

RESEARCH ARTICLE

WILEY

Job resources and burnout: Work motivation as a moderator

Sarah-Geneviève Trépanier¹  | Robert J. Vallerand² | Julie Ménard²  | Clayton Peterson¹¹Department of Human Resources Management, Business School, Université du Québec à Trois-Rivières, Quebec, Canada²Department of Psychology, Université du Québec à Montréal, Quebec, Canada**Correspondence**

Sarah-Geneviève Trépanier, Department of Human Resources Management, Université du Québec à Trois-Rivières, 3351, boul. des Forges, C.P. 500, Trois-Rivières, Quebec, Canada G9A 5H7.

Email: sarah-genevieve.trepanier@uqtr.ca

Funding information

Social Sciences and Humanities Research Council of Canada

Abstract

This longitudinal study (T1 $n = 399$; T2 $n = 279$) investigated the moderating role of work motivation in the relationship between job resources (control and recognition) and burnout. Overall, job recognition and control resulted in more burnout for employees with poor-quality work motivation (high controlled or low autonomous motivation). These results suggest that poor-quality motivation renders employees more vulnerable to certain resources in their work environment, as these job characteristics stimulate compensatory behaviours (e.g., overinvesting in one's job to boost one's sense of self-worth or to obtain others' approval), leading to energy depletion over time.

KEYWORDS

burnout, job resources, self-determination theory, work motivation

1 | INTRODUCTION

Organizations are facing increasingly turbulent and competitive times. In this context, they need to capitalize on their employees to maximize their success. Accordingly, organizations should aim to attract and develop an engaged, healthy and high-performing workforce by providing employees with stimulating work environments. In line with this, past research has shown that job resources are positively associated with indicators of optimal health in employees (e.g., work engagement, commitment, job satisfaction; Bakker, Demerouti, De Boer, & Schaufeli, 2003; Hakanen, Schaufeli, & Ahola, 2008; Nahrgang, Morgeson, & Hofmann, 2011), although it is recognized that not all employees are affected equally by their work environment and this adaptation is largely influenced by individual characteristics (Sonnentag & Frese, 2012). An important individual factor that could influence the impact of job resources on employees' health is the quality of their work motivation (i.e., the primary reasons why employees accomplish their work). As such, this study investigated the moderating role of work motivation (autonomous and controlled) in the longitudinal relationship between job resources (job control and recognition) and employee health (burnout). In the next sections, we will briefly discuss the basic propositions underlying the relationship between job characteristics and employee health before addressing the concept of work

motivation and its potential moderating role in the resources-health relationship.

2 | JOB RESOURCES AND EMPLOYEE HEALTH

According to the Job-Demands Resources model (JD-R model, Bakker, Demerouti, & Sanz-Vergel, 2014; Bakker & Demerouti, 2017), the work environment plays an important role in explaining employee psychological health and subsequent organizational effectiveness. Indeed, the presence of job demands (i.e., negatively valued aspects of the job that require considerable effort; Schaufeli & Taris, 2014), such as work overload, role conflict or role ambiguity, lead to health impairment by draining employees' psychological, cognitive and physical resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Conversely, job resources (i.e., aspects of the job that support individuals in performing their job), such as job control and recognition, have the potential to facilitate optimal psychological health and subsequently organizational effectiveness (Schaufeli, 2017). Indeed, by helping employees achieve work goals, reducing job demands and stimulating personal development (Bakker et al., 2014; Demerouti et al., 2001), job resources are proposed to be highly motivating and trigger work engagement as well as positive organizational outcomes. In line with

this, much empirical evidence supports the beneficial effect of job resources, linking these positive job characteristics to a variety of indicators of employee health and job functioning, including work engagement, commitment, job satisfaction and safety compliance (e.g., Hakanen et al., 2008; Nahrgang et al., 2011).

However, it is well established that individual factors can influence the effect of work-related factors on employee health (Kahn & Byosiére, 1992; Sonnentag & Frese, 2012). For example, optimism has been found to buffer the relationship between demands and distress (Mäkikangas & Kinnunen, 2003). More recently, Brenninkmeijer, Demerouti, le Blanc, and Hetty van Emmerik (2010) found that job autonomy predicted health (engagement, job satisfaction, commitment) more strongly for employees with low promotion focus (i.e., who are mainly concerned with fulfilling their obligations and strive for security), suggesting that individuals with lower-quality regulatory focus benefit more from the resources at their disposal. Accordingly, it appears important to further investigate individual factors that can influence the relationship between job resources and health. An important individual factor that can alter the effect of job resources is the quality of employees' work motivation.

3 | WORK MOTIVATION

Self-determination theory (Deci, Olafsen, & Ryan, 2017; Deci & Ryan, 2008) distinguishes between two qualitatively different forms of work motivation. Autonomous motivation refers to engaging freely in one's job for the inherent pleasure it provides (intrinsic motivation) and/or because one identifies with its meaning (identified regulation). Controlled motivation involves engaging in one's job because of external (e.g., for implicit approval or tangible rewards; external regulation) or internal (e.g., to boost one's self-esteem or to avoid feeling guilty or anxious; introjected regulation) pressure. While autonomous motivation promotes well-being and optimal job functioning (e.g., job performance, commitment and engagement; Fernet, Trépanier, Demers, & Austin, 2017; Fernet, Trépanier, Austin, Forest, & Gagné, 2015; Trépanier, Forest, Fernet, & Austin, 2015), controlled motivation is associated to maladaptive outcomes including distress, turnover intention and burnout (Fernet, Chanal, & Guay, 2017; Fernet, Trépanier, et al., 2017; Trépanier et al., 2015).

