = 3 = 5; 1 = 4; 1 = 6.
Amotivation S-factor	1.078 [.235; 1.921]	-.240 [-.569; .089]	-.231 [-.437; -.025]	-.425 [-.760; -.090]	.633 [.310; .956]	-.475 [-.716; -.234]	1 = 5 > 2 = 3 = 4 = 6
Cyberslacking	.142 [-.575; .859]	-.295 [-.646; .056]	-.056 [-.328; .216]	-.249 [-.627; .129]	.053 [-.241; .347]	.253 [-.125; .631]	6 > 2 = 4; 1 = 3 = 5 = 6; 1 = 2 = 3 = 4 = 5.
Competitiveness	.607 [.062; 1.152]	-.549 [-.784; -.314]	-.110 [-.379; .159]	-.459 [-.716; -.202]	.383 [.167; .599]	-.209 [-.456; .038]	1 = 5 > 3 = 4 = 6; 1 = 5 > 2 = 4; 3 = 6 > 2.
Devaluation	.481 [-.413; 1.375]	-.605 [-1.071; -.139]	.059 [-.323; .441]	-.361 [-.743; .021]	.227 [.015; .439]	-.418 [-.796; -.040]	1 > 2 = 6; 1 = 3 > 2; 5 > 2 = 4 = 6; 1 = 3 = 5; 3 = 4 = 6; 1 = 4.
Civic virtue	.208 [-.417; .833]	.569 [.173; .965]	-.241 [-.502; .020]	.073 [-.366; .512]	-.020 [-.290; .250]	-.031 [-.352; .290]	2 > 3 = 5 = 6; 1 = 2 = 4; 1 = 3 = 4 = 5 = 6.
Work engagement	-2.103 [-2.103; -2.103]	.618 [.095; 1.141]	.010 [-.404; .424]	.591 [.193; .989]	-.295 [-.528; -.062]	.476 [.057; .895]	2 = 3 = 6 > 1; 4 > 3; 2 = 4 = 6 > 5 > 1; 3 = 5 > 1.
Work-to-home enrichment	-.913 [-1.321; -.505]	.416 [.053; .779]	-.035 [-.333; .263]	.241 [-.124; .606]	-.087 [-.291; .117]	.079 [-.207; .365]	2 = 4 = 6 > 1; 2 > 3 = 5 > 1; 3 = 4 = 5 = 6 > 1.
Work-to-home conflict	.947 [.533; 1.361]	-.489 [-.816; -.162]	.013 [-.291; .317]	-.600 [-.906; -.294]	.252 [.040; .464]	-.128 [-.416; .160]	1 > 3 = 5 > 2 = 4; 1 > 6 > 5 > 4; 2 = 6; 3 = 6;

Note: Outcomes are factor scores with  $M = 0$  and  $SD = 1$ . Profile 1: *Globally Unfavorable*; Profile 2: *Globally Favorable and Supportive*; Profile 3: *Moderate-Indifferent*; Profile 4: *Moderately Favorable and Involved*; Profile 5: *Moderately Unfavorable*; Profile 6: *Moderately Favorable*. CI = 95% confidence interval.

