Are wellbeing dimensions diferentially related to employee proactive behavior? The joint moderating efects of knowledge job demands and empowering leadership

Are Wellbeing Dimensions Differentially Related to Employee Proactive Behavior? The Joint Moderating Effects of Knowledge Job Demands and Empowering Leadership

Abstract

The aim of this article was to investigate the conditions under which the dimensions of work-related wellbeing (i.e., serenity, social harmony, and involvement) can be beneficial for employee proactive behavior (PB). Based on theories of activation and theorization about the influence of wellbeing on performance, we proposed that the contribution of the wellbeing dimensions to PB depends on the type of challenge (i.e., knowledge job demands; KJDs) and level of stimulation (i.e., empowering leadership) that employees experience in their jobs. Data were collected from Canadian employees (N = 602) through a two-wave study. As predicted, findings indicated that KJDs and empowering leadership jointly interacted with serenity and involvement to predict PB. High levels of empowering leadership were found to strengthen the effect of the interactions between serenity and KJDs and between involvement and KJDs, and to intensify the positive relationship between involvement and PB among employees with high KJDs. We discuss the implications of these findings for theory and management of wellbeing and PB in workplaces.

Keywords: psychological wellbeing; proactive behavior; knowledge job demands; empowering leadership; activation theory

Conflict of interest statement: on behalf of all authors, the corresponding author states that there is no conflict of interest.

Are Wellbeing Dimensions Differentially Related to Employee Proactive Behavior? The Joint Moderating Effects of Knowledge Job Demands and Empowering Leadership

Introduction

Employee behaviors that involve anticipating the future and actively taking charge of situations to bring about changes are recognized by scholars and practitioners as being necessary for organizations to remain competitive in uncertain times (Campbell, 2000). The literature suggests that this set of behaviors, which is referred to as proactive behavior (PB) (Bindl & Parker, 2010), demands a conspicuous investment of self-regulatory resources from employees (e.g., persisting despite setbacks, sustaining attention, and making uncertain decisions). Empirical studies indicate that people experiencing higher levels of wellbeing produce more original thinking (Lyubomirsky, King, & Diener, 2005), are involved in more productive social exchange relationships with others (Bryson, Forth, & Stokes, 2014), and tend to engage more readily in challenging work (Forgas & George; 2001; Ilies & Judge, 2005). Based on a review of the literature on the "happy worker-productive worker" hypothesis, Warr and Nielsen (2018) reported evidence for the benefits of employee wellbeing for various types of work-related performance, including PB.

However, scholars have noted that the general wellbeing-performance relationship is small-to-moderate (for a quantitative review, see Ford, Cerasoli, Higgins, & Decesare, 2011) and that the magnitude of the correlation may depend on contextual factors. Specifically, according to the literature review done by Warr and Nielsen (2018), the relationship is stronger for employees having more cognitively demanding occupations (professional/managerial high skills jobs *vs* low skilled jobs) and when there is high discretion for the performance of one's job. Furthermore, the same researchers suggested that the level of activation is an important factor that may influence the contribution of different wellbeing dimensions to performance. However, the current literature has not yet offered an

integrative view of the circumstances under which wellbeing dimensions with different levels of activation may explain employee PB. Addressing these limitations is important for improving our understanding of the relationship between wellbeing and employee PB and help organizations manage effectively employee psychological wellbeing to enhance proactivity at work.

In this article, we examine hypotheses pertaining to the relationships between wellbeing dimensions and PB across different situations. We argue that each wellbeing dimension has the potential to provide an advantage for actions helping to achieve proactivity at work. Based on activation theories (Byron, Khazanchi, & Nazarian, 2010) as well as on wellbeing and proactive behavior models (Parker, Bindl, & Strauss, 2010; Warr & Nielsen, 2018), we specifically suggest that two contextual factors, namely knowledge job demands (KJDs) and empowering leadership, can increase vs. decrease the potential of wellbeing dimensions to foster PB. According to Parker et al.'s (2010) model, PB is more likely to occur when employees are "energized to" perform them, have a "reason to" perform them, and have positive "can-do" expectancies about them. However, wellbeing's contribution to PB has been essentially studied from the "energized to" perspective (Parker et al., 2010). Yet, according to scholars, this process does not occur in a situational vacuum (Bindl & Parker, 2010). Following this perspective, we argue that employees with different levels of mood activation may have different needs to convert their energetic potential into PB. As such, they may differentially respond to situations that bring to the forefront the "reason to" display proactivity, like KJDs, or the "can do" expectancies about proactivity, like empowering leadership. Our rationale is that these external conditions may increase vs. curb the degree of arousal in employees, which may enhance vs. undermine the wellbeing-PB relationship depending on the dimension of wellbeing considered. In sum, beyond hypothesizing a positive relationship between wellbeing dimensions and PB, we also predict three-way

interactions illustrating that these relationships are differentially impacted by the joint moderating influence of KJDs and empowering leadership.

The current study makes several contributions to the wellbeing and proactive performance literature. First, it heeds the recent calls to investigate the moderators of the effects of wellbeing on employee performance (Warr & Neilsen, 2018). By specifically targeting PB, our study follows recent suggestions indicating that wellbeing is more likely to influence discretionary and self-started behaviors than task performance (e.g., Warr, Bindl, Parker, & Inceoglu, 2014). Second, unpacking the wellbeing compound construct (Gilbert, Dagenais-Desmarais, & Savoie, 2011) will enable us to develop a finer-grained understanding of how its dimensions uniquely contribute to PB. Differentiating and theorizing the effects of wellbeing dimensions as a function of their activation level will help recognize the circumstances that may lead to a more substantial relationship between wellbeing and PB constructs (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012). Finally, by simultaneously considering the moderating roles of job characteristics and leadership, our study extends prior research that focused on the direct association between wellbeing dimensions and proactivity (Bindl et al., 2012; Warr et al., 2014). Accordingly, the present investigation provides a more comprehensive assessment of how situational factors can influence the wellbeing-PB relationship.

Theoretical Background and Hypothesis Development

Wellbeing and Proactive Behavior

In this article, we focus on wellbeing as a cognitive-affective state derived from a positive evaluation of oneself (i.e., serenity), social relationships (i.e., social harmony), and job activities (i.e., involvement) in the actual work context (Gilbert et al., 2011). The multidimensionality of this construct (Morin, Boudrias, Marsh, Madore, & Desrumaux, 2016) and its distinctiveness from its negative counterparts (Boudrias et al., 2011, 2014; Morin et

al., 2016) have been empirically documented. This contextualized approach to wellbeing implies that individuals positively assess their work situation and the meaning of their work experience. As such, it is different from context-free affects, which mostly reflect the hedonic rather than eudaimonic aspects of wellbeing (e.g., Fritz & Sonnentag, 2009; Warr et al., 2014). As mentioned by Warr and Nielsen (2018, p. 2), cognitive-affective wellbeing compounds comprise multiple dimensions, which can differ on their level of activation, namely "the degree to which they are physiologically and/or psychologically activated." In highly activated dimensions of wellbeing, people are enthusiastic and ready to invest energy to sustain a certain course of action (Christian, Garza, & Slaughter, 2011; Kleine, Rudolph, & Zacher, 2019). In low activated dimensions, people are calm and relaxed in connection to their work situation. They can reflect on their work and be receptive to further stimulation from their environment (Frijda, 1986; Roberts, & Whall, 1996). Both types of wellbeing dimensions, subsumed in the overarching wellbeing construct (Gilbert et al., 2011), can provide relevant resources for PB under certain, yet different, situational conditions.

