

THE JOB CAN KILL YOU OR MAKE YOU STRONGER: THE ROLE OF PASSION IN JOB DEMANDS, WORK MOTIVATIONAL IMBALANCE, AND WORK-LIFE CONFLICT

DANIELA DI SANTO
ALESSIO TESI
ANTONIO AIELLO
UNIVERSITY OF PISA, ITALY

ANTONIO PIERRO Sapienza University of Roma, Italy

This research examined the relationship between job demands, dualistic passion, proneness to work motivational imbalance, and work-life conflict in a sample of Italian employees (N = 525) enrolled in a cross-sectional study. Specifically, we hypothesized and found that the positive association between job demands and work-life conflict was significantly mediated by the proneness to work motivational imbalance. However, the relation between job demands and proneness to imbalance was moderated by passion for work. Specifically, the relationship between job demands and proneness to work motivational imbalance was stronger in employees with high (vs. low) obsessive passion; the same relationship did not occur in employees with high harmonious passion, suggesting that harmonious passion might be a protective personal resource against job demands. These findings could shed light on practical lines of intervention aimed at counteracting the negative effects of job demands such as motivational imbalance and work-life conflict.

Keywords: Job demands; Obsessive passion; Harmonious passion; Motivational imbalance; Work-life conflict. Correspondence concerning this article should be addressed to Antonio Pierro, Department of Social and Developmental Psychology, Sapienza University of Roma, Via dei Marsi 78, 00185 Roma (RM), Italy. Email: antonio.pierro@uniromal.it

A job gives a purpose and the money needed to live, increases the dignity of life, and "ennobles man" as per a well-known proverb. Nowadays it is necessary to consider that workers face greater and more pressing demands due to a competitive, uncertain labor market, traversed by crisis (e.g., Demerouti & Bakker, 2023). Certain job demands are hindrance (Van den Broeck et al., 2010) because they are an obstacle for employees, especially when their presence is not compensated with a significant amount of job and personal resources (Bakker & Demerouti, 2007, 2017; Halbesleben & Buckley, 2004). As a result, a work environment characterized by uncompensated higher job demands exhausts people, sometimes spilling over into the person's nonwork domains (Bakker et al., 2008). The intricate interplay between individuals' professional responsibilities and their personal lives is reflected in work-life conflict. Work-life conflicts arise from competition between personal and professional roles (Greenhaus & Beutell, 1985; Netemeyer et al., 1996) which causes several negative health outcomes (Greenhaus et al., 2006). Noteworthy, work is increasingly entering our lives and homes. For example, during the COVID-19 outbreak, millions of employees



Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

worldwide experienced working from home, which sometimes became a permanent arrangement. Consequently, boundaries between life spheres blur (Demerouti & Bakker, 2023), possibly increasing stress and conflict with private life (Blake et al., 2024; Hayes et al., 2020; Laß & Wooden, 2023).

To cope with challenging situations, employees have a number of personal resources at their disposal (Hobfoll, 1989, 2002, 2011; Judge et al., 2000; Xanthopoulou et al., 2007), including their passion for work (e.g., Benitez et al., 2023; Lavigne et al., 2014). Passion is a central component of human motivation and engagement (Vallerand et al., 2003; Vallerand et al., 2010). However, according to the dualistic model of passion (DMP; Vallerand et al., 2003; Vallerand & Houlfort, 2003), passion can encourage rigid persistence and unbalanced living (Vallerand et al., 2010). In the present work, we rely on the dual construct of passion predicted in the DMP, whereby people may have toward their work an obsessive passion (OP; an intense and compelled desire for the activity that becomes all-consuming) or a harmonious passion (HP; a strong but balanced commitment to the activity) generally achieving distinct and opposite results (Vallerand et al., 2003).

On the other hand, when work motivation overrides all other motivations, the worker may experience a motivational imbalance (Kruglanski et al., 2021; Szumowska et al., 2023) that preempt sacrificing oneself for the activity and losing interest in other activities or achievements. Accordingly, unbalanced work behaviors bring high work-family conflict (Chodkiewicz & Hauk, 2012; Hauk & Chodkiewicz, 2013). In the present study, we propose that employee-perceived job demands can fuel work-life conflicts through increased proneness to work motivational imbalance. Furthermore, we suggest that passion for work could moderate (i.e., exacerbate or mitigate) the effect of job demands on imbalance, depending on the type of the employee's passion. To formulate the moderation hypotheses, we rely on some evidence from the literature.

First, according to goal shielding theory (Shah et al., 2002), when a goal becomes focal for the person, all interfering goals are automatically inhibited. Because OP makes work goals focal, it leads to a greater deal of goal conflict, whereas HP allows for better integration and less conflict (Bélanger et al., 2019; Vallerand et al., 2003). Moreover, OP causes work to occupy a disproportionate space in a person's identity compared to other identity factors, whereas HP allows for its integration within the identity (Vallerand et al., 2003). Accordingly, obsessively passionate people are prone to enact extreme behavior related to their passionate activity (Bélanger et al., 2021; Chirico et al., 2021; Contu et al., 2023a, 2023b; Contu & Pierro, 2024; Vallerand & Paquette, 2021). HP, on the other hand, is a more balanced and positive form of passion toward one's work, felt as meaningful or enjoyable (Vallerand et al., 2003), and as such can act as a buffer against difficult conditions (Benitez et al., 2023). Based on these insights, we propose that job demands are positively associated with proneness to motivational imbalance only for obsessively passionate employees, while high harmonious passion should protect against imbalance. In turn, the proneness to motivational imbalance should stimulate work-life conflict. Below we detail the literature on which our hypotheses are based.

