A study examining the relationship between

workaholism in the workplace and work outcomes

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Abstract

Workaholism and its outcomes (e.g., work engagement, burnout and work-life balance) have been studied for over fifty years. This study focuses on job crafting behaviors as a mediator between workaholism and these outcomes. These outcomes include exhaustion as the most frequent symptom of being overly concerned about work. The two other outcomes are career satisfaction and work-life balance. We also controlled for variables including autonomy, support and job demands. We expected that …

96 participants filled out an online questionnaire addressing these expectations. The data was analysed through multiple linear regressions on SPSS. As expected, the results showed that workaholism is positively related to exhaustion and work-life conflict. Furthermore, support was an important predictor of work-life conflict and exhaustion. The mediation results also demonstrated that there are strong relationships between the control variables and job crafting. However, none of the job crafting behaviors were shown to be significantly related to the outcomes, except the social resources job crafting behaviors.

This study showed the importance of job crafting behaviors that increase social resources at work to decrease negative outcomes. Organizations should focus on social support for their employees, teaching and allowing them to craft their jobs.

Key words: workaholism, job crafting, organisational support, work-life balance

Introduction

Every individual depends on work to gain resources and keep a healthy, stable life. The concepts of work commitment and motivation (and how to improve these) have been ever-evolving topics for centuries. However, *overly high* commitment to work is a more recent area of study; it started during the 20th century with Wayne E. Oates who created the term "workaholism" in 1971. He defined this term as "an uncontrollable need to work incessantly" (Oates, 1971). Interestingly, he was influenced by a pastoral counsellor, Howard Clinebell, who spoke about overwork as an imbalance in lifestyle. Throughout the years, studies have developed more specific definitions of workaholism, and psychologists such as Spence and Robbins (1992) found that workaholics test higher in perfectionism, non-delegation, job stress and health complaints than others at work. In their study they used three factors to differentiate between different types of workaholics: drive, joy at work and work involvement. "Drive" can also be seen as the cognitive side of workaholism (Andreassen, 2014; Oates, 1971; Robinson, 1996; Schaufeli et al., 2008). This will showcase during decisions about working hours and feeling obligated to meet certain deadlines, for example. Second, the "joy at work" is the affective component. This is demonstrated by pleasure to take care of tasks, and other positive emotions about work. Work involvement is how focused one is at work in comparison to other aspects of one's life. These three factors make up two kinds of workaholics: enthusiastic workaholics (or engaged workers) and workaholics. Other research, such as Buelens and Poelmans' study on enriching the Spence and Robbins typology of workaholism (2004) has shown that workaholism can be distinguished by the addictive aspect of working too many hours. In their study, they describe workaholics as feeling guilt when not working and being perfectionists when at work.

Diving deeper into the topic, psychologists T. W. Ng, K. L. Sorensen, and D. C. Feldman, publishing in the *Journal of Organizational Behavior,* identified three dimensions that reflect Spence and Robbins' model of this lifestyle: the behavioral dimension (work involvement), the cognitive dimension (the drive at work), and the affective dimension (joy at work) (Ng et al., 2007). However, this model was found during studies on addiction and does not accommodate for crossover between the three dimensions. Furthermore, we see that workaholism has been defined as the state of "being overly concerned about work, to be driven by an uncontrollable work motivation, and to put so much energy and effort into work that it impairs private relationships, spare-time activities, and/or health" (Andreassen et al., 2014). Workaholics are obsessed with work. They work excessively, which creates negative consequences, especially when this occurs over two years (Schaufeli et al., 2008). Thus,

although workaholism has been defined in different ways over the years, the core of the concept is that people who struggle to find a good balance between their work motivation and their affect and cognition will most likely experience symptoms of workaholism.

These symptoms include a variety of outcomes that can affect a person's career and personal life. The purpose of this study is understanding the lifestyle of the workaholic and their level of engagement and achievement in the workplace. The outcomes will be focused on career satisfaction (as achievement), work-life balance, and exhaustion (as engagement). Interestingly, whereas much research has addressed the conceptualization and antecedents of workaholism, studies focusing on its outcomes - except health - are considerably rarer. Moreover, the mechanisms as to how workaholics achieve particular outcomes, such as performance and well-being, is largely absent. In order to draw conclusions concerning the negative and positive work outcomes of workaholism, *job crafting* will be used as a mediator of that relationship.

Job crafting and workaholism

Job crafting, a term coined by Wrzesniewski and Dutton in 2001, distinguishes different kinds of behaviors that workers use to change "role boundaries and intangible work role perceptions" (Lichtenthaler & Fischbach, 2019). It is the option to craft or adapt one's job tasks throughout one's career. Some important outcomes to this are increased organizational commitment (Hyun, 2020), work engagement (Bakker et al., 2012), meaningfulness (Chang et al., 2021), and job performance (Bruning & Campion, 2018).

