## The Influence of Job Demands and Job Resources on Work-life Balance: The Role of Passion for Work

**Master Thesis** 



# Social, Health and Organizational Psychology Faculty of Social and Behavioral Science Utrecht University

Name: Zsófia Kis

Student number: 0435015

Supervisor: Dr Jan Fekke Ybema

Second assessor: Dr Marieke den Ouden

Word count: 8541

Date: June 24, 2022

May be made publicly accessible

#### **Abstract**

In the present study, the Job Demands-Resources (JD-R) model is used as a framework to investigate the influence of job demands and job resources on individuals' passion for work and in turn, their work-life balance. Building on the dualistic model of passion (Vallerand, 2015; Bélanger, 2021), I predicted that job demands (i.e., workload) would increase individuals' obsessive (but not harmonious) passion, which in turn would be positively related to work-life conflict. Conversely, I predicted that job resources (i.e., autonomy, social support) would increase individuals' harmonious passion, which in turn would lead to work-life balance. I further examined if passion for work (OP vs HP) could mediate the effect of job demands and job resources on worklife balance and work-life conflict. In total, 140 participants were included. I found some support for my model. As expected, as employees were provided with more job resources (i.e., autonomy, social support), they showed higher levels of HP. Whereas as employees were facing more job demands (i.e., workload), they shower higher levels of OP. The results also show a partial mediation effect of OP on the relationship between job demands (i.e., workload) and work-life conflict. In addition, HP also partially mediated the relationship between job resources (i.e., autonomy, social support) and work-life conflict. These findings extend the literature by showing that the influence of job demands and job resources on work-life conflict can be partially explained by individuals' passion for work. The present study gives insight into the complexities of the relationship between job demands, job resources, passion for work, and the degree to which employees' work activities are in conflict with other life domains.

*Keywords*: passion for work, harmonious passion, obsessive passion, job demands-resources model, autonomy, social support, workload, work-life balance, work-life conflict

### The Influence of Job Demands and Job Resources on Work-life Balance: The Role of Passion for Work

Organizations nowadays struggle with how to deal with their employees' increasing demands for balance between their personal and professional domains (Barber et al., 2016). For this reason, the concepts of work-life balance (as well as work-life conflict) have been extensively studied in the last three decades. According to Greenhaus et al. (2003), work-life balance refers to "the extent to which an individual is equally engaged in—and equally satisfied with—his or her work role and family role" (Greenhaus et al., 2003, p. 513). Furthermore, based on an extensive review by Kalliath and Brough (2008), work-life balance is defined as an employee's own perception that work and non-work activities are compatible with each other and foster growth in accordance with the employee's life priorities. Accordingly, higher levels of work-life balance have been linked to job satisfaction, organizational commitment, and lower turnover intentions (Bell et al., 2012).

On the other hand, work-life conflict happens when an individual's involvement in the work domain hinders his/her involvement in the personal domain (Bell et al., 2012). In other words, when work tasks prevent an employee from fully enjoying their personal life and they find it difficult to fulfill their domestic obligations. Consequently, work-life conflict has been previously linked to lower levels of job satisfaction, reduced organizational commitment, as well as higher absenteeism and burnout (Bell et al., 2012). Therefore, it is essential to examine the underlying mechanisms that are associated with to the concepts of work-life balance and work-life conflict to prevent burnout and increased turnover, and foster job as well as life satisfaction instead. In order to do so, the job demands-resources model is used in the present study.

The job demands-resources (JD-R) model (Bakker and Demerouti, 2007) is a crucial theoretical framework for investigating work engagement and burnout in organizational contexts. According to the JD-R model, job characteristics, defined in terms of job demands and resources, account for work-related outcomes such as work engagement and burnout through two distinct processes: "health impairment and motivational processes" (Schaufeli and Bakker, 2004). Even though numerous studies support the JD-R model as job demands have been linked to burnout whereas resources have been linked to work engagement, there is little known about the underlying psychological mechanisms that might explain work-related outcomes (Trepanier et al., 2014) such as work-life balance and well-being.

The present study aims to gain a more coherent understanding of the effects of job demands and resources on health outcomes by using the Dualistic Model of Passion (Vallerand 2010a). Passion for work is defined as a strong inclination toward the profession that one loves and values, and to which a significant amount of time and energy is devoted (Vallerand 2010a). Furthermore, passion for work is a self-defining characteristic (Lavigne et al., 2012) which is a fundamental part of the person's identity (Fernet et al., 2014). Based on the Dualistic Model of Passion, we distinguish between two types of passion: harmonious passion and obsessive passion.

In the case of harmonious passion (HP), one's passion for work interacts harmoniously with other life domains and is viewed as being under the control of the individual (Moè, 2016). More specifically, HP generally leads to pleasant experiences since the passion promotes a flexible state of mind and enjoyment (Bélanger et al., 2015). As a result, the passion does not completely take over one's identity, thus preventing the passion from interfering with other life domains.

On the contrary however, obsessive passion (OP) in the organizational context is characterized by strong feelings of being obligated to carry out work tasks and boost one's self-esteem (Moè, 2016). Here, the passion "is attached to contingencies of self-worth" (Bélanger et al., 2015, p. 321) such as self-esteem and need for social approval and thus, it often leads to conflict between the passion and other life domains. Consequently, OP for work may decrease the experience of positive affect whereas enhance the experience of negative affect (Vallerand et al., 2010a).

In this paper, I propose that while working with passion can lead to beneficial psychological experiences such as greater work-life balance and subjective well-being (see Moè, 2016; Fernet et al., 2014), it can also take psychological tolls on the individual (i.e., work-life conflict and decreased subjective happiness; see Moè, 2016; Bélanger, 2013). These different outcomes are thought to be the result of job demands and job resources having opposing influence on the nature of individuals' passion for work (harmonious vs obsessive; Trepanier et al., 2014). The current study aims to provide a more thorough understanding of how job demands and job resources might contribute to work-life balance and subjective well-being by affecting individuals' passion for work.