PB is defined as employees' engagement in self-initiated behaviors oriented towards improving their work environment, their role in the organization and their own skills (Bindl & Parker, 2010; Campbell, 2000; Griffin et al., 2007). Sometimes referred to as proactive performance when a supervisor assesses this set of behaviors (e.g., Boudrias, Montani, & Vandenberghe, 2021), the term PB is appropriate when considered from the perspective of employees. PB can be distinguished from innovation as it does not include the same set of behaviors (Déprez, 2017) and the results of PB do not need to be an objective departure from organizational practices (Parker & Collins, 2010; Potočnik & Anderson, 2016). Still, PB and innovative behaviors would share similarities as they entail an analogous process to emerge and to be efficiently achieved within an organizational context. As such, the process leading to PB can be characterized by different phases, such as envisioning/conceiving

improvements, purposely promoting improvement ideas to others, and engaging in persistent efforts to implement them in the workplace (Bindl et al., 2012; Janssen, 2000). As described below, we suggest that the three dimensions of wellbeing provide the necessary resources to fuel PB (Fay & Hüttges, 2017).

Serenity at work refers to the feelings of self-assurance and comfort in one's work environment (Gilbert et al., 2011). Serene employees have a high self-esteem and positively perceive their ability in relation to the work context. Employees experiencing serenity at work are relatively strain-free and focus their attention on their work environment rather than on themselves and ruminative self-doubts (Gilbert et al., 2011; Mendonça, Junça-Silva, & Ferreira, 2018). As such, serenity would offer the advantage of giving the employee the mental space required to envision new ways of doing things and to generate ideas that may prove useful to improve the work setting. When employees experience serenity, they would access their full repertoire of resources to correctly appraise the situation and determine the courses of action to proactively adjust to it (Fredrickson, 2001; Fredrickson & Branigan, 2005). Yet, the contribution of serenity to PB has not been empirically studied.

Social harmony entails employees' positive feelings about their surrounding and social exchange relationships at work (Gilbert et al., 2011). Employees experiencing social harmony report being able to listen to others and display a positive social presence in their work context (e.g., smiling, behaving peacefully and cooperatively) (Dagenais-Desmarais & Savoie, 2012; Gilbert et al., 2011). Such positive social interactions are necessary for employees to collect information and exchange resources that will help them effectively introduce their envisioned changes (Cai, Parker, Chen, & Lam, 2019). In contrast, a person with conflictual relationships at work would have limited access to such resources from others, thereby having lower odds of making desired changes happen. Past research has documented the positive effect of social resources on proactivity (Cai et al., 2019; Vough,

Bindl, & Parker, 2017), yet the influence of social harmony on PB remains to be empirically determined.

Finally, employees experiencing a feeling of involvement are energized by the nature of activities and by the goals they are pursuing in their work context (Gilbert et al., 2011). They thrive in their work and report having the desire to set challenging goals for themselves (Dagenais-Desmarais & Savoie, 2012; Gilbert et al. 2011). This dimension of wellbeing can influence the amount of effort and persistence of employees in envisioning improvement in the workplace, developing their ideas, and implementing them in the workplace. Conversely, people who feel alienated from their work are unlikely to spend the extra-effort required to achieve proactive goals, especially when unexpected setbacks and difficulties arise. Although the contribution of the wellbeing dimension of involvement to PB has yet to be demonstrated, positive feelings in relation to one's job have been shown to be related to PB (Bindl et al., 2012; Parker et al., 2010). Following the above-mentioned arguments, we hypothesize:

Hypothesis 1: The wellbeing dimensions of serenity (Hypothesis 1a), social harmony (Hypothesis 1b), and involvement (Hypothesis 1c) are positively related to PB.

The Moderating Roles of Knowledge Job Demands and Empowering Leadership

So far, we have described how the three wellbeing dimensions offer relevant contributions to fuel PB. In the present section, we propose that boundary conditions can alter the effects of wellbeing dimensions. Our tenet is that the processes associated with PB need to be activated in some way to result in employees performing PB in the workplace. Based on activation theories (Gardner, 1990; Teichner, Arees, & Reilly, 1963) and on the theorizing on the effect of wellbeing on performance and PB (Parker et al., 2010; Warr & Nielsen; 2018), we identify KJDs and empowering leadership as two contingencies affecting the relationship between wellbeing dimensions and PB.

KJDs refer to demands or work characteristics associated with knowledge work (Ramirez & Steudel, 2008; Roberge, Boudrias, Chénard-Poirier, Vandenberghe, & Montani, 2020). According to Morgeson and Humphrey (2006), knowledge work is characterized by demands for specialized knowledge, dealing with complexity, processing a high level of information, using a variety of skills, and solving problems creatively. In addition, knowledge-intensive jobs have been described as requiring producing, sharing, and implementing new knowledge (Davenport, 2005). What stands out from these descriptions is that knowledge-intensive jobs require employees to envision improvement ideas and implement them in the achievement of their tasks. Therefore, PB appears to be closely associated with the requirements of knowledge-intensive jobs. Along this line, previous research has demonstrated that creative requirements or problem-solving demands are factors that arouse individuals to display proactivity-related behaviors, such as creativity and efforts for innovation (Chae & Choi, 2018; Odoardi, 2014a; Unsworth, Wall, & Carter, 2005).

Empowering leadership refers to a set of behaviors of a supervisor who encourages employees to take full ownership of their work situation, to display personal initiatives, and to act autonomously within the boundaries of the organization's goals and strategies (Amundsen, & Martinsen, 2014). According to Ahearne, Mathieu, and Rapp (2005), empowering leaders stimulate employees by enhancing the meaningfulness of their work, encouraging their participation in decision making processes, expressing confidence in their ability to achieve high performance, and providing them with autonomy from bureaucratic constraints. Previous research, including meta-analyses, has demonstrated that empowering leadership is positively related to employee creativity (Lee, Willis, & Tian, 2018), extra-role performance (Kim, Beehr, & Prewett, 2018), and job improvement behaviors (Pigeon, Montani, & Boudrias, 2017). Yet, there are also emerging concerns that, in certain conditions, empowering employees could yield negative consequences (Cheong, Spain,

Yammarino, & Yun, 2016; Cheong, Yammarino, Dionne, Spain, & Tsai, 2019; Sharma & Kirkman, 2015). In fact, empowering leadership has been proposed to act as a challenge stressor, because it exposes employees to higher work challenge and requires higher self-reliance from them, thus being stimulating and burdening at the same time (Cheong et al., 2016). In the next sections, we describe how KJDs and empowering leadership can jointly shape the effect of wellbeing dimensions on PB. The expected interaction effects are summarized in Figure 1.

[Insert Figure 1 here]

Moderation of the serenity-proactive behavior relationship. The expected contribution of serenity to PB stems from the idea that serenity may enable the process of actively envisioning new ways of doing things. It offers mental space and access to a full reservoir of abilities to imagine solutions that could change current work situations. Serenity can be conceived as a low-activation wellbeing dimension (Warr, 1990; Warr & Nielsen, 2018). According to distraction arousal theory (Teichner et al., 1963), external stressors or demands can decrease the envisioning of PB. As described in Byron et al. (2010), people have a limited pool of mental resources, and the allocation of such resources to the management of external demands or challenges limits their capacity to devote energy to creative thinking. Further, activation theory (Gardner, 1990; Yerkes & Dodson, 1908) suggests that activation by external demands might be beneficial up to a certain point, after which the activation has a negative effect on performance. As such, serenity at work offers the mental space needed to proactively imagine solutions for problems. However, it might need supplementary activation to result in the proactive implementation of new work-related ideas (Bindl et al., 2012).

Both KJDs and empowering leadership can convey information to employees about what the work context expects in terms of proactivity (Berg, Wrzesniewski, & Dutton, 2010;

Kim, Hon & Lee, 2010; Odoardi, 2014a, 2014b) and, therefore, provide relevant activation for the achievement of PB. In the context of low knowledge demands and low empowering leadership, serene individuals might not be sufficiently motivated to put significant effort into PB. This is because their work context does not communicate any information regarding expected proactive contributions. Conversely, when there is either a high level of KJDs or a high level of empowering leadership, employees are aware that proactive contributions are valued or required. This external stimulation stemming from job requirements or from the supervisor's empowerment should encourage serene individuals to engage in proactive efforts and implement their desired changes.