JOB DEMANDS AND WORK-LIFE CONFLICT

The Job Demands-Resources (JD-R) model posits that specific aspects of a job can either deplete individuals' mental and physical resources (job demands) or provide them with opportunities for personal growth and fulfillment (job and personal resources; Demerouti et al., 2001). Job demands can include workload, time pressure, role ambiguity, and emotional demands, that are perceived as highly costly and stressful by employees (Bakker & Demerouti, 2007, 2017; Di Santo et al., 2020). If demands exceed the resources available to the employee (e.g., social support, autonomy, skill development opportunities),



Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

they can lead to stress and burnout (Bakker & Demerouti, 2007, 2017; Bakker et al., 2005; Schaufeli & Bakker, 2004). Significant job demand levels create a spiral of resource loss that drains workers' energy (Bakker et al., 2008; Hobfoll, 2002) and spills over into other areas of a person's life (e.g., Scherer & Steiber, 2007). Consistently, several studies have shown that high job demands often cause the onset of work-life conflict (e.g., Bell et al., 2012; Lee et al., 2021; Scherer & Steiber, 2007). Other authors have found that this relationship also occurs over time, confirming its causal nature (e.g., Gu et al., 2020). Work-life conflict arises when the demands from work and personal life domains are mutually incompatible and holding one role is made more difficult by holding the other role (Greenhaus & Beutell, 1985; Carlson et al., 2000). If people establish boundaries between multiple areas of their lives, they can preserve psychological well-being (e.g., Nippert-Eng, 1996); otherwise, a series of negative consequences occur, such as reduced psychological well-being, negative emotions, and detrimental organizational outcomes (Allen et al., 2000; Amstad et al., 2011; Burke et al., 2010; Ernst Kossek & Ozeki, 1998; Haar, 2004; Higgins et al., 1992). Given the significant impact of work-life conflict on health, it is worth continuing to study its possible antecedents (e.g., Byron, 2005).

PASSION, MOTIVATIONAL IMBALANCE, AND WORK-LIFE CONFLICT

According to the JD-R model, personal resources can modulate employees' exhaustion or engagement through different evaluations of their job and job resources (Lavigne et al., 2014; Xanthopoulou et al., 2007). In line with the Conservation of Resources (COR) theory (Hobfoll, 2002), humans have a limited number of resources and energy that, if invested in one role, are not available for other roles. As previous studies (e.g., Benitez et al., 2023), we identified "passion" as a resource that can moderate the effect of demands. In particular, we relate to the definition of passion as a strong inclination toward an important, meaningful, and self-defining activity in which a significant amount of time and energy is invested, dualistically classified as obsessive passion (OP) and harmonious passion (HP; Vallerand et al., 2003; Vallerand & Houlfort, 2003). OP is a controlled internalization of the activity into one's self-concept, whereby the person feels a sense of pressure and an uncontrollable urge to engage in it. This pressure prevents one from completely detaching from thoughts about the activity, which becomes all-consuming. Important aspects of the self (e.g., self-esteem) are activity-dependent (Vallerand et al., 2014). On the contrary, HP is a more flexible and integrated approach to one's passions, resulting from a self-determined internalization process (i.e., the person feels no pressure to internalize the activity and engage in it, rather freely chooses to do so). Employees who are harmoniously passionate about their work feel it to be a significant, but not overbearing, part of their identity and in harmony with other aspects of their lives (Houlfort et al., 2018). As mentioned above, the two passions lead to distinct outcomes (e.g., Vallerand et al., 2014). Outcomes are generally positive and more adaptive for harmonious passion, such as job satisfaction (Vallerand & Houlfort, 2003; Vallerand et al., 2010), flow, vitality, affective commitment (Forest et al., 2011), psychological adjustment to retirement (Houlfort et al., 2015), more moderate and less rigid involvement in the activity (Vallerand & Paquette, 2021). In contrast, outcomes are generally negative for obsessive passion, such as negative emotions during task engagement (Vallerand et al., 2003), suppression of goals that conflict with one's passion, and preference for means that serve the passionate goals but undermine alternatives (e.g., "counterfinality"; Bélanger et al., 2019).

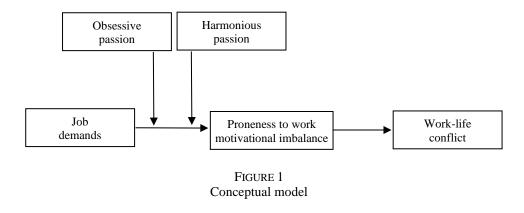
A substantial body of research found a role of OP (as opposed to HP) in extreme context-related behaviors (e.g., violent activism, romantic and sexual behaviors, aggression, and addiction; Bélanger et al.,



2021; Chirico et al., 2021; Contu et al., 2023a, 2023b; Contu & Pierro, 2024; Resta et al., 2022; Szumowska et al., 2023; Vallerand & Paquette, 2021), including obsessive behaviors at work, such as nondelegation, perfectionism (Burke & Fiksenbaum, 2009), and workaholism (Birkeland & Buch, 2015; Dalla Rosa & Vianello, 2020; Lajom et al., 2018). On the contrary, HP prevents the onset of burnout (Vallerand et al., 2010), is positively associated with expansive work behaviors (Burke & Fiksenbaum, 2009), and negatively with workaholism (Birkeland & Buch, 2015; Dalla Rosa & Vianello, 2020; Lajom et al., 2018). Along these lines, employees may be more or less prone to engage in extreme behavior depending on their passion. In particular, we suggest that job demands make employees prone to motivational imbalance when they have obsessive passion, but not when they have harmonious passion. According to the theory, under motivational imbalance, people are willing to neglect or sacrifice alternative goals for the dominant, focal goal (Kruglanski et al., 2021). Therefore, employees prone to work motivational imbalance may devote themselves totally to work, and engage in extreme work behaviors, neglecting everything else (e.g., partner, family, friends, and hobbies; Szumowska et al., 2023). Consistently, extreme work behaviors have been found positively related to work-family conflict (Chodkiewicz & Hauk, 2012; Hauk & Chodkiewicz, 2013).