#### The Job Demands-resources (JD-R) Model

The theoretical framework of the JD-R model allows for the explanation of employees' psychological health by examining the balance between job demands and job resources. While

each job has its unique set of risk factors that can easily lead to occupation-related stress, the core concept of the JD-R model is that these factors can be divided into two distinct categories, namely job demands and job resources (Bakker and Demerouti, 2007). The JD-R is a broad and flexible paradigm that may be used in a wide variety of organizational contexts regardless of the specific demands and resources involved (Schaufeli and Taris, 2014).

Job demands are those characteristics of a job that need persistent physical and/or psychological (cognitive and emotional) effort or abilities and are thus strongly related to physiological and/or psychological expenses such as work pressure, lack of social support, bad physical environment, or emotionally taxing interactions with clients and/or colleagues (Bakker and Demerouti, 2007). Consequently, job demands are believed to drain individuals' physical as well as psychological resources such as energy and motivation, ultimately leading to negative health outcomes such as burnout (Trepanier et al., 2014). However, based on previous literature, job resources can buffer the effects of pressing job demands and satisfy the basic psychological needs of autonomy, belonging, and competence. This, in turn, promotes both the intrinsic and extrinsic motivation of employees (Hakanen, Schaufeli and Aloha, 2008).

Thus, the positive physical, psychological, social, or organizational components of an occupation are referred to as job resources which are not only essential to counteract the effects of job demands but they are also crucial for achieving one's career goals (Bakker and Demerouti, 2007). According to Bakker and Demerouti (2007), job resources can be found at the organizational level (e.g., salary, job security), at the interpersonal level (e.g., perceived supervisor and coworker support), at the work level (e.g., role clarity, autonomy), and at the task level (e.g., task identity, task significance).

The effects of job demands and job resources on health as well as organizational outcomes have been widely studied to this date. In one specific study, Chen et al. (2017) investigated the link between work-related factors and work-family conflict as well as work-family facilitation among Taiwanese nurses. They found that demanding aspects of work such as work overload led to work-family conflict through increased emotional exhaustion. In contrast, work-related factors that provided workers with job resources such as autonomy led to work-family facilitation (i.e., work-life balance) through higher levels of job satisfaction. In another study, Holland et al. (2019) examined the impacts of perceived workload on satisfaction with work-life balance among Australian nurses. Their results indicate that when nurses experienced higher levels of workload,

they were less satisfied with their work-life balance, which in turn led to higher levels of turnover intentions (Holland et al., 2019).

#### The Dualistic Model of Passion

Based on Vallerand et al.'s (2010a) dualistic model, we distinguish between two types of passion: harmonious passion (HP) and obsessive passion (OP). These two motivational constructs can be differentiated based on how the passionate activity is balanced with other domains of life (Bélanger, Schumpe, and Nisa, 2019). Vallerand et al. (2003) also investigated the effects of passion in the context of work and organization.

In the organizational context, HP refers to a strong desire for engaging in the work that one loves and results from an autonomous internalizing process during which the passion is voluntarily assimilated into the person's identity (Vallerand et al., 2003b; Marsh et al., 2013). The work itself is well balanced with other life domains and does not occupy overwhelming space in the person's identity (Bélanger et al., 2019; Vallerand, 2015). Furthermore, in the case of HP, individuals have control over the passionate activity (i.e., one's work) and therefore HP is associated with more adaptive outcomes (Vallerand, 2010a; Vallerand, 2015).

Previous studies indicate that, in the context of the organizational realm, HP is negatively associated with burnout as well as conflict between work tasks and other activities (Vallerand et al., 2010b). For this reason, some organizational constructs such as personal interest, vital engagement, and commitment have previously been related to HP (Lavigne et al., 2012). However, it is crucial to distinguish between HP and work engagement because they are conceptualized differently. According to Lavigne et al. (2012), work engagement is believed to be the positive counterpart of burnout and it is defined as a mental state marked by devotion and immersion in one's work. However, an individual can be deeply immersed and committed to one's job without being passionate about it (Lavigne et al., 2012). Furthermore, previous research indicates that work engagement is positively related to work interference with family (i.e., work-life conflict) via the involvement in extra-role behaviors which is presumably not the case with HP (Fernet et al., 2014).

On the other hand, OP results from a controlled internalizing process which "originates from intrapersonal and/or interpersonal pressure because particular contingencies are attached to the passion, such as feelings of social acceptance" (Marsh et al., 2013, p. 797). Furthermore, OP is characterized by a strong and uncontrollable desire to engage in the passionate activity (i.e., one's work), which is associated with less adaptive outcomes (Vallerand, 2010a; 2015) and

interference with other life domains. One reason for this extreme form of engagement is that work activities are the sole source of basic needs satisfaction (Bélanger et al., 2019; Lalande et al., 2017). Consequently, individuals become overly attached to their work, define themselves exclusively through it, and inhibit all other goals that may interfere with its pursuit (Bélanger et al., 2019).

Based on previous research, organizational constructs such as workaholism have been linked to OP because these are strongly related to negative health outcomes (Lavigne et al., 2012). However, it is essential to differentiate between these concepts for at least two reasons. First, in the case of workaholism, intense involvement in and strong drive for work are paired with low levels of enjoyment whereas enjoyment is fully present for OP. Second, work is an integral part of an obsessively passionate individual's identity whereas workaholism can be better described as a type of addiction (Lavigne et al., 2012).

In one specific study, Vallerand et al. (2010b) investigated the effects of passion for work and burnout. More specifically, they hypothesized that obsessively passionate individuals would experience conflict between their work and other life activities which would ultimately lead to burnout. Conversely, HP is characterized by more adaptive outcomes, resulting in job satisfaction but no conflict. Their study conducted among nurses supported the model. Building on the work of Vallerand et al. (2010b), employees with higher levels of OP experience more work-life conflict, whereas those with higher levels of HP experience lower levels of work-life interference. In another study by Moè (2016), conducted among teachers, it was found that HP is associated with adaptive outcomes such as positive affect, job satisfaction, self-efficacy, and subjective happiness. On the contrary, OP was associated with decreased subjective happiness and increased negative affect.