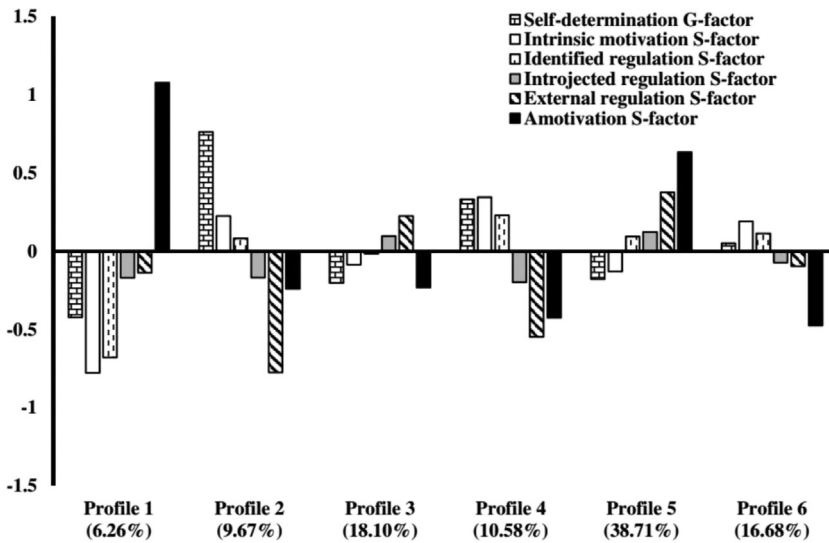


FIGURE 2 Motivation levels observed in each profile. *Note.* Outcomes are factor scores with  $M = 0$  and  $SD = 1$ ; Profile 1: *Globally Unfavorable*; Profile 2: *Globally Favorable and Supportive*; Profile 3: *Moderate-Indifferent*; Profile 4: *Moderately Favorable and Involved*; Profile 5: *Moderately Unfavorable*; and Profile 6: *Moderately Favorable*.

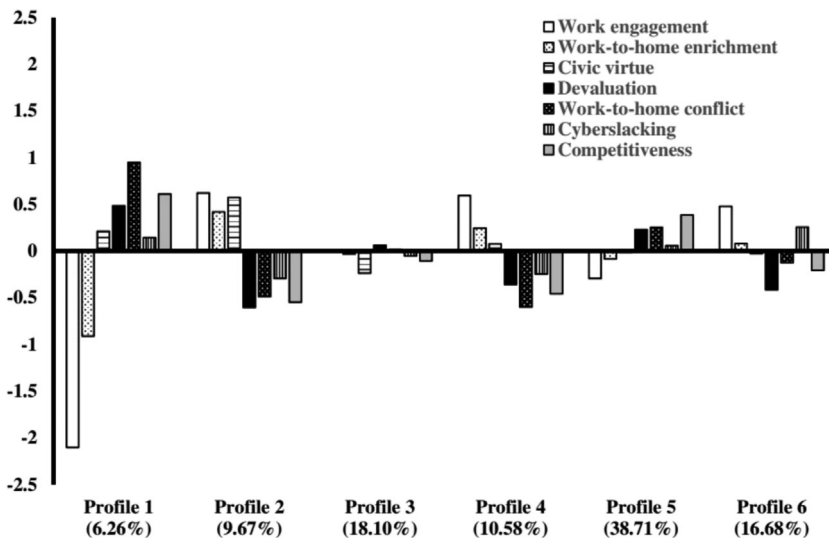


FIGURE 3 Outcome levels observed in each profile. *Note.* Outcomes are factor scores with  $M = 0$  and  $SD = 1$ ; Profile 1: *Globally Unfavorable*; Profile 2: *Globally Favorable and Supportive*; Profile 3: *Moderate-Indifferent*; Profile 4: *Moderately Favorable and Involved*; Profile 5: *Moderately Unfavorable*; and Profile 6: *Moderately Favorable*.

whereas specific levels of external regulation displayed multiple differences across profiles. More precisely, external regulation was the highest in the *Moderately Unfavorable* (5) profile, succeeded equally by the *Moderate-Indifferent* (3) and *Moderately Favorable* (6) profiles (although Profile 3 showed fewer differences with the other profiles than Profile 6), and then

equally by the *Globally Favorable and Supportive* (2) and *Moderately Favorable and Involved* (4) profiles. Interestingly, the specific levels of external regulation observed in the *Globally Unfavorable* (1) profile were similar to those identified in most of the other profiles, although they were higher than those observed in the *Globally Favorable and Supportive* (2) profile. Finally, specific levels of amotivation were found to be higher and comparable in the *Globally Unfavorable* (1) and *Moderately Unfavorable* (5) profiles than in all other profiles.