Finally, the combination of a high level of KJDs and a high level of empowering leadership could be detrimental for the creative thinking process. Indeed, following arousal theory, too much activation may annihilate the advantage provided by serenity (e.g., mental space for idea generation) in the process leading up to PB. A very high level of external stimulations would likely impair inner creative thoughts stemming from the calm and relaxed state of mind associated with serenity. The meta-analyses of Davis (2009) and Byron et al. (2010) suggested that an average level of arousal stemming from job demands is probably optimal for developing novel ideas. Relatedly, research has shown that empowering leadership may not only energize but also drain mental capacities (Cheong et al., 2016, 2019). When dealing with too many demands, employees may feel a pressure that hinders their internal thinking. Further, George and Zhou (2002) found that high creative job requirements can be detrimental to idea generation when employees are already aware of and connected to their inner feelings. Accordingly, too much external stimulation can reduce the beneficial effect of serenity on PB. In light of these arguments, we propose the following hypothesis:

Hypothesis 2: KJDs and empowering leadership jointly moderate the positive relationship between serenity and PB, such that this relationship will be strongest when either KJDs or empowering leadership are high.

Moderation of the involvement-proactive behavior relationship. Employees experiencing involvement at work are energized by the nature of their work activities and report having the desire to set challenging goals for themselves (Gilbert et al., 2011). Involvement can be conceived as a highly activated wellbeing dimension (Warr, 1990; Warr & Nielsen, 2018). Research by Bindl et al. (2012) showed that a highly activated positive mood is related to envisioning new ideas, planning their deployment, and implementing them in the workplace. Therefore, involvement is expected to foster PB given that it likely fuels key self-regulatory processes underlying proactivity at work. However, recent meta-analytic findings found that while thriving at work (i.e., a construct functionally similar to involvement) was strongly related to innovative behaviors, it did not emerge as a dominant predictor when considering other factors (Kleine et al., 2019). This implies we propose that the emerging effect of involvement might not be sufficient to trigger PB in the absence of "can do" and "reason to" conditions.

Accordingly, we contend that when there is a low level of KJDs and a low level of empowering leadership, the relationship will be the weakest. This is because energized employees will have no "reason to" be proactive in the absence of formal expectations (KJDs) and don't have a "can do" mindset in the absence of supervisors encouraging proactive behaviors (empowering leadership). In the condition of a high empowering leadership and low level of KJDs, only the condition supportive of the "can do" mindset would be present to communicate that proactivity is desirable, more or less formally. In the reverse situation – i.e., low empowering leadership and high KJDs – the formal system would give a "reason to" be proactive but employees would not have a supervisor encouraging their

"can do" mindset and supporting their initiatives. Finally, the relationship between involvement and proactivity should be the highest when both KJDs are high and the supervisor displays a leadership style that supports employees' initiatives. The above reasoning leads to the following hypothesis:

> *Hypothesis 3.* KJDs and empowering leadership jointly moderate the positive relationship between involvement and PB, such that this relationship will be the strongest when KJDs and empowering leadership are both high.

Moderation of the social harmony-proactive behavior relationship. Employees experiencing positive feelings about their surrounding and enjoying constructive social exchange relationships at work have been shown to have an advantage in the promotion of their improvement ideas (Vough et al., 2017). In context of external stimulation valuing PB, no obvious relationship can be expected between social harmony and PB. This is mainly because being externally stimulated to challenge existing ideas and to bring new ideas can conflict with an inner state arousal brought by the constructive relationships with others. When there is a fit between inner harmony arousal and external stimulation by the leader or job requirements promoting challenging the status quo (e.g., a consensus about the problem and the need for change), the contribution of social harmony might be the highest. However, we do not formulate any hypothesis related to these propositions because the measures used in this study do not capture the finer-grained "content" of proactive efforts to determine if they fit vs. do not fit social norms (Déprez, Battistelli, & Antino, 2019).

Method

Participants and Procedure

Participants were recruited from 17 organizations operating in different industries in Canada (extracted from a business's repertory of knowledge intensive companies). Employees in these organizations had different types of jobs, some being typically more

knowledge intensive (e.g., engineers, architects, lawyers) and other being less knowledge intensive (e.g., clerks, machine operators). All employees were invited to participate in an online survey investigating the relationships between wellbeing, performance, and innovation. A time-lagged design was used in this research. At Time 1 (T1), wellbeing dimensions, KJDs, empowering leadership and demographic variables were measured. At Time 2 (T2; three months later), we measured PB. The three-month time lag was set based on previous research recommending a short time lag (i.e., 1-3 months) to detect significant attitude-behavior relationships due to the decline of such relationships in longer time lags (e.g., more than 6 months) (Riketta, 2008; Zapf, Dormann, & Frese, 1996). Invitations were sent to 1633 employees to complete the online questionnaires during their work hours. Before answering questionnaires, participants were presented with the study objectives and the ethical guidelines. The research project received approval from the University's ethical committee. All participants provided their informed consent to participate.

At T1, 955 employees provided usable responses (response rate = 58%). Among them, 713 provided usable responses at T2 (response rate = 75%). To ensure that attrition between T1 and T2 was not a threat to the validity of our results, we perform t-tests to compared participants who completed only the T1 survey to those who completed both T1 and T2 surveys. No difference was found in responses to the study variables measured at T1: serenity ($t_{[952]} = -.68$, *ns*), harmony ($t_{[953]} = -.35$, *ns*), and involvement ($t_{[374]} = -.83$, *ns*), KJD ($t_{[385]} = -1.81$, ns), and empowering leadership ($t_{[953]} = -.80$, ns). Furthermore, no difference was found in demographic characteristics (sex, age, education level, tenure). Finally, among the 713 respondents, we excluded 110 participants (15%) who have changed supervisors or jobs between the two measurement times. The final sample for testing our hypotheses comprised 602 employees (final response rate = 37%; see supplemental files).

In the final sample, most participants were women (54%). Age was distributed as

follows: 25 years or less: 5%; 26-35 years: 31%; 36-45 years: 30%; 46-55 years: 24%; 56+ years: 11%. As for education, most participants had an undergraduate or higher degree (61%). Organizational tenure was higher than 5 years for 52% of the participants. Respondents reported working for large private companies (48%), small or medium sized private companies (23%), public organizations (28%), or non-profit organizations (1%). Participants reported being affiliated with various occupations and industries including natural sciences – basic and applied (e.g., engineering, architecture 36%), administration, business and finance (26%), and social sciences, teaching and public administration (13%).

Measures

Work-related wellbeing. Wellbeing was measured using Gilbert et al.'s (2011) instrument. This questionnaire is composed of 25 items measuring serenity (e.g., "I felt good, at peace with myself"; 12 items), social harmony (e.g., "I got along well with my colleagues"; 7 items), and involvement at work (e.g., "I found my work exciting and I wanted to enjoy every moment of it"; 6 items). Participants were asked to indicate the extent to which they had experienced each wellbeing item in the previous month at work (1 = *almost never*; 5 = *almost always*). We averaged scores on items for each dimension of wellbeing. Previous studies have reported strong reliabilities for serenity (αs = .86 and .89), harmony (αs = .82 and .79) and involvement (α = .84) (Deschênes & Capovilla, 2016; Leclerc, Boudrias, & Savoie, 2014) and found them to be distinguishable facets of work-related wellbeing (Morin et al., 2016; see "Study codebook" in the supplements for the details of the study variables).