#### Connecting the JD-R Model and Passion for Work

Based on previous research, certain job resources such as contextual autonomy support have previously been linked to HP because these job characteristics promote an autonomous internalization of work activities in the person's identity (Liu et al., 2011). More specifically, Liu et al. (2011) found that contextual autonomy support was associated with HP which in turn led to positive work outcomes such as employees' increased creativity.

On the other hand, cognitive, physical, and emotional job demands put employees under severe pressure, resulting in a controlled internalization of work in their identity which leads to an obsessive immersion in work activities (Trepanier et al. 2014). In other words, this obsessive

engagement helps them cope with the experienced job demands. In a study by Trepanier et al. (2014), job demands were positively associated with OP. They also found that employees who faced more job demands experienced higher levels of burnout, partly because they were obsessively passionate about their work. In addition, job resources were negatively associated with burnout and positively associated with work engagement via HP.

Building on the work of Liu et al. (2011) and Trepanier et al. (2014), it is essential to investigate the role of passion in the context of the JD-R model to acquire a more comprehensive understanding of the underlying mechanisms leading to positive and negative health outcomes in the context of work and organization.

#### **The Present Research**

The main goal of this research is to gain a better understanding of the underlying psychological mechanisms connecting the JD-R model, passion for work, work-life balance, and work-life conflict. It is essential to integrate the aforementioned concepts into one study because the results might help organizations to meet their employees' increasing demands for work-life balance through understanding crucial work-related factors that influence their well-being. In this study, I use the theoretical framework of the JD-R model to acquire a more coherent understanding of the influence that job demands and job resources have on employees' passion for work and in turn, their work-life balance and work-life conflict. The hypothesized relationships between all constructs are visualized in the research model in Figure 1.

*Hypothesis 1:* Job resources are positively related to HP.

Hypothesis 2: Job demands are positively related to OP (H2a) and negatively related to HP (H2b).

*Hypothesis 3:* HP is positively related to work-life balance (H3a) and negatively related to work-life conflict (H3b).

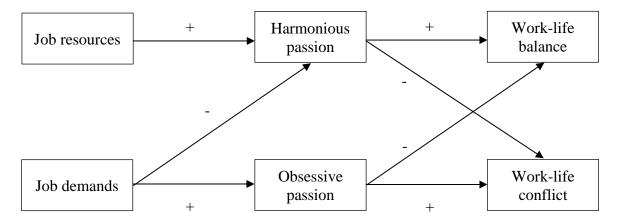
*Hypothesis 4:* OP is positively related to work-life conflict (H4a) and negatively related to work-life balance (H4b).

*Hypothesis 5:* Job resources positively predict work-life balance via HP.

Hypothesis 6: Job demands positively predict work-life conflict via OP.

Figure 1

Research Model Depicting the Proposed Hypotheses



#### Method

#### Power analysis

A power analysis in G\*Power 3.1 (Faul et al., 2009) was used to determine the research sample. The power analysis was based on H5 and H6 regarding the mediation. An increase in explained variance in work-life conflict and work-life balance of 5% due to the contribution of HP and OP was considered relevant. With  $\alpha$  = .05 and 1-  $\beta$  = .8, a sample size of N = 187 was needed.

#### **Participants**

Respondents were only eligible to participate if they were 18 years or older and had a job. In total, 233 participants started the survey. All incomplete questionnaires (n = 93) were eliminated from the study. In the end, a total of 140 participants were included in the analyses. Of the included participants, 53 were male (37.9%) with an average age of 30.6 years old. The other 87 participants were female (62.1%) with an average age of 31.7 years old. On average, participants worked 34.9 hours per week. Most participants worked in the business, consulting, and marketing industries.

#### Design and procedure

Data was collected at a single point in time which means that this research has a cross-sectional design. I used social media platforms such as Facebook, Instagram, and LinkedIn to recruit participants. Friends, family, and other acquaintances were also contacted via email and Whatsapp. The questionnaire was created and distributed via Qualtrics and was available in English. Individuals who met the inclusion criteria were requested to complete the questionnaire

and/or forward the questionnaire to others who met the inclusion criteria. Individuals from any field of work were able to participate in this study because it made no distinction between different professions. Participation was entirely voluntary and was not compensated.

#### **Ethical approval**

The University of Utrecht works according to the Code of Ethics for Psychologists (NIP, 2015). This research project was registered at the Utrecht University Student Ethics Review and Registration Site (UU-SER). The Faculty Ethics Review Board has given approval for this study.

#### **Measures**

Ten variables were measured using items from seven existing scales (see Appendices A-G) that are explained more in detail below. All items were available in English.

Job demands and job resources. 18 items of the Copenhagen Psychosocial Questionnaire (Kristensen and Borg, 2003) were used to measure participants' workload (4 items), autonomy (10 items), and social support (4 items). Items were scored on a five-point Likert scale, with answers ranging from 1 (Always) to 5 ( $Never/hardly\ ever$ ). "Is your workload unevenly distributed so it piles up?", "Do other people make decisions concerning your work?", and "How often do you get help and support from your colleagues?" are three example items from the scales. In the current study, the scales were reliable (autonomy  $\alpha = .81$ ; workload  $\alpha = .71$ ; social support  $\alpha = .83$ ).

**Passion for work.** The Passion for Work Scale (Lajom et al., 2018) consisting of 12 items was used to assess participants' passion for work comprising two subscales for HP and OP (6 items each). Participants were asked to indicate the extent to which they agreed with each statement on a scale from 1 (*Strongly disagree*) to 7 (*Strongly agree*). "My work is in harmony with the other activities in my life" and "I have difficulties controlling my urge to do my work" are two example items from the scale. Higher scores on this measure indicated participants' higher levels of HP and/or OP. In the current study, the scales were reliable (HP  $\alpha$  = .84; OP  $\alpha$  = .79).