Using the Regulatory Focus theory (Higgins, 1997), job crafting can be defined in two ways. It can be used to maximize the employee's gains by adding to their existing job tasks (which would imply they are engaging in "promotion-oriented" forms of job crafting), or it can be used to diminish certain tasks in order to create safety and avoid losses (which would indicate they are engaging in "prevention-focused" forms of job crafting). Based on previous research on workaholism, we know that workaholics hold both a promotion focus (i.e., they seek opportunities for growth and development) and a prevention focus (they are sensitive to negative outcomes and want to avoid loss) (Van Beek et al., 2014).

Every day, workers use these job crafting techniques: to increase structural job resources, social resources, challenging job demands and to decrease hindering job demands (Garg et al., 2021). These are the four principal behaviors that help accommodate the demands and the resources of a job. Regular workers often use these job crafting behaviors in order to increase their intrinsic motivation to work and achieve success in their career. It has been shown that employees always craft their jobs, however, workaholics will use job crafting behaviors when

they perceive an organizational support (Ishaque, & Mehmood, 2021). Therefore, when workaholics use job crafting behaviors, they focus on their success at work. This shows that their job crafting tends to be focused on increasing challenges instead of improving their well-being and intrinsic motivation (Mazzetti et al., 2014). They also have been shown to use job crafting behaviors in order to increase their structural job resources and challenging demands. Ng et al. (2007) showed previously that workaholics do not put energy into creating social relations at work. This, however, may depend on the type of position they have. Some people might need social interactions for example to fulfil tasks.

Both job resources and challenging demands are associated with growth and development (Demerouti et al., 2012), so we expect that workaholics will aim to increase their structural job resources, social resources, and challenging demands. However, hindering job demands are also generally associated with high levels of exhaustion and negative outcomes, which can be perceived as losses. Workaholics are prevention focused. We thus expect them to aim at reducing their hindering job demands. Overall, this reasoning implies that workaholics will strive towards generating more work for themselves, i.e., engage in job crafting to increase their job demands, but only insofar as this extra work is perceived to include opportunities for growth and development (positive outcomes in general). Since negative outcomes are to be avoided, workaholics will be motivated to reduce hindering job demands. In this study, we expect that workaholics will use job crafting as a prevention strategy of avoiding losses or responsibilities in forms of increased exhaustion, increased work-life conflict (opposite of work-life balance) and decreased career satisfaction, which are all defined below.

The present study

We assume that workaholism relates to work outcomes both directly and indirectly. One of the most common outcomes shown to be linked directly to workaholism is exhaustion (Spagnoli & Morinaro, 2020). As defined above, workaholics create higher demands for themselves making them more prone to experiencing negative feelings at work such as exhaustion, and, ultimately, burn-out. Demerouti and Halbesleben (2013) argued that burnout consists of two dimensions: energy and dedication (or the lack thereof). Engagement is supported by the same dimensions and a lack of engagement suggests a presence of burnout. It is possible to measure engagement and burnout with the same instrument in which a high score on burnout would imply a low score on engagement. Therefore, low exhaustion is considered engagement on the Oldenburg Burnout Inventory (Demerouti et al., 2001). Other work outcomes that have been found to be linked to workaholism are harmful work-life balance and

reduced career success (Burke & MacDermid, 1999; Meier et al., 2021). These work outcomes are predicted by the type of *job crafting* a person engages in throughout their career.