In addition to predicting employee health, work motivation has been shown to influence how employees are affected by environmental factors (Fernet & Austin, 2014). For example, Trépanier, Fernet, and Austin (2013) found that employees with low autonomous motivation experienced more distress in the presence of demands compared to highly autonomously motivated employees. Studies have also focused on the moderating role of motivation in the relationship between job resources and health as well as job functioning. In line with this, past studies have found autonomous (or intrinsic) motivation to be a catalyst that increased the beneficial effect of job resources on performance-related indicators, including work quality and organizational citizenship behaviours (e.g., Dysvik & Kuvaas, 2008, 2011; Kuvaas, 2006). For example, job autonomy has been

found to positively predict both self-reported and line manager rated work quality, but only for employees with high intrinsic motivation (Dysvik & Kuvaas, 2011). Other research has investigated the moderating role of work motivation in the relationship between job resources and employee strain (e.g., burnout) and shown that job resources have a more beneficial effect for employees with low-quality work motivation. For example, in a study among teachers, Fernet, Gagné, and Austin (2010) found that quality of relationships with co-workers predicted a stronger decrease in burnout over time for employees with low autonomous motivation.

Overall, employees appear to respond differently to work-related factors, depending on the type of motivation that drives them at work. Since employees who are autonomously motivated are self-driven at work and invest their energy in purposeful actions (Ryan & Deci, 2008), they may exhibit manifestations of well-being, regardless of the resources in their environment. Conversely, as employees who conduct their work for controlled reasons derive little pleasure from it, which they conduct mainly because of internal and external contingencies, they may be more sensitive to contextual factors and depend more strongly on job resources in their work environment to function adaptively (Fernet & Austin, 2014).

Although past research has investigated the role of motivation in the relationship between job resources and employee health, additional research is needed. With the exception of one study (Fernet et al., 2010), past research on the topic has been cross-sectional, and thus little is known about how motivation influences employees' adaptation to their work environment over time. Furthermore, past research has mostly assessed the moderating role of autonomous (or intrinsic) motivation or has measured motivation using a relative autonomy index (Grolnick & Ryan, 1987), which consists of a single score reflecting employees' overall motivation. As a consequence, little is currently known regarding the potential moderating role of controlled motivation in the job resources-health relationship. Given that autonomous and controlled motivation are separate concepts (and not opposite ends of the same continuum; Koestner, Otis, Powers, Pelletier, & Gagnon, 2008), it is important to assess both to fully understand how the reasons for which employees expend efforts at work can render them more or less sensitive to environmental factors.

4 | AIM OF THE STUDY

Using a longitudinal design (two data collections), this study investigated the moderating role of work motivation (autonomous and controlled) in the temporal relationship between job resources and burnout. This study was conducted among nurses, as this occupational group is at high risk of experiencing burnout (Adriaenssens, De Gucht, & Maes, 2015; Gelsema et al., 2006). Burnout is an important indicator of employee health, mainly characterized by feelings of being depleted of one's emotional energy (i.e., exhaustion; Bakker et al., 2014). It can have serious organizational repercussions, as it has been linked to turnover intention, absenteeism and reduced job performance (Swider & Zimmerman, 2010). In the nursing

profession, these consequences can have a significant impact on the quality of care provided (Hayes et al., 2012). This study investigated the moderating role of work motivation in the longitudinal relationship between two resources and burnout, namely job control (the ability to make important decisions about one's work, as well as the ability to gain access to resources necessary to effectively do one's job; Boamah & Laschinger, 2016) and recognition (the extent to which an employee's expectations are fulfilled by the social reward system; Boamah & Laschinger, 2016), as the absence of these two resources has been found to be linked to burnout (Leiter & Maslach, 2004).

In light of the theoretical considerations and empirical evidence presented above, the following hypotheses are proposed:

Hypothesis 1 *Controlling for baseline burnout, T1 autonomous motivation moderates the negative relationships between T1 job control and T2 burnout [H1a] as well as between T1 recognition and T2 burnout [H1b] such that the relationships are stronger for employees with low (versus high) autonomous motivation.*

Hypothesis 2 *Controlling for baseline burnout, T1 controlled motivation moderates the negative relationships between T1 job control and T2 burnout [H2a] as well as between T1 recognition and T2 burnout [H2b] such that the relationships are stronger for employees with high (versus low) controlled motivation.*

5 | METHOD

5.1 | Participants and procedure

A two-wave study was conducted in nurses working in the public healthcare sector in the province of Quebec, Canada. Data were collected at two time points over a 12-month period. For each data collection, nurses received an email explaining that the study pertained to psychological health in the nursing profession and inviting them to complete an online questionnaire. The email also informed nurses of the voluntary basis for participation and the fact that anonymity and confidentiality of responses would be preserved. Of the 399 nurses who participated at Time 1 (2,500 nurses were contacted, representing a 16% response rate), 279 also participated at Time 2 (response rate of 70%). The sample consisted mainly of women (88.8%). Mean age was 42.74 ($SD = 11.40$) and average job tenure was 18.83 years ($SD = 11.58$).