Work-life conflict. Three items of the work-home interference scale taken from SWING (Geurts et al., 2005) was used to measure work-life conflict on a Likert scale ranging from 0 (*Practically never*) to 3 (*Practically always*). "How often does it happen that you do not fully enjoy the company of your spouse/family/friends because you worry about your work?" is an example item from the scale. Higher scores on this scale indicated people's higher levels of work-life conflict. In the current study, the scale was reliable ( $\alpha = .78$ ).

Work-life balance. The 4-item work-life balance scale taken from the Job Stress Scale (Shukla and Srivastava, 2016) was used to assess participants' work-life balance on a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). "I am able to balance between time at work and time at other activities" is an example item from the scale. Higher scores on this scale indicated people's higher levels of work-life balance. In the current study, the scale was reliable ( $\alpha = .93$ ).

Furthermore, the following constructs were assessed to examine their overlap with the passion constructs mentioned in above.

*Work engagement.* The Utrecht Work Engagement Scale (UWES-3; Schaufeli et al., 2017) was utilized to measure work-engagement which consists of three items. Items had to be scored on a seven-point Likert scale with answers ranging from 1 (*Never*) to 7 (*Always/every day*). Higher scores on this measure indicated higher levels of work engagement. "At my work, I feel bursting with energy" and "I am enthusiastic about my job" are two example items on this scale. In the current study, the scale was reliable ( $\alpha = .86$ ).

**Burnout.** 17 items from the Maslach Burnout Inventory (Maslach et al., 1997) measured participants' level of burnout. Participants rated their levels of burnout on a Likert scale ranging from 1 (*Never*) to 7 (*Every day*). "I feel emotionally exhausted because of my work" and "I feel worn out at the end of a working day" are two example items from the scale. Higher scores on this scale indicated people's higher levels of burnout. In the current study, the scale was reliable ( $\alpha = .92$ ).

**Overcommitment.** Participants' level of overcommitment was assessed by the Intrinsic Effort Scale (Preckel et al., 2005). Participants were asked to indicate the extent to which they agreed with each statement on a Likert scale ranging from 1 (*Strongly disagree*) to 4 (*Strongly agree*). "I get easily overwhelmed by time pressures at work" and "I start thinking about work problems as soon as I get up in the morning" are two example items from the scale. In the current study, the scale was reliable ( $\alpha = .75$ ).

*Control variables.* The control variables used in this study were age, gender, living with a partner, number of children, highest level of education completed, work industry, type of work contract, and work hours / week.

#### **Statistical analyses**

The statistical analyses were conducted using *IBM SPSS Statistics v28*. The model of the present study was tested by the PROCESS macro-SPSS package and resembles Hayes' model 4 mediation (Hayes, 2017). As Cronbach's alpha was reliable for every scale (see above), no items had to be deleted.

#### **Results**

Table 1 shows the descriptive statistics and correlations of all variables in the study. The mean for HP was rather high (M = 4.72 on a seven-point scale, SD = 1.14), whereas the mean for OP was moderate (M = 3.22 on a seven-point scale, SD = 1.13). The mean for work-life balance was also moderate (M = 3.11 on a five-point scale, SD = .74). Some predictor variables correlated significantly with each other, however there were no correlations above .80, suggesting no multicollinearity.

However, there were some noteworthy correlations in the present study. Job resources (i.e., autonomy and social support) were significantly correlated with HP. Therefore, the more job resources someone has access to, the more likely it is that their professional activities are well-balanced with other life domains. Conversely, job demands (i.e., workload) were significantly correlated with OP as well as work-life conflict. Thus, the more job demands someone is facing at work, the more likely that their work activities will interfere with their personal life. Furthermore, there were significant negative correlations between job demands and HP as well as work-life balance. These are in line with my predictions which state that there is a positive relationship between job resources and HP as well as job demands and OP.

Additionally, the correlations were rather strong between work-life conflict and burnout, overcommitment, and OP. Work engagement was strongly correlated with both HP and OP which means that work engagement is an integral part of one's passion for work whether it is harmonious or obsessive. Moreover, there was a significant negative correlation between HP and burnout which indicates that those employees who are harmoniously passionate about their work are less likely to burn out. Interestingly, the correlation between OP and burnout was not significant. In addition, it is important to note that burnout levels were quite high in the present study as the mean score for participants was 3.12 on a scale ranging 1-7.

**Table1** *Means, Standard Deviations and Correlations* 

	M	SD	R	1	2	3	4	5	6	7	8	9	10
1 Autonomy	3.38	.65	1-5	-									
2 Workload	2.78	.70	1-5	17	-								
3 Social	3.76	.82	1-5	.24*	37**	-							
support													
4 Work-life	3.11	.74	1-5	.19	44**	.23	-						
balance													
5 Work-life	1.97	.66	0-3	22	.50**	32**	46**	-					
conflict													
6 Work	4.55	1.01	1-7	.36**	.02	.18	21	.05	-				
engagement													
7 Burnout	3.12	1.03	1-7	24*	.38**	30**	12	.59**	31**	-			
8 Over-	2.43	.53	1-4	21	.49**	30**	32**	.64**	.00	.53**	-		
commitment													
9 Harmonious	4.72	1.14	1-7	.38**	26*	.47**	.20	31**	В	47**	23	-	
passion													
10 Obsessive	3.22	1.13	1-7	.07	.37**	18	20	.43**	.45**	.16	.49**	.17	-
passion													

*Note.* N = 140. \*\*Correlation is significant at the 0.01 level (2-tailed), \*correlation is significant at the 0.05 level (2-tailed).

First, a regression analysis of HP on the job demands and job resources variables (i.e., autonomy, workload, social support) was conducted. As shown in Table 2, job resources showed to be significantly related to HP. Employees experienced higher levels of harmonious passion as they reported higher autonomy and higher social support in their work. Thus, hypothesis 1 which predicted that job resources are positively related to HP was supported.