Turning our attention to the other outcomes and starting with those reflecting maladaptive functioning, cyberslacking was found to be the highest in the *Moderately Favorable* (6) profile, compared to all other profiles. In contrast, levels of competitiveness were found to be higher in the *Globally Unfavorable* (1) and *Moderately Unfavorable* (5) profiles relative to all other profiles, and higher in the *Moderate-Indifferent* (3) and *Moderately Favorable* (6) profiles than in the *Globally Favorable and Supportive* (2) one. Similarly, levels of work devaluation were higher in the *Globally Unfavorable* (1) and *Moderately Unfavorable* (5) profiles relative to most other profiles, and the lowest in the *Globally Favorable and Supportive* (2) profile. Finally, work-to-home conflict was the highest in the *Globally Unfavorable* (1) profile, followed by the *Moderate-Indifferent* (3), *Moderately Unfavorable* (5), and *Moderately Favorable* (6) profiles, and the lowest in the *Globally Favorable and Supportive* (2) and *Moderately Favorable and Involved* (4) profiles. Work-to-home conflict was also higher in the *Moderately Favorable* (6) profile than in the *Moderately Unfavorable* (5) profile.

Finally, for the outcomes reflecting adaptive functioning, levels of civic virtue were higher in the *Moderately Favorable* (6) profile than in all other profiles. In contrast, work engagement was found to be the lowest in the *Globally Unfavorable* (1) profile, followed by the *Moderately Unfavorable* (5) profile, and the highest in the *Globally Favorable and Supportive* (2), *Moderate-Indifferent* (3), *Moderately Favorable and Involved* (4), and *Moderately Favorable* (6) profiles. Work engagement was also higher in the *Moderately Favorable and Involved* (4) profile than in the *Moderate-Indifferent* (3) profile. Finally, levels of work-to-home enrichment were the highest in the *Globally Favorable and Supportive* (2) profile, and the lowest in the *Globally Unfavorable* (1) profile.

## DISCUSSION

This study showed that employees reported being exposed to well-differentiated combinations of need-supportive, need-thwarting, and need-indifferent behaviors from their supervisor, thus supporting the idea that many supervisors concurrently rely on several types of behaviors. The behavioral profiles identified in this study helped us to achieve a more nuanced and realistic understanding of the nature, and outcome implications of these combinations as they most commonly occur in real life settings.

### Theoretical and practical contributions

Our findings contribute to leadership research and theory in several ways. First, extending past SDT research (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014), we documented for the first time the role of need-indifferent behaviors in the definition of supervisors' need-related behavioral profiles, at least as perceived by employees. In this regard, our findings emphasize how critical it is to consider this uniquely distinctive category of need-

related behaviors (Huyghebaert-Zouaghi et al., 2022, 2023). Moreover, our results also address the scarcity, in leadership research, of person-centered studies which consider how the full range of negative, passive, and positive supervisory behaviors perceived by subordinates combine within distinctive supervisory profiles (e.g., Doucet et al., 2015; Hancock et al., 2023). Second, by documenting the implications of these behavioral profiles for subordinates' work motivation, well-being, attitudes, behaviors, and work-home experiences, our study emphasizes the central role played by subordinates' global perceptions of the need-related behaviors adopted by their supervisors, together with their specific perceptions of their need-supportive, need-thwarting, and need-indifferent behaviors.