5.2 | Measures

5.2.1 | Job resources

Job recognition (four items, $T1 \alpha = .86/T2 \alpha = .85$) and control (three items, $T1 \alpha = .71/T2 \alpha = .66$) were measured with the Areas of Work Life Scale (Leiter & Maslach, 2004). Sample items are 'I receive

recognition from others for my work' and 'I have control over how I do my work'. Participants were asked to rate the degree to which they agreed with the statements on a scale ranging from 1 (*totally disagree*) to 5 (*totally agree*). The psychometrical properties (e.g., reliability, factor structure, consistency across occupational groups) of the AWS have been supported by past research (Leiter & Maslach, 2004).

5.2.2 | Work motivation

The Multidimensional Work Motivation Scale (MWMS; Gagné et al., 2015) was used to assess autonomous motivation (six items; $T1 \alpha = .84/T2 \alpha = .84$; e.g., 'Because this job has a personal significance for me') and controlled motivation (10 items; $T1 \alpha = .77/T2 \alpha = .80$; e.g., 'Because I have to prove to myself that I can'). Participants were asked to indicate on a seven-point scale from 1 (*not at all for this reason*) to 7 (*exactly for this reason*), the degree to which each item corresponded to the reason they performed their job. The psychometrical properties (e.g., factor structure, convergent and discriminant validity) of the MWMS have been supported in its validation study (Gagné et al., 2015).

5.2.3 | Burnout

Burnout was assessed with the emotional exhaustion subscale (five items; $T1 \alpha = .92/T2 \alpha = .93$; e.g., 'I feel used up at the end of a work day') of the Maslach Burnout Inventory General Survey (Schaufeli, Leiter, Maslach, & Jackson, 1996). Emotional exhaustion is widely considered the key component of burnout (Demerouti et al., 2001). On a scale from 1 (*never*) to 7 (*every day*), participants were asked to indicate how often they experienced these feelings. The psychometrical properties (e.g., factor structure, reliability and factor invariance) of the MBI-GS have been established by past research (e.g., Schutte, Toppinen, Kalimo, & Schaufeli, 2000).

5.3 | Statistical analysis

Properties (i.e., means, standard deviations and correlations) of the measures are presented in Table 1. Moderation analyses (Hayes, 2013) were performed using PROCESS v.2 in SPSS v.25. The analyses were conducted only with participants that responded at both time points. Participants with missing data for the second time point were excluded. The independent and moderating variables were centered and the interaction was probed +1SD above and -1 SD under the moderator's mean (Aiken, West, & Reno, 1991). Sociodemographic variables (gender, job status and age) that have been linked to employee health (e.g., Antoniou, Polychroni, & Vlachakis, 2006; Garrosa, Moreno-Jimenez, Liang, & Gonzalez, 2008) were included as control variables. Bootstrap was fixed to 5,000 iterations and produced a 95% confidence interval.

TABLE 1 Means, standard deviations, correlations between variables

Variables	Scale	Mean	SD	1	2	3	4	5	6	7	8	9
1. T1 job recognition	1–5	3.69	0.80	–								
2. T1 job control	1–5	3.60	0.73	0.65*	–							
3. T1 autonomous motivation	1–7	5.36	0.95	0.29*	0.34*	–						
4. T1 controlled motivation	1–7	3.60	0.94	–0.13*	–0.11	0.16*	–					
5. T1 burnout	1–7	3.24	1.29	–0.37*	–0.45*	–0.18*	0.31*	–				
6. T2 job recognition	1–5	3.73	0.76	0.61*	0.42*	0.22*	–0.10	–0.30*	–			
7. T2 job control	1–5	3.64	0.71	0.40*	0.55*	0.23*	–0.11	–0.33*	0.53*	–		
8. T2 autonomous motivation	1–7	5.37	0.91	0.21*	0.56*	0.68*	0.09	–0.08	0.34*	0.30*	–	
9. T2 controlled motivation	1–7	3.63	0.97	–0.03	0.04	0.11	0.63*	0.21*	–0.02	–0.02	0.23*	–
10. T2 burnout	1–7	2.94	1.26	–0.19*	–0.26*	–0.10	0.20*	0.64*	–0.32*	–0.31*	–0.13*	0.23*

Abbreviation: SD, standard deviation.

* $p < .05$.