Table 2

Regression Results of Harmonious Passion (HP) with Autonomy, Workload, and Social Support

Predictors	В	SE B	β	t	р
Autonomy	.475**	.128	.275	3.719	<.001
Workload	121	.124	075	976	.331
Social support	.523**	.108	.379	4.843	<.001

*Note.* \*\* indicates p < .001, \* indicates p < .05.

Second, a regression analysis of OP on the job demands and job resources variables (i.e., autonomy, workload, social support) was conducted. As shown in Table 3, job demands showed to be significantly related to OP. Employees experienced higher levels of obsessive passion as they reported higher workload in their work. Thus, hypothesis 2b which predicted that job demands are positively related to OP was also supported. Interestingly, autonomy also showed to be significantly related to OP which means that employees experienced higher levels of obsessive passion as they reported more autonomy in their work. This is contrary to previous research in the field (see Fernet et al., 2014).

Table 3

Regression Results of Obsessive Passion (OP) with Autonomy, Workload, and Social Support

Predictors	В	SE B	β	t	р
Autonomy	.276*	.139	.161	1.992	.048
Workload	.583**	.135	.366	4.330	<.001
Social support	117	.117	086	999	.320

*Note.* \*\* indicates p < .001, \* indicates p < .05.

Both hypotheses 3 and 4 were tested in two regression analyses. As proposed by hypothesis 3, I expected that HP is positively related to work-life balance (H3a) and negatively related to work-life conflict (H3b). Furthermore, as proposed by hypothesis 4, I expected that OP is positively related to work-life conflict (H4a) and negatively related to work-life balance (H4b). First, work-life balance was regressed on job demands and job resources in step 1 (see Table 4, Step 1) before passion for work (i.e., HP and OP) was added to the regression equation (see Table 4, Step 2). In steps 1 and 2, workload was significantly negatively related to work-life balance. However, there was no other relationship after the analysis. Thus, as shown in Table 4, Step 2, hypothesis 3a was rejected whereas hypothesis 3b was supported. Furthermore, employees experienced significantly lower levels of work-life balance as they reported higher workload in their work.

For the second hierarchical regression, work-life conflict was regressed on job demands and job resources in step 1 (see Table 5, Step 1) before passion for work (i.e., HP and OP) was added to the equation (see Table 5, Step 2). In both steps 1 and 2, workload was significantly positively related to work-life conflict. Furthermore, there were also significant relationships

between passion for work (both HP and OP) and work-life conflict. Thus, as shown in Table 5, Step 2, hypothesis 4a was supported whereas hypothesis 4b was rejected. Furthermore, employees experienced significantly higher levels of work-life conflict as they reported higher workload in their work.

**Table 4**Hierarchical Regression of Work-life Balance on Job Demands, Job Resources and Passion Variables

Predictors	В	SE B	β	t	р
Step 1					
Autonomy	.118	.088	.104	1.333	.185
Workload	426**	.086	407	-4.973	<.001
Social support	.054	.075	.061	.730	.467
Step 2					
Autonomy	.110	.093	.098	1.182	.239
Workload	387**	.094	370	4.140	<.001
Social support	.022	.083	.025	.269	.788
НР	.049	.063	.075	.779	.438
OP	056	.058	086	975	.331

*Note.* \*\* indicates p < .001, \* indicates p < .005.

**Table 5**Hierarchical Regression of Work-life Conflict on Job Demands, Job Resources and Passion Variables

Predictors	В	SE B	β	t	р
Step 1					
Autonomy	121	.076	119	-1.597	.112
Workload	.404**	.074	.429	5.498	<.001
Social support	110	.064	136	-1.721	.087
Step 2					
Autonomy	107	.073	106	-1.473	.143
Workload	.249**	.073	.265	-3.411	<.001
Social support .003		.065	.003	.043	.965
HP164*		.049	280	-3.350	.001
OP .232**		.045	.392	5.137	<.001

*Note.* \*\* indicates p < .001, \* indicates p < .005.

In order to test hypothesis 5, mediation analyses were conducted. The results are shown in Table 6 with a number of 5000 bootstrap samples. Hypothesis 5 stated that job resources (i.e., autonomy, social support) positively predict work-life balance via HP. However, this hypothesis was not supported as HP did not mediate the relationship between job resources and work-life balance. Furthermore, there was no relationship between job resources and work-life balance. However, job resources were significantly related to HP, whereas job demands were significantly related to OP. Interestingly, autonomy was also significantly related to OP. In addition, the direct effect between workload and work-life balance was significantly negative.

Table 6

Total Effect, Direct Effect, Indirect Effect, and Mediation Outcome for Job Demands-resources

(X), Passion for Work (M), and Work-life Balance (Y)

Job demands and job resources	Passion for work	Total effect	<i>X&gt;M</i>	M>Y	Direct effect X>Y∖M	Indirect effect X>M>Y	Mediation
Autonomy	HP	.13	.47**	.04	.11	.02	No
Social support	HP	.04	.52**	.04	.02	.02	No
Workload	HP	38	12	.04	38**	00	No
Autonomy	OP	.10	.27*	05	.11	01	No
Social support	OP	.02	11	05	.02	.00	No
Workload	OP	41	.58**	05	38**	03	No

*Note.* HP = harmonious passion, OP = obsessive passion, \*\* indicates p < .01, \* indicates p < .05.

In order to test hypothesis 6, another set of mediation analyses were conducted. The results are shown in Table 7 with a number of 5000 bootstrap samples. Hypothesis 6 stated that job demands (i.e., workload) positively predict work-life conflict via OP. This hypothesis was supported as OP did mediate the relationship between job demands and work-life conflict. These results indicate that the total influence of job demands on work-life conflict can be partially explained by OP. Thus, as employees faced more job demands (i.e., higher workload), they were more likely to experience work-life conflict, partly because they were obsessively passionate about their work. In addition, HP also mediated the relationship between job resources (i.e., autonomy, social support) and work-life conflict. This implies that job resources influenced work-life conflict in an indirect way through higher levels of HP. In other words, as employees were provided with more job resources (i.e., higher levels of autonomy and/or more social support), they were less likely to experience work-life conflict, partly because they were harmoniously passionate about their work. Furthermore, the direct effect between workload and work-life conflict was significantly positive.