## Supervisors' need-related behaviors profiles

Supporting the expected number of profiles stipulated in Hypothesis 1, our findings revealed six supervisory profiles, displayed in Figure 1. However, the nature of these profiles only partially supported Hypothesis 1: (1) *Globally Unfavorable* (i.e., very high global need-hampering behaviors, moderately high specific need-thwarting and need-supportive behaviors, and moderately low specific need-indifferent behaviors); (2) *Globally Favorable and Supportive* (i.e., low global need-hampering behaviors, moderately low specific need-indifferent behaviors, average specific need-thwarting behaviors, and moderately high specific need-supportive behaviors); (3) *Moderate-Indifferent* (i.e., average global need-hampering behaviors and specific need-supportive behaviors, moderately low specific need-thwarting behaviors, and moderately high specific need-indifferent behaviors); (4) *Moderately Favorable and Involved* (i.e., low global need-hampering behaviors, average specific need-supportive and need-thwarting behaviors, and moderately low specific need-indifferent behaviors); (5) *Moderately Unfavorable* (i.e., moderately high global need-hampering behaviors, with close to average specific need-thwarting, need-indifferent, and need-supportive behaviors); and (6) *Moderately Favorable* (i.e., moderately low global need-hampering behaviors, together with close to average specific need-indifferent, need-thwarting, and need-supportive behaviors).

These results align with prior research conducted in the work area while focusing on other conceptualizations of supervisors' behaviors (Doucet et al., 2015; Hancock et al., 2023), as well as with prior SDT research conducted in the sport and education domains (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014). Indeed, as expected, we identified a predominantly unfavorable need-thwarting profile (Profile 1 – *Globally Unfavorable*) and a generally average mixed profile displaying a combination of distinct types of behaviors (Profile 6 – *Moderately Favorable*). Moreover, rather than one, we identified two predominantly favorable need-supportive profiles (Profile 2 – *Globally Favorable and Supportive* and Profile 4 – *Moderately Favorable and Involved*) which were both characterized by low levels of global need-hampering behaviors, moderately low specific need-indifferent behaviors, and average specific need-thwarting behaviors, but differentiated by moderately high specific need-supportive behaviors in Profile 2 versus average levels of specific need-supportive behaviors in Profile 4. This unexpected identification of two predominantly favorable profiles, differentiated by levels of need-supportive behaviors, is consistent with the idea that subordinates' perceptions of specific interpersonal styles may deviate from their global perception of their supervisors' interpersonal behaviors and represent something unique to this specific set of behaviors, over and above subordinates' global perception of their supervisors' interpersonal behaviors. An important theoretical and practical contribution of our research was the identification of a generally

favorable profile in which supervisors seemed to rely on a combination of need-supportive and need-thwarting behaviors (*Globally Favorable and Supportive*). Indeed, we extend the person-centered leadership literature by providing evidence of generalizability of a combination which was only once observed by Chénard-Poirier et al. (2022). On a practical level, the identification of this profile combining need-supportive and need-thwarting behaviors is consistent with the idea that it might be difficult for supervisors to maintain a purely supportive profile over time (only 9.67% of the employees described their supervisors as *Globally Favorable and Supportive*), possibly because different types of behaviors are required in different circumstances (Gagné et al., 2020). Identifying a *Moderately Favorable* mixed profile (16.68%) also supported this assertion. It would be important for future studies to assess the conditions under which similar profiles tend to be, or not, identified, to better understand the mechanisms underpinning their formation, as well as their stability over time.

Supporting our expectations and previous empirical evidence (e.g., Doucet et al., 2015; Hancock et al., 2023), we also identified a reasonably large (18.10%) profile predominantly defined by need-indifferent behaviors (i.e., the *Moderate-Indifferent* profile). This profile contributes to the SDT literature on leadership by reinforcing the unique nature of need-indifferent behaviors (Huyghebaert-Zouaghi et al., 2023). Given the detrimental consequences of need-indifferent behaviors, the identification of this profile also offers leverage for practitioners by showing that such behaviors dominate the perceptions of a sizeable portion of employees. Although not alarming in and of itself, the size of this profile is even more concerning when we add it to that of the largest profile, which was defined by a combination of need-thwarting and need-indifferent behaviors (*Moderately Unfavorable*; 38.71%). This profile also supported our expectation of identifying a predominantly unfavorable profile dominated by need-thwarting and need-indifferent behaviors (Doucet et al., 2015; Hancock et al., 2023). Altogether, these results open new avenues for practitioners by showing that, for the majority of French subordinates, their perceptions of their supervisors are dominated by negative behaviors.