Knowledge job demands. Roberge et al.'s (2020) scale was used to measure KJDs. After being presented a description of knowledge work (e.g., "Knowledge work can be characterized by an intensive treatment of information, problem solving and production of innovative solutions […]"), employees answered three items asking if their job fits with the

description provided (e.g., "To what extent do you perceive your current job to fit this description"; 1 = *not at all*; 5 = *completely*). Roberge et al.'s (2020) study indicated that this unidimensional scale is reliable (α = .94), displays convergent validity with Morgeson and Humphrey's (2006) knowledge demands scales, as illustrated by the sizeable correlations with these scales (*r*s = .60 [problem solving], .54 [specialization], .53 [information processing], .52 [skill variety], and .37 [job complexity]), and correlates significantly (*p*s < .01) with the relevant job characteristics used in the O*Net database to describe knowledge work activities (e.g., *r*s = .36 [decision-making and problem solving], .32 [information analysis], .31 [creativity], and -.22 [repetitive tasks]).

Empowering Leadership. Empowering leadership was measured using a French version of Ahearne et al.'s (2005) 12-item questionnaire (Yahia, Montani, & Courcy, 2018). Participants assessed the empowering leadership of their supervisor through four facets (enhancing the meaningfulness of work, expressing confidence in high performance, fostering participation in decision making, and providing autonomy from bureaucratic constraints). A sample item is "My manager believes that I can handle demanding tasks". A Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) was used. Based on Yahia et al.'s (2018) study indicating that the dimensions strongly correlate and the reliability for the overall scale is excellent (α = .93), we averaged scores across all items to create a single score of empowering leadership.

Proactive behavior. Employee PB was measured with Chiocchio et al.'s (2012) 3-item scale based on Griffin et al.'s (2007) work. Participants reported the extent to which they had displayed proactive behaviors in their tasks in the past three months (e.g., "Came up with ideas to improve the way in which your core tasks are done") on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Prior studies have reported evidence for the reliability and validity of this scale (Chiocchio et al., 2012; Griffin et al., 2007; αs = .91−.94).

Results

Confirmatory Factor Analysis and Descriptive Statistics

Prior to testing hypotheses, we conducted a confirmatory factor analysis (CFA) with Mplus 7.11 (Muthén & Muthén, 1998-2012) to assess the discriminant validity of our variables. The items of the scale measuring empowering leadership were averaged to create scores for each of the dimensions and the latter were treated as separate indicators of empowering leadership in the CFA. Results indicated that the hypothesized six-factor model, including the three wellbeing dimensions, KJDs, empowering leadership, and PB, exhibited a reasonable fit (χ^2 [362] = 1367.24, $p < .01$, CFI = .85, RMSEA = .06, SRMR = .06). Moreover, this model outperformed an alternative model where the three wellbeing dimensions were combined as well as a one-factor model combining all indicators (Table 1). Taken together, these findings support the distinctiveness of the study variables.

[Tables 1 and 2 about here]

Table 2 presents the descriptive statistics and correlations for the study variables. Following our hypotheses, the three wellbeing dimensions were significantly related to PB, as measured at T2 ($.27 < r < .37$; $p < .01$). Further, KJDs and empowering leadership were also positively associated with PB. Finally, some demographic variables (e.g., gender, tenure) were related to our predictors while education was related to PB, justifying these variables being controlled for in hypotheses testing.

Hypotheses Testing

To test our hypotheses, we conducted moderated multiple regression analyses while mean centering our predictors (Cohen & Cohen, 1983). Control variables were entered in a first step, and all the main predictors of PB were entered in a second step. Hypotheses 1a-c would be supported if the regression coefficients associated with serenity (WB-S), harmony (WB-H), and involvement (WB-I) are statistically significant. As such, results indicate that

WB-I (b = .26; t = 4.49, p < .001) is a significant predictor of PB, but not WB-S (b = .04; t = 0.62, p = .539) and WB-H (b = .07; t = 1.451, p = .147), providing partial support for Hypothesis 1. In a third step, we entered all two-way interactions that were needed to be incorporated in the regression model before testing the three-way interactions involving wellbeing dimensions, KJDs, and empowering leadership (EL). Support for Hypotheses 2 and 3 would require a statistically significant increase in variance explained in PB in Model 4 (ΔR^2), significant regression coefficients for the hypothesized interactions (WB-S × KJD × EL and WB-I × KJD × EL), and a pattern of results that is consistent with hypothesized predictions (Cohen & Cohen, 1983). Results indicated that the hypothesized interactions were significant and explained unique variance in PB (ΔR^2 = .01), thereby proving initial support for our three-way interaction hypotheses.

More specifically, regarding Hypothesis 2, results indicate that the interaction term WB-S × KJD × EL involving the serenity dimension of wellbeing was significant (b = -.14; t = -2.09, p = .037). Figure 2 displays the pattern of results. To examine Hypothesis 2, we examined the simple slopes between serenity and PB in four conditions. Simple slopes analysis indicated that the relationship between serenity and PB was non-significant in all moderating conditions: at low empowering leadership and low KJDs, b = .02; t = 0.71, p = .786; at low empowering leadership and high KJDs, b = .16; t = 1.08, p = .281; at high empowering leadership and low KJDs, b = .27; t = 1.50, p = .133; at high empowering leadership and high KJDs, b = –.18; t = –1.32, p = .186. Moreover, we probed this interaction using the Johnson- Neyman technique (Gardner Harris, Li, Kirkman, & Mathieu, 2017), which helped identify the specific regions of empowering leadership where the interaction between serenity and KJDs on PB was significant. The results showed that when the level of empowering leadership was below 1.17 (i.e., the lower 85%), the conditional effect of the serenity × KJD interaction on PB was non-significant; however, when the level of

empowering leadership was above 1.17 (i.e., the upper 15%), a significantly positive interaction between serenity and KJDs on PB emerged. Furthermore, the slope difference test indicated that there was a significant difference between the simple slope for high empowering leadership-high KJDs and the simple slope for high empowering leadership-low KJDs (t = –1,99, p = 0.047). Taken together, these findings suggest that the contribution of serenity to PB was stronger when there were either high KJDs and low empowering leadership, or low KJDs and high empowering leadership. Consistent with the "too much" stimulation effect proposed by activation theory, the pattern of the relationship between serenity and PB tends to be negative when the levels of KJDs and empowering leadership were both high. Therefore, Hypothesis 2 is partially supported.

Regarding Hypothesis 3, the interaction term WB-I × KJD × EL related to the involvement dimension of wellbeing is significant (b = .16; t = 2.40, p = .017). Figure 3 displays the pattern of results. To examine Hypothesis 3, we examined the simple slopes between involvement and PB in four conditions. Simple slopes analyses indicated that, consistent with Hypothesis 3, the strongest (positive) relationship between involvement and PB emerged when empowering leadership and KJDs were high (b = .44; t = 4.38, p = .000). Moreover, results from the Johnson- Neyman test showed that when the level of empowering leadership was below 0.20 (i.e., the lower 55%), the involvement × KJD interaction on PB was non-significant; however, when the level of empowering leadership was above 0.20 (i.e., the upper 45%), a significantly positive interaction between involvement and KJDs on PB emerged. In addition, as predicted, results from the slopes difference test showed that the simple slope for high empowering leadership-high KJDs was significantly different from both the simple slopes for high empowering leadership-low KJDs (t = 2.49, p = 0.047) and low empowering leadership-high KJDs (t = 2.02, p = 0.044). However, the pattern of the remaining results differed from our predictions. More precisely, the simple slope was non-

significant at low level of empowering leadership and high level of KJDs (b = .16; t = 1.64, p = .101) and high level of empowering leadership and low level of KJDs (b = .05; t = 0.37 p = .711). Further, contrary to expectations, involvement was positively and significantly related to PB when empowering leadership and KJDs were low (b = .21; t = 2.75, p = .006). Taken together, Hypothesis 3 stating that involvement would be most strongly related to PB at high levels of both empowering leadership and KJDs was supported by simple slopes and the slopes differences analyses; however, the pattern of results for the other moderating conditions diverged from our predictions and therefore did not provide full support for Hypothesis 3.