Table 7

Total Effect, Direct Effect, Indirect Effect, and Mediation Outcome for Job Demands-resources

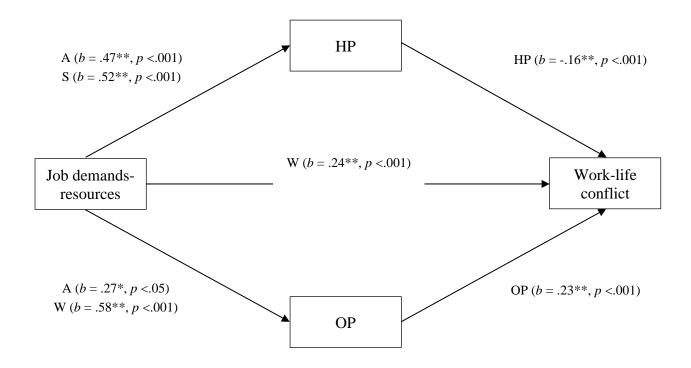
(X), Passion for Work (M), and Work-life Conflict (Y)

Job demand and job resources	Passion for work	Total effect	<i>X&gt;M</i>	M>Y	Direct effect X>Y\M	Indirect effect X>M>Y	Mediation
Autonomy	HP	17	.47**	16**	10	07*	Partial
Social support	HP	08	.52**	16**	.00	08*	Partial
Workload	HP	.25	12	16**	.24**	.01	No
Autonomy	OP	04	.27*	.23**	10	.06	No
Social support	OP	02	11	.23**	.00	02	No
Workload	OP	.37	.58**	.23**	.24**	.13*	Partial

*Note.* HP = harmonious passion, OP = obsessive passion, \*\* indicates p < .01, \* indicates p < .05.

Figure 2

Mediation Effect between Autonomy (A), Social support (S), Workload (W) and Work-life conflict via Passion for work (i.e., HP and OP)



#### **Discussion**

The primary aim of this study was to investigate the role of passion in the context of the JD-R model to acquire a more comprehensive understanding of the underlying mechanisms leading to positive and negative health outcomes in the context of work and organization. Based on the dualistic model of passion (Vallerand, 2015; Bélanger, 2021) and the JD-R paradigm (Bakker and Demerouti, 2007), I hypothesized that job resources (i.e., autonomy, social support) are positively related to HP, thereby fostering individuals' work-life balance. On the other hand, I hypothesized that job demands (i.e., workload) are positively related to OP, which in turn is positively related to work-life conflict. Importantly, I hypothesized that job resources positively predict work-life balance via HP and job demands positively predict work-life conflict via OP.

#### Job Demands, Job Resources, and Passion for Work

Conform the expectations, job resources (i.e., autonomy, social support) showed to be significantly related to HP. This means that employees experienced higher levels of harmonious passion as they reported higher autonomy and/or more social support in their work. Conversely, job demands (i.e., workload) showed to be significantly related to OP. In other words, employees experienced higher levels of obsessive passion as they reported higher workload in their work. These results are in line with previous research (Trepanier et al., 2014) that also found that job demands were positively related to OP and negatively related to HP, whereas job resources were positively related to HP.

Interestingly however, autonomy also showed to be significantly related to OP which means that employees experienced higher levels of obsessive passion as they reported more autonomy in their work. This is contrary to previous research in the field (see Fernet et al., 2014). An explanation for this could be that there is a bidirectional relationship between these two variables which means that autonomy can affect OP and vice-versa. In other words, employees with greater levels of OP will use their job autonomy to take on more work responsibilities and spend more time at work, resulting in a loss of balance between work activities and other life domains.

The present study thus confirms but also contributes to previous findings on the relationship between job demands, job resources, and passion for work, and emphasizes the importance of investigating the role of passion in the context of the JD-R model in order to acquire

a more comprehensive understanding of the underlying mechanisms leading to positive and negative health outcomes in the context of work and organization.

#### Passion for Work, Work-life Balance, and Work-life Conflict

Contrary to expectations, HP was not related to work-life balance. However, as expected, HP was negatively related to work-life conflict. This means that employees experienced less work-life conflict as they had higher levels of HP. Furthermore, employees experienced significantly lower levels of work-life balance as they reported higher workload in their work. On the other hand, however, OP was positively related to work-life conflict but there was no relationship between OP and work-life balance. In other words, higher levels of OP led employees to experience more interference between their personal and professional lives. In addition, employees experienced significantly higher levels of work-life conflict as they reported higher workload in their work.

These results are in line with previous studies (Vallerand et al., 2010b) which found that obsessively passionate individuals experienced conflict between their work and other life activities which ultimately led to burnout. Conversely, HP was characterized by more adaptive outcomes, resulting in job satisfaction but no work-life conflict. The present study partly confirms these findings and contributes to previous research by providing evidence that harmoniously passionate employees experience lower levels of work-life conflict whereas their obsessively passionate counterparts experience higher levels of work-life interference.

#### The Mediating Effect of Passion for Work

As hypothesized, OP partially mediated the relationship between job demands (i.e., workload) and work-life conflict. This means that the influence of job demands on work-life conflict were partially explained by OP. In other words, employees who faced more job demands (i.e., higher workload) were more likely to experience work-life conflict, partly because they were obsessively passionate about their work. In addition to this, HP also mediated the relationship between job resources (i.e., autonomy, social support) and work-life conflict. This implies that the influence of job resources on work-life conflict was partially explained by HP. This means that employees who were provided with more job resources (i.e., higher levels of autonomy and/or more social support) were less likely to experience work-life conflict, partly because they were harmoniously passionate about their work. Contrary to what was expected however, HP did not mediate the relationship between job resources and work-life balance.