In sum, our results contribute to the leadership literature by highlighting the relevance of a finer-grained person-centered representation of supervisors' need-related behaviors which jointly considers subordinates' global perceptions of the need-related style of their supervisors (global need-hampering behaviors), alongside each specific category of behaviors (supportive, thwarting, and indifferent). Despite our reliance on a novel comprehensive measure of supervisors' behaviors and on a more rigorous disaggregation of subordinates' global and specific perceptions of their supervisors' need-related behaviors, our results were also highly consistent with our expectations, anchored in the limited amount of previous studies conducted in this area. This evidence of generalizability has important practical implications, as it suggests that these profiles can be anticipated to systematically appear across different work settings and irrespective of the conceptualization of leadership behaviors under study (Doucet et al., 2015; Hancock et al., 2023). However, the generalizability of these profiles will need to be formally assessed in future studies relying on similar and distinct operationalizations and conducted among employees from a wider range of occupations, cultures, and countries.

## Outcomes of supervisors' need-related behaviors profiles

Our results revealed a rich pattern of associations between profile membership and outcome levels. In order to understand more clearly the benefits associated with each configuration of

interpersonal behaviors from supervisors, readers are referred to Figures 2 (depicting levels of work motivation for each profile) and 3 (depicting levels of all other outcomes for each profile). The statistical significance of the differences between profile-specific outcome levels is also illustrated in the last column of Table 2. In addition, we provide a more detailed examination of the benefits (or disadvantages) associated with each configuration of interpersonal behaviors from supervisors in the following paragraphs.

Our results first showed that the *Globally Favorable and Supportive* profile, followed closely by the *Moderately Favorable and Involved* profile, and then by the *Moderately Favorable* profile, was associated with the most desirable levels of adaptive functioning among employees. These results thus support Hypothesis 2 and are aligned with previous person-centered results highlighting the benefits of need-supportive behaviors and similarly positive styles of leadership (Amoura et al., 2015; Doucet et al., 2015; Haerens et al., 2018; Hancock et al., 2023; Leo et al., 2022; Matosic & Cox, 2014). More precisely, these results show that employees seem to experience the most optimal functioning when they report being supported by their supervisor without also being exposed to need-indifferent behaviors. In particular, the positive outcomes associated with the *Globally Favorable and Supportive* profile suggested that exposure to need-supportive behaviors seems to help employees cope with need-thwarting behaviors, as long as these are not combined with need-indifferent behaviors. An important contribution of our research lies in the lack of outcome differences between the *Globally Favorable and Supportive* and *Moderately Favorable and Involved* profiles. This result has important practical implications, suggesting that employees can benefit equally from exposure to highly favorable and to moderately favorable combinations of supervisory behaviors. In other words, supervisors should set reasonable and attainable expectations for themselves, keeping in mind that it seems more important to rely on predominantly supportive behaviors than to try to completely avoid the occasional reliance on need-thwarting behaviors. In fact, findings from this study indicate that need-indifferent behaviors might even be more important to avoid, at least as part of a profile that also encompasses other types of behaviors. We come back to this question shortly.

Our results showed the least desirable outcomes to be associated with the *Globally Unfavorable* profile, followed closely by the *Moderately Unfavorable* and *Moderate-Indifferent* ones. These results support Hypothesis 3 and are consistent with prior person-centered results revealing that the least desirable outcomes seemed to be found in profiles dominated by negative types of need-related behaviors and styles of leadership (Amoura et al., 2015; Doucet et al., 2015; Haerens et al., 2018; Hancock et al., 2023; Leo et al., 2022; Matosic & Cox, 2014). Without surprise, the most detrimental profile (i.e., *Globally Unfavorable*) was the one dominated by high global levels of need-hampering behaviors accompanied by moderately high levels of need-thwarting behaviors. Importantly, and also consistent with previous results (Huyghebaert-Zouaghi et al., 2021, 2022, 2023; Skogstad et al., 2007), the observation that the second-to-worst patterns of outcomes were associated with two of the profiles displaying higher than average levels of need-indifferent behaviors clearly highlights the undesirable nature of these behaviors, whether they occur on their own (*Moderate-Indifferent* profile) or in combination with need-thwarting behaviors (*Moderately Unfavorable* profile).