Of incidental interest, results additionally revealed that the WB-H × KJD × EL three-way interaction term did not significantly predict PB (b = .02, t = 0.42, p = .677).

Discussion

The purpose of this study was to investigate how and under what conditions employee wellbeing dimensions are differentially related to PB. The theoretical and practical implications of these findings are discussed in the next sections.

Theoretical Implications

Our study results indicate that the contribution of wellbeing dimensions (serenity, harmony, involvement) to PB are not equal. Therefore, studying them through a global construct could lead to erroneous conclusions. This research thus indicates that theorizing related to the effect of wellbeing on PB would benefit from considering wellbeing dimensions separately. First, based on the conceptualization of the processes leading up to PB (e.g., envisioning, promoting, implementing), we proposed that each wellbeing dimension provides a critical ingredient that fuels the achievement of PB within the work context. In this respect, we first found that only involvement, a highly activated affective state, has a significant relationship to PB, when all dimensions of wellbeing are simultaneously

considered. This result is in line with previous research (Bindl et al., 2012; Warr et al., 2014) and might suggest that involvement is an "activated" dimension of wellbeing directly related to PB based on its proximity to the implementation phase. Presumably contributing to more distal phases of employee proactivity (e.g., envisioning possibilities, social promotion of new ideas), other wellbeing dimensions might be related to the achievement of PB indirectly or conditionally, therefore explaining inconsistent findings in the wellbeing-performance literature (Warr & Neilsen, 2018).

Second, we found that the contribution of serenity – a low activated dimension of wellbeing reflecting a positive view of oneself and one's abilities – on PB depends on situational characteristics. Based on arousal (Gardner, 1990) and distraction arousal theory (Teichner et al., 1963), we expected that a high level of external stimulation stemming from both the leader and the job requirements could annihilate the potential benefit of serenity for PB. Interestingly, albeit non-significant, we found a pattern of result that suggest serenity could be negatively relate to PB in this condition. This result is compatible with results of previous research suggesting that external arousal can distract or impede the inner mental processes that could facilitate the envisioning of new solutions to work situations (Byron et al., 2010; Davis, 2009). Further, it is in line with the proposition that empowering leadership could not only stimulate but also tax employees' resources (Cheung et al., 2016, 2019). In this research, we found that empowering leadership was associated with significantly different effects for serenity among employees having knowledge intensive jobs vs. less knowledge intensive jobs. To our knowledge, this is a new contribution to the empowering leadership literature that outlines some boundary conditions associated with the adoption of this leadership style.

Nevertheless, it is worth mentioning that even if the overall pattern of results was consistent with Hypothesis 2, the relationship between serenity and PB did not reach the level

of significance in any condition. Therefore, further theorizing is needed to clarify the boundary conditions associated with the effects of low-activated dimensions of wellbeing on PB. One possibility could be to investigate the "over-justification hypothesis" (Tang & Hall, 1995), proposing that external reinforcements (or directions) could diminish the positive effects of intrinsically psychological states on curiosity, exploration and implementation efforts. This possibility would fit, for instance, with the literature showing a complex picture where creative job requirements interact with other factors to determine the valence of the contribution of positive psychological states on employee innovative behaviors (George & Zhou, 2002; Shin, Yuan, & Zhou, 2017). Another possibility would be to empirically test the correlates of serenity in earlier stages of PB, for instance in the process of envisioning new ways of doing things. This variable could be more proximal to serenity and hence could lead to the demonstration of significant and more robust effects.

Third, our research indicates that the contribution of involvement to PB is moderated by situational variables. While past research (e.g., Bindl et al., 2012; Warr et al., 2014) has suggested that highly activated wellbeing dimensions are more strongly related to PB (as we also found), our study extends this knowledge by showing that the contribution of involvement could be optimized when the external environment is aligned with the adoption of a proactive stance at work. Therefore, a contingent perspective for this highly activated dimension of wellbeing helps refine our understanding of its contribution to PB. Based on PB theory (Parker et al., 2010), we argued that the energy provided by involvement would lead to the highest level of PB when employees also have a "reason to" be proactive (KJDs) and a leader sustaining a "can-do" attitude to PB (empowering leadership). Our results confirm this prediction. However, our research reveals an interesting and unexpected finding for employees reporting having less intensive knowledge jobs and a low level of empowering leader. In this condition, it appears that the energy provided by involvement represents a

unique contributor to PB. This result suggests that involvement is a critical ingredient for PB that can compensate for the lack of empowering leader behaviors in non-intensive knowledge jobs. In this situation, involvement could play a role similar to a substitute for leadership (Kerr & Jermier, 1978), namely being a powerful personal state that would make external factors less important for the achievement of PB. Thus, further research would be needed to replicate this finding.

Finally, social harmony was not associated with PB either alone or in conjunction with knowledge demands and empowering leadership. These results can be explained by the fact that employees who care about social harmony in the workplace tend to be concerned that their change-oriented behaviors, such as PB, would threaten the status quo and, therefore, impair the quality of social relationships (Brewer & Chen, 2007). Consequently, they might be less inclined to "rock the boat" with such behaviors. Research indirectly supports this assertion, namely by showing that collectivist people – i.e., people who ascribe high importance to maintaining social harmony – are less likely to engage in innovative behaviors even when they feel capable of doing so (Ng & Lucianetti, 2016). Correspondingly, as indicated by our study results, the heightened well-being state of social harmony might refrain employees from engaging in proactive actions, despite the proactivity-supportive conditions enabled by empowering leadership and knowledge demands.

Practical Implications

This study has practical implications for the promotion of proactive work behaviors. First, because involvement is the most influential wellbeing dimension in the prediction of PB, organizations could implement conditions that facilitate this feeling. For instance, human resource management practices that indicate that the organization cares about employees' wellbeing (Kurtessis et al., 2017) and their thriving at work (Kleine et al., 2019) could be implemented by organizational decision-makers. According to Guest (2017), a variety of

human resource practices would be helpful for this purpose, such as those showing investment in employees (e.g., mentoring and career support), providing engaging work (e.g., skill utilization), ensuring a positive work environment (e.g., equal opportunities), giving voice (e.g., two-way communications), and providing organizational support (e.g., involvement climate and practices).

Second, the pattern of results in this study suggests that there might be some conditions where it could be more or less advantageous to tap on some wellbeing dimensions to sustain PB. These results, should they be confirmed and solidified by additional research, indicate that serenity could produce more positive results if external empowering leadership or demands for innovation are not simultaneously high. For employees having knowledge intensive jobs, according to our results supervisors should consider displaying a moderate level of empowering leadership to maximize the benefits of serenity for PB. This might imply allowing serene employees to engage in proactive actions without excessive stimulation to encourage these behaviors.

The pattern of results obtained for involvement collides with the intervention recommendations based on the serenity dimension. In the case of involvement, our results suggest that organizations should provide employees with high levels of both KJDs and empowering leadership. This indicates that there are possible trade-offs in the job conditions that organizations need to ensure to enhance the benefits of wellbeing dimensions for PB. These trade-offs could mirror the tensions evoked in the literature on ambidexterity, namely "discovery/exploration" vs. "exploitation" (Raisch, Birkinshaw, Probst, & Tushman, 2009). Indeed, the optimal condition for the effects of serenity to occur might imply allowing space for "discovery", while the optimal situation for the effects of involvement to occur might imply encouraging "exploitation" of improvement objectives and ideas. In the context of our study, this trade-off appears to be relevant for employees having knowledge intensive jobs

(i.e., higher job requirements to innovate). In the case of employees with low intensive jobs, it seems that the stimulation of involvement alone can increase the level of PB, while the addition of empowering leadership is not necessary.

