Burnout and Organizational Withdrawal:

Investigating the Moderating Role of Managerial Coaching

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Abstract

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Burnout is a pervasive issue across a wide range of work environments, often leading to organizational withdrawal and elevated turnover costs. While organizational interventions such as wellness programs exist, they frequently lack the immediacy and personalization needed to address daily workplace stressors. This study investigates the role of managerial coaching as a targeted, embedded form of social support capable of disrupting the workplace stressor-strain-withdrawal pathways. Drawing on the job demands–resources (JD-R) model and conservation of resources (COR) theory, this study examines whether managerial coaching can disrupt the pernicious effects of hindrance demands on burnout and bolster psychological resources to mitigate the subsequent relationship between burnout and organizational withdrawal. Using a moderated mediation model, I tested whether managerial coaching weakens the positive relationships between (1) hindrance demands and burnout, and (2) burnout and organizational withdrawal. Results indicate that coaching did not moderate the stressor–strain–withdrawal pathways but disrupted the stability of hindrance demands and withdrawal over time, while burnout remained stable. By clarifying the impact of managerial coaching through post hoc analyses, this study offers theoretical and practical insights into specific leadership-driven strategies for enhancing employee resilience and organizational retention.

Keywords: burnout, hindrance demands, managerial coaching, organizational withdrawal

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Introduction

Burnout, a state of emotional exhaustion, depersonalization or cynicism, and a feeling of diminished achievement (Halbesleben & Buckley, 2008), is a prevalent issue affecting the modern global workforce. For instance, Schaufeli (2018) found that 10% of workers in European countries experienced burnout compared to 17% of workers in non-European countries. Another study conducted by Pendell (2018) in the United States revealed that about 28% of millennials felt frequently or constantly burned out, whereas 21% of older-generation workers did. Adding to the prevalence of burnout are two overarching consequences of this work-related strain. The first includes health issues such as lack of sleep, headaches, and respiratory and gastrointestinal ailments (Kim et al., 2011). The second includes a myriad of negative effects on job and organizational factors due to increased levels of burnout, such as reduced operating effectiveness, impaired decision-making, and limited creativity (Bakker et al., 2023).

At the crossroads of burnout's two overarching consequences is its impact on organizational withdrawal. Meta-analytic evidence has found robust support for the relationship between higher levels of burnout and various forms of organizational withdrawal (Swidler & Zimmerman, 2010). Drawing on Hanisch and Hulin's (1990) two forms of withdrawal, work withdrawal (absenteeism) and job withdrawal (turnover), evidence shows that emotional exhaustion leads to absenteeism, while the depersonalization leads to turnover (Swidler & Zimmerman, 2010). Further, organizational withdrawal itself carries non-financial and financial consequences. Studies show that between 2015 and 2019, the average number of lost workdays (absenteeism) per employee annually increased from 8.9 to 10.3 across Canada and from 11.3 to 12.2 in Quebec (Statistique Canada, 2021). A recent survey conducted by the human resources consulting firm Mercer (2024) reported that the average voluntary turnover rate in Canada is

11.9%. From a financial standpoint, stress-related costs in Canada are estimated at $16 billion, and in Great Britain, costs are $7.3 billion annually (Seitel, 2006). Additionally, a Gallup report (2019) highlights that the cost of replacing an employee can range from 50% to 200% of their annual salary, depending on the role and industry.

These statistics illustrate the prevalence, cost, and effects of burnout, organizational withdrawal, and their relationship. This calls attention to the need for interventions or organizational strategies aimed at alleviating the rise and effects of burnout before and after they have started to take hold. One such intervention is social support, a potential tool for mitigating the rise of burnout and its associated withdrawal behaviors. Social support refers to the psychological or material resources provided to the person in need, which can buffer the relationship between environmental stressors and an individual's appraisal of stress and/or experience of strain (Viswesvaran et al., 1999). This research focuses on the source of support, especially support from the manager in terms of coaching employees who are experiencing difficulties with work demands, burnout, and in turn, associated organizational withdrawal.

In this study, managerial coaching is conceptualized specifically as a set of coaching behaviors enacted by managers in their routine interactions with employees. Because “coaching” can encompass a broad range of formal and informal practices, it is important to delineate the behavioral focus of this construct. Managerial coaching, as examined here, refers to individualized feedback, guidance, and developmental support that help employees interpret and respond more effectively to workplace demands (Heslin et al., 2006). These behaviors promote employee learning and adaptive coping, distinguishing coaching from other supervisory practices such as performance evaluation or mentoring. Although professional coaches exist within many organizational contexts, the present study focuses on managers because they exert continuous,

proximal influence over employees' work experiences and are typically the first point of contact when difficulties arise. This focus aligns with the practical assumption that managers possess, or are expected to possess, sufficient training and competence to address employee challenges and to provide supportive guidance in navigating work-related strain. By centering on these coaching behaviors, the study positions managerial coaching as a workplace resource with the potential to influence how employees experience burnout and engage in withdrawal behaviors.

Particular attention is given to coaching's role in addressing hindrance demands such as role ambiguity, role conflict, red take, and daily hassles (Rodell & Judge, 2009), as they are well-established predictors of strain and negative work outcomes such as burnout and disengagement (LePine et al., 2005). Managerial coaching, through individualized guidance and support, may help employees reinterpret or navigate these demands more effectively, thereby attenuating the strain process. Additionally, by fostering a supportive and developmental environment, coaching may weaken the downstream consequences of burnout, including forms of organizational withdrawal. This study seeks to explore this dual conditional relationship through the following research question: *Does managerial coaching buffer the relationships between hindrance demands and burnout, and between burnout and organizational withdrawal?*

This research makes several meaningful contributions to the literature. While previous research has extensively linked burnout to organizational withdrawal, there is a notable gap in understanding how managerial coaching may moderate this relationship. Few studies have examined the role of coaching as an intervention specifically aimed at reducing withdrawal behaviors among employees experiencing elevated levels of burnout. Addressing this gap will provide organizations with actionable insights into whether and how coaching can serve as a protective factor.

This study also contributes to the existing literature by integrating the job demands-resources (JD-R) model and conservation of resources (COR) theory to provide a comprehensive understanding of how coaching functions as an intervention targeting hindrance demand and burnout. By exploring coaching within these theoretical frameworks, this research aims to deepen knowledge of how workplace managerial interventions can foster resilience and engagement among employees by acting as a job resource that not only replenishes existing resource loss but also helps reframe hindrance demands as opportunities for growth.

Additionally, by explicitly incorporating appraised hindrance demands, this study adds conceptual and methodological clarity to the stressor-strain-outcome pathway. While many JD-R studies focus broadly on job demands or assume that certain demands are hindrances, this research focuses on validly capturing pernicious hindrance demands through appraisals and exposure rather than assumption, allowing for a more nuanced methodological understanding of how managerial coaching can target stressors that are actually considered hindrances (LePine et al., 2005; Rodell & Judge, 2009). This contribution refines our understanding of hindrance demands to better capture their detrimental nature and how coaching might buffer their effects.

From a practical perspective, this research can offer valuable recommendations for organizations seeking to minimize turnover and disengagement. By integrating proactive managerial coaching into their leadership practices, organizations may enhance employee retention, maintain productivity, and improve overall workplace well-being. A meta-analysis by Theebohm and colleagues (2013) has shown that coaching can significantly affect well-being, coping, work attitudes, and other individual-level outcomes. Specifically, coaching can help employees navigate hindrance demands by adjusting their perception of such demands (Wrzesniewski & Dutton, 2001) or by pulling them back from the burnout (Grant et al., 2009),

which together are often barriers to performance and well-being. By addressing these stressors and the resulting strain directly, coaching can empower employees to manage these circumstances more effectively, thereby reducing the likelihood of withdrawal.

Literature Review and Hypothesis Development

The job demands-resources (JD-R) theory (Bakker & Demerouti, 2007) provides a comprehensive framework for understanding how various aspects of the work environment contribute to employee well-being and performance outcomes, particularly burnout. Bakker et al. (2007) defined job demands as "those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) efforts or skills and are therefore associated with certain physiological and/or psychological costs" (p. 312), whereas job resources are "physical, social, psychological, and organizational resources that are conducive to accomplishing work goals and objectives and/or potentially reduce the negative influence of job demands" (p. 312). According to Demerouti et al. (2001), individuals begin to experience burnout when job demands consistently exceed available resources. When these demands are not adequately matched by resources, they lead to chronic strain and eventually to higher levels of burnout, characterized by emotional exhaustion and depersonalization.

Despite its strengths, early formulations of the JD-R model have been critiqued by Crawford et al., (2010) for treating job demands as uniformly negative, overlooking the possibility that some demands might also have motivational value and promote work engagement. To address this gap, Crawford et al. (2010) drew on the transactional theory of

stress (Cavanaugh et al., 2000; Lazarus & Folkman, 1984; LePine et al., 2005), proposing a distinction between challenge and hindrance stressors or demands.

Challenge demands are appraised as opportunities for learning or achievement and can foster engagement, like workload or time pressure. In contrast, hindrance demands such as red tape, role conflict, and role ambiguity (Rodell & Judge, 2009) are characterized by their obstructive nature and limited potential for personal growth or achievement. Further, hindrance demands are often marked by elements of uncontrollability and ambiguity, making it difficult for employees to mobilize resources or exert control over their work environment (Cavanaugh et al., 2000). As a result, hindrance demands are frequently perceived as demotivating, generating feelings of frustration, powerlessness, and stagnation. A meta-analysis on challenge–hindrance stressor framework by LePine et al. (2005) found that hindrance stressors had a negative direct effect on performance, as well as negative indirect effects through increased strain and decreased motivation.

While the JD-R model identifies job demands as core predictors of strain, the transactional theory of stress (Lazarus & Folkman, 1984) explains why the impact of those demands depends on how employees appraise them. According to this theory, stress is not a direct reaction to job conditions but a psychological response that arises when individuals interpret demands as exceeding their coping resources. This appraisal process, specifically whether a situation is evaluated as a challenge or a hindrance by employees, is what activates strain responses such as burnout. Because individuals rely on their coping resources, past experiences, and perceived support when forming these appraisals, the same objective demand may have different psychological consequences for different employees. In this study, assessing hindrance appraisals is essential because it captures the cognitive mechanism central to

transactional theory and provides a more precise explanation of how job demands translate into burnout.

Once job demands are perceived as hindrances, ongoing exposure to such stressors leads to the depletion of psychological resources, causing individuals to experience burnout, particularly emotional exhaustion and cynicism (Halbesleben & Buckley, 2008). Unlike challenge stressors, which can enhance motivation when supported by sufficient resources, hindrance stressors create a toxic cycle of strain, as they rarely yield any sense of accomplishment or progress. The strain induced by these stressors impairs cognitive functioning and emotional regulation, leading to reduced performance and negative attitudes toward the organization (LePine et al., 2005). Thus, the perception of experienced job demands as hindrances serves as a primary antecedent to burnout in the workplace, thereby leading to the first hypothesis:

Hypothesis 1: Perceived hindrance job demands are positively associated with employee burnout.

As strain accumulates, organizational withdrawal often follows as a behavioral outcome. Organizational withdrawal can be understood as a self-protective mechanism that employees engage in when excessive job demands deplete their resources. Taris et al. (2001) suggest that employees experiencing burnout may disengage from their work environment either psychologically (e.g., reduced organizational commitment, depersonalization) or physically (e.g., absenteeism, turnover) to conserve their remaining resources and protect themselves from further strain.

This process aligns with the conservation of resources (COR) theory (Hobfoll, 1989), which emphasizes that individuals strive to acquire, retain, and protect resources such as energy,

time, and social support because resource loss is psychologically distressing. According to COR theory, when job demands exceed an employee's available resources or when resources are threatened, negative outcomes such as stress, burnout, and withdrawal behaviors become more likely. Moreover, research suggests that resource loss is not only harmful but also has a compounding effect; when individuals are already experiencing resource depletion, the perception of further resource threats intensifies their response (Hobfoll, 2001). This means that employees already experiencing higher levels of burnout are even more likely to withdraw when faced with additional stressors, as they attempt to preserve what little resources they have left. In this context, organizational withdrawal serves as a coping mechanism for burnout, allowing employees to reduce their psychological or physical presence at work to mitigate further resource depletion and regain a sense of stability.

Furthermore, emotional exhaustion, a core component of burnout, has been directly linked to various withdrawal behaviors (Leiter, 1993). Employees experiencing exhaustion are likely to distance themselves from their work, reduce their engagement (work withdrawal), and ultimately seek exit strategies (job withdrawal) to escape the stressor (Taris et al., 2001). In highly demanding work environments, where support is minimal, withdrawal may serve as the only viable coping strategy to mitigate burnout's long-term effects.