Although previous studies have provided evidence for the influence of job demands and job resources on work-life balance and work-life conflict (Chen et al., 2017), the present research expands our current knowledge by showing that the effect of job demands and job resources on work-life conflict can be partially explained by individuals' passion for work. To this date, this is the first study to provide evidence for a partial mediational effect of passion for work in this relation. These findings provide insight into the complexities of the relationship between job demands, job resources, passion for work, and the degree to which employees' work activities conflict with other life domains. Furthermore, this study reaffirms the assumption that while working with passion can have beneficial psychological experiences such as greater work-life balance and subjective well-being (see Moè, 2016; Fernet et al., 2014), it can also take psychological tolls on employees ultimately leading to work-life conflict and decreased subjective happiness (Moè, 2016; Bélanger, 2013).

#### **Passion for Work and Related Organizational Constructs**

Besides the mediating effect of passion for work, other organizational constructs – namely work engagement, burnout, and overcommitment – were assessed to examine their overlap with the passion constructs tested in the present study. Based on the findings, HP and work engagement were strongly related to each other. This means that employees who are harmoniously passionate about their work experience higher levels of work engagement. However, as mentioned before, it is crucial to distinguish between HP and work engagement as they are conceptualized differently because an individual can be deeply immersed and committed to one's job without being passionate about it (Lavigne et al., 2012). In addition, there was also a significantly strong positive relationship between OP and work engagement. This relationship can be attributed to the fact that OP is characterized by an extreme form of engagement where work is the sole source of basic needs satisfaction (Bélanger et al., 2019; Lalande et al., 2017). Consequently, employees who are obsessively passionate about their work experience extremely high levels of work engagement because they are overly attached to their work and inhibit all other goals that may interfere with its pursuit (Bélanger et al., 2019).

The present findings also show that there was a significantly negative relationship between HP and burnout. In other words, employees who experience higher levels of HP have a lower chance to burn out from work. Interestingly, OP was not related to burnout. A reason for this could be that OP only leads to burnout eventually through work-life conflict as Vallerand proposed in a

previous study (Vallerand et al., 2010b). Their findings indicate that work-life conflict explains (i.e., mediates) the relationship between OP and burnout.

Lastly, based on the results, OP and overcommitment were significantly related. Previous research also linked OP and overcommitment because both constructs are strongly associated with negative health outcomes (Lavigne et al., 2012). Accordingly, previous studies indicated rather strong associations between OP and overcommitment (Portía et al., 2021) which are confirmed by the present findings as well. There was no relationship between HP and overcommitment.

#### Limitations

Although the present study shows valuable results, it is important to consider some limitations. First of all, the results of this research are based on self-reports which poses the possibility of common method variance. Future research should focus on replicating the proposed model by acquiring data from different standpoints such as colleagues or supervisors on job demands and job resources at the workplace. However, based on the review by Kalliath and Brough (2008), work-life balance is defined as an individual's own perception that work and non-work activities are compatible with each other and foster growth in accordance with the employee's life priorities. Thus, since employees' individual perception play a crucial role in the degree to which they experience work-life balance, self-report seems to be an effective way for measuring work-life balance.

A second limitation that has to be taken into consideration is the fact that most of the participants who filled out the survey did not speak English as their first or native language. Even though most participants spoke English fluently and on a very advanced level, the language of the survey might have caused difficulties in properly understanding the questions. Thus, utilizing more translations for the different measures in the study could be valuable in future research.

Another major factor that could have influenced the findings is that the study took place in the midst of a global pandemic (COVID-19), during which period government-imposed measures forced the majority of the population to work from home. As a result, it is unclear whether respondents filled out the questionnaires based on memories of their work situation prior to the pandemic or their current working conditions. This could have had a substantial impact on the findings of the current study, particularly when it came to examining work-life balance and conflict. The work from home setup might have induced higher levels of obsessive passion and work-life conflict as it could have been increasingly difficult for employees to distinguish between

their professional and personal lives. On the other hand, however, a flexible work from home setup might have had a positive effect on harmonious passion as well as work-life balance. Therefore, including this remote working component as a variable in the study could be beneficial in future research.

#### Conclusion

The present research examined the underlying psychological processes between job demands, job resources, passion for work and work-life balance by integrating the JD-R model (Bakker and Demerouti, 2007) and the dualistic model of passion (Vallerand, 2015; Bélanger, 2021). My findings demonstrate that as employees are provided with more job resources, they experience higher levels of HP. Whereas employees who are facing more job demands experience increased levels of OP. Furthermore, as expected, a partial mediation effect of OP was found on the relationship between job demands (i.e., workload) and work-life conflict. In addition, HP also mediated the relationship between job resources (i.e., autonomy, social support) and work-life conflict. These results extend our knowledge on the underlying psychological mechanisms related to the complex relationship between job demands, job resources, passion for work, and the degree to which employees' work activities are balanced with other life domains.

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#### Appendix A

The following items from the COPSOQ (Kristensen & Borg, 2003) will be used to measure workload, autonomy, and social support as factors of job demands and job resources on a Likert scale ranging from 1 (*Always*) to 5 (*Never/hardly ever*).

#### Workload

- 1. Is your workload unevenly distributed so it piles up?
- 2. Do you get behind with your work?
- 3. How often can you take it easy and still do your work?
- 4. Do you have enough time for your work tasks?

#### Autonomy

- 1. Do other people make decisions concerning your work?
- 2. Do you have a large degree of influence concerning your work?
- 3. Can you influence how quickly you work?
- 4. Do you have a say in choosing who you work with?
- 5. Can you influence the amount of work assigned to you?
- 6. Do you have any influence on when you work?
- 7. Do you have any influence on HOW you do your work?
- 8. Do you have any influence on WHAT you do at work?
- 9. Do you have any influence on your work environment?
- 10. Can you influence the quality of your work?