THE PRESENT RESEARCH

Drawing on the JD-R model (Demerouti et al., 2001), the DMP (Vallerand et al., 2003), and motivational imbalance theory (Kruglanski et al., 2021), in the present study we aim to test whether job demands are positively associated with work-life conflict through a proneness to work motivational imbalance. According to the motivational imbalance theory (Kruglanski et al., 2021; Szumowska et al., 2023), a focal goal pursuit can lead to sacrificing other vital goals. Therefore, for employees with unbalanced work motivation, job responsibilities may encroach on the individual's other roles, leading to conflict. In addition, drawing on the dualistic classification of passion (Vallerand et al., 2003, 2010), we hypothesized that the type of passion could moderate the relationship between job demands and the proneness to imbalance. In particular, OP employees should be more prone to motivational imbalance; on the contrary, HP employees should be less prone to imbalance, as HP may act as a "buffer" (Benitez et al., 2023) against this eventuality. We tested a moderated mediation model with the two types of passion as distinct moderators. The model is represented graphically in Figure 1. We expected that a) job demands should be positively associated with work-life conflict through the proneness to work motivational imbalance; however, b) the proneness for motivational imbalance should occur when employees have high OP; c) the proneness for motivational imbalance should not occur when employees have high HP.





Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

METHOD

Participants and Design

The study's hypotheses were tested through a cross-sectional study conducted in Italy within a sample of employees (N = 525; 34.5% men; $M_{age} = 40.56$, $SD_{age} = 12.24$; $M_{job\ seniority} = 12.14$ years, $SD_{job\ seniority} = 10.92$). As for the educational level, 4% had a middle school education or lower, 37.3% had a high school education, 56% had a university degree, and 2.7% of participants had a Ph.D. Participants took part in the study voluntarily through an online procedure: they were contacted by research collaborators through social networking groups (e.g., Facebook) and asked to participate in a survey inquiring about their work attitudes and experiences. Once informed consent was obtained, participants were asked to indicate their demographic information (age, gender, education level, occupation, job seniority). Next, participants completed a questionnaire designed to collect the measures of research interest (listed below). All items were administered in Italian. In the Instruments section, we provide examples of items translated into English. The last part of the questionnaire thanked and fully debriefed the participants.

Instruments

Job demands. Job demands were measured through the following four items designed to assess hindrance job demands, that are viewed as obstacles to personal growth and are associated with negative outcomes such as stress and burnout (Van den Broeck et al., 2010). The job demands scale was adapted by items derived from Brown and Leigh's (1996) psychological climate and efforts measure: "My job requires many sacrifices," "My job requires complete dedication to it," "My job requires a great deal of responsibility and effort," "All my resources are needed to achieve the work objectives requested of me." Items were scored on a 6-point Likert scale (ranging from *do not agree at all* to *completely agree*). A total job demands score was computed by averaging responses to each item ($\alpha = .88$).

Passion for work. Passion for work was assessed through the Italian version (Bélanger et al., 2015) of the Passion Scale developed by Vallerand and colleagues (2003). The Passion Scale comprises two subscales of six items each, assessing harmonious (HP) and obsessive (OP) passion. Ratings are made on a 7-point Likert scale (ranging from *do not agree at all* to *completely agree*). A sample item for OP is "I have difficulties controlling my urge to do my work," and a sample item for HP is "My work is in harmony with other activities in my life." Two total scores (one for HP and one for OP) were computed by averaging across responses. Results from exploratory and confirmatory factor analyses provided strong support for the bifactorial structure of the scale in several life contexts, including work (Carbonneau et al., 2008; Vallerand & Houlfort, 2003). In the present sample, internal consistency analyses supported the reliability of the HP (α = .90) and OP (α = .87) scales.

Proneness to work motivational imbalance. Proneness to work motivational imbalance was measured through an 11-item scale adapted to the work context from the Extreme Personality Scale developed by Szumowska and colleagues (2023). Sample items were "When I devote myself to achieving a work goal, everything else becomes insignificant," and "When I focus on my work, I easily forget other things." Items were scored on a 7-point Likert scale (ranging from *do not agree at all* to *completely agree*). A total proneness to work motivational imbalance score was computed by averaging responses to each item ($\alpha = .93$).

Work-life conflict. The work-life conflict was measured through the following five items designed to assess work interfering with private life, including one's family, friends, and free time activities, adapted from Netemeyer and colleagues (1996): "I am often forced to give up other activities due to my job," "Many times my work interferes with my private life," "My job prevents me from spending the amount of time I would like with my family," "My job often interferes with my home responsibilities," "My job leaves me little time to socialize with friends, pursue a hobby or other free time activities." Items were scored on a 6-point Likert (ranging from *do not agree at all* to *completely agree*). A total score of work-life conflict was computed by averaging responses to each item ($\alpha = .93$).

RESULTS

Descriptive statistics and correlations between variables are presented in Table 1. Job demands, proneness to work motivational imbalance, and work-life conflict were significantly and positively correlated between them. In addition, we found a significant positive correlation between job demands and both types of passion. To further clarify these relationships, we performed Hotelling's t-squared test, that is, a multivariate statistical test frequently used in pairwise comparison of correlations to test the difference between correlations (Hotelling, 1992). We compared the correlation between job demands and obsessive passion versus the correlation between job demands and harmonious passion. Hotelling's test shows that OP was significantly (z = 6.78, p < .01) more correlated with job demands than HP. There was also a positive and significant correlation between the two types of passion and the proneness to work motivational imbalance. We performed Hotelling's t-squared test and found that OP was significantly more correlated with proneness to imbalance than HP (z = 12.88, p < .01). Finally, OP was positively and significantly correlated with work-life conflict; on the contrary, HP was negatively and significantly correlated with work-life conflict.

TABLE 1
Means (SDs) and correlations of the main variables

	M(SD)	1	2	3	4	5
1. JD	3.92(1.35)	_				
2. HP	4.60(1.50)	.18*	_			
3. OP	2.88(1.41)	.46*	.51*	_		
4. Proneness	3.09(1.39)	.50*	.16*	.65*	_	
5. Work-life conflict	3.48(1.56)	.55*	21*	.30*	.51*	-

Note. JD = job demands; HP = harmonious passion; OP = obsessive passion; Proneness = proneness to work motivational imbalance.