Thus, based on the COR theory, higher levels of burnout can be expected to drive organizational withdrawal as employees seek to protect their well-being, leading to the following hypotheses:

H2a: Burnout is positively associated with work withdrawal (absenteeism)

H2b: Burnout is positively associated with job withdrawal (turnover intentions)

Coaching on the Hindrance Demands-Burnout-Withdrawal Relationship

The theoretical grounding for this study draws on both the job demands–resources (JD-R) model and conservation of resources (COR) theory. The JD-R model posits that while job demands are typically associated with strain and burnout, their negative effects can be offset by job resources such as social support, which has been shown to be one of the most effective predictors and moderators in the relationship between stressors and work-related outcomes (Bavik, 2020). This demands–burnout–withdrawal relationship is especially problematic in environments where employees routinely face demands that exceed their available resources. Over time, it can lead to rising turnover costs, loss of institutional knowledge, and a deteriorating workplace climate. The persistence of this serial relationship represents critical points of intervention for protecting employee health and for sustaining organizational effectiveness. To effectively intervene, it is essential to address both the primary contributors to burnout, such as how employees appraise and experience job demands, and strategies to mitigate its impact once higher levels of burnout have already taken hold.

While various interventions like stress management workshops or company-wide wellness initiatives aim to reduce burnout, many operate outside the daily realities of employees' work lives. They are often generic, lacking the personalization, immediacy, and continuity necessary to meaningfully address ongoing stressors (Semmer, 2003). In contrast, managerial coaching is embedded in the work environment and delivered by someone with familiarity and direct influence over employees' tasks, expectations, and resources. In this research context, the primary source of support is therefore the manager.

Pletzer et al. (2023) integrated leadership theory with JD-R theory to show how managerial intervention can act as a job resource to mitigate burnout. Importantly, job demands

are not uniformly harmful; they can be experienced either as challenge demands, which foster growth and engagement, or hindrance demands, which obstruct progress and increase stress. Managerial coaching plays a critical role in this distinction. By offering tailored guidance, emotional support, and constructive feedback, coaching can help employees reinterpret their prior perceptions of hindrance demands, encouraging them to manage or treat certain demands as challenges rather than hindrances.

Managerial support carries distinct weight due to the manager's formal role and influence over job resources, career progression, and workplace culture (Gottfredson & Aguinis, 2017). Unlike peer or organizational support, managerial support is uniquely positioned to shape an employee's daily work experience, access to development opportunities, and overall job satisfaction. For instance, consider an employee experiencing high job demands and early signs of elevated burnout. A supportive manager might proactively intervene and reinforce job resources by providing social support such as adjusting workload expectations, offering constructive feedback, reducing uncertainty, or facilitating access to resources such as mentoring or flexible work arrangements. Such support can serve as a critical buffer, preventing further resource depletion and mitigating the risk of withdrawal. Conversely, in the absence of managerial support, employees may feel isolated in their struggles, leading to disengagement and eventual turnover.

Managerial coaching, as outlined by Heslin et al. (2006), consists of three core components: guidance, facilitation, and inspiration. These components reflect both what managers do (behavioral coaching) and how employees experience it (perceptual coaching; Jolly et al., 2021). Heslin's (2006) coaching dimensions can be conceptually linked to House's (1981) four types of social support, as each coaching component engages a distinct support function.

Guidance involves communicating clear performance expectations and offering constructive feedback, which aligns with informational and appraisal support by providing clarity and evaluative input. Facilitation entails helping employees analyze challenges and enhance their performance, which corresponds to instrumental support by offering practical assistance and promoting problem-solving. Inspiration focuses on encouraging employees to realize and develop their potential, which draws on emotional support that boosts confidence and motivation. The effectiveness of coaching depends not only on the delivery of these support types through managerial behavior but also on how employees interpret and value them. When employees perceive coaching efforts as genuine and supportive, these interactions become powerful resources that help mitigate the impact of hindrance demands on burnout and reduce the likelihood of organizational withdrawal.

While the JD-R model helped explain how managerial coaching can mitigate the effects of hindrance demands on burnout, COR theory (Hobfoll et al., 2018) provides a useful lens for understanding how coaching can weaken the connection between burnout and organizational withdrawal. When employees experience burnout, they face a depletion of emotional and cognitive resources (LePine et al., 2005), which may prompt withdrawal behaviors as a self-protective response. Managerial coaching can play a restorative role by helping employees replenish lost resources or access new ones. As Hobfoll (1989) explains, individuals rely on resource-rich relationships to recover from stress, and managerial coaching offers both direct resource gain and signals of further support availability. Coaching behaviors such as developmental feedback, encouragement, and guidance can thus restore a sense of efficacy and emotional balance. Halbesleben et al. (2014) emphasize that social support may act not only as a valued resource itself but also as a replacement for other threatened resources. Accordingly,

when managers actively engage in coaching, they help buffer the resource loss that links burnout to withdrawal, offering employees a sense of reinforcement and reducing the need to disengage from their work or organization.

To summarize, managerial coaching plays a vital role in shaping how employees interpret and respond to job demands. By providing developmental support, emotional encouragement, and task-specific guidance, coaching can help employees reappraise hindrance demands as opportunities for learning and growth, reducing their deleterious effects. Furthermore, coaching can serve as a stabilizing resource even after burnout emerges, offering support that helps individuals manage strain without resorting to organizational withdrawal. In this way, managerial coaching may act as a critical resource at two key stages of the stress process: by altering how demands are initially perceived and by buffering the consequences of strain once it occurs, leading to the following two hypotheses:

Hypothesis 3: Managerial coaching moderates the relationship between hindrance job demands and burnout, such that higher levels of managerial coaching will weaken the positive association between hindrance demands and burnout.

Hypothesis 4: Managerial coaching moderates the relationship between employee burnout and organizational withdrawal (i.e., work withdrawal [H4a] and job withdrawal [H4b]), such that higher levels of managerial coaching will diminish the relationship between burnout and organizational withdrawal.

Beyond its role as an individual moderator in the stressor–strain and strain–withdrawal pathways, managerial coaching may exert a compounding or double-moderating effect. When coaching reduces the impact of hindrance demands on burnout, those same actions can also lower the likelihood that burnout will lead to organizational withdrawal. In other words,

managerial coaching may not only disrupt the formation of strain (burnout) but also weaken the consequences of that strain (withdrawal), suggesting an enhanced moderating effect. This dual moderating role positions coaching as a resource amplifier that interrupts the stress process at multiple critical stages while also fostering the accumulation of additional resources over time. This aligns with the COR theory, by which resources tend to generate other resources, forming resource caravans that support employees' capacity to cope and adapt in demanding environments (Hobfoll, 2002). As such, consistent managerial coaching may initiate a cascading resource gain process, whereby initial support enables the preservation and accumulation of psychological resources across the strain process. This leads to the final hypothesis,

Hypothesis 5: Managerial coaching exerts a double-moderating effect by simultaneously moderating the relationship between hindrance job demands and burnout, and the relationship between burnout and organizational withdrawal (i.e., work withdrawal [H5a] and job withdrawal [H5b], such that the indirect effect of hindrance demands on withdrawal through burnout is weaker at higher levels of coaching.

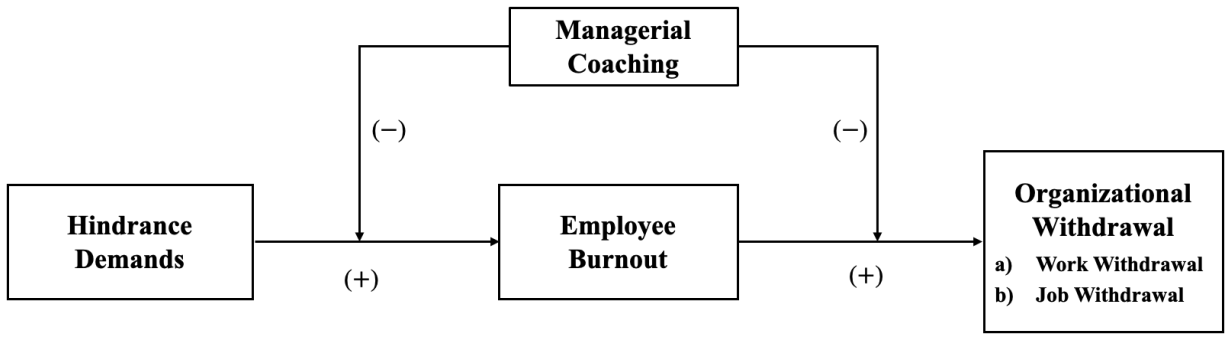

Figure 1. Theoretical Framework

Methods

Openness and Transparency

This study was pre-registered on https://aspredicted.org/zp8k-7845.pdf prior to data collection to enhance research transparency and reduce potential biases in hypothesis testing and analysis. The pre-registration includes details regarding the study's hypotheses, methodology, sample size, variables, and planned analyses (see Appendix A). The raw data cannot be made publicly available due to confidentiality constraints, but syntax and outputs for reported results are available from the author upon request.

Procedure

The research employed a correlational, two-wave repeated measures design, with surveys administered one month apart. This approach enables the examination of associations among key variables, including hindrance demand experiences, burnout, managerial coaching, and organizational withdrawal, while accounting for prior levels of the outcomes. The same measures are used at both time points to assess changes.

Data were collected through an online survey hosted on Qualtrics and administered via Prolific. The target sample consisted of working individuals based in Canada. This population is especially relevant given their active engagement in professional environments, which may expose them to significant workplace stressors. Their experiences can provide meaningful insights into how burnout develops and how support factors such as managerial coaching may influence this development and subsequent withdrawal behaviors.

In the first wave, three pre-screening questions were used to ensure participants met eligibility criteria. Participants were required to be employed full-time, work more than 30 hours

per week, and have a direct supervisor. If participants met criteria, they were then provided with an informed consent form that outlined the purpose of the study, voluntary participation, anonymity, and data confidentiality (see Appendix B). Only those who consented were allowed to proceed. In Wave 2, three additional questions were included to assess participants' current work context: whether they were still working with the same supervisor, whether they had experienced a role change, and the nature of any such role change. The median survey completion time for both waves was 6 and 5 minutes, respectively, during which participants responded to validated scales measuring hindrance demand appraisals and exposure, burnout, and organizational withdrawal, as well as basic demographic and occupational questions (wave 1 only).

Participants

In the first wave, 200 workers from Canada were recruited through Prolific, a well-established data collection platform recognized for providing relatively high quality and reliable samples for academic research (Douglas et al., 2023). Due to attrition, only 166 participants responded in Wave 2. After excluding those who failed attention checks, the final sample consisted of 152 participants across both waves. About three-quarters of participants (74%) were between 25 and 44 years of age, indicating that most respondents were in the early to mid-career stage. Gender distribution was relatively balanced, with 56% identifying as male and 44% as female. Regarding ethnicity, 59% of participants identified as White/Caucasian, while 41% identified as non-White/non-Caucasian, reflecting a reasonable degree of ethnic diversity within the sample. Over half of the participants (53%) reported having a university degree, while an additional 18% had completed a master's degree or higher.

Over half of the participants (58.6%) reported a tenure of 6 years or less, while a smaller number (9%) had been in their positions for more than 15 years. Participants' household incomes varied considerably, with most reporting household incomes between $50,000 and $124,999 (63%), and a substantial portion (31%) of households earning $125,000 or more annually.

Measures

Hindrance demands. The Demand & Hindrance Appraisal Scale (DHAS) adapted from Rodell and Judge (2009), was used to assess participants' combined experience and appraisal of workplace hindrance demands. This scale captures both the frequency of encountering specific workplace stressors typically regarded as hindrances and the extent to which these stressors are appraised as hindrances. The DHAS includes two sections. In Section 1 (experience), participants were asked to reflect on their work over the past 30 days and indicate how frequently they personally experienced each of eight common hindrance demands (e.g., red tape, lack of role clarity), using a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*very frequently*). In Section 2 (appraisal), participants were presented with the definition of hindrance demand (i.e., "*A hindrance is something that interferes with your work and stands in the way of achieving your goals. These circumstances seem like a roadblock, almost impossible to overcome*"), confirmed they understood the definition, and rated the extent to which each of the eight demands were considered as hindrances for them on a scale from 1 (*not a hindrance at all*) to 5 (*a major hindrance*). Each experience and appraisal was then combined by multiplying parallel item responses to create 8 appraised hindrance demand experiences that conceivably ranged from 1 to 25, which were then averaged together, with higher scores indicating greater exposure to job-

related demands appraised as hindrances. Responses to the combined items demonstrated high internal consistency reliability (α = .90).

Burnout. The 16-item Maslach Burnout Inventory – General Survey (Maslach et al., 1996) was used to evaluate three dimensions of burnout: emotional exhaustion (e.g., "I feel emotionally drained from my work"), cynicism (e.g., "I have become less enthusiastic about my work"), and professional efficacy (e.g., "I can effectively solve the problems that arise in my work"). Participants were asked to rate how frequently they experienced each item using a 7-point Likert scale ranging from 1 (*never*) to 7 (*every day*). Responses showed high internal consistency (α = .91).