However, the cross-sectional nature of the present data does not allow drawing causal inferences among the study variables. Therefore, our practical recommendations should be interpreted as general indications for promoting a positive balance between wellbeing and PB, rather than for ensuring a positive influence of wellbeing dimensions on employee engagement in proactive actions.

Strengths, Limitations, and Directions for Future Research

As any research, this study has strengths and limitations. With regards to the strengths, we used a design with temporal separation for the measurement of wellbeing and PB. This methodological strategy minimizes the possibility that common method variance bias could represent a major threat to our study results. Moreover, Siemsen, Roth, and Oliveira, (2010) indicated that common method variance is not a relevant issue for the test of moderating effects. With regards to the limitations, our study design did not allow determining the causal direction of the relationships among our variables. To address this limitation, future studies could consider using experimental or quasi-experimental designs to ascertain the direction of the relationships between wellbeing dimensions and PB across different work conditions. Further, longitudinal panel designs could be used to investigate the temporal ordering of the variables, as well as the possibility that different directional relationships do exist among our variables (Spector, 2019).

Additionally, PB was assessed with a self-report instrument. Although this is a limitation, PB is more sensitive to self-presentation bias in comparison to a supervisor rating. Accordingly, self-report measures remain a relevant method to capture this type of behavior that is not always visible by the supervisor in some situations (e.g., autonomous knowledge

workers, high span of control). Finally, our measurement model reached a reasonable fit but not an excellent one. Therefore, future studies could try to replicate our findings by using different operationalizations of the study variables. This would also contribute to increase the generalizability of our findings. One avenue could be to examine the phases of envisioning and planning (Bindl et al., 2012) as more proximal outcome variables than PB. This would allow capturing the mechanisms underlying the effect of wellbeing dimension that were discussed but not empirically assessed in this study.

Conclusion

This research indicated that the wellbeing dimensions (i.e., serenity, involvement, and harmony) are differentially related to PB. This research provides initial evidence that the contribution of involvement to PB could be increased in specific, yet contrasting, work conditions for workers having intensive (vs. low intensive) knowledge job demands, and that the contribution of serenity varies significantly for knowledge workers depending on the level of empowering leadership. These results could be used to more precisely detect the effect of wellbeing dimensions in different organizational contexts. We hope that our findings will stimulate further research to identify the factors that enhance or hinder the benefits of different types of wellbeing for employees and organizations.

Data availability statement: The dataset and codebook for the study variables are available in supplementary files.

References

Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology, 90*, 945.

Amundsen, S., & Martinsen, Ø. L. (2014). Empowering leadership: Construct clarification, conceptualization, and validation of a new scale. *The Leadership Quarterly, 25*, 487-511.

Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior, 31*, 158-186.

Bindl, U. K., & Parker, S. K. (2010). Feeling good and performing well? Psychological engagement and positive behaviors at work. *The Handbook of Employee Engagement: Models, Measures and Practice*. Cheltenham: Edward-Elgar Publishing

Bindl, U. K., Parker, S. K., Totterdell, P., & Hagger-Johnson, G. (2012). Fuel of the self-starter: How mood relates to proactive goal regulation. *Journal of Applied Psychology, 97*, 134-150.

Byron, K., Khazanchi, S., & Nazarian, D. (2010). The relationship between stressors and creativity: a meta-analysis examining competing theoretical models. *Journal of Applied Psychology, 95*, 201-212.

Boudrias, J. S., Montani, F., & Vandenberghe, C. (2021). How and when does psychological wellbeing contribute to proactive performance? The role of social resources and job characteristics. *International Journal of Environmental Research and Public Health*, *18*(5), 2492.

Brewer, M. B., & Chen, Y. R. (2007). Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Psychological Review, 114*,

133-151.

Bryson, A., Forth, J., & Stokes, L. (2014). *Does worker wellbeing affect workplace performance?* IZA Discussion Paper No. 9096, Department for Business, Innovation & Skills: UK Government.

Campbell, D. J. (2000). The proactive employee: Managing workplace initiative. *Academy of Management Perspectives, 14*, 52-66.

Cai, Z., Parker, S. K., Chen, Z., & Lam, W. (2019). How does the social context fuel the proactive fire? A multilevel review and theoretical synthesis. *Journal of Organizational Behavior, 40*, 209-230.

Chae, H., & Choi, J. N. (2018). Contextualizing the effects of job complexity on creativity and task performance: Extending job design theory with social and contextual contingencies. *Journal of Occupational and Organizational Psychology*, *91*, 316-339.

Cheong, M., Spain, S. M., Yammarino, F. J., & Yun, S. (2016). Two faces of empowering leadership: Enabling and burdening. *The Leadership Quarterly, 27*, 602-616.

Cheong, M., Yammarino, F. J., Dionne, S. D., Spain, S. M., & Tsai, C. Y. (2019). A review of the effectiveness of empowering leadership. *The Leadership Quarterly, 30*, 34-58.

Chiocchio, F., Lebel, P., Therriault, P.-Y., Boucher, A., Hass, C., Rabbat, F.-X., & Bouchard, J. (2012). *Stress and performance in health care project teams*. Newtown Square, PA: Project Management Institute.

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*, 89-136.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Dagenais-Desmarais, V., & Savoie, A. (2012). What is psychological well-being, really? A

grassroots approach from the organizational sciences. *Journal of Happiness Studies, 13*, 659-684.

Davenport, T. H. (2005). *Thinking for a living: How to get better performance and results from knowledge workers*. Harvard Business School Press, Boston.

Davis, M. A. (2009). Understanding the relationship between mood and creativity: A meta-analysis. *Organizational Behavior and Human Decision Processes, 108*, 25-38.

Déprez, G. (2017). *Relationship between constructive deviance, proactive behaviors and innovation: analysis of the constructs and their consequences*. Unpublished doctoral dissertation, Université de Bordeaux, Bordeaux, France.

Déprez, G. R. M., Battistelli, A., & Antino, M. (2019). Norm and Deviance-Seeking Personal Orientation Scale (NDPOS) Adapted to the Organisational Context. *Psychologica Belgica*, *59*, 393-415.

Deschênes, A. A., & Capovilla, P. (2016). Emotional self-efficacy: A factor to explain psychological health at work. *Psychologie du travail et des organisations*, *22*, 173-186.

Fay, D., & Hüttges, A. (2017). Drawbacks of proactivity: Effects of daily proactivity on daily salivary cortisol and subjective well-being. *Journal of Occupational Health Psychology*, *22*, 429-442.

Ford, M. T., Cerasoli, C. P., Higgins, J. A., & Decesare, A. L. (2011). Relationships between physical, psychological, and behavioral health and work performance: A review and meta-analysis. *Work & Stress*, *25*, 185-204.

Forgas, J. P., & George, J. M. (2001). Affective influences on judgments and behavior in organizations: An information processing perspective. *Organizational Behavior and Human Decision Processes*, *86*, 3–34.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.

Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought- action repertoires. *Cognition & Emotion, 19,* 313-332.

Frijda, N. H. (1986). *The emotions*. Cambridge, England: Cambridge University Press.

Fritz, C., & Sonnentag, S. (2009). Antecedents of day-level proactive behavior: A look at job stressors and positive affect during the workday. *Journal of Management, 35,* 94-111.

Gardner, D. G. (1990). Task complexity effects on non-task related movements: A test of activation theory. *Organizational Behavior and Human Decision Processes, 45,* 209–231.

George, J. M., & Zhou, J. (2007). Dual tuning in a supportive context: Joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity. *Academy of Management Journal*, *50,* 605-622.