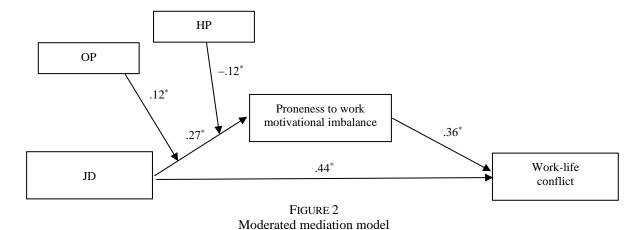
We then tested the hypothesized moderated mediation model with the proneness to work imbalance as a mediator between job demands and work-life conflict and with the two types of passions as distinct moderators of the relationship between job demands and proneness to work imbalance. The analysis was performed using SPSS PROCESS macro (Hayes, 2022), Model 9. Ninety-five percent CIs were employed and 5000 bootstrapping resamples were run. The results obtained from the analysis are summarized in Table 2 and Figure 2.

^{*}p < .001.

TABLE 2 Findings of the moderated mediation analysis

	Proneness to work motivational imbalance				Work-life conflict					
	b	SE	t	p	95% CI	b	SE	t	p	95% CI
JD	0.27	0.04	7.47	< .001	[0.20, 0.34]	0.44	0.05	9.65	< .001	[0.35, 0.54]
HP	-0.21	0.03	-6.50	< .001	[-0.27, -0.15]	-	_	_	_	_
JD*HP	-0.12	0.02	-5.27	< .001	[-0.17, -0.08]	-	_	_	-	-
OP	0.61	0.04	14.92	< .001	[0.53, 0.69]	_	_	_	_	_
JD*OP	0.12	0.03	4.75	< .001	[0.07, 0.18]	-	_	_	-	-
Proneness	-	-	_	_	-	0.36	0.04	8.00	< .001	[0.27, 0.44]

Note. JD = job demands; HP = harmonious passion; OP = obsessive passion; b = unstandardized regression coefficient; SE = standard error.



Note. JD = job demands. The values close to the obsessive passion (OP) and harmonious passion (HP) arrows represent the interaction terms. Results are unstandardized. *p < .001

As can be seen, job demands were significantly and positively associated with the proneness to work imbalance. The two types of passion were significantly associated with the proneness to work imbalance (i.e., OP positively and HP negatively; see Table 2). Importantly, the effects on the proneness to imbalance of the two interactions (i.e., between OP and JD, and HP and JD) were significant: $JD \times OP$ positively and $JD \times HP$ negatively.

A simple slopes analysis revealed that the conditional effect of JD on the proneness to imbalance at a high level (1 SD above the mean) of OP was higher — effect = 0.45; p < .001; 95% CI [0.33, 0.56] — than at a low level (-1 SD belove the mean) of OP — effect = 0.10; p = .037; 95% CI [0.01, 0.18] —, indicating that OP exacerbates the relation between JD and the proneness to imbalance. This pattern of results is displayed in Figure 3. A simple slopes analysis also revealed the conditional effect of JD on the proneness to imbalance at a low level (-1 SD belove the mean) of HP was significant and positive — effect = 0.46; p < .001; 95% CI [0.36, 0.55] —, while at a high level (1 SD above the mean) of HP the relationship between JD and the proneness to imbalance became nonsignificant — effect = 0.09; p = .091; 95% CI [-0.01, 0.19] —, suggesting that HP can act as a "buffer" for job demands. This pattern of results is displayed in Figure 4.

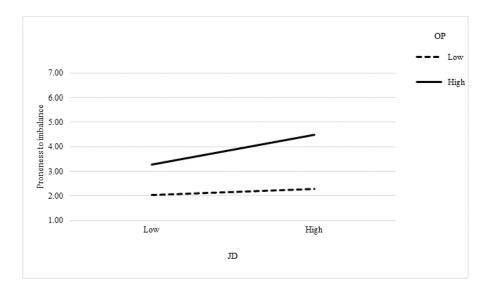


FIGURE 3
The relationship between job demands (JD) and proneness to work motivational imbalance by obsessive passion (OP) levels

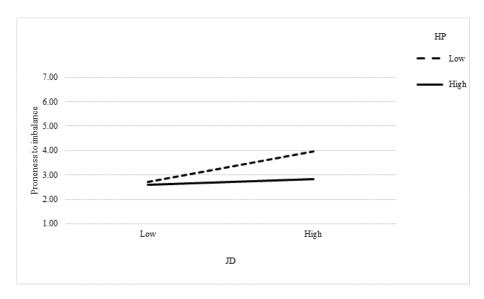


FIGURE 4
The relationship between job demands (JD) and proneness to work motivational imbalance by harmonious passion (HP) levels

As for the effect of the proneness to work motivational imbalance on work-life conflict, the results (see Table 2) show a significant and positive relationship. A significant and positive direct effect of JD on work-life conflict was also found. Importantly, and in line with our hypothesized moderated mediation model, the conditional indirect effect of JD on work-life conflict through the proneness to imbalance at the two levels of OP was higher at a high level (1 SD above the mean) of OP — indirect effect = 0.16; 95% CI [0.10, 0.23] — than at a low level (-1 SD belove the mean) of OP — effect = 0.03; 95% CI [0.00,



Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

0.07]. On the contrary, the conditional indirect effect of JD on work-life conflict through the proneness to imbalance at the two levels of HP was significant and positive at a low level (-1 SD belove the mean) of HP — indirect effect = 0.16; 95% CI [0.11, 0.22] — while at a high level (1 SD above the mean) this indirect effect became nonsignificant — indirect effect = 0.03; 95% CI [-0.01, 0.07] —, confirming a buffering effect of harmonious passion.