In the present study, we control for three important job characteristics: job demands, autonomy, and support. These characteristics, which stand at the core of the Job-Demand-Control-Support model (JD-CS) introduced by Karasek (1979) and Karasek and Theorell (1990), are predictors of job crafting behaviours. Job demands refer to the "physical, social, psychological, or organizational characteristics that require physical and psychological effort" (Demerouti et al., 2001). Job control is the extent to which one is capable of controlling their demands and work activity. Environments in which job demands are high and control is low (or "high strain jobs") may create negative outcomes at work and lead to more health issues (Karasek, 1979). These variables relate directly to job crafting behaviors and work outcomes. Job crafting, as defined above, is the act of changing one's job tasks throughout one's career. These tasks take into account the challenges (or the demands) and the support and autonomy an employer will give its employees. Furthermore, workaholics generate more job demands for themselves and can relate to all other concepts in the model which makes it important to control for these concepts in the study. These control variables are important because they relate directly to job crafting behaviors of which they are predictors, because they are related to the outcomes (support, autonomy and job demands) and because workaholics generate more work (demands) for themselves. They can relate to all other concepts in the model.
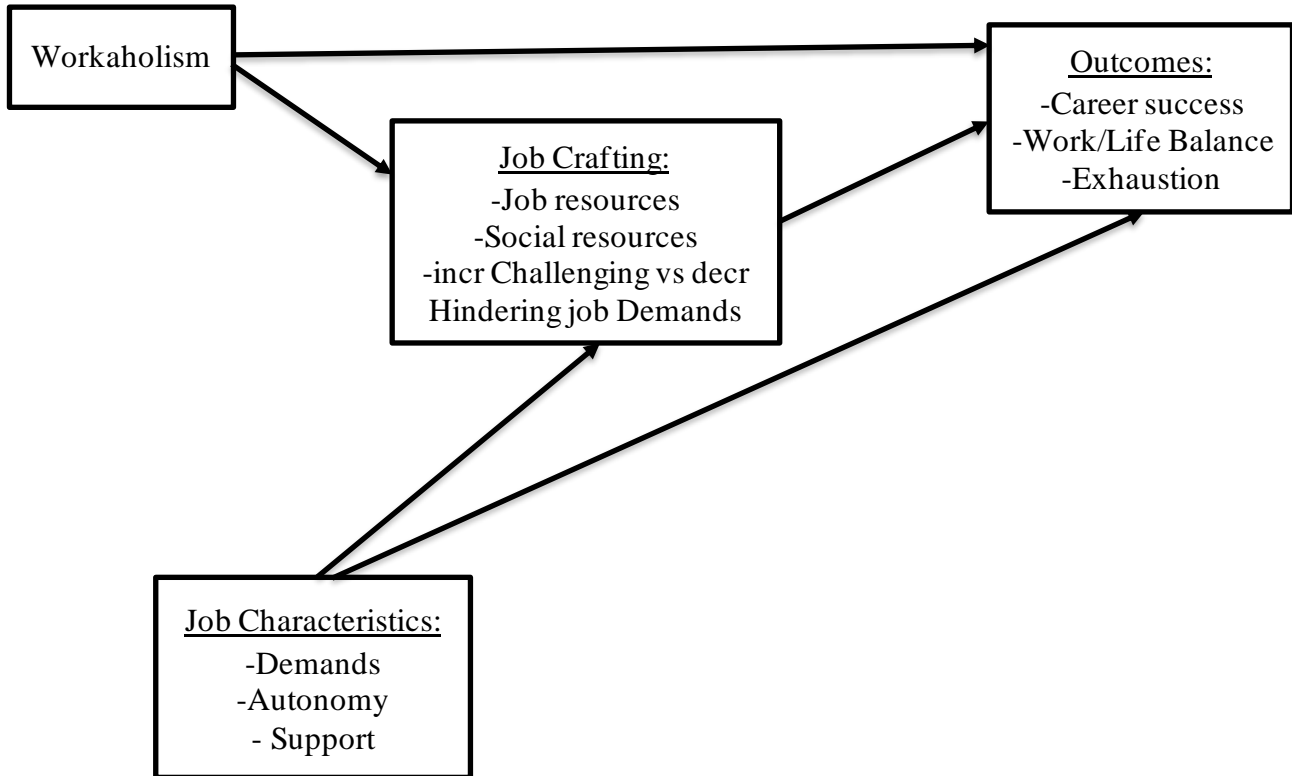
Research question

Do workaholics differ in the way they attempt to craft their jobs compared to regular workers, and does this account for differences in the types of outcomes they achieve? And is the association between workaholism and outcomes mediated through job crafting behaviors?

The following hypotheses will be tested:

1. We hypothesize that workaholism is positively related to negative outcomes at work, which include symptoms of work-life conflict, exhaustion, and decreased career satisfaction.

2. Workaholics will use job crafting behaviors in order to increase their career satisfaction but will not use it to decrease their work-life conflict or decrease symptoms of exhaustion.

3. These relationships are mediated by job crafting (utilizing structural and social job resources, challenging, and hindering job demands). I.e., workaholism will be positively associated with structural and social resources, and challenging job demands and negatively with hindering job demands.

4. Increased organizational and/or inter-colleague support and worker autonomy will lead to higher levels of career satisfaction, work-life balance, and lower levels of exhaustion.

Figure 1 presents the model to be tested graphically.