Organizational withdrawal. Three scales were used to measure organizational work withdrawal ([i] absenteeism and [ii] absence) and job withdrawal ([iii] turnover intentions). For [i] absenteeism and [iii] turnover intention, participants rated their agreement on a 7-point Likert scale (1 = *never*, 7 = *all the time*). The six-item work withdrawal (absenteeism) subscale combined items from Hanisch and Hulin (1990) and Lehman (1998) to assess absenteeism, lateness, and unauthorized work avoidance (e.g., "I have left work early without permission"; "I frequently think about being absent from work"). Responses to the work withdrawal scale had acceptable reliability (α = .78). In addition, a single behavioral indicator was included to capture [ii] recent absence behavior, asking participants to report how many times they missed scheduled work in the past 30 days. This measure was subsequently converted to a binary variable (absence vs. no absence) due to the highly skewed distribution of responses. Job withdrawal (turnover intentions) was measured with the following three items, which were developed by the O'Driscoll & Beehr (1994). It includes "I am thinking about leaving my job", "I am planning to

look for a new job over the next 12 months", and "I am actively searching for a new job outside my current employer". Responses to this scale demonstrated high reliability (α = .92).

Managerial coaching. The study used the ten-item Coaching Behavior Measure developed by Heslin et al. (2006) to assess managerial coaching. This measure captures coaching-specific behaviors that reflect three core dimensions: guidance (e.g., "provide guidance regarding performance expectations"), facilitation (e.g., "act as a sounding board for you to develop your ideas"), and inspiration (e.g., "express confidence that you can develop and improve") and was assessed using a 5-point Likert scale (1 = *not at all* to 5 = *very much*). Responses to this measure demonstrated high internal consistency (α = .96).

Please see Appendix C for the codebook of all measures.

Analytical Strategy

Regression analyses were used to test hypotheses. Specifically, multiple and logistic regressions were used to test for direct effects hypothesized in Hypotheses 1 and 2. Hayes' PROCESS Model 1 was used to examine the moderating effects in Hypotheses 3 and 4, and PROCESS Model 58 was employed to test the double moderated mediation model in Hypothesis 5 (Hayes, 2016). Because absence was coded as binary outcome (0 = no leave taken, 1 = leave taken), a logistic regression was conducted when absence was the outcome. In all analyses, age was included as a covariate given its relationship to study variables in previous research (Ahola et al., 2008, Finegold et al., 2002) and because it was the only sociodemographic variable with correlations with study variables. Further, lagged regression analyses were conducted, controlling for prior levels of the outcome in each analysis. To test the hypotheses, predictors were taken from wave 1 and outcomes from wave 2, with corresponding wave 1 measures and

age included as covariates. Schaufeli et al (2011) emphasized that to properly understand the relationship between demands and chronic levels of burnout, it is essential to account for the stability of burnout over time. Therefore, hindrance demands at wave 1 were used to predict burnout at wave 2 controlling for wave 1 burnout, while wave 1 burnout was examined as a predictor of wave 2 absenteeism, absence, and turnover intention controlling for the associated wave 1 items. Managerial coaching at wave 2 was tested as a moderator of these relationships, and Hypothesis 5 further assessed whether the effects of wave 1 hindrance demand on wave 2 outcomes operated indirectly through burnout (wave 2) in a moderated mediation framework. In these moderation analyses, interaction effects were probed at low, moderate, and high levels of coaching, corresponding to the 16th, 50th, and 84th percentiles in the sample, which approximate −1 SD, the mean, and +1 SD respectively.

Following the main hypothesis testing, exploratory post-hoc analyses were conducted to further investigate the potential role of managerial coaching over time. Specifically, coaching assessed at wave 2 was examined to determine whether it influenced the autoregressive relationships between each of the core variables from wave 1 to wave 2 (e.g., hindrance demands wave 1 → hindrance demands wave 2). This step was intended to explore the logic that coaches may help employees reinterpret their experiences, capturing whether the presence of coaching altered the extent to which initial levels of hindrance demands, burnout, and withdrawal carried forward across waves. Building on these analyses, Hayes (2016) PROCESS Model 7 was then employed to approach the hypothesized relationships from a different perspective. These exploratory approaches were adopted to develop a richer understanding of coaching's potential buffering function beyond the primary hypotheses testing and to identify areas that might inform future theory development and practical interventions.

Results

The descriptive statistics and correlations are presented in Table 1. Participants reported hindrance demand scores slightly above the midpoint of the combined scale at Wave 1 (M = 7.37, SD = 4.27), followed by a modest decline at Wave 2 (M = 6.61, SD = 4.33). Burnout levels were situated slightly above the central value of the 7-point scale at baseline (M = 3.62, SD = 1.14) and increased at Wave 2 (M = 4.51, SD = 0.87), indicating a rise in experienced strain over time. Absenteeism scores remained close to the lower region of the 7-point scale across waves (W1: M = 2.32, SD = 0.97; W2: M = 2.19, SD = 0.93), and the proportion of participants reporting at least one absent day was identical at both time points (38%). Turnover intentions also remained modest across waves (W1: M = 3.09, SD = 1.77; W2: M = 2.90, SD = 1.72). Managerial coaching scores were slightly below the midpoint of the 5-point scale at both assessments (W1: M = 2.94, SD = 1.11; W2: M = 2.83, SD = 1.09), suggesting restricted variation in perceived coaching over time.

Hypothesis 1 stated that perceived hindrance demands would be positively associated with employee burnout. Multiple regression analysis of hindrance demand predicting burnout after controlling for age and prior burnout levels (see Table 2) indicated that the overall model was significant, $F(3, 148) = 36.78$, $p < .001$, $R^2 = .43$, showing that the predictors explained a substantial proportion of variance in burnout. However, hindrance demands were not a significant predictor of changes in burnout ($b = .02$, $p = .130$). By contrast, wave 1 burnout was a strong positive predictor of wave 2 burnout ($b = .45$, $p < .001$), suggesting that prior burnout was more influential in explaining existing burnout. Thus, Hypothesis 1 was not supported.

Hypothesis 2 suggested that burnout would be positively associated with both work withdrawal (i.e., absenteeism and absence; H2a) and job withdrawal (i.e., turnover intentions;

H2b). For absenteeism, multiple regression analysis (see Table 2) controlling for age and wave 1 absenteeism showed that the model was significant, $F(3, 148) = 79.05$, $p < .001$, $R^2 = .79$. Wave 1 burnout was not a significant predictor of wave 2 absenteeism ($b = .05$, $p = .287$), whereas wave 1 absenteeism strongly predicted wave 2 absenteeism ($b = .73$, $p < .001$). For actual absence, a logistic regression (see Table 2) showed a significant model, $\chi^2(3) = 23.98$, $p < .001$. However, wave 1 burnout did not significantly predict wave 2 absence ($b = .10$, $SE = .17$, Wald = .39, $p = .532$, OR = 1.11), whereas wave 1 absence significantly predicted wave 2 absence ($b = 1.60$, $SE = .37$, Wald = 18.62, $p < .001$, OR = 4.97). For turnover intentions, regression analysis (see Table 2) indicated that the model was significant, $F(3, 148) = 88.24$, $p < .001$, $R^2 = .64$. Wave 1 burnout was not a significant predictor of wave 2 turnover intentions ($b = .13$, $p = .196$), whereas wave 1 turnover intentions strongly predicted wave 2 turnover intentions ($b = .72$, $p < .001$). Together, these findings lend no support for Hypothesis 2a or 2b.

Hypothesis 3 predicted that managerial coaching would moderate the effect of hindrance job demands on burnout, such that the proposed positive relationship between hindrance demands and burnout would be weaker at higher levels of managerial coaching. The overall model was significant, $F(5, 146) = 22.08$, $p < .001$, $R^2 = .43$, but the interaction between hindrance demands and managerial coaching was non-significant ($b = –.01$, $p = .349$; see Table 3). These results indicate that managerial coaching did not moderate the relationship between wave 1 hindrance demands and wave 2 burnout while controlling for prior burnout, and thus Hypothesis 3 was not supported.

Hypothesis 4 predicted that managerial coaching would moderate the relationship between employee burnout and organizational withdrawal, such that higher levels of managerial coaching would diminish the association between burnout and both work withdrawal (i.e.,

absenteeism and absence; H4a) and job withdrawal (i.e., turnover intentions; H4b). For absenteeism, the overall model was significant, $F(5, 146) = 47.41$, $p < .001$, $R^2 = .62$, but the interaction between burnout and managerial coaching was non-significant ($b = –.02$, $p = .605$; see Table 3). For the binary measure of actual absence, the logistic regression model was significant, $\chi^2(5) = 27.78$, $p < .001$, Nagelkerke $R^2 = .23$, but again the interaction between burnout and coaching was also non-significant ($b = .22$, $p = .136$; see Table 3). Taken together, managerial coaching did not moderate the effect of burnout on either absenteeism or actual absence. Thus, Hypothesis 4a was not supported. Similarly, for turnover intentions, the overall model was significant, $F(5, 146) = 53.10$, $p < .001$, $R^2 = .65$, but the interaction between burnout and managerial coaching was non-significant ($b = –.08$, $p = .229$; see Table 3). Thus, Hypothesis 4b was not supported.

Hypothesis 5 proposed a double-moderating effect of managerial coaching, such that coaching would simultaneously moderate the relationship between hindrance job demands and burnout, as well as the relationship between burnout and organizational withdrawal. Specifically, the indirect effect of hindrance demands on organizational withdrawal through burnout was expected to be weaker at higher levels of managerial coaching for both work withdrawal (i.e., absenteeism, absence; H5a) and job withdrawal (i.e., turnover intentions; H5b).

Absenteeism

The first stage of the model between wave 1 hindrance demands and wave 2 burnout was significant, $F(5, 146) = 7.51$, $p < .001$, $R^2 = .20$. Hindrance demands were positively associated with burnout ($b = .11$, $p = .005$), but the interaction between hindrance demands and coaching was not significant ($b = –.01$, $p = .429$; see Table 4), indicating that coaching did not moderate the effect of hindrance demands on burnout. The second stage of the model between wave 2

burnout and wave 2 absenteeism was also significant, $F(6, 145) = 39.70$, $p < .001$, $R^2 = .62$. However, wave 2 burnout was not a significant predictor of wave 2 absenteeism ($b = .06$, $p = .586$). Further, the interaction between burnout and wave 2 coaching was also not significant ($b = .00$, $p = .980$; see Table 4). Therefore, no conditional indirect effects of hindrance demands on absenteeism through burnout were significant.

Absence

The first stage of the model between wave 1 hindrance demands and wave 2 burnout was significant, $F(5, 146) = 7.48$, $p < .001$, $R^2 = .20$. Hindrance demands were positively associated with wave 2 burnout ($b = .11$, $p = .005$), but again the interaction between hindrance demands and coaching was also not significant ($b = –.01$, $p = .465$; see Table 5), indicating that coaching did not moderate the effect of hindrance demands on burnout. The second stage of the model between wave 2 burnout and wave 2 actual absence was also significant, Model $\chi^2(6) = 25.19$, $p = .0003$. However, wave 2 burnout was not a significant predictor of absence ($b = .04$, $p = .792$), nor was the interaction between wave 2 burnout and wave 2 coaching ($b = .16$, $p = .409$; see Table 5). Conditional indirect effects of hindrance demands on absence through burnout were therefore nonsignificant.

Taken together, for both absenteeism and absence, Hypothesis 5a was not supported.

Turnover Intentions

The first stage model between wave 1 hindrance demands and wave 2 burnout was significant, $F(5, 146) = 8.49$, $p < .001$, $R^2 = .23$. Hindrance demands were positively associated with burnout ($b = .09$, $p = .029$), but the interaction between hindrance demands and coaching was not significant ($b = –.01$, $p = .570$; see Table 6), indicating that coaching did not moderate the effect of hindrance demands on burnout. The second stage of the model between wave 2

burnout and wave 2 turnover intentions was also significant, $F(6, 145) = 49.36$, $p < .001$, $R^2 = .67$. However, wave 2 burnout was not a significant predictor of turnover intentions ($b = .20$, $p = .458$), nor was the interaction between burnout and coaching significant ($b = .03$, $p = .711$; see Table 6). Conditional indirect effects of hindrance demands on turnover intention through burnout were therefore nonsignificant. Thus, Hypothesis 5b was not supported.

Post hoc Analyses

Hypothesis testing revealed no support for the proposed model. Revisiting the logic behind the hypotheses, managerial coaching may yet play an important role in helping employees reappraise their experiences, just not in the way that was anticipated. As such, whether managerial coaching interrupts the pathways between prior and later levels of each of the core study variables was next explored to test this idea further.

For hindrance demands, multiple regression analysis (see Table 7) controlling for age indicated that the model was significant, $F(4, 147) = 34.74$, $p < .001$, $R^2 = .49$. Results indicated that hindrance demands at wave 1 significantly predicted hindrance demands at wave 2 ($b = .99$, $p < .001$) and that the interaction between hindrance demands and coaching was also significant ($b = –.12$, $p = .013$). Conditional effects analysis (see Figure 2) showed that the relationship between hindrance demands across waves was weaker as managerial coaching increased: at low coaching ($b = .80$, 95% CI: .63, .98; see Table 8), moderate coaching ($b = .65$, 95% CI: .52, .77), and high coaching ($b = .50$, 95% CI: .33, .67). This suggests that coaching buffered the effects of hindrance demands from wave 1 to wave 2.