DISCUSSION

In the present study, we tested whether job demands were positively associated with work-life conflict through the proneness to work motivational imbalance. We tested our hypothesis through a cross-sectional study conducted on employees in Italy. Results confirm our hypothesis that job demands can make employees prone to motivational imbalance toward their work. Overall, the results of the mediation model confirmed that job demands are positively associated with work-family conflict through proneness to motivational imbalance.

Before describing the potential contribution of this research to the existing literature, we would like to point out some conceptual differences between variables of interest. For example, although obsessive passion (OP) reflects intense engagement with work similarly to "workaholism" (Schaufeli et al., 2006), the two variables differ in their underlying motivations, as shown in studies that have tested their discriminant validity (Birkeland & Buch, 2015). Some conceptual differences have been identified (see Birkeland & Buch, 2015); workaholics do not necessarily value their work, as opposed to employees with OP; workaholics also seem to be addicted to the "action" of working, whereas employees with OP are rather addicted to their work as important to their identity; furthermore, the passion model includes the reasons why the person is addicted to work, whereas workaholism explains the addiction per se (see Birkeland & Buch, 2015). Accordingly, studies have found a positive association between the two variables (e.g., Dalla Rosa & Vianello, 2020).

Moreover, in our study, obsessive passion strongly correlated with the proneness to work motivational imbalance. Although both are motivational constructs, we glimpse some conceptual differences (see also Szumowska et al., 2023); for example, OP is concerned with the intensity and nature of passion for work and how this is intertwined with identity (Vallerand et al., 2003), while the motivation to unbalance for work depends on the failure to balance different personal motivations (Kruglanski et al., 2021; Szumowska et al., 2023). The motivation behind OP is often intrinsic, stemming from a deep love for the activity, that is, individuals feel compelled to pursue their passion because it is important to their self-concept (Vallerand et al., 2003). In contrast, the proneness to work motivational imbalance can result from an imbalance of motivational factors that can be both intrinsic and extrinsic. For example, imbalance may lead to an overemphasis on some motivational needs, such as social recognition and significance, while neglecting other motivational factors such as leisure time or social ties (Kruglanski et al., 2021; Szumowska et al., 2023).

Our results unveil that a proneness to work motivational imbalance may be a mechanism that mediates the relationship between job demands and work-life conflict, advancing previous literature (Carlson et al., 2000; Greenhaus & Beutell, 1985; Scherer & Steiber, 2007). High job demands can make work the person's focal activity, and meeting the work demands can become an overwhelming motivation, such that the person may be naturally led to sacrifice everything else (i.e., work extremism; Kruglanski et al., 2021; Szumowska et al., 2023).

Nevertheless, we hypothesized that passion might play a role in mitigating or exacerbating the effect of job demands on imbalance. By testing the separate moderator effect of the two types of work passion, we



Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

found that OP exacerbated the effect of job demands on imbalance. In contrast, HP was found to attenuate the effect of job demands, such that high HP protected against imbalance. Our findings align with previous research (e.g., Benitez et al., 2023), highlighting HP as a "buffer" resource against challenging conditions, such as hindrance job demands. Indeed, harmonious type passion integrates with other aspects of life, allowing moderate and more flexible involvement in activity (Vallerand & Pacquette, 2021) as well as positive emotions and satisfaction from work without compromising other spheres (Vallerand et al., 2003). This can translate into the ability to appropriately balance work motivation and other personal motivations, reducing the risk of work extremism and conflict.

Limits and Future Directions

The study has limitations that should be considered when interpreting the results. First, its cross-sectional design does not allow to draw causal conclusions about the relationships found. Future research can address this limitation by conducting studies using experimental and longitudinal designs. Secondly, the survey design may be sensitive to some biases, such as the social desirability bias in the responses provided. Thirdly, all variables were assessed using self-report measures, increasing the risk of common method variance; this risk could be reduced in the future by implementing longitudinal studies, but also by including other sources of information or providing behavioral measures of the variables of interest. To improve the generalizability of our results, future studies can test the model by considering the specifics of different organizational and cultural contexts. Indeed, both the job demand-resources model and work-life balance are significantly influenced by cultural norms and values, as well as public and social policies (Györkös et al., 2012; Ollier-Malaterre, 2016). Consistent to the above critical point, self-report measures may yield different results due to cultural biases in responses. We suggest that future research should consider cross-cultural comparisons to identify common patterns and unique differences. Furthermore, using mixed methods that combine quantitative and qualitative methods would provide a comprehensive view of our model in various organizations and cultural contexts.

Following our study aims, we examined the influence of passion, but it would be interesting to observe the effect of other workers' resources, that is, optimism or self-efficacy (Xanthopoulou et al., 2007) in the relationship between job demands and imbalance. Indeed, other personal resources available to the individual could amplify or mitigate the possibility that job demands create imbalance. Finally, future research could extend and deepen more the motivational basis of work-life conflict. Research also suggests that extreme dedication to work widens the gap in the married couple, causing feelings of loneliness, undervaluation, and a greater perception of the relationship as problematic in partners (Robinson et al., 2001). A person's work imbalance while aiming to satisfy his or her need for significance may lead to a feeling of loss of significance for his or her partner, especially if the latter's importance stems from being in a couple (e.g., Contu et al., 2023a). This could be a direction for future research.

Practical Implications and Conclusive Remarks

Despite the limitations, we believe these findings have some practical implications. First, deepening the relationship between job demands and work-life conflict is critical for organizations, employees, and policymakers, as it has implications for employees' well-being, satisfaction, organizational commitment, and turnover intentions (Allen et al., 2000; Amstad et al., 2011; Ernst Kossek & Ozeki, 1998; Haar, 2004). In addition, the



Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

prevalence of dual-income families and evolving societal norms about work and family roles underscore the importance of addressing work-life conflict in contemporary workplaces (e.g., Gemmano et al., 2023). As per the JD-R model (Demerouti et al., 2001), in under-resourced workplaces, work demands exhaust the worker (Di Santo et al., 2020). Nevertheless, the present results show that passion is a nonnegligible personal resource.