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┌─────────────────┐                                    ┌──────────────────────┐
│  Workaholism    │────────────────────────────────────▶│     Outcomes:        │
│                 │───┐                                 │  -Career success     │
└─────────────────┘   │                                 │ -Work/Life Balance   │
                      │                                 │   -Exhaustion        │
                      ▼                                 └──────────────────────┘
            ┌──────────────────────┐                        ▲
            │    Job Crafting:     │                        │
            │   -Job resources     │───────────────────────┘
            │  -Social resources   │
            │ -incr Challenging vs decr │
            │  Hindering job Demands │
            └──────────────────────┘
                   ▲         ▲
                   │          │
          ┌──────────────────────┐
          │ Job Characteristics: │
          │     -Demands         │
          │    -Autonomy         │
          │    - Support         │
          └──────────────────────┘
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Methods

Participants

The data were collected by recruiting individuals on Instagram and in person. Gpower 3.1 states that for a small to moderate effect size of 0.10 (as found in previous research on workaholism and outcomes), a *p*-value of .05, a power of .80, the desired number of participants was 218 participants. After months of sending out the links and requesting family and friends to fill it out, the target sample of research participants totalled ninety-six (*N*= 96) working individuals. The participants completed a Qualtrics questionnaire once, defining this study as cross-sectional. The survey was posted online on a survey website which was accessible to anyone with the link. The link was posted on my private social media pages (Instagram, Facebook, and LinkedIn) to notify people of the survey collection. It was also spread by word-of-mouth to those outside my social media connections. The survey was brief (fifteen minutes to complete) and the importance of this study was explained. Also included was the obligatory consent form.

Among the participants who filled out the complete questionnaire, 40.4% (or 38 participants) are male and 59.6% (or 56 participants) are female. We can also note that 6.6% finished secondary school, 43.6% finished college, 44.7% graduated with a master's degree, and 4.3% obtained a doctoral degree. Lastly, it is important to state that 41.5% are located in Europe, 55.3% live in North America, 1.1% in Australia, and 2.2% in Asia.

Measures

The questionnaire was created on the Qualtrics survey platform and included the demographics stated above, and five different questionnaires to support the research. These questionnaires included the following measures:

Workaholism. The measure included in the questionnaires for the participants was the DUWAS (Schaufeli & Taris, 2004). This survey measured workaholism for each participant. The items of this questionnaire included 10 items such as: "It's important to me to work hard even when I don't enjoy what I'm doing", "I feel that there's something inside me that drives me to work hard", "I feel obliged to work hard, even when it's not enjoyable". A five-point scale for responses options was used for this questionnaire which included "Never", "Sometimes", "Half of the time", "Most of the time" and "Always". Using SPSS's reliability analysis, the Cronbach alpha for this questionnaire was α=.808, which is satisfactory.

Performance The Career Satisfaction Scale (CSS; Greenhaus et al., 1990; Hofmans et al., 2008) was used to test job performance and career satisfaction. This scale consisted of five

items on a scale of five from "strongly disagree" to "strongly agree". The items included statements like: "I am satisfied with the success I have achieved in my career.", "I am satisfied with the progress I have made toward meeting my goals for advancement", and "I am satisfied with the progress I have made toward meeting my goals for the development of new skills." The Cronbach alpha for this scale was α=.850.

Work-Life Conflict. The SWING questionnaire (Geurts et al., 2005) was used to measure WLB as an outcome of workaholism. This scale consisted of nine items on a scale of five from "never" to "always". The items included statements like: "You do not fully enjoy the company of your spouse/family/friends because you worry about your work", "Your work schedule makes it difficult for you to fulfil your domestic obligations", and "You have to work so hard that you do not have time for any of your hobbies". The Cronbach alpha for this scale was α=.897.

Exhaustion. The Oldenburg Burnout Inventory (Demerouti et al., 2001) was used to measure exhaustion. This questionnaire consisted originally of sixteen items on a four-category scale, ranging from "strongly disagree" to "strongly agree". The items included statements such as: "There are days when I feel tired before I arrive at work", "During my work, I often feel emotionally drained", and "After my work, I usually feel worn out and weary". The only statements from this questionnaire that were included were those dealing with the exhaustion aspect of burnout. The Cronbach alpha for this measure was α=.788.

Job Crafting. Tims, Bakker and Derks' 2012 Job Crafting Scale (JCS) measured job crafting as a mediator between workaholism and work outcomes. This questionnaire consists of twenty-one items on a scale of five from "never" to "always". The items cover the different four categories of job crafting: increasing structural job resources (JCR), decreasing hindering job resources (JCH), increasing social job resources (JCS) and increasing challenging job demands (JCC). Examples of these included statements like: "I try to develop myself professionally", "I try to ensure that my work is emotionally less intense", "I ask my supervisor to coach me", and "I regularly take on extra tasks even though I do not receive extra salary for them". The Cronbach alphas for these four scales were: JCR α=.786, JCH α=.831, JCS α=.854, and JCC α=.819.