#### Social support

- 1. How often do you get help and support from your colleagues?
- 2. How often are your colleagues willing to listen to your work-related problems?
- 3. How often do you get help and support from your immediate superior?
- 4. How often is your immediate superior willing to listen to your work-related problems?

#### Appendix B

The Passion for Work Scale (Lajom et al., 2018) will be used to assess passion for work, comprising two subscales assessing HP and OP. Participants will be asked to indicate the extent to which they agree with each statement on a scale from 1 (*Strongly disagree*) to 7 (*Strongly agree*).

- 1. My work is in harmony with the other activities in my life.
- 2. The new things that I discover about my work allow me to appreciate it even more.
- 3. My work reflects the qualities I like about myself.
- 4. My work allows me to live a variety of experiences.
- 5. My work is well integrated in my life.
- 6. My work is in harmony with other things that are part of me.
- 7. I have difficulties controlling my urge to do my work.
- 8. I have almost an obsessive feeling for my work.
- 9. My work is the only thing that really turns me on.
- 10. If I could, I would only do my work.
- 11. My work is so exciting that I sometimes lose control over it
- 12. I have the impression that my work controls me.

#### Appendix C

The following items of the SWING work-home interference questionnaire (Geurts et al., 2005) will be used to assess participants' work-life conflict on a Likert scale ranging from 0 (*Practically never*) to 3 (*Practically always*).

How often does it happen that...

- 1. You do not fully enjoy the company of your spouse/family/friends because you worry about your work?
- 2. You find it difficult to fulfil your domestic obligations because you are constantly thinking about your work?
- 3. Your work schedule makes it difficult for you to fulfil your domestic obligations?

#### Appendix D

The following items were taken from the Job Stress Scale (Shukla & Srivastava, 2016) to measure work-life balance. Participants will be asked to indicate the extent to which they agree with each statement on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*). [\*questions were reversed]

- 1. I am able to balance between time at work and time at other activities.
- 2. I have difficulty balancing my work and other activities. \*
- 3. I feel that the job and other activities are currently balanced.
- 4. Overall, I believe that my work and other activities are balanced.

#### Appendix E

Work engagement will be assessed with the following items taken from the Utrecht Work Engagement Scale (Schaufeli et al., 2017). Participants will rate their levels of employee engagement on a Likert scale ranging from 1 (*Never*) to 7 (*Always/every day*).

- 1. At my work, I feel bursting with energy.
- 2. I am enthusiastic about my job.
- 3. I am immersed in my work.

#### Appendix F

The following items from the Maslach Burnout Inventory (Maslach et al., 1997) will measure participants' level of burnout. Participants will rate their levels of burnout on a Likert scale ranging from 1 (*Never*) to 7 (*Every day*).

- 1. I feel emotionally exhausted because of my work.
- 2. I feel worn out at the end of a working day.
- 3. I feel tired as soon as I get up in the morning and see a new working day stretched out in front of me.
- 4. I get the feeling that I treat some clients/colleagues impersonally, as if they were objects.
- 5. Working with people the whole day is stressful for me.
- 6. I feel burned out because of my work.
- 7. I have become more callous to people since I have started doing this job.
- 8. I'm afraid that my work makes me emotionally harder.
- 9. I feel frustrated by my work.
- 10. I get the feeling that I work too hard.
- 11. I'm not really interested in what is going on with many of my colleagues.
- 12. Being in direct contact with people at work is too stressful.
- 13. I feel as if I'm at my wits' end.
- 14. I have the feeling that my colleagues blame me for some of their problems.

#### Appendix G

Participants' level of overcommitment will be assessed by the Intrinsic Effort Scale (Preckel et al., 2005). Participants will be asked to indicate the extent to which they agree with each statement on a Likert scale ranging from 1 (*Strongly disagree*) to 4 (*Strongly agree*).

- 1. I get easily overwhelmed by time pressures at work.
- 2. I start thinking about work problems as soon as I get up in the morning.
- 3. When I get home, I can easily relax and forget all about work.
- 4. People close to me say I sacrifice too much for my job.
- 5. Work is usually still on my mind when I go to bed.
- 6. If I put off something that needs to be done today, I'll have trouble sleeping at night.

#### Appendix H

#### Information Letter to Participants

Dear Sir / Madam,

Thank you for your interest in my research on employee wellbeing. Below I present you with information about the study 'The Influence of Job Demands and Job Resources on Work-life Balance: The Role of Passion for Work'. The aim of this study is to examine whether job demands and job resources affect work-life balance and work-life conflict, and whether this relationship is explained by different types of passion for work.

#### Background research

The present study is part of a master's thesis that is being conducted at Utrecht University under the supervision of Dr Jan Fekke Ybema.

#### Questionnaire

You will be presented with various statements in this questionnaire, and you will be asked to respond by indicating how much you agree or disagree with each item. The questionnaire comprises several sections with varying answer options, so please pay attention to the answer scale. Try to pick the answer that you agree with the most for each question. The questionnaire consists of 68 questions, and it takes about 10-15 minutes to complete. Participating in the study will not expose you to any significant risks or inconveniences, and there will be no deliberate deception and you will not be confronted with any explicit objectionable material.

#### Confidentiality

The study is conducted anonymously, and your information will not be shared with third parties under any circumstances, unless you have provided your explicit permission for this in advance.

#### Voluntary participation

Participation in this study is voluntary. You can withdraw from the study at any moment, without giving a reason, without this having any negative consequences for you. The data collected up to that point will be used for the research unless you explicitly indicate that you do not want this.

#### Contact person and complaints

If you have any questions or comments about the study, please contact me, via z.kis@students.uu.nl.

Sincerely,

Zsofia Kis

#### Appendix I

#### Informed Consent Form

I hereby declare that have read the provided information regarding the study 'The Influence of Job Demands and Job Resources on Work-life Balance: The Role of Passion for Work' and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form.

I voluntarily agree to participate in the study
I do not agree to participate in the study