Therefore, promoting autonomous internalization of work (i.e., HP, e.g., through job enrichment) may mean promoting a culture of "balance" that would also affect the bidirectional influence between work and private life. Employers and organizations should encourage employees to develop a positive passion for work, to pursue other interests, and to value their extra work responsibilities without fearing negative career repercussions because work demands are not fully met. For instance, work-family enrichment can enhance perceived control over work-family matters and reduce the negative effects of work-family conflict (Baral & Bhargava, 2010). When individuals experience enrichment in both work and family domains, it can lead to positive outcomes and a better balance between the roles. Organizations could also implement flexible work arrangements to help employees balance professional and personal needs (Allen et al., 2013). Other specific interventions to support harmonious passion could include establishing mentorship programs to provide guidance and support to employees in managing their passion. Harmonious passion would enable employees to engage in healthy activities, such as some regular workout, adequate rest, and hobbies cultivation, which can help them also to manage stress and maintain a healthy work-life balance. Additionally, work goals should be set with realistic expectations and manageable workloads, to prevent employees from feeling overwhelmed (Neubert & Dyck, 2016). Conversely, obsessive passion often leads to setting unrealistic expectations and standards (Vallerand et al., 2003) which can foster imbalance. In conclusion, workplace interventions can help create a work environment that encourages employees to engage in work in a balanced and satisfying way. In contrast, imbalance is likely if the organization pushes employees to focus completely on work goals, due to intense competition and the drive for excessive productivity, with negative organizational and personal repercussions for employees (Houlfort et al., 2013). It may be useful to continue research and develop managerial lines and practices that promote employee autonomy and positive passion, reducing the risk of imbalance in motivation.

REFERENCES

- Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, 5(2), 278-308. https://doi.org/10.1037/1076-8998.5.2.278
- Allen, T. D., Johnson, R. C., Kiburz, K. M., & Shockley, K. M. (2013). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology*, 66(2), 345-376. https://doi.org/10.1111/peps.12012
- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology*, 16, 151-169. https://doi.org/10.1037/a0022170.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. https://doi.org/10.1108/02683940710733115
- Bakker, A. B., & Demerouti, E. (2017). Job Demands-Resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. https://doi.org/10.1037/ocp00 00056
- Bakker, A. B., Demerouti, E., & Dollard, M. F. (2008). How job demands affect partners' experience of exhaustion: Integrating work-family conflict and crossover theory. *Journal of Applied Psychology*, 93(4), 901-911. https://doi.org/10.1037/0021-9010.93.4.901
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10, 170-180. https://doi.org/10.1037/1076-8998.10.2.170
- Baral, R., & Bhargava, S. (2010). Work-family enrichment as a mediator between organizational interventions for work-life balance and job outcomes. *Journal of Managerial Psychology*, 25(3), 274-300. https://doi.org/10.1108/02683941011023749



- Bélanger, J. J., Collier, K. E., Nisa, C. F., & Schumpe, B. M. (2021). Crimes of passion: When romantic obsession leads to abusive relationships. *Journal of Personality*, 89(6), 1159-1175. https://doi.org/10.1111/jopy.12642
- Bélanger, J. J., Pierro, A., Kruglanski, A. W., Vallerand, R. J., De Carlo, N., & Falco, A. (2015). On feeling good at work: The role of regulatory mode and passion in psychological adjustment. *Journal of Applied Social Psychology*, 45(6), 319-329. https://doi.org/10.1111/jasp.12298
- Bélanger, J. J., Schumpe, B. M., & Nisa, C. F. (2019). How passionate individuals regulate their activity with other life domains: A goal-systemic perspective. *Journal of Personality*, 87(6), 1136-1150. https://doi.org/10.1111/jopy.12463
- Bell, A. S., Rajendran, D., & Theiler, S. (2012). Job stress, wellbeing, work-life balance and work-life conflict among Australian academics. *E-Journal of Applied Psychology*, 8(1), 25-37. https://doi.org/10.7790/ejap.v8i1.320
- Benitez, M., Orgambídez, A., Cantero-Sánchez, F. J., & León-Pérez, J. M. (2023). Harmonious passion at work: Personal resource for coping with the negative relationship between burnout and intrinsic job satisfaction in service employees. *International Journal of Environmental Research and Public Health*, 20(2), Article 1010; https://doi.org/10.3390/ijerph20021010.
- Birkeland, I. K., & Buch, R. (2015). The dualistic model of passion for work: Discriminate and predictive validity with work engagement and workaholism. *Motivation and Emotion*, *39*, 392-408. https://doi.org/10.1007/s11031-014-9462-x
- Blake, H., Hassard, J., Singh, J., & Teoh, K. (2024). Work-related smartphone use during off-job hours and work-life conflict: A scoping review. *PLOS Digital Health*. https://irep.ntu.ac.uk/id/eprint/51596
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358-368. https://doi.org/10.1037/0021-9010.81.4.358
- Burke, R. J., & Fiksenbaum, L. (2009). Work motivations, work outcomes, and health: Passion versus addiction. *Journal of Business Ethics*, 84, 257-263. https://doi.org/10.1007/s10551-008-9697-0
- Burke, R. J., Fiksenbaum, L., El-Kot, G., Koyuncu, M., & Jing, W. (2010). Potential antecedents and consequences of work-family conflict: A three country study. In S. Kaiser, M. J. Ringlstetter, D. R. Eikhof, & M. P. E. Cunha (Eds.), *Creating balance? International perspectives on the work-life integration of professionals* (pp. 101-119). Springer Berlin Heidelberg.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67, 169-198. https://doi.org/10.1016/j.jvb.2004.08.009
- Carbonneau, N., Vallerand, R. J., Fernet, C., & Guay, F. (2008). The role of passion for teaching in intrapersonal and interpersonal outcomes. *Journal of Educational Psychology*, 100(4), 977-987. https://doi.org/10.1037/a0012545
- Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, 56(2), 249-276. https://doi.org/10.1006/jvbe.1999.1713
- Chirico, A., Lucidi, F., Pica, G., Di Santo, D., Galli, F., Alivernini, F., Mallia, L., Zelli, A., Kruglanski, A. W., & Pierro, A. (2021). The motivational underpinnings of intentions to use doping in sport: A sample of young non-professional athletes. *International Journal of Environmental Research and Public Health*, 18, Article 5411. https://doi.org/10.3390/ijerph18105411
- Chodkiewicz, J., & Hauk, M. (2012). The relationship between workaholism defined as an addiction and a behavioral tendency and work-family conflict. *Medycyna Pracy*, 63, 199-209.
- Contu, F., Ellenberg, M., Kruglanski, A. W., & Pierro, A. (2023a). People act extremely toward their amorous partner when they feel insignificant. *Personal Relationships*, 30(4), 1293-1315. https://doi.org/10.1111/pere.12506
- Contu, F., Ellenberg, M., Kruglanski, A. W., & Pierro, A. (2023b). Means substitutability in personal significance restoration. *Frontiers in Psychology*, 14, Article 1193336. https://doi.org/10.3389/fpsyg.2023.1193336
- Contu, F., & Pierro, A. (2024). Significance loss brings to extreme self-care related behaviors: The role of interpersonal influence and obsessive (vs. harmonious) passion. *Frontiers in Psychology*, *15*, Article 1374747. https://doi.org/10.3389/fpsyg.2024.1374747
- Dalla Rosa, A., & Vianello, M. (2020). Linking calling with workaholism: Examining obsessive and harmonious passion as mediators and moderators. *Journal of Career Assessment*, 28(4), 589-607. https://doi.org/10.1177/1069072720909039
- Demerouti, E., & Bakker, A. B. (2023). Job Demands-Resources theory in times of crises: New propositions. *Organizational Psychology Review*, 13(3), 209-236. https://doi.org/10.1177/20413866221135022
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. https://doi.org/10.1037/0021-9010.86.3.499
- Di Santo, D., Tesi, A., Aiello, A., & Pierro, A. (2020). The relationship between need for closure and compliance to harsh power tactics in high demanding jobs: A study conducted among firefighters and social workers. *Journal of Applied Social Psychology*, 50 (10), 599-606. https://doi.org/10.1111/jasp.12698