Control variables: Demands and Autonomy. The Job Content Questionnaire (JCQ) was used to analyse the job characteristics as control factors of workaholism (Karasek et al., 1998). Items concerning job demands, support and autonomy at work were included. This three-part questionnaire consisted of five items for the demands section, four items for the autonomy section, and seven items for the support section. All the items were calculated on a scale of five

from "never" to "always". Examples of the questions included: "Do you have to work under high time pressure?", "Do you decide the order of your work yourself?", and "Can you count on your colleagues when your work gets tough?". The Cronbach alphas for these three scales were: demands α=.767, autonomy α=.823, and support α=.793.

Statistical analyses

Further control variables included gender, age, and level of education. With the aid of the *Statistical Program for Social Sciences* (SPSS) the research question/study hypotheses were tested using Preacher & Hayes's (Field, 2014) PROCESS mediation analysis. In addition, correlational and regression analyses were conducted, and means and standard deviations were computed.

Results

Throughout the study, we hypothesized that higher levels of workaholism would lead to certain positive and negative outcomes (see Figure 1). These outcomes include increased career satisfaction on the positive side, and more work-life conflict (WLC) and exhaustion on the negative side. The study also hypothesized that job crafting (including all four types) would be an important mediator between workaholism and these outcomes. We also predicted that participants testing higher in workaholism will especially use job crafting to increase their career satisfaction. The last hypothesis was testing for relationships between the three control variables (autonomy, support and job demands) and the outcome variables.

The four different types of job crafting were then analysed through multiple linear regressions to identify if they have any significant effect over our three main outcomes, as well as over levels of workaholism (Table 1, 2, 3, and 4). Three control variables including autonomy and support at work, and job characteristics were also included in the linear regressions. In order to check the validity of our hypotheses, we used process mediation analyses to control for relations between the variables.

Table 1: Multiple linear regression results of career satisfaction

	Model 1	*Model 2*	*Model 3*
Background:			
Gender	-.04	-.08	-.06
Education	.063	.02	.05
Age	.217*	.16	.18
Control:			
Demands		.17	.12
Autonomy		.18	.23*
Support		.36***	.30**
Workaholism		.03	-.05

Job Crafting:			
JC – Resources			-.03
JC – Social			.23
JC – Challenging			.09
JC – Hindering			.02
R^2	.06	.23**	.27**
R^2 change		.17**	.04

*** $p < 0.001$

** $p < 0.01$

* $p < 0.05$

The above Table 1 shows the results of our first regression analysis between career satisfaction, the demographics, the control variables, workaholism, and job crafting. Based on the R^2 change figures, model 2 accounted for a significant increase in R^2, whereas model 3 (addition of job crafting) did not result in a significant additional part of the variance in the outcome. Thus, we discuss the findings for model 2. As one of our hypothetical outcomes, we can see that career satisfaction is predicted by support at work. We can observe a significant positive relationship between career satisfaction and support at work. Job crafting and workaholism do not predict career satisfaction, as stated in this table.

Table 2: Multiple linear regression results of exhaustion

	Model 1	Model 2	Model 3
Background:			
Gender	.12	.14	.10
Education	-.08	.01	-.01
Age	-.28**	-.32**	-.29*

Control:			
Demands		-.09	.02
Autonomy		-.05	-.13
Support		-.34***	-.28**
Workaholism		.33**	.45***
Job Crafting:			
JC – Resources			.02
JC – Social			-.26*
JC – Challenging			-.12
JC – Hindering			.25**
R^2	.10*	.32***	.44**
R^2 *change*		.22***	.12**

*** $p < 0.001$

** $p < 0.01$

* $p < 0.05$

Table 2 shows us the relationship between exhaustion at work and the other factors of our study. By looking at the R^2 and R^2 change significance levels, we focused our results on model 3 which includes the four different types of job crafting. The first result we can note is that exhaustion is positively related to workaholism, meaning that individuals who tested high in workaholism, also tested high in exhaustion at work. We can also observe that age predicts exhaustion meaning that older adults do not test as high in exhaustion as younger adults. Furthermore, support is seen to be an important predictor of exhaustion, when support increases, exhaustion decreases. This is shown by the type of job crafting that increases social resources at work which is negatively related to exhaustion. Another interesting result to note is that the job crafting type that takes care of decreasing hindering job demands is positively related to burn-out and, more specifically, exhaustion. This goes against hypothesis …