	T2 burnout			
	Autonomous motivation		Controlled motivation	
	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI
Gender	–0.03 (0.19)	[–0.40, 0.35]	–0.04 (0.19)	[–0.41, 0.32]
Age	>0 (0.01)	[–0.01, 0.01]	>0 (0.01)	[–0.01, 0.01]
Job status	–0.04 (0.14)	[–0.32, 0.24]	–0.05 (0.14)	[–0.32, 0.23]
T1 burnout	0.63* (0.05)	[0.53, 0.74]	0.64* (0.06)	[0.53, 0.75]
T1 job control	0.07 (0.10)	[–0.13, 0.27]	0.05 (0.10)	[–0.14, 0.23]
T1 moderator	0.02 (0.07)	[–0.11, 0.16]	–0.01 (0.07)	[–0.16, 0.13]
Interaction	–0.08 (0.09)	[–0.27, 0.10]	0.21* (0.09)	[0.03, 0.39]
Gender	–0.03 (0.19)	[–0.40, 0.34]	–0.04 (0.19)	[–0.41, 0.33]
Age	>0 (0.01)	[–0.01, 0.01]	>0 (0.01)	[–0.01, 0.01]
Job status	–0.03 (0.14)	[–0.31, 0.25]	–0.01 (0.14)	[–0.29, 0.26]
T1 burnout	0.63* (0.05)	[0.53, 0.74]	0.64* (0.05)	[0.54, 0.75]
T1 recognition	0.11 (0.08)	[–0.06, 0.28]	0.08 (0.08)	[–0.08, 0.24]
T1 moderator	>0 (0.07)	[–0.13, 0.14]	–0.04 (0.07)	[–0.18, 0.11]
Interaction	–0.16* (0.08)	[–0.31, –0.01]	0.17* (0.08)	[0.02, 0.33]

Abbreviations: *b*, unstandardized coefficient; CI, confidence interval; SE, standard error.* $p < .05$.**TABLE 2** Moderating role of T1 work motivation in the relationship between T1 resources and T2 burnout

6 | RESULTS

Controlling for baseline burnout, results show (Table 2) that autonomous motivation moderated the effect of recognition on burnout over time (Figure 1). Recognition positively predicted burnout for employees low on autonomous motivation ($b = .26$; $CI = [.03, .49]$, $p = .03$) but not for employees high on autonomous motivation ($b = –.04$; $CI = [–.24, .16]$, $p = .69$). Autonomous motivation did not significantly moderate the relationship between job control and burnout. The first hypothesis was therefore not supported, as the relationship between recognition and burnout was

positive (rather than negative) for low autonomously motivated employees.

Results show (Table 2) that, while controlling for baseline burnout, recognition and job control positively predicted burnout over time for employees high on controlled motivation (recognition: $b = .25$; $CI = [.03, .46]$, $p = .03$; job control: $b = .25$; $CI = [.01, .48]$, $p = .04$). The relationship between the two resources and burnout was not significant for employees low on controlled motivation (recognition: $b = –.08$; $CI = [–.30, .14]$, $p = .48$; job control: $b = –.15$; $CI = [–.42, .11]$, $p = .26$). See Figures 2 and 3. Hypothesis 2 was not supported as the moderating effects were in the opposite direction.

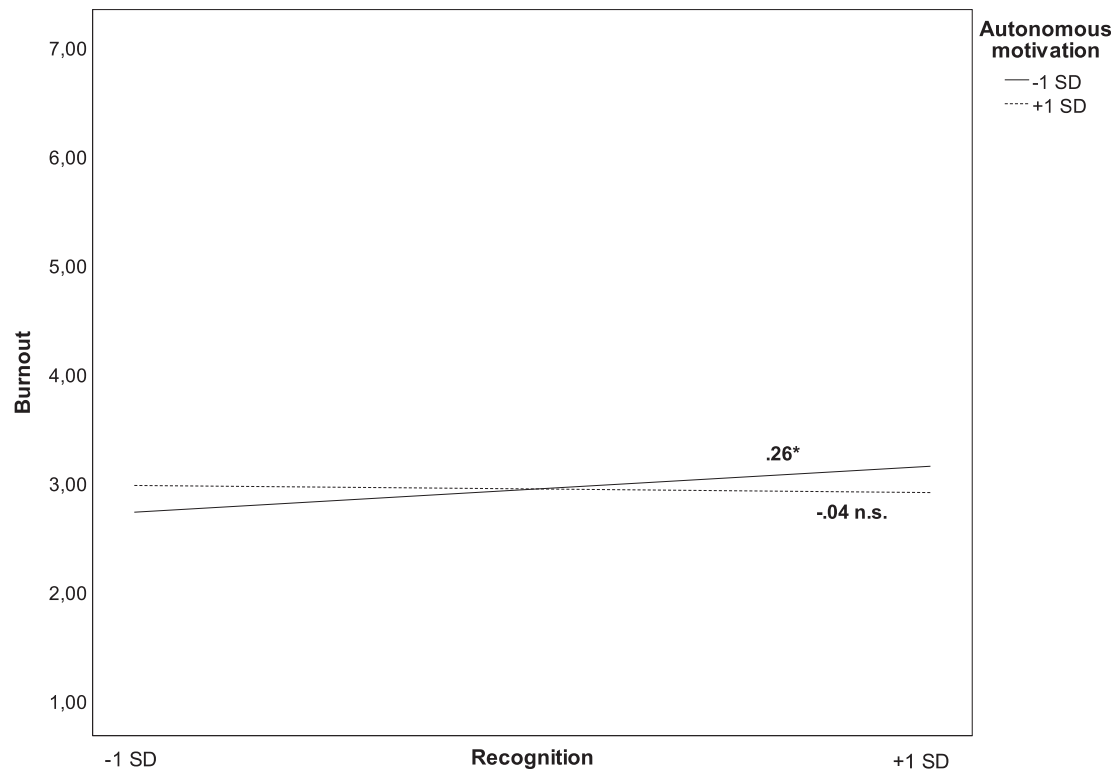


FIGURE 1 The moderating role of T1 autonomous motivation in the relationship between T1 recognition and T2 burnout * $p < .05$