Building on this, an additional exploratory test was conducted to assess the conditional indirect effect model from wave 1 hindrance demands to wave 2 hindrance demands (path a) to wave 2 burnout (path b), with wave 2 coaching moderating the first path (path a) and controlling

for age and wave 1 burnout. The overall model was significant, $F(4, 147) = 32.61$, $p < .001$, $R^2 = .47$. Although prior burnout levels remained a strong predictor of subsequent burnout ($b = .41$, $p < .001$), results also revealed a significant indirect pathway through the persistence of hindrance demands. Specifically, wave 1 hindrance demands predicted wave 2 hindrance demands ($b = .90$, $p = .001$), which in turn predicted wave 2 burnout ($b = .06$, $p = .001$). The indirect effect of wave 1 hindrance demands on burnout at wave 2 decreased slightly as managerial coaching increased: at low coaching: ($b = .04$, 95% CI: .01, .07; see Table 11), moderate coaching ($b = .03$, 95% CI: .01, .05), and high coaching ($b = .02$, 95% CI: .01, .05). While the index of moderated mediation was marginally significant (Index = –.007, 95% CI: –.018, .001), the direction of the effect suggests that higher levels of coaching may help reduce the continuity of hindrance demands over time, thereby slightly weakening their indirect or cumulative influence on later burnout.

Returning to whether managerial coaching interrupts pathways between prior and later levels, for burnout (see Table 7), the model was significant, $F(4, 147) = 26.76$, $p < .001$, $R^2 = .42$. Results indicated that wave 1 burnout significantly predicted wave 2 burnout ($b = .59$, $p < .001$). However, the interaction between burnout and coaching was nonsignificant ($b = –.04$, $p = .382$). Thus, managerial coaching did not moderate the relationship between wave 1 and wave 2 burnout.

For absenteeism (see Table 7), the model was significant, $F(4, 147) = 62.56$, $p < .001$, $R^2 = .63$. Results showed that wave 1 absenteeism significantly predicted wave 2 ($b = 1.07$, $p < .001$), and the interaction between absenteeism and coaching was significant ($b = –.11$, $p = .024$). Conditional effects analysis (see Figure 3) showed that the relationship between absenteeism across waves weakened as managerial coaching increased: at low coaching ($b = .91$, 95% CI:

.74, 1.08; see Table 9), medium coaching (b = .78, 95% CI: .68, .88), and high coaching (b = .65, 95% CI: .52, .78). This suggests that coaching buffered the effects of absenteeism from wave 1 to wave 2.

For absence (see Table 7), logistic regression analysis controlling for age indicated that the model was significant, $\chi^2(4) = 24.49$, $p < .001$, Nagelkerke $R^2 = .20$. Results showed that wave 1 absence did not significantly predict wave 2 absence (b = 1.54, p = .138). The interaction between absence and coaching was also nonsignificant (b = .04, p = .901). Thus, coaching did not moderate the effects of wave 1 absence on wave 2 absence.

Finally, for turnover intentions (see Table 7), the model was significant, $F(4, 147) = 69.72$, $p < .001$, $R^2 = .65$. Results showed that wave 1 turnover intentions significantly predicted wave 2 turnover intentions (b = 1.06, $p < .001$), and the interaction between turnover intentions and coaching was significant (b = –.11, p = .009). Conditional effects analysis (see Figure 4) showed that the relationship between turnover intentions across waves weakened as managerial coaching increased: at low coaching (b = .89, 95% CI: .76, 1.02; see Table 10), medium coaching (b = .75, 95% CI: .66, .85), and high coaching (b = .62, 95% CI: .48, .77). This pattern suggests that coaching buffered the effects of wave 1 turnover intentions on wave 2 turnover intentions.

Given that the hypothesis revealed no significant interaction between burnout and withdrawal behaviors in the lagged effect model, additional exploratory analyses were conducted using Hayes (2016) PROCESS Model 7 to examine whether the persistence of burnout predicts withdrawal behaviors. For absenteeism and actual absence, these exploratory tests yielded no significant results, indicating that the persistence of burnout has no effect on these outcome

variables. However, the results of the exploratory test for the model predicting wave 2 turnover intention were particularly interesting.

The overall model was significant, $F(4, 147) = 73.39$, $p < .001$, $R^2 = .67$. Although prior turnover intention levels remained a strong predictor of subsequent turnover intentions ($b = .74$, $p < .001$), results also revealed a significant indirect pathway through the persistence of burnout. Specifically, wave 1 burnout predicted wave 2 burnout ($b = .65$, $p = <.001$), which in turn predicted wave 2 turnover intention ($b = .41$, $p = .001$). The indirect effect of Wave 1 burnout on turnover intention at Wave 2 through Wave 2 burnout decreased slightly as managerial coaching increased: at low coaching (b = 0.24, 95% CI: .06, .44, Table 12), medium coaching (b = 0.22, 95% CI: .06, .38), and at high coaching, (b = 0.20, 95% CI: .06, .34). However, the index of moderated mediation included zero (Index = –0.02, 95% CI: –.06, .01), indicating that managerial coaching did not significantly moderate the indirect effect of burnout on turnover intention.

Discussion

The purpose of this study was to examine whether managerial coaching buffered the detrimental effects of hindrance job demands on burnout and thereby reduced organizational withdrawal outcomes across time. Contrary to expectations, none of the hypothesized direct or moderated effects were supported when using the conservative approach of accounting for prior levels of the outcomes. Prior hindrance demands did not significantly predict later burnout, and prior burnout did not significantly predict later absenteeism, absence, or turnover intentions. Moreover, managerial coaching did not moderate the effects of hindrance demands or burnout on

subsequent outcomes, nor did the double-moderated mediation model yield significant indirect effects.

Revisiting the logic behind the hypotheses, post hoc analyses were conducted to explore a more nuanced picture for the role of managerial coaching. While managerial coaching did not buffer cross-construct relationships, it attenuated the longitudinal stability of certain constructs. Specifically, higher levels of coaching were associated with weakened carryover of hindrance demands, absenteeism, and turnover intentions over the course of a month. Employees reporting higher managerial coaching were therefore less likely to remain vulnerable to prior negative experiences, suggesting that coaching may still have an important role to play in disrupting the persistence of stressors and withdrawal tendencies themselves, as opposed to interrupting their relationships. Interestingly, no such moderating effect emerged for burnout or absence, indicating that some outcomes may be less malleable to coaching once established.

Returning to the hypothesized model, it is important to consider potential explanations for the lack of significant findings in this study. First, the stability of the constructs across time (1 month) was particularly strong. Wave 1 measures were consistently the most robust predictors of their wave 2 counterparts, leaving limited variance for hindrance demands, burnout, and the interaction with managerial coaching to explain.

A second related explanation for the unsupported hypotheses lies in the central role of burnout within the tested model. Burnout was positioned as the critical mediator linking hindrance demands to withdrawal outcomes. However, analyses revealed that burnout neither predicted subsequent withdrawal outcomes nor was moderated by coaching across waves in the post hoc analyses. This lack of responsiveness suggests that burnout may represent a relatively rigid and entrenched state of strain, rather than a malleable condition subject to short-term

workplace resources. Exploratory analyses further supported this notion and although managerial coaching appeared to weaken the continuity of hindrance demands across waves, its moderating effect on the indirect pathway from hindrance demands to burnout through later hindrance demands was only marginal. These findings suggest that while coaching can buffer the persistence of stressors themselves, its influence may be limited once burnout has developed. Indeed, prior research has shown that burnout is highly stable over time across one- to two-year intervals and sometimes persists at similar levels over periods as long as eight years (Houkes et al., 2008; Schaufeli & Enzmann, 1998; Taris et al., 2005; Toppinen-Tanner et.al., 2002). Moreover, large-scale prospective studies show that recovery from severe burnout is relatively rare, with only about one-third of affected employees improving after three years (Leone et al., 2008). These findings further add support that burnout reflects a chronic, enduring condition (Maslach et.al., 2001).

Although the lagged effect model revealed that prior burnout levels were not associated with withdrawal behaviors, exploratory analysis showed that the persistence of burnout predicted turnover intention but not absenteeism or actual absence. This finding is noteworthy because the persistence of burnout appears to influence stable, long-term cognitive evaluations of one's job, such as the intention to stay or leave, rather than short-term behavioral outcomes. Prior research supports this distinction, showing that while burnout is consistently and strongly related to turnover intentions, its associations with absenteeism and actual turnover are considerably weaker (Schaufeli & Enzmann, 1998). Despite this relationship, coaching seemed to have no effect in attenuating burnout, suggesting that once burnout becomes chronic, it may resist the influence of supportive managerial behaviors.

From this perspective, burnout may have acted as a bottleneck variable that constrained the larger model. Because coaching did not attenuate the stability of burnout across time, its potential to moderate subsequent processes (i.e., burnout leading to absenteeism, absence, or turnover intentions) was limited. In other words, if burnout remains relatively unchanged, hypothesized indirect effects through burnout cannot materialize, regardless of the presence of coaching or variation in hindrance demands.

This interpretation aligns with prior longitudinal evidence showing that burnout at baseline is strongly correlated with burnout at follow-up, suggesting that employees who exhibit burnout symptoms tend to remain on that trajectory unless work conditions fundamentally change (Hakanen & Schaufeli, 2012; Toppinen-Tanner et al., 2009). Proximal outcomes like absenteeism or turnover intentions may fluctuate in response to contextual resources, while burnout, once established, appears resistant to intervention, particularly when measured across relatively short time frames.

Taken together, these results suggest that burnout's rigidity may have undermined the hypothesized stressor–strain–withdrawal pathway. Rather than moderating acute stressor–strain processes, coaching functioned as a stability disruptor, interrupting the persistence of demands and withdrawal tendencies over time. From a JD-R perspective, coaching may act as a job resource that recalibrates how employees engage with work across episodes. From a COR perspective, it may help replenish or reframe employees' resource pools, thereby reducing the likelihood that past stressors perpetuate into future stressors. Importantly, the absence of effects on burnout highlights the limits of coaching's influence: while it may prevent cycles of frustration and withdrawal, it may be less effective in reversing psychological strain resulting from sustained exposure to such conditions.

Theoretical Implications

Although the hypothesized effects were not supported, the findings nonetheless yield important contributions to theory. First, the findings suggest that burnout may act as a boundary condition in the JD-R framework. Rather than a malleable mediator, burnout as shown in previous studies was relatively stable across waves, with recovery from the condition being rare (Leone et al., 2008). Furthermore, the present study indicated that burnout was resistant to managerial coaching, highlighting the necessity of theorizing when and why certain forms of strain are less responsive to job resources.

Second, the results reframe the role of coaching in stressor–strain–withdrawal processes. Rather than serving as a direct moderator, coaching functioned as a stability disruptor that weakened the persistence of demands and withdrawal tendencies across time. This study extends JD-R and COR perspectives by demonstrating that resources like coaching can shape the continuity of demands and withdrawal, not just their initial onset, consistent with the idea that individuals are evolutionarily wired to obtain and preserve resources to manage current and future challenges (Hobfoll et al., 2018).

Third, this study advances the operationalization of hindrance demands. Rather than assuming certain job demands are hindrances, this study measured hindrance demands by capturing both their frequency and employees' subjective appraisal of them. By combining these two dimensions, the resulting measure captured the experienced level of appraised hindrance demands, reflecting not only how often such demands occur but also how strongly they are perceived as hindrances. While other studies have measured both frequency and appraisal (Webster et.al., 2011), this is the first study to my knowledge that combines these measures into a single experiential variable, aligning with the transactional model of stress, which emphasizes

the role of cognitive appraisal in shaping stress responses (Lazarus & Folkman, 1984). This also extends the JD-R framework by integrating individual perception into demand assessment. It advances measurement practice by moving beyond exposure-based metrics to incorporate the psychological meaning employees assign to their demands, offering a more dynamic representation of stressor experiences.

Practical Implications

The findings also hold important implications for practice. First, the results suggest that managerial coaching may be most effective at preventing the persistence of negative experiences rather than reversing deeply entrenched states such as burnout. For organizations, this highlights the importance of introducing coaching proactively before employees reach high levels of psychological exhaustion. Coaching interventions may be more successful when targeted at employees experiencing hindrance demands or early signs of withdrawal, where they can disrupt the escalation toward strain or turnover. By weakening the stability of hindrance demands and withdrawal tendencies across time, coaching helps employees avoid becoming "stuck" in cycles of disengagement. This suggests that organizations should integrate coaching not only as a remedial intervention but also as part of ongoing development practices aimed at maintaining flexibility in how employees respond to stressors.

Further, the absence of effects on burnout underscores the need for multifaceted well-being strategies. Complementary support at individual and organizational levels such as job redesign, career counselling, and organizational development may be required to address entrenched burnout (Le Blanc & Schaufeli, 2008). In this way, coaching can serve as one

component of a broader occupational health strategy, functioning as a preventive resource rather than a standalone tertiary intervention.

Limitations and Future Research

This study has several limitations that should be acknowledged. First, the reliance on self-reported data introduces the risk of common method variance (Conway, 2002) and social desirability effects. Although responses were anonymous and measures were taken across two waves to reduce such concerns, future studies could incorporate multi-source data, such as supervisor ratings of coaching or organizational records of withdrawal behaviors, to triangulate findings. In particular, for absence, this study did not collect information on the reasons for employee absences, whether they were due to physical illness, mental health issues, or unspecified sick leave. Similarly, for turnover intention, this study relied on self-reported measures and did not track actual turnover. Incorporating organizational records in future research would provide a more accurate assessment of these outcomes.