Table 3: Multiple linear regression results of work-life conflict

	Model 1	*Model 2*	*Model 3*
Background:			
Gender	.19	.18*	.16
Education	-.13	-.03	-.04
Age	-.17	-.23*	-.21*
Control:			
Demands		.09	.16
Autonomy		-.05	-.09
Support		-.24**	-.22*
Workaholism		.49***	.55***
Job Crafting:			
JC – Resources			-.01
JC – Social			-.10
JC – Challenging			-.07
JC – Hindering			.20*
R^2	.08	.45***	.50***
R^2 change		.37***	.05

*** $p < 0.001$

** $p < 0.01$

* $p < 0.05$

The above table 3 represents the relation between work-life conflict and the controls: background, workaholism and job crafting. Since the model 3 does not include significant results in its R^2 change, we discuss the data under model 2. It is important to note the high

significant positive relation between workaholism and work-life balance. We can also note significant results pointing to age being a predictor of work-life conflict, older adults did not feel a conflict between their personal and professional lives as much as younger adults did. There is also one last noteworthy result: support at work is negatively related to work-life conflict. Support is thus an important predictor of work-life balance (Talukder, 2019).

Table 4: Multiple linear regression results of four types of job crafting:

	Job Crafting – Resources		Job Crafting – Social		Job Crafting – Challenging		Job Crafting – Hindering	
	Model 1	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*
Background:								
Gender	-.11	-.15	-.12	-.17	.18*	.15	.05	.05
Education	-.02	-.01	-.12	-.10	-.04	-.06	-.01	-.04
Age	-.08	-.16	.11	.10	-.60***	-.48***	-.21*	-.22
Control:								
Demands		.36***		.22*		.19*		-.13
Autonomy		.18		-.11		-.27**		.06
Support		.24*		.25**		.20*		.11
Workaholism		.16		.41***		-.05		-.08
R^2	.02	.27***	.03	.33***	.38***	.51***	.05	.10
R^2 *change*		.25***		.30***		.13***		.05

*** $p < 0.001$

** $p < 0.01$

* $p < 0.05$

The final table above (Table 4) represents the relationships between each type of job crafting and workaholism, the background and control variables. We can note that decreasing hindering job crafting behaviors were not significant in their relationships with either of the other variables. Three other types of job crafting, including increasing challenging job demands, increasing resources and support, were all positively related to the demands and support control variables. Autonomy, on the other hand, was negatively related only to increasing challenging job demands. Furthermore, there are significant indications that age is negatively related to job crafting to increase job demands while gender positively related to that type of job crafting which means that women were more likely to increase their job demands than men. Our last important result is that workaholism was significantly positively related to increasing social resources as a job crafting behavior.

Mediation analyses. The results of the mediation analysis using PROCESS by Hayes, showed a couple significant results that were not found during the regression analyses. The results demonstrated that there is a relationship between high workaholism levels on the one hand, and symptoms of exhaustion, as well as work-life conflict on the other. These results suggest that Hypothesis 1 is accepted for exhaustion and work-life conflict, however it is rejected for career satisfaction.

Three process analyses were done to measure the mediation relationship of job crafting and the other variables. We found that workaholism and job crafting had no significant relationships to work-life conflict, exhaustion, or career satisfaction. Thus, Hypothesis 2 is rejected.

The next process analysis measured the significance of each type of job crafting in the model and tested whether they have any significant relationships with the other variables. The results of this process analysis demonstrated that increasing social resources was related positively to career satisfaction and exhaustion, but the other types of job crafting did not have any significant results. Hypothesis 3 is only supported for the job crafting behavior that involves increasing one's social resources. Thus, the idea that the association between workaholism and outcomes was mediated by job crafting was only confirmed for social resources crafting, in relation to career satisfaction and exhaustion.

Lastly, we tested for the validity of Hypothesis 4 which predicted that autonomy and support would influence work-life balance, career satisfaction and exhaustion. Support had significant negative relationships with work-life conflict and exhaustion, and positive relationships with career satisfaction. Autonomy, on the other hand, showed a positive

relationship only with career satisfaction. The fourth hypothesis is, then, only accepted for the variable "support".

Discussion

The above findings suggest that workaholism is significantly and positively related to work-life conflict which means that people who tested higher in workaholism behaviors, also tested high in work-life conflict. As previous findings show (Mazzetti et al., 2014; Fry & Cohen, 2009), workaholism leads to being addicted to work and workaholics tend to put aside all their other personal goals and relationships in order to satisfy the organization they work for. When adding the control variables to the analysis (support, autonomy and job demands), the results showed that job demands are also positively related to workaholism. People who have more demands at work, test higher in workaholism. These results are in agreement with previous findings (Mazzetti et al., 2016). Lastly, workaholism is associated with higher levels of exhaustion which also supports the study's first hypothesis.