Di Santo, D., Tesi, A., Aiello, A., & Pierro, A.

Job demands and passion on imbalance and work-life conflict

- Ernst Kossek, E., & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, 83, 139-149. https://doi.org/10.1037/0021-9010.83.2.139
- Forest, J., Mageau, G. A., Sarrazin, C., & Morin, E. (2011). "Work is my passion": The different affective, behavioural, and cognitive consequences of harmonious and obsessive passion toward work. *Canadian Journal of Administrative Sciences*, 28, 27-30. https://doi.org/10.1002/cjas.17
- Gemmano, C. G., Manuti, A., Girardi, S., & Balenzano, C. (2023). From conflict to balance: Challenges for dual-earner families managing technostress and work exhaustion in the post-pandemic scenario. *Interna*tional Journal of Environmental Research and Public Health, 20(8), Article 5558. https://doi.org/10.3390/ijerph20085558
- Greenhaus, J. H., Allen, T. D., & Spector, P. E. (2006). Health consequences of work-family conflict: The dark side of the work-family interface. In P. L. Perrewé & D. C. Ganster (Eds.), *Employee health, coping and methodologies* (pp. 61-98). Elsevier Science/JAI Press. https://doi.org/10.1016/S1479-3555(05)05002-X
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *The Academy of Management Review*, 10(1), 76-88. https://doi.org/10.5465/amr.1985.4277352
- Gu, Y., You, X., & Wang, R. (2020). Job demands and emotional labor as antecedents of female preschool teachers' work-to-family conflict: The moderating role of job resources. *International Journal of Stress Management*, 27(1), 23-34. https://doi.org/10.1037/str0000130
- Györkös, C., Becker, J., Massoudi, K., de Bruin, G. P., & Rossier, J. (2012). The impact of personality and culture on the job demands-control model of job stress. *Swiss Journal of Psychology*, 71(1), 21-28. https://doi.org/10.1024/1421-0185/a000065
- Haar, J. M. (2004). Work-family conflict and turnover intention: Exploring the moderation effects of perceived work-family support. *New Zealand Journal of Psychology*, 33, 35-39.
- Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management*, 30(6), 859-879. https://doi.org/10.1016/j.jm.2004.06.004
- Hauk, M., & Chodkiewicz, J. (2013). The role of general and occupational stress in the relationship between workaholism and work-family/family-work conflicts. *International Journal of Occupational Medicine and Environmental Health*, 26, 383-393. https://doi.org/10.2478/s13382-013-0087-1
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). The Guilford Press.
- Hayes, S., Priestley, J., Ishmakhametov, N., & Ray, H. (2020). "I'm not working from home, I'm living at work": Perceived stress and work-related burnout before and during COVID-19. *PsyArXiv*. Advance online publication. https://doi.org/10.31234/osf.io/vnkwa
- Higgins, C. A., Duxbury, L. E., & Irving, R. H. (1992). Work-family conflict in the dual-career family. *Organizational Behavior and Human Decision Processes*, 51, 51-75. https://doi.org/10.1016/0749-5978(92)90004-Q
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524. https://doi.org/10.1037/0003-066X.44.3.513
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307-324. https://doi.org/10.1037/1089-2680.6.4.307
- Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational Psychology*, 84(1), 116-122. https://doi.org/10.1111/j.2044-8325.2010.02016.x
- Hotelling, H. (1992). Relations between two sets of variates. In S. Kotz & N. L. Johnson (Eds.), Break-throughs in statistics: Methodology and distribution (pp. 162-190). Springer. https://doi.org/10.1007/978-1-4612-4380-9_14
- Houlfort, N., Fernet, C., Vallerand, R. J., Laframboise, A., Guay, F., & Koestner, R. (2015). The role of passion for work and need satisfaction in psychological adjustment to retirement. *Journal of Vocational Behavior*, 88, 84-94. https://doi.org/10.1016/j.jvb.2015.02.005
- Houlfort, N., Philippe, F. L., Bourdeau, S., & Leduc, C. (2018). A comprehensive understanding of the relationships between passion for work and work-family conflict and the consequences for psychological distress. *International Journal of Stress Management*, 25(4), 313-329. https://doi.org/10.1037/str0000068
- Houlfort, N. L. Philippe, F. J. Vallerand, R., & Ménard, J. (2013). On passion and heavy work investment: Personal and organizational outcomes. *Journal of Managerial Psychology*, 29(1), 25-45. https://doi.org/10.1108/JMP-06-2013-0155
- Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology*, 85(2), 237-249. https://doi.org/10.1037/0021-9010.85.2.237
- Kruglanski, A. W., Szumowska, E., Kopetz, C. H., Vallerand, R. J., & Pierro, A. (2021). On the psychology of extremism: How motivational imbalance breeds intemperance. *Psychological Review*, *128*(2), 264-289. https://doi.org/10.1037/rev0000260