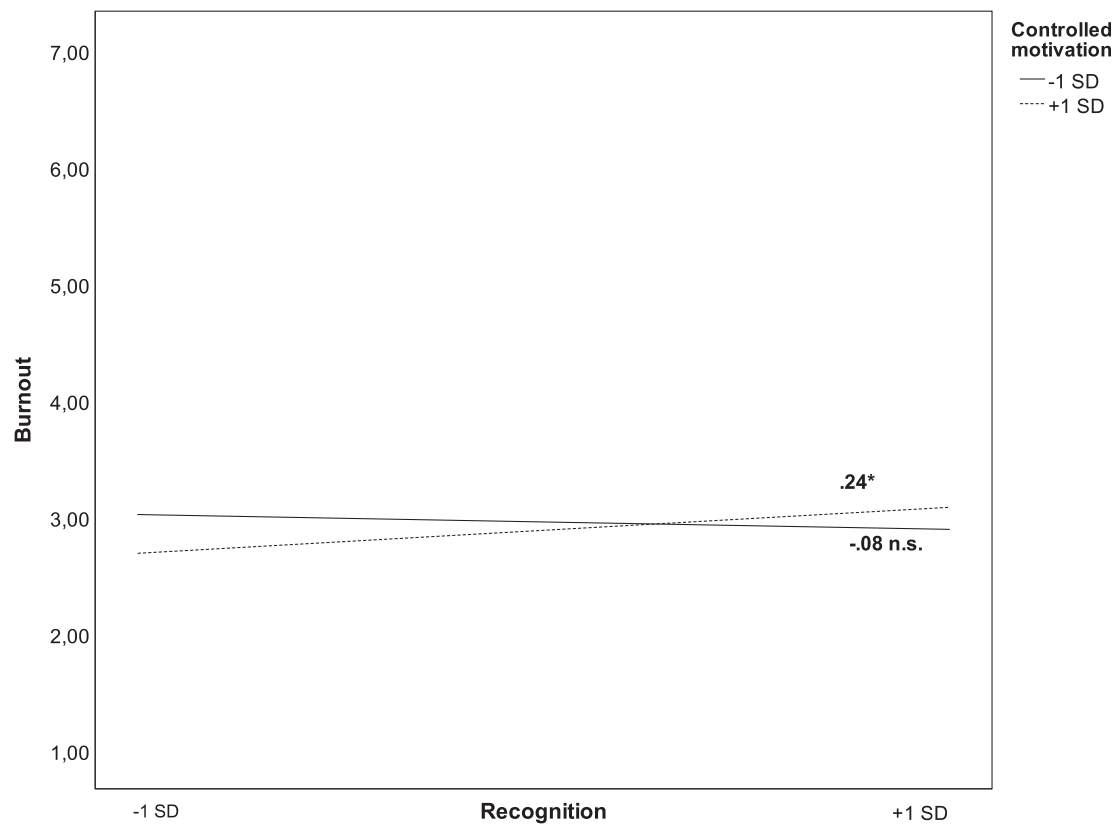


FIGURE 2 The moderating role of T1 controlled motivation in the relationship between T1 recognition and T2 burnout * $p < .05$