High levels of career-satisfaction, however, were related to one of the control variables: support at work. This finding is in line with Hypothesis 4 and supports it. Employees who test high in career-satisfaction, are also seen to use social resources at work such as openly communicating with their coworkers and management team. And since our results do not explain what the causality is, we can also explain these findings by assuming that these workers might request more social support when times at work are harder.

When speaking of high demands at work, the participants of this study also tested high in exhaustion levels. Interestingly, we found that high levels of support were associated with low levels of exhaustion. Once again, we can say that Hypothesis 4 is supported. These findings agree with earlier findings that the lack of social support is an important predictor of workaholism (Caesens et al., 2014). These results suggest that workers who receive low levels of support must expend more effort to get the work done than others. In addition to this, higher levels of job crafting to increase social resources were associated with lower levels of exhaustion which supports our previous findings but does not support any of our hypotheses since we are not specifically looking at workaholic behavior. Contrary to this, job crafting behaviors that decrease hindering job demands are associated with higher exhaustion. The analysis does not demonstrate the causality, meaning that further research would need to be carried out to understand the true relationship between these variables. The result could possibly suggest that when employees are exhausted, they attempt to reduce the hindering parts of their job demands to lower their job tasks and stress at work. However, the results that fall under decreasing hindering job demands were not significant given that we did not have a large enough sample of participants to determine whether this type of job crafting was important for workaholics.

Work-life conflict, another important outcome of this study, was shown to be related to support at work. Higher support at work will tend to decrease work-life conflict and increase a person's work-life balance. These findings are in agreement with Hypothesis 4 of the study. Additionally, in our study, older generations tend to have better work-life balance than younger ones. Younger generations do not have their lives set as older adults do and might focus more on their career instead of their personal life, which would mean that, in general, they test higher in work-life conflict scores.

This last section is focused on the job crafting behaviors. As mentioned previously, decreasing hindering job demands did not display significant results in this study. We assume that this is due to a reduced sample and data that was too general in terms of job crafting behavior. However, the other three types of job crafting behaviors were associated with higher levels of support at work. In other words, employees who have more support at work, will increase their resources, social resources, and challenging demands at work. Furthermore, when the demands are high, workers tend to use job crafting behaviors to increase their resources at work as well as their social resources and challenging job demands. The causality can also be presented in the opposite direction which would lead to more logical results: people who increase their challenging demands and social resources are more likely to have more demands at work. When looking at this increase in challenging job demands, we note that younger people have been seen to employ this type of job crafting behavior more than older adults, but they also have decreased autonomy when doing so. This is an interesting result since the definition of job crafting is to improve job tasks for one's well-being. Workaholism was only associated with increased social resources as a job crafting behavior.

Practical implications. The findings demonstrate that importance should be given to increasing social resources and general social support at work. People tend to be happier, be more successful and less exhausted when social support is given. An important take-away from this study is that management and supervisors should encourage their employees to craft their jobs in different ways to make their lives more balanced between work and their personal life. Training sessions and social gatherings at work could be useful for issues such as having employees suffer from workaholism symptoms including burn-out and later, turnover intention. Furthermore, management empathy and regularly checking in with employees can truly improve their wellbeing at work. Support can be examined as giving employees more help, such as increasing the psychological support by listening to each and every one of the employees. This can be researched more through the effects of support at the workplace.

Limitations and implications for future research

Some important limitations should be noted following this study. Firstly, the present study drew on a cross-sectional design, meaning that causal inferences were not warranted. A longitudinal study could give us more insight on how the participants evolve throughout time in their levels of workaholism and its outcomes. Replicating the relationships that were found may give different results and relationships between the variables. This is important, since a number of the associations reported in the present study can easier be accounted for by assuming that the causal direction of these associations runs counter to what we expected. We would need more specific analyses to understand the direction of the causality. In other words, do high levels of exhaustion lead to decreasing one's hindering job demands? Or does an increase in hindering job demands lead to more exhaustion? The cross-sectional design of this study prevents causal interpretation of the findings. For example, the finding that attempts to decrease hindering job demands through job crafting was positively, rather than negatively, related to exhaustion can be interpreted by assuming that especially exhausted workers will engage in such crafting – i.e., the causality of this direction runs the other way. This underlines the importance of (a) using stronger designs to study these associations and (b) more conceptual clarity on the associations among job crafting and its presumed "outcomes". The present study suggested that bad outcomes could trigger job crafting behaviors, rather than that job crafting results in better outcomes. More theoretical work on these associations is therefore warranted.