George, J. M., & Zhou, J. (2002). Understanding when bad moods foster creativity and good ones don't: The role of context and clarity of feelings. *Journal of Applied Psychology, 87,* 687–697.

Gilbert, M. H., Dagenais-Desmarais, V., & Savoie, A. (2011). Validation of a psychological health at work measure. *European Review of Applied Psychology*, *61*, 195-203.

Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal, 50,* 327-347.

Guest, D. E. (2017). Human resource management and employee well- being: Towards a new analytic framework. *Human Resource Management Journal, 27,* 22-38.

Ilies, R., & Judge, T. A. (2005). Goal regulation across time: The effects of feedback and affect. *Journal of Applied Psychology, 90,* 453–467.

Janssen, O. (2000). Job demands, perceptions of effort–reward fairness, and innovative work behavior. *Journal of Occupational and Organizational Psychology, 73,* 287-302.

Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, *22*, 375-403.

Kim, T. Y., Hon, A. H., & Lee, D. R. (2010). Proactive personality and employee creativity: The effects of job creativity requirement and supervisor support for creativity. *Creativity Research Journal*, *22*, 37-45.

Kim, M., Beehr, T. A., & Prewett, M. S. (2018). Employee responses to empowering leadership: A meta-analysis. *Journal of Leadership & Organizational Studies, 25,* 257-276.

Kleine, A. K., Rudolph, C. W., & Zacher, H. (2019). Thriving at work: A meta- analysis. *Journal of Organizational Behavior*, *40*, 973-999.

Leclerc, J. S., Boudrias, J. S., & Savoie, A. (2014). Psychological health and performance at work: bidirectional longitudinal associations? *Le Travail Humain*, *77*, 351-372.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, *43*, 1854-1884.

Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta- analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior, 39,* 306-325.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, *131*, 803-855.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, *91*, 1321-1339.

Morin, A.J.S**.**, Boudrias, J.-S., Marsh, H.W., Madore, I., & Desrumaux, P. (2016). Further reflections on disentangling shape and level effects in person-centered analyses: An

illustration aimed at exploring the dimensionality of psychological health. *Structural Equation Modeling: A Multidisciplinary Journal, 23, 438-454*.

Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user's guide* (7th Edition). Los Angeles, CA: Muthén & Muthén.

Ng, T. W. H., & Lucianetti, L. (2016). Within-individual increases in innovative behavior and creative, persuasion, and change self-efficacy over time: A social–cognitive theory perspective. *Journal of Applied Psychology, 101*, 14-34.

Odoardi, C. (2014a). The positive relationship between problem solving demand and innovative work behaviour in the health sector. *Applied Psychology Bulletin*, *271*, 40-53.

Odoardi, C. (2014b). Feeling of responsibility for change and innovation in the context of health behavior: the role of cognitive workload, empowering leadership and proactive personality. *Psychologie du Travail et des Organisations*, *20*, 382-398.

Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, *36*, 827-856.

Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, *36*, 633-662.

Pigeon, M., Montani, F., & Boudrias, J. S. (2017). How do empowering conditions lead to empowered behaviours? Test of a mediation model. *Journal of Managerial Psychology*, *32*, 357-372.

Potočnik, K., & Anderson, N. (2016). A constructively critical review of change and innovation-related concepts: towards conceptual and operational clarity. *European Journal of Work and Organizational Psychology, 25,* 481-494.

Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M. L. (2009). Organizational ambidexterity: Balancing exploitation and exploration for sustained performance.

Organization Science, *20*, 685-695.

Ramirez, Y. W. et Steudel, H. J. (2008). Measuring knowledge work: The knowledge work quantification framework, *Journal of Intellectual Capital*, *9*, 564- 84.

Roberge, V., Chenard-Poirier, L.A., Boudrias, J.S., Montani, F., & Vandenberghe, C. (2020). Le travail du savoir : sa mesure et ses relations avec le bien-être et l'innovation. [Knowledge work : measurement and relation with wellbeing and innovation]. In *Le temps de défis : (r)évolution du travail et des organisations* (Eds C. Lagabrielle, D. Steiner & A. Battistelli). Paris : l'Harmattan.

Riketta, M. (2008). The causal relation between job attitudes and performance: A meta-analysis of panel studies. *Journal of Applied Psychology*, *93*, 472-481.

Roberts, K. T., & Whall, A. (1996). Serenity as a goal for nursing practice. *Image: The Journal of Nursing Scholarship*, *28*, 359-364.

Ryff, C. D. (2019). Entrepreneurship and eudaimonic well-being: Five venues for new science. *Journal of Business Venturing*, *34*, 646-663.

Sharma, P. N., & Kirkman, B. L. (2015). Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group & Organization Management*, *40*, 193-237.

Shin, S. J., Yuan, F., & Zhou, J. (2017). When perceived innovation job requirement increases employee innovative behavior: A sensemaking perspective. *Journal of Organizational Behavior*, *38*, 68-86.

Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, *13*, 456-476.

Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, *34*, 125-137.

Tang, S. H., & Hall, V. C. (1995). The overjustification effect: A meta- analysis. *Applied Cognitive Psychology, 9,* 365-404.

Teichner, W. H., Arees, E., & Reilly, R. (1963). Noise and human performance, a psychophysiological approach. *Ergonomics, 6,* 83-97.

Unsworth, K.L., Wall, T.D., & Carter, A. (2005). Creative requirement: A neglected construct in the study of employee creativity? *Group & Organization Management, 30,* 541-560.

Vough, H. C., Bindl, U. K., & Parker, S. K. (2017). Proactivity routines: The role of social processes in how employees self-initiate change. *Human Relations, 70,* 1191-1216.

Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology, 63,* 193-210.

Warr, P., Bindl, U. K., Parker, S. K., & Inceoglu, I. (2014). Four-quadrant investigation of job-related affects and behaviours. *European Journal of Work and Organizational Psychology, 23,* 342-363.

Warr, P., & Nielsen, K. (2018). Wellbeing and work performance. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City, UT: DEF Publishers.

Yahia, N. A., Montani, F., & Courcy, F. (2018). The role of stressors on innovative behavior: When superior empowering leadership protects the innovation potential of workers. *Psychologie du Travail et des Organisations, 24,* 51-67.

Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology, 18,* 459-482.

Zapf, D. Z., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research : a review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology, 1,* 145-169.

Table 1

Confirmatory Factor Analysis Results: Fit Indices

Model	χ^2	*df*	$\Delta\chi^2$	Δdf	CFI	RMSEA	SRMR
Hypothesized 6-factor model	1367.24*	362	–	–	.85	.06	.06
4-factor model (combining serenity, harmony, and involvement)	1651.24*	371	284*	9	.81	.08	.07
One-factor model	3163.83*	377	1796.60*	15	.69	.11	.09

Note: $N = 602$. CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

*$p < .01$.

Table 2

Descriptive Statistics and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Gender	1.46	0.50	–									
2. Age	3.05	1.09	–.10**	–								
3. Education level	3.74	0.95	.18**	.06	–							
4. Organizational tenure	4.69	1.75	–.14**	.47**	–.11**	–						
5. WB Serenity	4.09	0.49	.01	.03	–.08	–.07*	(.85)					
6. WB Harmony	4.40	0.43	–.12**	–.06	–.01	–.08*	.60**	(.77)				
7. WB Involvement	3.94	0.63	–.01	.01	–.07	–.10**	.70**	.51**	(.85)			
8. KJD	3.87	1.02	.17**	.01	.19**	.00	.10**	.10**	.23**	(.94)		
9. Empowering leadership	3.44	0.87	.06	–.04	.05	–.14**	.37**	.37**	.45**	.22**	(.93)	
10. PB Time 2	3.97	0.58	–.05	.01	.04*	–.03	.30**	.27**	.37**	.15**	.26**	(.77)

Note. $N = 602$. For Gender: 1 = female, 2 = male. For Age: 1 = ≤ 25 years, 2 = 26-35 years, 3 = 36-45 years, 4 = 46-55 years, 5 = 56-65 years, 6 = ≥ 66 years. For Educational level: 1 = primary school, 2 = secondary school, 3 = college, 4 = undergraduate, 5 = graduate. For Organizational tenure: 1 = < 6 months, 2 = 6 months-1 year, 3 = 1-2 years, 4 = 2-5 years, 5 = 5-10 years, 6 = 10-15 years, 7 = > 15 years.