Before turning our attention to the role played by other combinations of desirable and undesirable behaviors, it appears important to summarize some previous theoretical considerations likely to shed light on the pattern of results observed in this study. More precisely, Chénard-Poirier et al. (2022) found that the combination of desirable and undesirable leadership behaviors (i.e., transformational leadership and petty tyranny) was particularly harmful

to exposed employees. They attributed this result to the within-domain exacerbation phenomenon (e.g., Greenbaum et al., 2015; Lian et al., 2012; Xu et al., 2015) which suggests that exposure to inconsistent supervisory behaviors amplifies the harmful effects of undesirable behaviors. This inconsistency may drain employees' resources by making it harder for them to anticipate and make sense of their supervisors' behaviors. Chénard-Poirier et al. (2022) invoked an uncertainty mechanism (Lind & van den Bos, 2002) to explain this phenomenon, highlighting the fact that behavioral inconsistency makes it harder for subordinates to anticipate their supervisor's behaviors (loss of control) and makes them question the quality of their relationship with the latter (relational insecurity). Supporting this assertion, they found that employees exposed to such mixed profiles seemed to benefit from any clarification (i.e., increases in both desirable and undesirable supervisory behaviors) of the supervisor's dominant style.

The results associated with the three profiles characterized by a combination of behaviors (i.e., need-supportive and need-thwarting in the *Globally Favorable and Supportive* profile; need-thwarting and need-indifferent in the *Moderately Unfavorable* profile; and need-supportive, need-thwarting, and need-indifferent in the *Moderately Favorable* profile) contribute to the research literature by indicating that need-indifferent behaviors can be a more potent driver of ill-being and poor functioning than need-thwarting behaviors. Indeed, the positive outcomes resulting from a combination of need-supportive and need-thwarting behaviors (*Globally Favorable and Supportive* profile), in the absence of need-indifferent behaviors, could suggest that subordinates may assume that there must be a good reason underlying their supervisor's occasional reliance on need-thwarting behaviors (e.g., crisis management; Gagné et al., 2020) when their perceptions of need-supportive behaviors remain higher. In other words, these results suggest that employees can cope with their supervisors' need-thwarting behaviors, as long as their need-supportive behaviors remain dominant and that need-indifferent behaviors are absent. In contrast, the presence of need-indifferent behaviors in an otherwise very similar profile (*Moderately Favorable*) led to a direct reduction in outcomes desirability (which was particularly noteworthy for cyberslacking). These results extend upon prior person-centered research by showing the absence of need-indifferent behaviors to be an essential element to allow employees to maximally benefit from need-supportive behaviors. Indeed, need-indifferent behaviors may trigger existential concerns for subordinates who may experience groundlessness, lack of meaning, and come to feel unseen and lose sense of how they fit in (Koole et al., 2006). When occurring within the context of an overall favorable relationship dominated by need-supportive behaviors, where employees see their supervisors' behaviors as predictable (Greenbaum et al., 2015), need-indifferent behaviors may be seen as unusual and unexpected. The ambivalence and unpredictability created by such behaviors is thus more likely to drain employees' resources as they try to make sense of their supervisor's behaviors. Future research will be needed to analyze whether and how need-indifferent behaviors may generate such a sense of uncertainty among employees.