Second, the two-wave design, although stronger than cross-sectional approaches, used only two time points. This limits the ability to capture longer-term developmental processes of burnout and withdrawal. Future research examine additional boundary conditions that may explain why coaching buffered certain relationships but not others. For example, contextual factors such as organizational culture, workload intensity, or managerial span of control may shape the effectiveness of coaching.

Third, managerial coaching was measured through employees' perceptions rather than observed behaviors. In addition to coaching behaviour measure (Heslin et al., 2006), future research should also account for differences in coaching style and skill. Comparative analyses

have shown that ineffective managerial coaching often reflects an autocratic, directive, and controlling style associated with a traditional bureaucratic management paradigm, characterized by command, compliance, and coercion, rather than empowerment, inclusion, and participation (Ellinger et.al., 2008). Thus, the effectiveness of coaching may depend not only on employees' perceptions but also on the actual quality and style of coaching delivered.

A final consideration concerns the nature of managerial coaching itself. Although this study treats coaching behaviors as a form of support that managers can provide, it is important to acknowledge that most managers receive little to no formal training in coaching competencies. Scholars also note that effective managerial coaching is not universal, as many managers lack the time, incentives, or competencies to coach effectively (Goleman, 2000; Hunt & Weintraub, 2002). This stands in contrast to professional coaches, who are specifically trained to deliver structured developmental interventions. As a result, the "coaching" enacted by managers in everyday organizational settings is better understood as a set of supportive, feedback-oriented behaviors rather than a formally guided coaching practice. This distinction has implications for both the interpretation of the present findings and the design of workplace interventions. If managerial coaching behaviors are unevenly developed or inconsistently applied, their capacity to buffer strain or disrupt the burnout–withdrawal process may be limited. Future research may benefit from assessing the extent to which managers possess coaching-related skills or examining whether training leaders in evidence-based coaching practices strengthens the protective effects theorized in this study.

Conclusion

This study examined whether managerial coaching buffers the effects of hindrance job demands on burnout and organizational withdrawal over time. The findings challenge the notion of coaching as a cross-construct moderator, instead highlighting its role as a disruptor of longitudinal stability, while identifying burnout as a highly stable form of strain resistant to short-term intervention. The study highlights burnout's entrenched nature and suggests coaching is more effective in preventing persistence of negative experiences than reversing established burnout. These insights pave the way for future research on coaching's boundary conditions and its role in sustaining employee well-being.

References

Ahola, K., Honkonen, T., Virtanen, M., Aromaa, A., & Lönnqvist, J. (2008). Burnout in relation to age in the adult working population. Journal of Occupational Health, 50(4), 362-365.

Bakker, A. B., & Demerouti, E. (2007). The job demands–resources model: State of the art. Journal of Managerial Psychology, 22, 309–328. https://doi.org/10.1108/02683940710733115

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job Demands-Resources Theory: Ten Years Later. *Annual Review of Organizational Psychology and Organizational Behavior*, *10*, 25–53. https://doi.org/10.1146/annurev-orgpsych-120920-053933

Bavik, Y. L., Shaw, J. D., & Wang, X. H. (2020). Social support: Multidisciplinary review, synthesis, and future agenda. Academy of Management Annals, 14(2), 726-758.

Borders, L. D., Young, J. S., Wester, K. L., Murray, C. E., Villalba, J. A., Lewis, T. F., & Mobley, A. K. (2011). Mentoring promotion/tenure-seeking faculty: Principles of good practice within a counselor education program. Counselor Education and Supervision, 50, 171–188. doi:10.1002/j.1556-6978. 2011.tb00118.x

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. Journal of Applied Psychology, 85(1), 65–74. https://doi.org/10.1037/0021-9010.85.1.65

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. Journal of Applied Psychology, 95(5), 834–848. https://doi.org/10.1037/a0019364

Conway, J. M. (2002). Method variance and method bias in industrial and organizational psychology. In S. G. Rogelberg (Ed.), Handbook of research methods in organizational and industrial psychology (pp. 344–365). Malden, NJ: Blackwell Publishers.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. Journal of Applied Psychology, 86(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. European Journal of Psychological Assessment, 19(1), 12–23. https://doi.org/10.1027//1015-5759.19.1.12

Douglas, B. D., Ewell, P. J., & Brauer, M. (2023). Data quality in online human-subjects research: Comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA. Plos one, 18(3), e0279720.

Ellinger, A.D., Hamlin, R.G., & Beattie, R.S. (2008). Behavioural indicators of ineffective managerial coaching: A cross-national study. Journal of European Industrial Training, 32(4): 240-57.

Finegold, D., Mohrman, S., & Spreitzer, G. M. (2002). Age effects on the predictors of technical workers' commitment and willingness to turnover. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 23(5), 655-674.

Gallup. (2019, March 13). This fixable problem costs U.S. businesses $1 trillion. https://www.gallup.com/workplace/247391/fixable-problem-costs-businesses-trillion.aspx

Goleman, D. (2000). Leadership that gets results. Harvard Business Review, March-April: 78-90.

Gottfredson, R. K. & Aguinis, H. (2017). Leadership behaviors and follower performance: Deductive and inductive examination of theoretical rationales and underlying mechanisms. Journal of Organizational Behavior, 38(4)

Grant, A. M., Curtayne, L., & Burton, G. (2009). Executive coaching enhances goal attainment, resilience and work-place well-being: A randomized controlled study. The Journal of Positive Psychology, 4, 396–407.

Hakanen, J. J., & Schaufeli, W. B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. Journal of Affective Disorders, 141(2–3), 415–424. https://doi.org/10.1016/j.jad.2012.02.043

Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. Journal of Management, 30(6), 859–879. https://doi.org/10.1016/j.jm.2004.06.004

Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of vocational behavior*, *37*(1), 60-78.

Hayes, A. F. (2016). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. The Guilford Press.

Heslin, P. A., Vandewalle, D., & Latham, G. P. (2006). Keen to help? Managers' implicit person theories and their subsequent employee coaching. Personnel Psychology, 59(4), 871–902. https://doi.org/10.1111/j.1744-6570.2006.00057.x

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44, 513± 524.

Houkes, I., Winants, Y., Twellaar, M., & Verdonk, P. (2008). Development of burnout over time and the causal order of the three dimensions of burnout among male and female GPs: A three-wave panel study. BMC Public Health, 8(1), 210. https://doi.org/10.1186/1471-2458-8-210

House, J. S. (1981). Work stress and social support. Addison-Wesley Pub. Co.

Hunt, J.M., & Weintraub, J.R. (2002). How coaching can enhance your brand as a manager. Journal of Organizational Excellence, 21(2): 39-44.

Jolly, P. M., Kong, D. T., & Kim, K. Y. (2021). Social support at work: An integrative review. *Journal of Organizational Behavior*, *42*(2), 229–251. https://doi.org/10.1002/job.2485

Jonathon R. B. Halbesleben, and M. Ronald Buckley, "Burnout in Organizational Life," Journal of Management 30, no. 6 (2004), pp. 859–79.

Kacmar, K. M., & Ferris, G. R. (1991). Perceptions of organizational politics scale (POPS). Educational and Psychological Measurement, 51(1), 193–205.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications of job redesign. Administrative Science Quarterly, 24(2), 285–308. https://doi.org/10.2307/2392498

Kim, H., Ji, J., & Kao, D. (2011). Burnout and physical health among social workers: A three-year longitudinal study. *Social work*, 258-268.

Lawrence, S. A., Gardner, J., & Callan, V. J. (2007). The support appraisal for work stressors inventory: Construction and initial validation. Journal of Vocational Behavior, 70(1), 172–204. https://doi.org/10.1016/j.jvb.2006.09.003

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.

Le Blanc, P. M., & Schaufeli, W. B. (2008). Burnout interventions: An overview and illustration. Handbook of stress and burnout in health care, 201-215.

Lee RT, Ashforth BE. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. J.Appl.Psychol.8:123–33

Lehman, W. E. K., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. Journal of Applied Psychology, 77(3), 309–321. https://doi.org/10.1037/0021-9010.77.3.309

Leiter, M. P. (1993). Burnout as a developmental process: consideration of models. In W. B. Schaupeli, C. Mascach, & T. Marek (Eds.), Professional Burnout: Recent Developments in Theory and Research (pp. 237± 250). Washington, DC: Taylor & Francis.

Leone, S. S., Huibers, M. J. H., Knottnerus, J. A., & Kant, I. (2008). The prognosis of burnout and prolonged fatigue in the working population: A comparison. Journal of Occupational and Environmental Medicine, 50(10), 1195–1202. https://doi.org/10.1097/JOM.0b013e31817e9173

LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. Academy of Management Journal, 48, 764–775.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach Burnout Inventory Manual (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review of Psychology, 52, 397–422. https://doi.org/10.1146/annurev.psych.52.1.397

Mercer. (2024, September 5). How much turnover is too much? imercer.com. https://www.imercer.com

O'Driscoll, M. P., & Beehr, T. A. (1994). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. Journal of organizational Behavior, 15(2), 141-155.

Pendell R, (2018). Millennials are burning out. Gallup, July19. https://www.gallup.com/workplace/237377/millennials-burning.aspx

Pletzer, J. L., Breevaart, K., & Bakker, A. B. (2024). Constructive and destructive leadership in job demands-resources theory: A meta-analytic test of the motivational and health-impairment pathways. *Organizational Psychology Review*, *14*(1), 131–165. https://doi.org/10.1177/20413866231197519

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, *15*(2), 150–163. https://doi.org/10.2307/2391486

Rodell, J. B., & Judge, T. A. (2009). Can "good" stressors spark "bad" behaviors? The mediating role of emotions in links of challenge and hindrance stressors with citizenship and counterproductive behaviors. The Journal of Applied Psychology, 94(6), 1438–1451. https://doi.org/10.1037/a0016752

Schaufeli W.B., Leiter MP, Maslach C, Jackson SE. (1996). The Maslach Burnout Inventory—general survey. In MBI Manual, ed. C Maslach, SE Jackson, MP Leiter, pp. 1926. Palo Alto, CA: Consulting Psychologists Press.3rd ed.

Schaufeli, W. B. (2018). Work engagement in Europe: Relations with national economy, governance and culture. *Organizational Dynamics*, *47*(2), 99-106

Schaufeli, W. B., & Enzmann, D. (1998). The burnout companion to study and practice: A critical analysis. Taylor & Francis.

Schaufeli, W. B., Maassen, G. H., Bakker, A. B., & Sixma, H. J. (2011). Stability and change in burnout: A 10-year follow-up study among primary care physicians. Journal of Occupational and Organizational Psychology, 84(2), 248–267. https://doi.org/10.1111/j.2044-8325.2010.02013.x

Semmer, N. K. (2003). Job stress interventions and organization of work. In: J. Campbell Quick and L.E Terick (Eds), handbook of occupational Health Psychology 9pp. 325-353). Washington DC: American Psychological Association.

Shoman Y, El May E, Marca SC, Wild P, Bianchi R, et al. 2021. Predictors of occupational burnout: a systematic review. International Journal of Environmental Research and Public Health, 18, 9188.

Statistique Canada. (2021). Tableau 14-10-0190-01 (anciennement CANSIM 279-0029) - Absence du travail chez les employés à temps plein selon la géographie, données annuelles. https://www150.statcan.gc.ca/t1/tbl1/fr/tv.action?pid=1410019001

Susan Seitel, "Work-Life Experts Launch New Web- Based Training to Help Employees Battle the Costs of Stress and Build a Resilient Workforce," PRWeb, www.prwebdirect.com/releases/2006/2/prweb340379.htm(accessed May 14, 2006).

Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational behavior*, *76*(3), 487-506.

Taris, T. W., Le Blanc, P. M., Schaufeli, W. B., & Schreurs, P. J. G. (2005). Are there causal relationships between the dimensions of the Maslach Burnout Inventory? A review and

two longitudinal tests. Work & Stress, 19(3), 238–255. https://doi.org/10.1080/02678370500270453

Taris, T. W., Schreurs, P. J., & Van Iersel-Van Silfhout, I. J. (2001). Job stress, job strain, and psychological withdrawal among Dutch university staff: Towards a dual process model for the effects of occupational stress. *Work & Stress*, *15*(4), 283-296

Theeboom, t., Beersma, B. & van Vianen, A.e.M. (2013). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. The Journal of Positive Psychology, 9(1), 1–18.

Toppinen-Tanner, S., Ahola, K., Koskinen, A., & Väänänen, A. (2009). Burnout predicts hospitalization for mental and cardiovascular disorders: 10-year prospective results from industrial sector. Stress and Health, 25(4), 287–296. https://doi.org/10.1002/smi.1272

Toppinen-Tanner, S., Kalimo, R., & Mutanen, P. (2002). The process of burnout in white-collar and blue-collar jobs: Eight-year prospective study of exhaustion. Journal of Organizational Behavior, 23(5), 555–570. https://doi.org/10.1002/job.15

Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. Journal of Vocational Behavior, 54, 314–334.

Wrzesniewski, A., & Dutton, J. (2001). Crafting a job: Employees as active crafters of their work. Academy of Management Review, 26, 179–201.