- Lajom, J. A. L., Amarnani, R. K., Restubog, S. L. D., Bordia, P., & Tang, R. L. (2018). Dualistic passion for work and its impact on career outcomes: Scale validation and nomological network. *Journal of Career Assessment*, 26, 631-648. https://doi.org/10.1177/1069072717723096
- Lavigne, G. L., Forest, J., Fernet, C., & Crevier-Braud, L. (2014). Passion at work and workers' evaluations of job demands and resources: A longitudinal study. *Journal of Applied Social Psychology*, 44(4), 255-265. https://doi.org/10.1111/jasp.12209
- 265. https://doi.org/10.1111/jasp.12209 Laß, I., & Wooden, M. (2023). Working from home and work-family conflict. *Work, Employment and Society*, *37*(1), 176-195. https://doi.org/10.1177/09500170221082474
- Lee, R. S., Son Hing, L. S., Gnanakumaran, V., Weiss, S. K., Lero, D. S., Hausdorf, P. A., & Daneman, D. (2021). Inspired but tired: How medical faculty's job demands and resources lead to engagement, worklife conflict, and burnout. *Frontiers in Psychology*, *12*, Article 609639. https://doi.org/10.3389/fpsyg.2021.609639
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81(4), 400-410. https://doi.org/10.1037/0021-9010.81.4.400
- Neubert, M. J., & Dyck, B. (2016). Developing sustainable management theory: Goal-setting theory based in virtue. *Management Decision*, *54*(2), 304-320. https://doi.org/10.1108/MD-05-2014-0312
- Nippert-Eng, C. (1996). *Home and work: Negotiating boundaries through everyday life.* University of Chicago Press.
- Ollier-Malaterre, A. (2016). Cross-national work-life research: A review at the individual level. In T. D. Allen & L. T. Eby (Eds.), *The Oxford handbook of work and family* (pp. 315-330). Oxford University Press.
- Resta, E., Ellenberg, M., Kruglanski, A. W., & Pierro, A. (2022). Marie Curie vs. Serena Williams: Ambition leads to extremism through obsessive (but not harmonious) passion. *Motivation and Emotion*, 46, 382-393. https://doi.org/10.1007/s11031-022-09936-3
- Robinson, B. E., Flowers, C., & Carroll, J. (2001). Work stress and marriage: A theoretical model examining the relationship between workaholism and marital cohesion. *International Journal of Stress Management*, 8, 165-175. https://doi.org/10.1023/A:1009533415030
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315. https://doi.org/10.1002/job.248
- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2006). Dr Jekyll or Mr Hyde? On the differences between work engagement and workaholism. In R. J. Burke (Ed.), *Research companion to working time and work addiction* (pp. 193-217). Edward Elgar Publishing. https://doi.org/10.4337/9781847202833.00018
- Scherer, S., & Steiber, N. (2007). Work and family in conflict? The impact of work demands on family life. In D. Gallie (Ed.), *Employment regimes and the quality of work* (pp. 137-178). OUP Oxford.
- Shah, J. Y., Friedman, R., & Kruglanski, A. W. (2002). Forgetting all else: On the antecedents and consequences of goal shielding. *Journal of Personality and Social Psychology*, 83(6), 1261-1280. https://doi.org/10.1037/0022-3514.83.6.1261
- Szumowska, E., Kruglanski, A. W., & Kopetz, C. (2023). Extremism and the extreme personality. In A.W. Kruglanski, A. Fishbach, & C. Kopetz (Eds.), *Goal Systems theory. Psychological processes and applications* (pp. 239-256). Oxford University Press.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagné, M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756-767. https://doi.org/10.1037/0022-3514.85.4.756
- Vallerand, R. J., & Houlfort, N. (2003). Passion at work: Toward a new conceptualization. In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Emerging perspectives on values in organizations* (pp. 175-204). Information Age.
- Vallerand, R. J., Houlfort, N., & Forest, J. (2014). Passion for work: Determinants and outcomes. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 85-105). Oxford University Press.
- Vallerand, R. J., & Paquette, V. (2021). On extreme behavior and outcomes: The role of harmonious and obsessive passion. In A. W. Kruglanski, C. Kopetz, & E. Szumowska (Eds.), *The psychology of extremism* (pp. 66-95). Routledge.
- Vallerand, R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the role of passion for work in burnout: A process model. *Journal of Personality*, 78(1), 289-312. https://doi.org/10.1111/j.1467-6494.2009.00616.x
- Van den Broeck, A., De Cuyper, N., De Witte, H., & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the Job Demands-Resources model. *European Journal of Work and Organizational Psychology*, 19(6), 735-759. https://doi.org/10.1080/13594320903223839
- 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. https://doi.org/10.1037/1072-5245.14.2.121