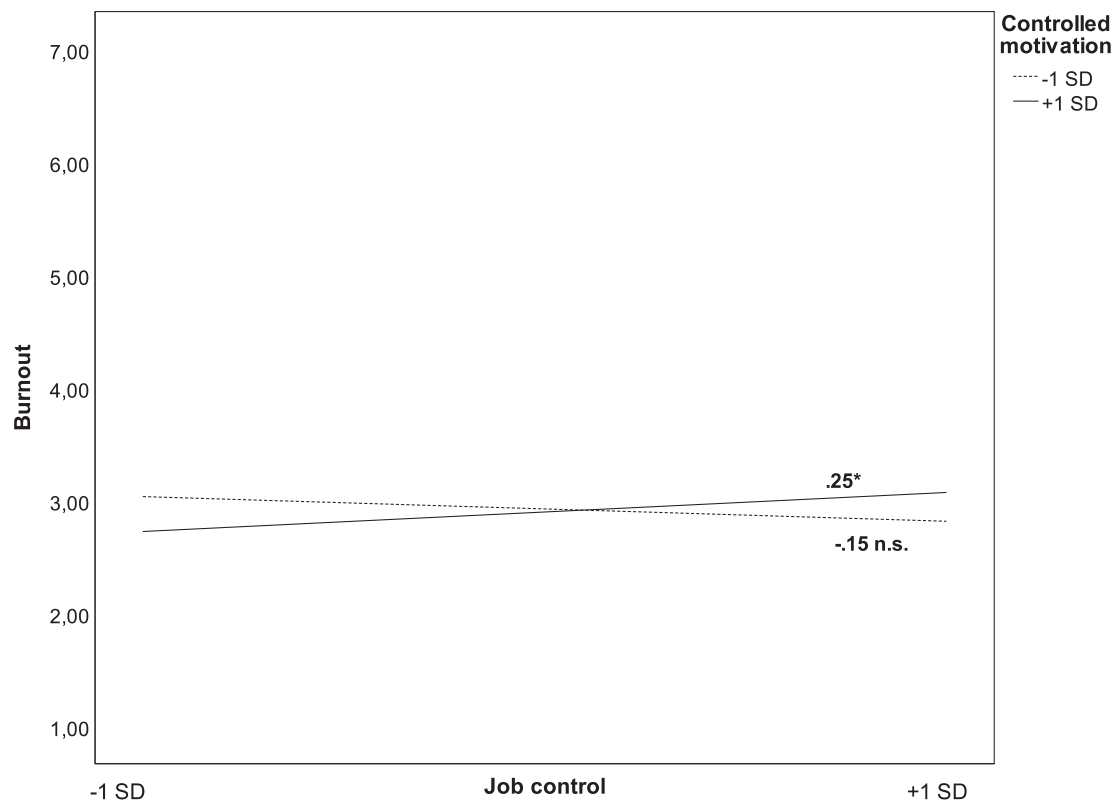


FIGURE 3 The moderating role of T1 controlled motivation in the relationship between T1 job control and T2 burnout * $p < .05$

7 | DISCUSSION

7.1 | Theoretical contributions

The results of the present study showed that the quality of employees' motivation significantly altered how job resources impact their health. Indeed, controlling for baseline burnout, job recognition positively predicted burnout over time for employees with poor-quality work motivation (high controlled or low autonomous motivation), whereas job control positively predicted burnout for employees with high controlled motivation. Up to now, past JD-R model-based research has overwhelmingly shown that job resources promote employee well-being (e.g., work engagement, commitment, job satisfaction; Bakker et al., 2003; Hakanen et al., 2008; Nahrgang et al., 2011). By revealing counterintuitive results pertaining to the combined effect of job resources and work motivation over time, the present study nuances the motivational process proposed by the JD-R model and shows that certain job resources can actually drain (rather than increase) employees' energy depending on the quality of their work motivation. Further research is needed to investigate this issue in greater length by assessing whether this pattern of results can apply to all resources or whether certain resources interact differently with work motivation to distinctively predict employee health over time.

7.1.1 | Job recognition

Although past research has shown that job recognition is a protective factor against burnout (e.g., Boamah & Laschinger, 2016), the results of this study have illustrated that its temporal effect is highly dependent on the quality of employees' motivation. Indeed, it positively predicted burnout over time for employees with low-quality (high controlled or low autonomous) motivation. As employees with low-quality work motivation often act under the influence of the pressures linked to social expectations (Deci & Ryan, 2008; Fall & Roussel, 2014), they may overly seek recognition, as this form of validation soothes their desire for external approval and fuels their sense of self-worth (Deci & Ryan, 2014). Relying on job recognition for such purposes is maladaptive, as our results showed that it depletes employees' energy reservoir, resulting in greater burnout over time.

7.1.2 | Job control

Our results revealed a differentiated pattern regarding the moderating role of work motivation in the longitudinal relationship between job control and burnout. Indeed, whereas controlled motivation moderated the relationship between job control and burnout, this relationship was not influenced by the degree of autonomous motivation

employees experience regarding their work. It is therefore the active presence of pressure one feels to accomplish one's job and not the lack of pleasure derived from one's job or the personal significance associated with it that alters how control influences the deployment of one's energy at work. These results concur with the proposition that autonomous and controlled motivation tap into different motivational experiences, which have distinct effects on individuals' functioning (Koestner et al., 2008; Trépanier et al., 2015) and highlight the relevance of investigating both to fully understand employees' adaptation to their work environment. More specifically, our results suggest that, as the self-esteem of employees who are motivated in a controlled manner is contingent on the outcomes achieved at work (e.g., their performance, the approval of others; Ferris, 2014), having the opportunity to exercise job control can render these employees more likely to work compulsively to achieve these valued outcomes (Fernet & Austin, 2014). However, results showed that this mechanism is costly, as it is associated with burnout over time, providing additional evidence that behaving in a controlled manner leads to energy depletion (Gagné, 2014).

Overall, the results of the present study showed that employees with poor-quality motivation (high controlled or low autonomous motivation) are more sensitive to environmental factors and that, for these employees, certain job resources can result in adverse consequences. For employees with more controlled motives, job recognition and, to a lesser extent, job control appear to create fertile grounds for compensatory behaviours (e.g., overinvesting in one's job to boost one's sense of self-worth or to obtain others' acknowledgement). Over time, such actions, which require a considerable amount of energy, erode employees' resources, leading to energy depletion (Vansteenkiste & Ryan, 2013). As such, although past JD-R model-based research has mostly investigated personal resources (positive individual characteristics) that either boost the positive effect of job resources or reduce the detrimental effect of job demands on employee health (e.g., self-efficacy, Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007), our study highlights the relevance of taking into account less adaptive individual factors that can undermine the beneficial impact of job resources over time.

7.2 | Limitations and future research

Our study focused on one dimension of burnout, namely emotional exhaustion. Although this manifestation is identified as the key component of burnout (Demerouti et al., 2001), future research is encouraged to simultaneously assess all three dimensions (i.e., emotional exhaustion, cynicism and reduced personal accomplishment) to gain insight into how job resources and work motivation interact to predict these manifestations over time, as they have distinct predictors (e.g., Fernet, Austin, Trépanier, & Dussault, 2013). Future research is also encouraged to investigate other job resources (e.g., career opportunities, social support) and broaden the scope of the outcomes investigated and assess both positive and negative emotional, attitudinal and behavioral indicators of health and job functioning (e.g., vitality,

commitment, counterproductive behavior). Lastly, although there is no established ideal interval to investigate the temporal effects of job characteristics on employee health (Lesener, Gusy, & Wolter, 2019), future research could validate the present study's findings using shorter (e.g., 3 months) or longer (e.g., 2 years) time intervals. Doing so would provide further insight into the complex temporal interplay between job resources and employee health, as well as the role of work motivation within this relationship.