Webster, J. R., Beehr, T. A., & Love, K. (2011). Extending the challenge-hindrance model of occupational stress: The role of appraisal. Journal of Vocational Behavior, 79(2), 505-516.

Table 1. Means, Standard Deviation, and Intercorrelation Between Study Variables (N = 152)

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. **Age**	2.78	.94																	
2. **Gender**	.56	.50	-.10																
3. **Education**	2.78	.89	-.21**	-.07															
4. **Ethnicity**	.59	.49	.29***	-.12	-.36***														
5. **Tenure**	7.14	5.46	.40***	.08	-.18*	.21*													
6. **Income**	5.71	1.50	.11	.17*	.20*	-.03	.17*												
7. **Hindrance Demand W1**	7.37	4.27	-.20*	.18*	.12	-.11	-.02	.09											
8. **Burnout W1**	3.62	1.14	-.20*	.04	-.06	-.06	-.04	-.06	.55***										
9. **Absenteeism W1**	2.32	.97	-.23**	.19*	.06	-.15	-.05	.13	.25**	.26**									
10. **Absence W1**	.38	.49	-.13	-.01	-.02	-.09	-.14	-.06	.26**	.21**	.19*								
11. **Turnover Intention W1**	3.09	1.77	-.13	.00	.01	-.09	-.12	-.10	.49***	.63***	.29***	.27***							
12. **Managerial Coaching W1**	2.94	1.11	-.07	-.09	.03	.00	-.16*	.03	-.27***	-.44***	.00	-.10	-.33***						
13. **Hindrance Demand W2**	6.60	4.33	-.17*	.09	.15	-.13	-.07	.12	.67***	.51***	.24**	.22**	.41***	-.21**					
14. **Burnout W2**	4.51	.87	-.11	-.01	.08	-.10	-.01	-.04	.43***	.65***	.12	.12	.35***	-.29***	.52***				
15. **Absenteeism W2**	2.19	.93	-.21**	.09	.11	-.18*	-.14	.08	.27***	.26**	.78***	.17*	.22**	-.01	.33***	.16*			
16. **Absence W2**	.38	.49	-.12	-.15	.06	-.04	-.13	.02	.09	.14	.24**	.39***	.26**	-.03	.04	.04	.20*		
17. **Turnover Intention W2**	2.90	1.72	-.14	.03	.07	-.13	-.13	-.09	.50***	.55***	.23**	.18*	.80***	-.20*	.49***	.44***	.34***	.15	
18. **Managerial Coaching W2**	2.83	1.09	-.14	-.07	.07	.02	-.28***	-.03	-.18*	-.25**	.12	.00	-.13	.77***	-.22**	-.18*	.03	.08	-.13

Note. Gender (0 = female, 1 = male), ethnicity (0 = ‘‘non-white/ non-caucasian”, 1 = ‘‘white/ caucasian”), absence (0 = no, 1 = yes), * p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 2. Hypotheses 1 and 2 (Regression Results for the Direct Effects of Hindrance Demands on Burnout and Burnout on Withdrawal Outcomes)

	Burnout W2				*Absenteeism W2*				*Absence W2*				*Turnover Intention W2*			
Variable	*b*	*SE*	*β*	*p*	*b*	*SE*	*β*	*p*	*b*	*SE*	*Wald*	*OR*	*b*	*SE*	*β*	*p*
Age	.02	.06	.02	.718	-.02	.05	-.02	.680	-.15	.20	.58	.86	-.06	.09	-.03	.544
Burnout W1	.45***	.06	.59	<.001												
Hindrance demands W1	.02	.02	.11	.130												
Absenteeism W1					.73***	.05	.76	<.001								
Absence W1									1.60***	.37	18.62	4.97				
Turnover Intention W1													.72***	.06	.74	<.001
Burnout W2					.05	.04	.06	.287	.10	.17	.39	1.11	.13	.10	.08	.196

Note. Absence (0 = no, 1 = yes), p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 3. Hypotheses 3 and 4 (Regression Results Testing the Moderating Effect of Managerial Coaching on the Hindrance Demands–Burnout and Burnout–Withdrawal Relationships)

	Burnout W2			*Absenteeism W2*			*Absence W2*			*Turnover Intention W2*		
Variable	*b*	*SE*	*p*	*b*	*SE*	*p*	*b*	*SE*	*p*	*b*	*SE*	*p*
Age	.02	.06	.742	-.03	.05	.578	-.10	.20	.632	-.06	.09	.498
Burnout W1(B1)	.45***	.06	<.001	.08	.11	.440	-.43	.44	.323	.33	.20	.105
Hindrance demands W1 (HD1)	.05	.03	.127									
Coaching W2 (C2)	.07	.09	.472	.02	.13	.896	-.53	.53	.317	.23	.23	.316
HD1 × C2	-.01	.01	.349									
Absenteeism W1				.74***	.05	<.001						
Absence W1							1.68***	.38	<.001			
Turnover Intention W1										.72***	.06	<.001
B1× C2				-.02	.04	.605	.22	.15	.135	-.08	.06	.229

Note. Absence (0 = no, 1 = yes), p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 4. Hypothesis 5a (Regression Results for the Conditional Indirect Effect of the Hindrance Demands W1 on Absenteeism W2 via Burnout W2 at Varying Level of Coaching)

	Burnout W2				*Absenteeism W2*			
Variable	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Age	-.04	.07	-.57	.559	-.03	.05	-.47	.640
Hindrance demands W1 (HD1)	.11*	.04	2.85	.005	.01	.01	.74	.460
Burnout W2 (B2)					.04	.16	.26	.792
Coaching W2 (C2)	-.02	.11	-.21	.834	-.04	.23	-.19	.846
Absenteeism W1	.03	.07	.41	.680	.73***	.05	13.75	<.001
HD1 × C2	-.01	.01	-.79	.429				
B2 × C2					.001	.05	.03	.980

			95% CI	
Indirect effects (HD1 → B2 → Absenteeism W2)	*b*	*SE*	LL	UL
Low (1.55)	.004	.01	-.01	.02
Medium (2.80)	.004	.01	-.01	.02
High (4.00)	.003	.01	-.01	.02

Note. R^2 for burnout = .20, R^2 for absenteeism = .62, p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 5. Hypothesis 5a (Regression Results for the Conditional Indirect Effect of the Hindrance Demands W1 on Absence W2 via Burnout W2 at Varying Level of Coaching)

	Burnout W2				*Absenteeism W2*			
Variable	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Age	-.05	.07	-.65	.516	-.15	.20	-.76	.44
Hindrance demands W1 (HD1)	.11**	.04	2.83	.005	-.003	.05	-.06	.949
Burnout W2 (B2)					-.45	.62	-.72	.474
Coaching W2 (C2)	-.03	.11	-.24	.808	-.57	.90	-.63	.527
Absence W1	.02	.14	.17	.863	1.69***	.38	4.40	<.001
HD1 × C2	-.01	.01	-.73	.465				
B2 × C2					.16	.20	.83	.409

			95% CI	
Indirect effects (HD1 → B2 → Absence W2)	*b*	*SE*	LL	UL
Low (1.55)	-.02	.04	-.10	.04
Medium (2.80)	.001	.02	-.05	.04
High (4.00)	.01	.03	-.05	.07

Note. R^2 for burnout = .20, p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 6. Hypothesis 5b (Regression Results for the Conditional Indirect Effect of the Hindrance Demands W1 on Turnover Intention W2 via Burnout W2 at Varying Level of Coaching)

	Burnout W2				Turnover Intention *W2*			
Variable	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Age	-.04	.07	-.57	.568	-.03	.09	-.33	.743
Hindrance demands W1 (HD1)	.09*	.04	2.20	.029	.04	.02	1.68	.096
Burnout W2 (B2)					.20	.27	.74	.458
Coaching W2 (C2)	-.03	.11	-.32	.752	-.14	.39	-.35	.727
Turnover Intention W1	.08*	.04	2.01	.046	.68***	.05	12.55	<.001
HD1 × C2	-.01	.01	-.57	.570				
B2 × C2					.03	.09	.37	.711

			95% CI	
Indirect effects (HD1 → B2 → Turnover Intention W2)	*b*	*SE*	LL	UL
Low (1.55)	.02	.01	-.0001	.04
Medium (2.80)	.02	.01	.002	.04
High (4.00)	.02	.01	-.002	.05

Note. Note. R^2 for burnout = .23, R^2 for turnover intention= .67, p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 7. Post hoc Analysis (Regression Results Testing the Moderating Effect of Managerial Coaching W2 between Wave 1 and Wave 2 Variables)

	Hindrance demands W2				*Burnout W2*				*Absenteeism W2*				*Absence W2*				*Turnover Intention W2*			
Variable	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*	*b*	*SE*	*Z*	*p*	*b*	*SE*	*t*	*p*
Age	-.28	.28	-.98	.328	.01	.06	.14	.891	-.05	.05	-.90	.368	-.14	.20	-.73	.467	-.08	.09	-.88	.380
Hindrance demands W1 (HD1)	.99***	.15	6.59	<.001																
Burnout W1 (B1)					.59***	.12	4.90	<.001												
Absenteeism W1 (A1)									1.07***	.15	7.11	<.001								
Absence W1 (ABi1)													1.54	1.04	1.48	.138				
Turnover Intention W1 (TI1)																	1.06***	.12	8.79	<.001
Coaching W2 (C2)	.43	.43	.10	.319	.11	.15	.75	.456	.16	.11	1.55	.123	.14	.23	.63	.528	.28	.15	1.89	.060
HD1 × C2	-.12*	.05	-2.53	.013																
B1 × C2					-.04	.04	-.88	.382												
A1 × C2									-.11*	.05	-2.28	.024								
ABi1 × C2													.04	.34	.12	.901				
TI1 × C2																	-.11**	.04	-2.65	.009

Note. Absence (0 = no, 1 = yes), p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 8. Conditional Effects of Hindrance Demands W1 on Hindrance Demands W2 at Varying Levels of Managerial Coaching W2.

			95% CI	
Conditional effects (Hindrance demands W1 → Hindrance demands W2)	*b*	*SE*	LL	UL
Low (1.55)	.80	.09	.63	.98
Medium (2.80)	.65	.06	.52	.77
High (4.00)	.50	.09	.33	.67

Table 9. Conditional Effects of Absenteeism W1 on Absenteeism W2 at Varying Levels of Managerial Coaching W2.

			95% CI	
Conditional effects (Absenteeism W1 → Absenteeism W2)	*b*	*SE*	LL	UL
Low (1.55)	.91	.09	.74	1.08
Medium (2.80)	.78	.05	.68	.88
High (4.00)	.65	.07	.52	.78

Table 10. Conditional Effects of Turnover Intentions W1 on Turnover Intention W2 at Varying Levels of Managerial Coaching W2.

			95% CI	
Conditional effects (Turnover Intention W1 → Turnover Intention W2)	*b*	*SE*	LL	UL
Low (1.55)	.89	.07	.76	1.02
Medium (2.80)	.75	.05	.66	.85
High (4.00)	.62	.07	.48	.77

Table 11. Conditional Indirect Effects of Hindrance Demands on Burnout W2, Moderated by Managerial Coaching W2 at Path A.

	Hindrance Demand W2				*Burnout W2*			
Variable	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Age	-.17	.28	-.61	.543	.03	.06	.47	.643
Hindrance demands W1 (HD1)	.90***	.15	5.96	<.001	-.01	.02	-.53	.600
Hindrance demands W2 (HD2)					.06***	.02	3.45	<.001
Burnout W1	.71**	.27	2.61	.01	.41***	.06	7.12	<.001
Coaching W2 (C2)	.58	.42	1.36	.176				
HD1 × C2	-.13*	.05	-2.61	.01				

			95% CI	
Indirect effects (HD1 → HD2 → Burnout W2)	*b*	*SE*	LL	UL
Low (1.55)	.04	.01	.01	.07
Medium (2.80)	.03	.01	.01	.05
High (4.00)	.02	.01	.01	.05
Index of moderated mediation	Index	SE	LL	UL
Coaching W2 (C2)	-.01	.004	-.02	.0009

Note. p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

Table 12. Conditional Indirect Effects of Burnout on Turnover Intention W2, Moderated by Managerial Coaching W2 at Path A.

	Burnout W2				*Turnover Intentions W2*			
Variable	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Age	.01	.06	.13	.895	-.06	.09	-.68	.499
Burnout W1 (B1)	.65***	.13	5.02	<.001	-.10	.12	-.84	.401
Burnout W2 (B2)					.41**	.12	3.31	.001
Turnover Intentions (TOI) W1					.74***	.74	12.36	<.001
Coaching W2 (C2)	.13	.15	.87	.385				
B1 × C2	-.04	.04	-.99	.322				

			95% CI	
Indirect effects (B1 → B2 → TOI W2)	*b*	*SE*	LL	UL
Low (1.55)	.24	.10	.06	.44
Medium (2.80)	.22	.08	.06	.38
High (4.00)	.20	.07	.06	.34

Index of moderated mediation	Index	SE	LL	UL
Coaching W2 (C2)	-.02	.02	-.06	.01

Note. p < .05. ** p < .01. *** p < .001, values were rounded to two decimals.