However, in the absence of need-supportive behaviors, exposure to a mixed profile in which need-indifferent behaviors are combined with need-thwarting behaviors (*Moderately Unfavorable* profile) seems to be associated with a further, and far more substantial decrease, in outcomes desirability which is second only to the *Globally Unfavorable* profile (characterized by very high global need-hampering behaviors, moderately high specific need-thwarting and need-supportive behaviors, and moderately low specific need-indifferent behaviors). Therefore, although our results support the idea that need-thwarting behaviors could be, in and of themselves, a potent driver of maladaptive outcomes, they also suggest that need-indifferent

behaviors should not be neglected and may reflect the uncertainty mechanism at play in the within-domain exacerbation effect. We thus extend prior research in suggesting that, by adopting behaviors expressing uncertainty, chaos, and alienation, need-indifferent supervisors create a climate of ambiguity which makes employees vulnerable (Huyghebaert-Zouaghi et al., 2023; Lapidot et al., 2007; Skogstad et al., 2014). Indeed, we add to prior suggestions (Skogstad et al., 2007) arguing that passive forms of leadership akin to need-indifferent behaviors (e.g., passive-avoidant leadership; Avolio et al., 1999) could be as destructive as more actively negative types of leadership similar to need-thwarting behaviors (e.g., abusive supervision; Tepper, 2000). By documenting the joint influence of these types of behaviors on subordinates' work motivation, well-being, attitudes, behaviors, and work-home functioning, we contribute to extend a very scarce literature on the implications of passive forms of leadership for employees' functioning. These results also have practical implications as organizations and supervisors may consider need-indifferent behaviors (or other forms of passive leadership) to be less problematic than need-thwarting behaviors (or other forms of actively negative leadership such as abusive supervision). Our results suggest that both forms of behaviors need to be prevented, for they have the power to have devastating effects for employees'—and eventually organizational—functioning.

Altogether, our results reinforce the idea that all three types of need-related behaviors are important to consider when investigating the role of supervisory profiles. These results are also consistent with SDT (Ryan & Deci, 2017), which highlights the benefits of need-supportive environments and the undesirable effects of need-thwarting environments. Moreover, they reinforce the need to consider need-indifferent behaviors, as these seem to be very important pieces of the overall puzzle.

## Limitations and suggestions for future research

This study presents some noteworthy limitations. First, we relied on a convenience sample of French employees. Thus, the generalizability of our results to other cultural, linguistic, or even occupational groups is unknown. This question is particularly relevant to the universality assumption of SDT propositions regarding psychological need fulfillment and of the benefits of need nurturing environments (Vansteenkiste et al., 2020). Future research could, for instance, look into the generalizability of the identified profiles in specific occupational groups (e.g., hospitality workers; Gui et al., 2021; Jiménez-Estévez et al., 2023). Second, even though shared method variance cannot play a role in multivariate person-centered analyses (Meyer & Morin, 2016; Siemsen et al., 2010), our results could have been influenced by social desirability biases and by our reliance on subordinates' reports only. Although prior person-centered research (e.g., Hancock et al., 2023) has shown that profiles identified among a sample of supervisors (based on their perceptions of their own behaviors) were highly comparable to those identified among independent samples of subordinates (based on their perceptions of their supervisors' behaviors), these findings were based on different leadership conceptualizations than the one used in the present study. As such, it would seem important for future research based on the current tripartite conceptualization of supervisory behaviors (Huyghebaert-Zouaghi et al., 2023) to verify the extent to which the profiles identified in this study, and their implications, would generalize to supervisors' perceptions of their own behaviors (e.g., Hancock et al., 2023). Moreover, some of our measures of attitudes and behaviors (i.e., devaluation and civic virtue) had a level of reliability that was at the lower limit of acceptability. Although this

lower-than-ideal reliability is unlikely to have interfered with the profile estimation process (because of the way profiles are estimated and our reliance on factor scores incorporating a control for unreliability), it would be important for future research to rely on instruments with more established evidence of reliability or to rely on informant ratings of behaviors (e.g., civic virtue). Third, we did not control how often the participants had contact with their supervisor or whether they had several supervisors. Future research could examine how the quantity of interactions with one's supervisor influences profile membership and look into how subordinates' perceptions of different supervisors combine to influence their work motivation, well-being, attitudes, behaviors, and work-home functioning.