*$p < .05$; **$p < .01$.

Table 3

Multiple Moderated Regression Results

Variables	PB Time 2			
	Model 1	Model 2	Model 3	Model 4
Gender	–.06	–.06	–.05	–.05
Age	.03	.01	.01	.01
Education Level	.05	.06	.06	.06
Organizational tenure	–.04	.02	.02	.02
WB Serenity (WB-S)		.04	.02	.06
WB Harmony (WB-H)		.07	.08	.07
WB Involvement (WB-I)		.26**	.27**	.24**
Knowledge job demands (KJD)		.06	.05	.05
Empowering leadership (EL)		.10*	.09*	.08
WB-S × KJD			–.03	–.07
WB-H × KJD			.00	.01
WB-I × KJD			.06	.09
WB-S × EL			–.02	–.02
WB-H × EL			.01	.00
WB-I × EL			.04	.03
EL × KJD			–.11*	–.09*
WB-S × KJD × EL				–.14*
WB-H × KJD × EL				.02
WB-I × KJD × EL				.16*
Total R^2	.01	.16**	.17**	.18**
ΔR^2		.16	.01	.01

Note. $N = 602$. Except for Total R^2 and ΔR^2 rows, entries are standardized regression coefficients.
*$p < .05$; **$p < .01$.

Figure 1. Representation of the expected moderating influences on the relationship between serenity and PB and between involvement and PB*.

* Note. A "+" denotes that a positive relationship is expected in that condition, a "++" denotes that the strongest (and positive) relationship is expected in that condition, and "0" denotes that no relationship is expected.

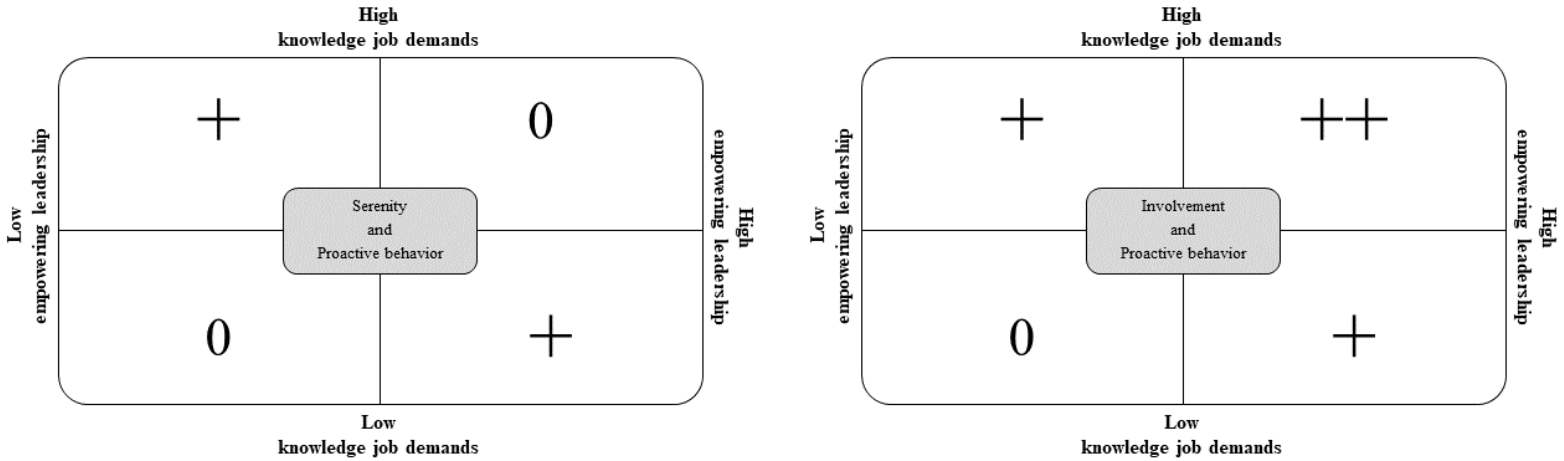

Figure 2. Serenity contribution to PB as a function of KJD and empowering leadership (EL).

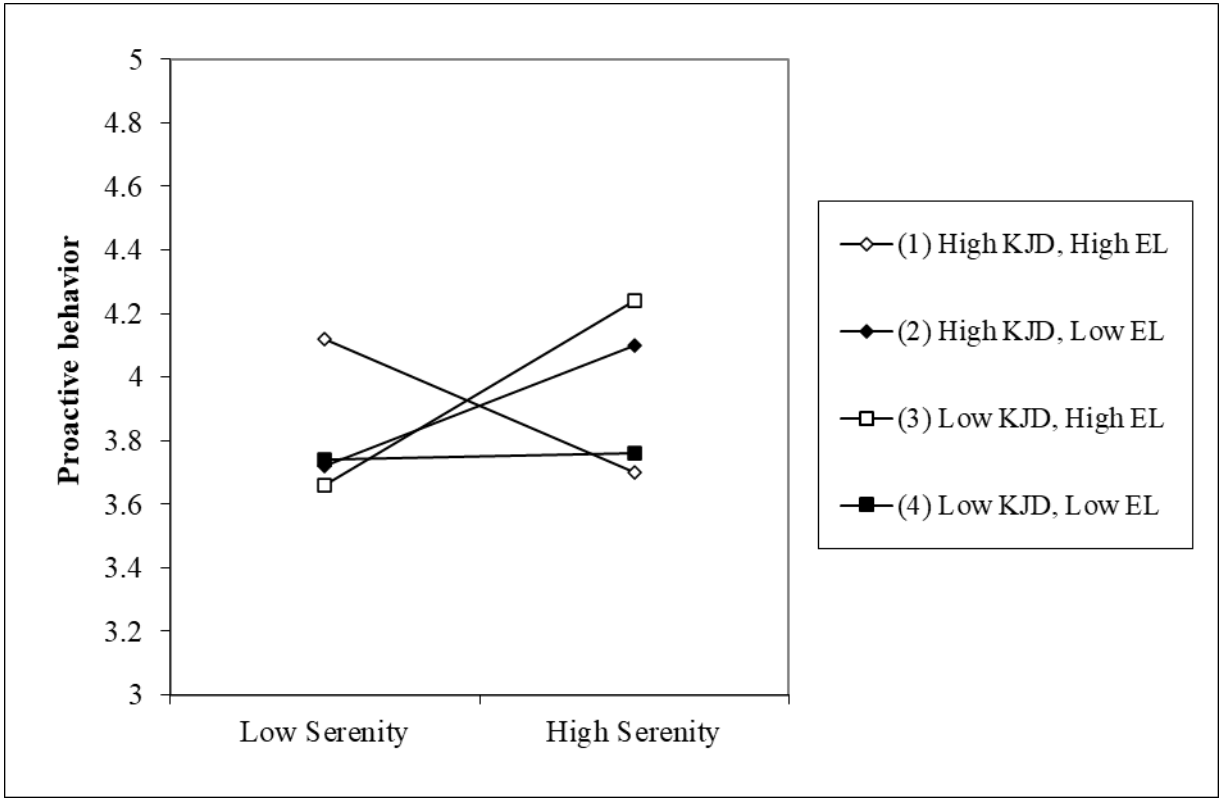

Figure 3. Involvement contribution to PB as a function of KJD and empowering leadership (EL).