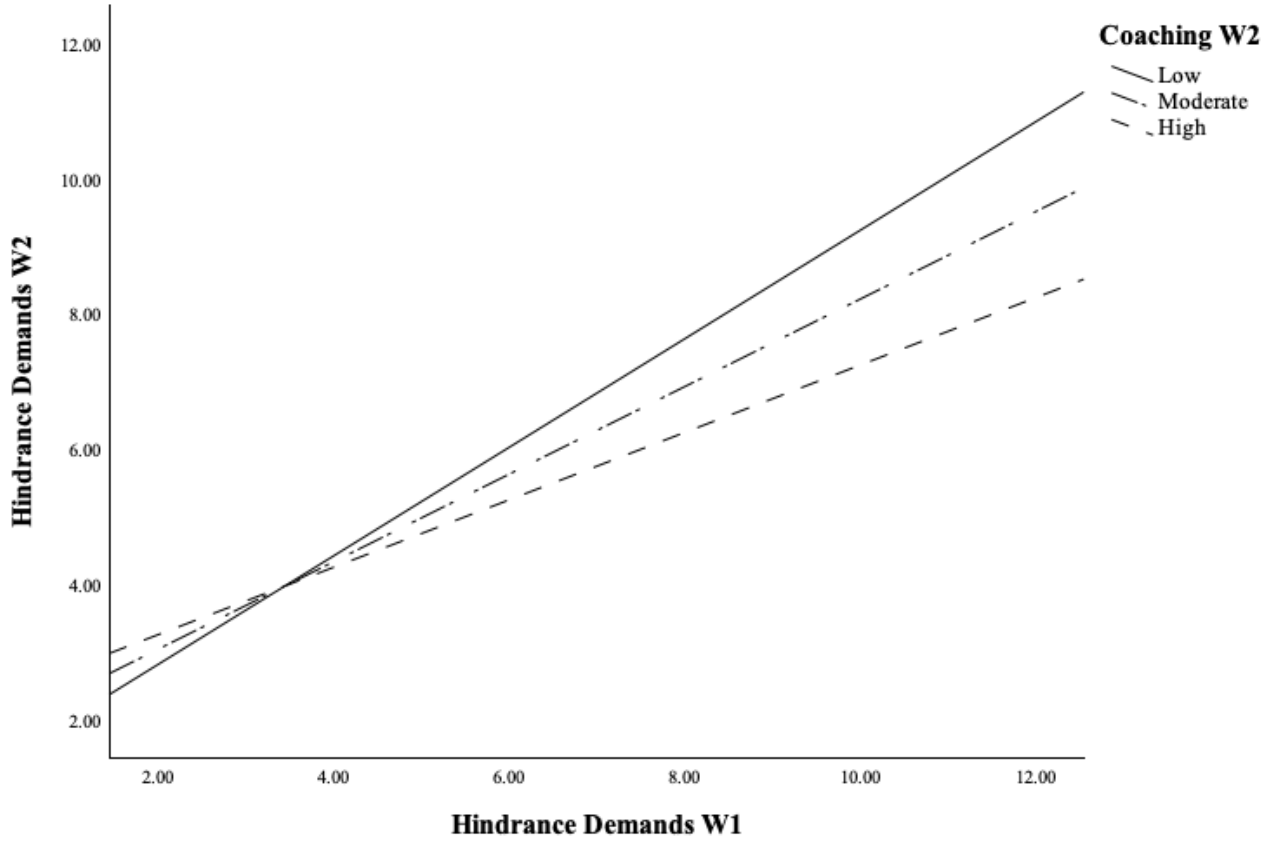

Figure 2. Conditional Effects of Hindrance Demands Across Waves at Varying Levels of Managerial Coaching.

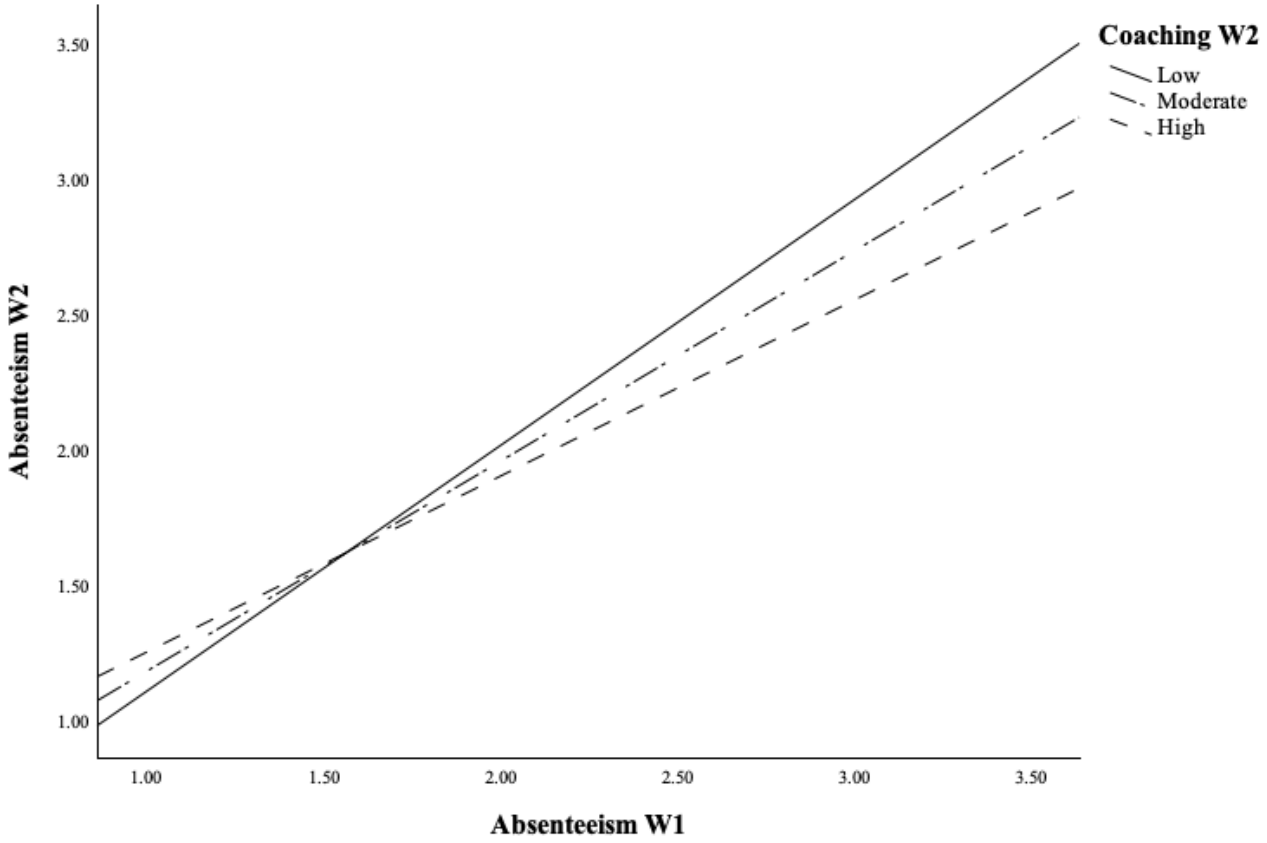

Figure 3. Conditional Effects of Absenteeism across Waves at Varying Levels of Managerial Coaching.

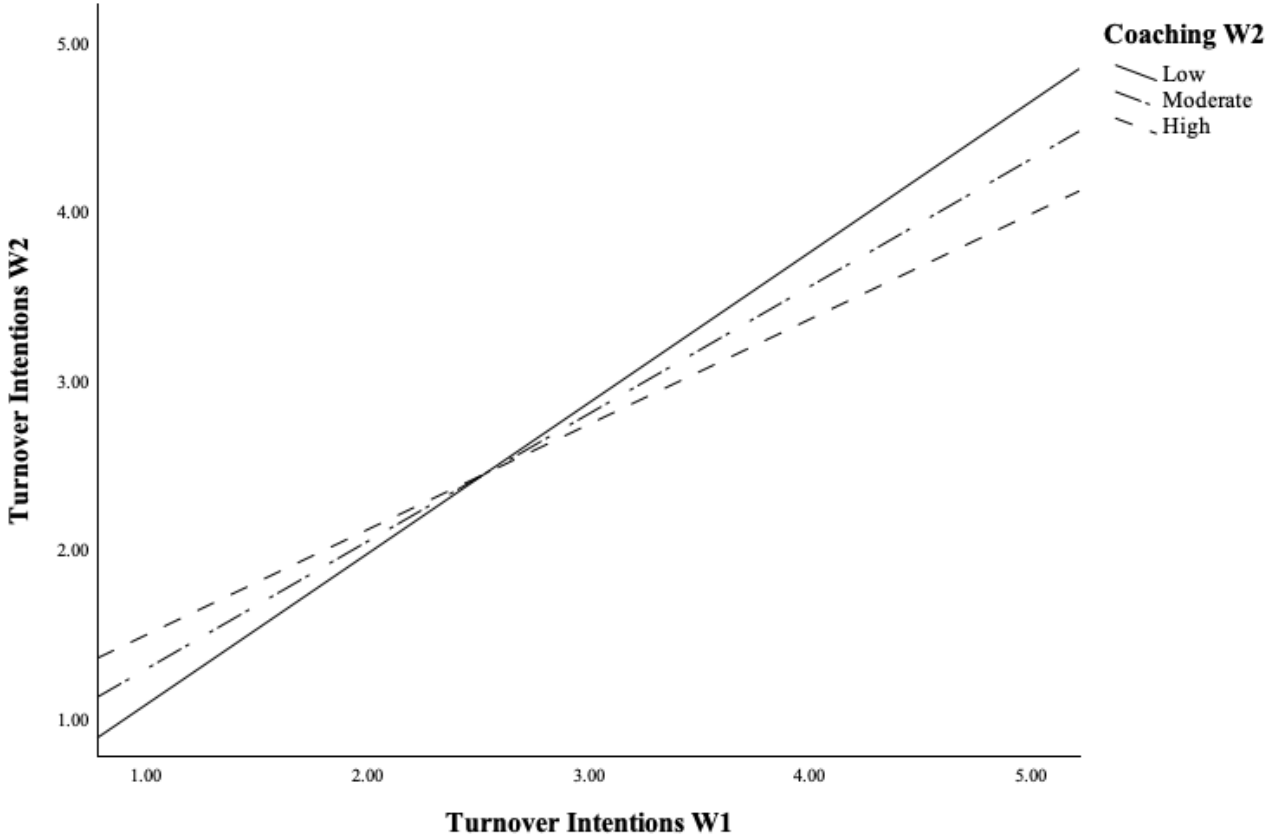

Figure 4. Conditional Effects of Turnover Intentions across Waves at Varying Levels of Managerial Coaching.

Appendix A

Pre-registration information

1) Data collection. *Have any data been collected for this study already?*

i. Yes, we already collected the data.
ii. No, no data have been collected for this study yet.
iii. It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid pre-registration nevertheless.
(Note: *'Yes'* is not an accepted answer.)

2) Hypothesis. *Does managerial coaching buffer the relationship between hindrance demands and burnout, and between burnout and organizational withdrawal?*

Burnout is a pervasive issue across a wide range of work environments, often leading to emotional exhaustion, organizational withdrawal, and elevated turnover costs. While organizational interventions like wellness programs exist, they frequently lack the immediacy and personalization needed to address daily workplace stressors. This study investigates the role of managerial coaching as a targeted, embedded form of social support capable of disrupting the demand-burnout–withdrawal cycle. Drawing on the job demands–resources (JD-R) model and conservation of resources (COR) theory, this study will examine whether managerial coaching can disrupt the pernicious effects of hindrance demands on burnout and bolster psychological resources to mitigate the subsequent relationship between burnout and organizational withdrawal. Using a moderated-mediation model, we test whether managerial coaching weakens (1) the positive relationship between hindrance demands and burnout, and (2) the link between burnout and organizational withdrawal. By clarifying the impact of managerial coaching, this study offers theoretical and practical insights into specific leadership-driven strategies for enhancing employee resilience and organizational retention.

H1: Perceived hindrance job demands are positively associated with employee burnout.
H2a: Burnout is positively associated with work withdrawal (absenteeism)
H2b: Burnout is positively associated with job withdrawal (turnover intentions)
H3: Managerial coaching moderates the relationship between hindrance job demands and burnout, such that higher levels of managerial coaching will weaken the positive association between hindrance demands and burnout.
H4: Managerial coaching moderates the relationship between employee burnout and organizational withdrawal (i.e., work withdrawal (H4a) and job withdrawal (H4b)), such that higher levels of managerial coaching will diminish the relationship between burnout and organizational withdrawal.
H5: Managerial coaching exerts a double-moderating effect by simultaneously moderating the relationship between hindrance job demands and burnout, and the relationship between burnout and organizational withdrawal (i.e., work withdrawal (H5a) and job withdrawal (H5b), such that the indirect effect of hindrance demands on withdrawal through burnout is weaker at higher levels of coaching.