Fourth, future research could extend knowledge on a broader range of outcomes of such combinations. For instance, future studies could deepen our understanding of the motivational processes triggered by distinct combinations of perceived interpersonal behaviors from supervisors by examining how these profiles trigger distinct psychological need states among subordinates (i.e., need satisfaction, frustration, and unfulfillment; Huyghebaert-Zouaghi et al., 2021). Fifth, we only examined consequences of the supervisory behaviors profiles. It would seem important, for future studies, to also consider antecedents. For instance, researchers could look into how organizations may create a fertile ground for the emergence of more optimal supervisory profiles while preventing the development (or reducing the occurrence) of the less desirable profiles identified in this study. For example, when promoting organizational support, organizations could instill normative values wherein every member of the organization is counted on to be supportive of others (Frear et al., 2018), which could trickle down to naturally encourage need-supportive behaviors from supervisors. In contrast, organizational dehumanization (Lagios et al., 2023) may help create a norm according to which mistreatment is acceptable. Finally, this study, like many previous person-centered studies based on SDT (Amoura et al., 2015; Haerens et al., 2018; Leo et al., 2022; Matosic & Cox, 2014) or within the field of leadership (Doucet et al., 2015; Hancock et al., 2023), was cross-sectional in nature. As such, research in this area has generally failed to provide information regarding the temporal (in)stability of distinct combinations of supervisory behaviors, their longitudinal implications, and the directionality of the observed associations. Future research relying on longitudinal designs would make it possible to achieve a clearer picture of need-related behaviors' dynamic nature, their predictors, and their outcomes.

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## CONFLICT OF INTEREST STATEMENT

There was no conflict of interest in conducting or reporting this research.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## ETHICS STATEMENT

This study was exempt from ethical review, according to local regulations.

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## ENDNOTES

- <sup>1</sup> We refer the readers to Table S3 of the Online Supporting Information where we report more accurate (Hayes & Coutts, 2020; Morin et al., 2020) model-based omega ( $\omega$ ) coefficients of composite reliability (McDonald, 1970). More precisely, all  $\omega$  values associated with the covariates were acceptable, considering that values approaching .500 remain acceptable for bifactor S-factors (e.g., motivational regulation) given that reliable (true score) variance is divided into two components (the G- and S-factors) in bifactor modeling (Morin et al., 2020; Perreira et al., 2018). Yet, this lower level of reliability (be it based on alpha or omega) reinforces the importance of relying on an approach providing some control for unreliability in our main analyses, which is one of the reasons why we elected to rely on factor scores, which are partially corrected for measurement errors (Skrondal & Laake, 2001).
- <sup>2</sup> The AIC and aLMR are thus reported only to ensure transparency but will not be used in model assessment.
- <sup>3</sup> Prior to these analyses, we empirically tested the relevance of including participants' demographics (age, sex, working full time or part time, having a permanent or temporary work contract, number of weekly work hours, tenure in the current position, tenure with the current supervisor, having a managerial role, and working in the public or private sector) as possible controls in our analyses by contrasting two models. First, we estimated a null model in which associations between demographics and the profiles were set to be 0 (AIC = 13351.433; CAIC = 13642.506; BIC = 13588.506; ABIC = 13417.072). Second, we estimated a free model in which these associations were freely estimated (AIC = 13396.995; CAIC = 13930.629; BIC = 13831.629; ABIC = 13517.334). The free model resulted in a lower level of fit to the data according to all information criteria, and was thus rejected, consistent with a lack of influence of these characteristics on profile membership.

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## SUPPORTING INFORMATION

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