7.3 | Practical implications and conclusion

The present findings provided insight to organizations seeking to reduce the risk of ill-being in their employees. Our results showed that for employees with poor-quality work motivation (high controlled motivation, and to a lesser extent low autonomous motivation), job resources resulted in greater burnout over time. It therefore appears important to prevent this form of motivation in employees. As past research has shown that demanding work environments thwart employees' needs for autonomy, competence and relatedness, which are essential psychological resources that facilitate the internalization process and without which suboptimal motivation is more likely to emerge (Trépanier et al., 2015), reducing the presence of job demands is important. Although it might be difficult, if not impossible, to eliminate all job demands, organizations could seek to reduce these taxing job characteristics as much as possible. Particular attention should be given to job hindrances (i.e., job demands that undermine the achievement of valued goals; Cavanaugh, Boswell, Roehling, & Boudreau, 2000) as they are particularly stressful and harmful for employees' psychological needs and health (Albrecht, 2015; Crawford, Lepine, & Rich, 2010). For example, organizations could aim to clarify job roles and mandates in order to reduce role ambiguities and conflicts. Organizations are also encouraged to promote positive (e.g., transformational leadership) and reduce more destructive forms of managerial practices (e.g., tyrannical, laissez-faire leadership) in their managers as they can have a significant impact on employees' psychological needs and the quality of their work motivation (Fernet et al., 2015; Trépanier, Boudrias, & Peterson, in press). For example, Trépanier et al. (in press) found that destructive leadership (and in particular tyrannical leadership) fostered need frustration and controlled motivation, which subsequently undermined employee health and job functioning (i.e., burnout, lower commitment and performance). Finally, organizations are encouraged to rethink how performance is assessed and compensated (e.g., contingent rewards), as such practices may promote low-quality work motivation in employees (Deci, Koestner, & Ryan, 1999; Gagné & Forest, 2008) and can lead to ill-being over time.

Overall, our results showed that the longitudinal relationship between specific job resources and employee health is complex and that work motivation, and more specifically low-quality motivation (high controlled or low autonomous motivation), is an important individual factor that needs to be taken into account to adequately assess how employees are affected by job resources. By doing so, both

researchers and practitioners can better understand the boundary conditions under which the use of job resources can have counterproductive effects on employee health and job functioning over time.

ORCID

Sarah-Geneviève Trépanier  <https://orcid.org/0000-0001-8008-0896>

Julie Ménard  <https://orcid.org/0000-0002-8884-3402>

REFERENCES

- Adriaenssens, J., De Gucht, V., & Maes, S. (2015). Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *International Journal of Nursing Studies*, 52(2), 649–661.
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Albrecht, S. L. (2015). Challenge demands, hindrance demands, and psychological need satisfaction. *Journal of Personnel Psychology*, 14(2), 70–79.
- Antoniou, A. S., Polychroni, F., & Vlachakis, A. N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece. *Journal of Managerial Psychology*, 21(7), 682–690.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 389–411.
- Boamah, S. A., & Laschinger, H. (2016). The influence of areas of worklife fit and work-life interference on burnout and turnover intentions among new graduate nurses. *Journal of Nursing Management*, 24(2), E164–E174.
- Brenninkmeijer, V., Demerouti, E., le Blanc, P. M., & Hetty van Emmerik, I. J. (2010). Regulatory focus at work: The moderating role of regulatory focus in the job demands–resources model. *Career Development International*, 15(7), 708–728.
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology*, 85(1), 65–74.
- 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.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627–668.
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, 49(3), 182–185.
- Deci, E. L., & Ryan, R. M. (2014). The importance of universal psychological needs for understanding motivation in the workplace. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 13–32). New York, NY: Oxford University Press.
- 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.
- Dysvik, A., & Kuvaas, B. (2008). The relationship between perceived training opportunities, work motivation and employee outcomes. *International Journal of Training and Development*, 12(3), 138–157.
- Dysvik, A., & Kuvaas, B. (2011). Intrinsic motivation as a moderator on the relationship between perceived job autonomy and work performance. *European Journal of Work and Organizational Psychology*, 20(3), 367–387.
- Fall, A., & Roussel, P. (2014). Compensation and work motivation: Self-determination theory and the paradigm of motivation through incentives. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 199–217). New York, NY: Oxford University Press.
- Fernet, C., & Austin, S. (2014). Self-determination and job stress. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 231–244). New York, NY: Oxford University Press.
- Fernet, C., Austin, S., Trépanier, S.-G., & Dussault, M. (2013). How do job characteristics contribute to burnout? Exploring the distinct mediating roles of perceived autonomy, competence, and relatedness. *European Journal of Work and Organizational Psychology*, 22(2), 123–137.
- Fernet, C., Chanal, J., & Guay, F. (2017). What fuels the fire: Job- or task-specific motivation (or both)? On the hierarchical and multidimensional nature of teacher motivation in relation to job burnout. *Work & Stress*, 31(2), 145–163.
- Fernet, C., Gagné, M., & Austin, S. (2010). When does quality of relationships with coworkers predict burnout over time? The moderating role of work motivation. *Journal of Organizational Behavior*, 31(8), 1163–1180.
- Fernet, C., Trépanier, S.-G., Austin, S., Forest, J., & Gagné, M. (2015). Transformational leadership and optimal functioning at work: On the mediating role of employees' perceived job characteristics and motivation. *Work & Stress*, 29(1), 11–31.
- Fernet, C., Trépanier, S.-G., Demers, M., & Austin, S. (2017). Motivational pathways of occupational and organizational turnover intentions in newly registered nurses: A cross-sectional study on autonomous and controlled motivation, and forms and targets of commitment. *Nursing Outlook*, 65(4), 444–454.
- Ferris, D. L. (2014). Contingent self-esteem: A review and applications to organizational research. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 127–142). New York, NY: Oxford University Press.
- Gagné, M. (2014). Self-determination theory in the work domain: This is just the beginning. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 414–431). New York, NY: Oxford University Press.
- Gagné, M., & Forest, J. (2008). The study of compensation systems through the lens of self-determination theory: Reconciling 35 years of debate. *Canadian Psychology*, 49(3), 225–232.
- Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., Van den Broeck, A., Aspel, A. K., ... Güntert, S. T. (2015). The multidimensional work motivation scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology*, 24(2), 178–196.
- Garrosa, E., Moreno-Jimenez, B., Liang, Y., & Gonzalez, J. L. (2008). The relationship between socio-demographic variables, job stressors, burnout, and hardy personality in nurses: An exploratory study. *International Journal of Nursing Studies*, 45(3), 418–427.
- Gelsema, T. I., Van Der Doef, M., Maes, S., Janssen, M., Akerboom, S., & Verhoeven, C. (2006). A longitudinal study of job stress in the nursing profession: Causes and consequences. *Journal of Nursing Management*, 14(4), 289–299.

- Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, 52(5), 890–898.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The job demands-resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224–241.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., ... North, N. (2012). Nurse turnover: A literature review—an update. *International Journal of Nursing Studies*, 49(7), 887–905.
- Kahn, R. L., & Byosiére, P. B. (1992). Stress in organizations. In M. D. Dunnette & L. M. Hugh (Eds.), *Handbook of industrial and organizational psychology* (pp. 571–650). Palo Alto, CA: Consulting Psychologists Press.
- Koestner, R., Otis, N., Powers, T. A., Pelletier, L., & Gagnon, H. (2008). Autonomous motivation, controlled motivation, and goal progress. *Journal of Personality*, 76(5), 1201–1230.
- Kuvaas, B. (2006). Performance appraisal satisfaction and employee outcomes: Mediating and moderating roles of work motivation. *The International Journal of Human Resource Management*, 17(3), 504–522.
- Leiter, M. P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In P. Perrewé & D. C. Ganster (Eds.), *Research in occupational stress and well-being* (Vol. 3, pp. 91–134). Oxford, England: Elsevier.
- Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, 33(1), 76–103.
- Mäkikangas, A., & Kinnunen, U. (2003). Psychosocial work stressors and well-being: Self-esteem and optimism as moderators in a one-year longitudinal sample. *Personality and Individual Differences*, 35(3), 537–557.
- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71–94.
- Ryan, R. M., & Deci, E. L. (2008). From ego depletion to vitality: Theory and findings concerning the facilitation of energy available to the self. *Social and Personality Psychology Compass*, 2(2), 702–717.
- Schaufeli, W. B. (2017). Applying the job demands-resources model. *Organizational Dynamics*, 2(46), 120–132.
- Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). The Maslach burnout inventory-test manual. In C. Maslach, S. E. Jackson, & M. P. Leiter (Eds.), *Maslach burnout inventory—General survey* (3rd ed., pp. 22–26). Palo Alto CA: Consulting Psychologists Press.
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health* (pp. 43–68). Dordrecht: Springer.
- Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. (2000). The factorial validity of the Maslach Burnout Inventory-General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational and Organizational Psychology*, 73(1), 53–66.
- Sonnentag, S., & Frese, M. (2012). Stress in organizations. In I. B. Weiner (Ed.), *Handbook of psychology* (Vol. 12). Hoboken, NY: Wiley.
- 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.
- Trépanier, S. G., Boudrias, V., & Peterson, C. (2019). Linking destructive forms of leadership to employee health. *Leadership & Organization Development Journal*, 40(7), 803–814.
- Trépanier, S.-G., Fernet, C., & Austin, S. (2013). The moderating role of autonomous motivation in the job demands-strain relation: A two sample study. *Motivation and Emotion*, 37(1), 93–105.
- Trépanier, S.-G., Forest, J., Fernet, C., & Austin, S. (2015). On the psychological and motivational processes linking job characteristics to employee functioning: Insights from self-determination theory. *Work & Stress*, 29(3), 286–305.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23, 263–280.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121–141.

How to cite this article: Trépanier S-G, Vallerand RJ, Ménard J, Peterson C. Job resources and burnout: Work motivation as a moderator. *Stress and Health*. 2020;36: 433–441. <https://doi.org/10.1002/smi.2939>