3) Dependent variable. *Describe the key dependent variable(s) specifying how they will be measured.*

Our dependent variables is organizational withdrawal, which will be measured using the following scale:

OWS – Organizational Withdrawal Scale

Participants were asked to reflect on their behavior over the past 14 days and indicate how frequently they engaged in each of the following actions at work. “During the past two weeks (14 days), how often did you personally do the following at work?” Scale: 1 (Never) to 7 (All of the time)

Work Withdrawal (Absenteeism) (Hanisch & Hulin, 1991; Lehman, 1998)

- OWS_WW1 = I have left work early without permission.
- OWS_WW2 **=** I have taken longer lunch or rest breaks than allowed.
- OWS_WW3 = I have made excuses to get out of work tasks.
- OWS_WW4 = I have fallen asleep at work.
- OWS_WW5 = I have thought about being absent from work
- OWS_WW6 = I have shown up late for work

Job Withdrawal (Turnover Intentions) (O'Driscoll & Beehr, 1994)

- OWS_JW1 = I am thinking about leaving my job.
- OWS_JW2 = I am planning to look for a new job over the next 12 months.
- OWS_JW3 = I am actively searching for a new job outside my current employer.

Additional Absenteeism Indicator

- OWS_AAI – Please indicate the number of full workdays you were absent (excluding approved leave, holidays, or scheduled time off) in the past 14 days. (or)

Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. Journal of Vocational Behavior, 37(1), 60–78.

Lehman, W. E. K., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. Journal of Applied Psychology, 77(3), 309–321. https://doi.org/10.1037/0021-9010.77.3.309

O'Driscoll, M. P., & Beehr, T. A. (1994). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. *Journal of organizational Behavior*, *15*(2), 141-155.

4) Conditions. *How many and which conditions will participants be assigned to?*

This is a correlational, two-wave repeated measures design, with surveys administered one month apart. Therefore, there are no conditions.

5) Analyses. *Specify exactly which analyses you will conduct to examine the main question/hypothesis.*

The primary analysis to test the hypothesis will be linear regression analysis, conducted using Hayes' PROCESS macro in SPSS.

6) Outliers and Exclusions. *Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.*

One attention check will be included in the survey data collection to exclude inattentive respondents. Outliers will be inspected through descriptive analyses of participant responses.

7) Sample Size. *How many observations will be collected or what will determine sample size? (No need to justify decision but be precise about exactly how the number will be determined.)*

We will collect data from approximately 150 participants, based on related validation studies and estimated required power.

8) Other *Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)*

No.

9) Name *Give a title for this AsPredicted pre-registration (suggestion: use the name of the project, followed by study description.)*

Managerial Coaching Study

10) Type of study.

Class project or assignment
Experiment
Survey
Observational/archival study
Other:

11) Data source

Prolific
MTurk
University lab
Field experiment / RCT
Other:

Appendix B

Consent Form

INFORMATION AND CONSENT FORM

Study Title: Burnout and Organizational Withdrawal: Investigating the Moderating Role of Managerial Coaching
Researcher: Jerome Xavier Selvaraj, Concordia University
Researcher's Contact Information: jeromexselvaraj@gmail.com
Faculty Supervisor: Steve Granger
Faculty Supervisor's Contact Information: steven.granger@concordia.ca
Source of funding for the study: Faculty Research Development Program

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE
The purpose of this research is to explore how managerial coaching and support are perceived in real-world work environments and how employees respond to them.

B. PROCEDURES
If you consent to participate in this research and meet criteria for inclusion, you will be invited to complete two surveys one month apart that will ask to respond to a few questions yourself, your thoughts, and your beliefs around work and those you work with. In total, participating in this study will take approximately 8 minutes per survey (16 minutes total).

C. RISKS AND BENEFITS
You face very minimal risks by participating in this research. These risks include 1) potential fatigue when completing the survey or 2) potential discomfort in answering certain questions. You can quit the online survey anytime as you wish.

This research might benefit you personally by promoting self-reflection. Further, as a token of appreciation, you will receive $2.25 CDN for completing each 10-minute survey. Please note that the incentive is displayed in CDN dollars.

D. CONFIDENTIALITY

We will gather the following information as part of this research: Your demographic information including age, gender, working hours and other variables relevant to the topic of this research. We will not allow anyone to access the information, including your family members, except for researchers directly involved in conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered will be confidential. That means that the research team will be able to know the participants' identity, but it will not be disclosed.

The only identification information we have will be your Prolific ID, which is a random code. Given that you have the right to request your responses withdrawn from the database within three months of completion, all you need to do is to inform us and provide your Prolific ID and we will delete your responses altogether. The data will be stored in a password-protected computer and a crowd space in the researchers' institution. We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop and quit the survey at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information, you must inform the research team within three months upon the completion of your survey via Prolific's messaging system.

Participants who complete their surveys will receive monetary incentive from Prolific directly. For those who are timed out or do not finish the survey, we will not be able to provide rewards based on Prolific's policies.

There are no negative consequences for not participating or asking us not to use your information except for not being able to receive the monetary incentive.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

If you agree to participate in this survey, please click "yes" and you will be automatically directed to the online survey. Clicking Yes indicates your consent to participate in this survey.

If you do not agree to participate in this survey, you can click "no" and you will be withdrawn from the online survey. You can also simply close the webpage. No information will be recorded.

Do you agree to participate in this research under the conditions described?

__Yes __No

Appendix C

Codebook

Legend

Mean/sum scale score acronym – scale name – header

- Scale range or type (anchor details)
    - **Item acronym** = item details
        - **Mean subscale score acronym** = subscale name: subscale items

Citation

Scales

DHAS – Demand & Hindrance Appraisal Scale

Section 1: Experience

Participants are instructed to rate each statement based on the following question: "Think about your work over the past 14 days. To what extent have you personally experienced each of the following situations?"

Scale: 1 (Not at all) to 5 (Very frequently)

Red Tape

- DHAS_RT1_EX = I have had to go through a lot of red tape to get my job done.
- DHAS_RT2_EX = My duties and work objectives have been unclear to me.

Role Ambiguity

- DHAS_RA1_EX = I have not fully understood what is expected of me.
- DHAS_RA2_EX = There have been clear, planned goals and objectives for my work. (R)

Role Conflict

- DHAS_RC1_EX = I have received conflicting requests from two or more people.
- DHAS_RC2_EX = I have worked with two or more groups who operate quite differently.

Daily Hassles

- DHAS_DH1_EX = I have received assignments without adequate resources and materials to execute them.

- DHAS_DH2_EX = I have had many hassles to go through to get projects/ assignments done.

Section 2: Appraisal

Definition: "A hindrance is something that interferes with your work and stands in the way of achieving your goals. These circumstances seem like a roadblock, almost impossible to overcome."

Participants are instructed to rate each statement based on the following question: "Thinking about the same situations you experienced in the past 14 days, please rate the extent to which each one represented a hindrance demand for you — that is, how much it interfered with your ability to perform well at work or achieve your goals."

Scale: 1 (Not a hindrance at all) to 5 (A major hindrance)

Red Tape

- DHAS_RT1_HA = Having to go through a lot of red tape to get my job done.
- DHAS_RT2_HA = Having unclear duties and work objectives.

Role Ambiguity

- DHAS_RA1_HA = Not fully understanding what is expected of me.
- DHAS_RA2_HA = Lacking clear, planned goals and objectives for my work.

Role Conflict

- DHAS_RC1_HA = Receiving conflicting requests from two or more people.
- DHAS_RC2_HA = Working with two or more groups who operate quite differently.

Daily Hassles

- DHAS_DH1_HA = Receiving assignments without adequate resources and materials.
- DHAS_DH2_HA = Going through many hassles to complete projects or assignments.

Rodell, J. B., & Judge, T. A. (2009). Can "good" stressors spark "bad" behaviors? The mediating role of emotions in links of challenge and hindrance stressors with citizenship and counterproductive behaviors. The Journal of Applied Psychology, 94(6), 1438–1451. https://doi.org/10.1037/a0016752

MBI-GS – Maslach Burnout Inventory – General Survey – "How often do you feel this way about your work?"

Participants are instructed to rate each statement based on how frequently they experience the feeling described.

Scale: 1 (Never) to 7 (Every day)

Emotional Exhaustion (EX)

- MBI_EX1 = I feel emotionally drained from my work.
- MBI_EX2 = I feel used up at the end of the workday.
- MBI_EX3 = I feel tired when I get up in the morning and have to face another day on the job.
- MBI_EX4 = Working all day is really a strain for me.
- MBI_EX5 = I feel burned out from my work.

Cynicism (CY)

- MBI_CY1 = I have become less interested in my work since I started this job.
- MBI_CY2 = I have become more cynical about whether my work contributes anything.
- MBI_CY3 = I doubt the significance of my work.
- MBI_CY4 = I just want to do my job and not be bothered.
- MBI_CY5 = I've become less enthusiastic about my work.

Professional Efficacy (PE) (reverse-coded: higher = lower burnout)

- MBI_PE1 = I can effectively solve the problems that arise in my work.
- MBI_PE2 = I feel I'm making an effective contribution to what this organization does.
- MBI_PE3 = I believe I am good at my job.
- MBI_PE4 = I feel exhilarated when I accomplish something at work.
- MBI_PE5 = I have accomplished many worthwhile things in this job.
- MBI_PE6 = In my opinion, I am good at doing the things I do in my job.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach Burnout Inventory Manual (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

OWS – Organizational Withdrawal Scale

Participants were asked to reflect on their behavior over the past 14 days and indicate how frequently they engaged in each of the following actions at work.

"During the past two weeks (14 days), how often did you personally do the following at work?"

Scale: 1 (Never) to 7 (All of the time)

Work Withdrawal (Absenteeism) (Hanisch & Hulin, 1991; Lehman, 1998)

- OWS_WW1 = I have left work early without permission.
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- OWS_WW5 = I have thought about being absent from work
- OWS_WW6 = I have shown up late for work

Job Withdrawal (Turnover Intentions) (O'Driscoll & Beehr, 1994)

- OWS_JW1 = I am thinking about leaving my job.
- OWS_JW2 = I am planning to look for a new job over the next 12 months.
- OWS_JW3 = I am actively searching for a new job outside my current employer.

Additional Absenteeism Indicator

- OWS_AAI – Please indicate the number of full workdays you were absent (excluding approved leave, holidays, or scheduled time off) in the past 14 days. (or)

Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. Journal of Vocational Behavior, 37(1), 60–78.

Lehman, W. E. K., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. Journal of Applied Psychology, 77(3), 309–321. https://doi.org/10.1037/0021-9010.77.3.309

O'Driscoll, M. P., & Beehr, T. A. (1994). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. *Journal of organizational Behavior*, *15*(2), 141-155.

MSS – Managerial Support Scale – *"How much can you count on your manager to do the following?"*

Participants are instructed to rate each statement

- 1 (Not at all) to 5 (Very much)

Coaching Behavior Support (Heslin et al., 2006)

- MSS_CB1 = Provide guidance regarding performance expectations.
- MSS_CB2 = Help you to analyze your performance.
- MSS_CB3 = Provide constructive feedback regarding areas for improvement.

- MSS_CB4 = Offer useful suggestions regarding how you can improve your performance.
- MSS_CB5 = Act as a sounding board for you to develop your ideas.
- MSS_CB6 = Facilitate creative thinking to help solve problems.
- MSS_CB7 = Encourage you to explore and try out new alternatives.
- MSS_CB8 = Express confidence that you can develop and improve.
- MSS_CB9 = Encourage you to continuously develop and improve.
- MSS_CB10 = Support you in taking on new challenges.

Heslin, P. A., Vandewalle, D., & Latham, G. P. (2006). Keen to help? Managers' implicit person theories and their subsequent employee coaching. Personnel Psychology, 59(4), 871–902. https://doi.org/10.1111/j.1744-6570.2006.00057.x

Attention check and Sociodemographic:

ATNCHK – Attention check performance
- 0 (missed), 1 (passed)

AGE – Age (years), "Kindly choose your age category"
- 1 = 18-24
- 2 = 25-34
- 3 = 35-44
- 4 = 45-54
- 5 = 55-65

GENDER – Gender, "What is your gender?"
- 1 = Male
- 2 = Female
- 3 = non-binary/non-conforming
- 4 = prefer not to say

EDU – Education, "What is the highest level of your education?"
- 1 = High school or below
- 2 = College
- 3 = University
- 4 = Master or above.

ETH – Ethnicity, "What is your ethnicity?"

- 1 = White/Caucasian
- 2 = Black/African/Caribbean

- 3 = Latin American
- 4 = East/ Southeast Asian
- 5 = South Asian
- 6 = Middle Eastern/North African
- 7 = Indigenous/First Nations/Metis/Inuit
- 8 = Mixed/Multiple Ethnicities
- 9 = Other (please specify)

HINC – Household income, "Approximately, what was your household income over the last year?"

- 1 = less than $20,000
- 2 = $20,000 to $34,999
- 3 = $35,000 to $49,999
- 4 = $50,000 to $74,999
- 5 = $75,000 to $99,999
- 6 = $100,000 to $124,000
- 7 = $125,000 to $149,000
- 8 = Over $150,000

EMPSTAT – Employment status, "What is your current employment status?"

- 1 = Part-time
- 2 = Full-time
- 3 = Other

TENURE – tenure (years), "How long have you been working at your current job?"

- Slider [0-40]