Secondly, the power analysis required more than double participants than were recruited to fill out the survey. Having over 200 participants in a cross-sectional study such as this one would add statistical power in the regressions and, especially, the process analyses that were done, possibly resulting in more significant results, and providing a more robust insight in the processes examined here. Furthermore, the use of a convenience sample could have affected the results. The respondents were people who had similar education levels and stayed within the same age group in the majority. This could have reduced the amount of systematic variance on these concepts, possibly reducing statistical power.

Future research should take these limitations into consideration for the replication and modification of this study. Furthermore, the job crafting types should be individually analysed as they show some significant differences in the way they mediate the relationship between workaholism and its outcomes.

Conclusion

Social support and increasing one's social resources as a job crafting behavior is one of the most important results of the study. People are social beings and workaholism is known to lead to negative outcomes at work and in one's personal life. To decrease a worker's exhaustion and work-life conflict, it is important for the organization to provide their employees with more support, and more specifically, personalized support for each individual employee. Job crafting is a way for individuals to change and adapt their job tasks, however it is the responsibility of the organization to make sure every employee takes advantage of all the job crafting options that are available to them.

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Appendix A: Information and consent forms

Dear Participant,

Thank you for taking part in my study on workaholism and its outcomes at the workplace. My name is Clara Colas and I am a Master's student studying Social, Health, and Organizational Psychology at Utrecht University.

This online survey has been created for the data collection of my Master's thesis in the Organizational Psychology track. The main purpose of this study is to research the effects of work motivation on outcomes at work (positive and negative). The overall goal of this data collection is to analyze job crafting as mediator between work motivation and outcomes.

The data that you will be providing will only be used for the purposes of this study. It will remain completely confidential and anonymous so that it cannot be linked back to you. The collected data will be stored for 10 years on a secure server of Utrecht University. The participation is voluntary and you may withdraw at any time or leave questions blank without giving a reason.

The questionnaire will contain a demographic section that will help me in identifying my sample of participants. Then, there will be 100 questions to answer about work motivation, job performance, work-life balance, exhaustion, and job crafting, on defined scales. The survey will take in total 10-15 minutes.

If you have official complaints, you may issue them to the UU's complaints officer: klachtenfunctionaris-fetcsocwet@uu.nl. If you have any questions about data protection please get in contact with the Data Protection Officer of the UU ("Functionaris Gegevensbescherming"): https://www.uu.nl/en/organisation/data-protection-officer.

If you have any questions about this study or this questionnaire, please contact me, Clara Colas at c.j.colas@students.uu.nl.

Thank you, again!

Consent Form

I confirm that: I have read and understood the information on the previous page. I have been informed of the purpose of the study and what the questionnaire will consist of.

I understand that: I may withdraw my participation at any time throughout the study without any further consequences. The data remains confidential and anonymous. No personal information will be shared.

By selecting "I agree", you confirm that you have read and understood the described conditions, and that you agree with them.

Appendix B: Survey questions

DUWAS:

1. I seem to be in a hurry and racing against the clock
2. I find myself continuing to work after my co-workers have called it quits
3. It's important to me to work hard even when I don't enjoy what I'm doing
4. I stay busy and keep many irons in the fire
5. I feel that there's something inside me that drives me to work hard
6. I spend more time working than on socializing with friends, on hobbies, or on leisure activities
7. I feel obliged to work hard, even when it's not enjoyable
8. I find myself doing two or three things at one time such as eating lunch and writing a memo, while talking on the telephone
9. I feel guilty when I take time off work
10. It is hard for me to relax when I'm not working

CSS:

1. I am satisfied with the success I have achieved in my career.
2. I am satisfied with the progress I have made toward meeting my overall career goals.
3. I am satisfied with the progress I have made toward meeting my goals for income.
4. I am satisfied with the progress I have made toward meeting my goals for advancement
5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills

BO:

1. I always find new and interesting aspects in my work
2. There are days when I feel tired before I arrive at work
3. It happens more and more often that I talk about my work in a negative way
4. After work, I tend to need more time than in the past in order to relax and feel better
5. I can tolerate the pressure of my work very well
6. Lately, I tend to think less at work and do my job almost mechanically
7. I find my work to be a positive challenge
8. During my work, I often feel emotionally drained
9. Over time, one can become disconnected from this type of work
10. After working, I have enough energy for my leisure activities
11. Sometimes I feel sickened by my work tasks
12. After my work, I usually feel worn out and weary
13. This is the only type of work that I can imagine myself doing
14. Usually, I can manage the amount of my work well
15. I feel more and more engaged in my work
16. When I work, I usually feel energized

JCS:

1. I try to develop my capabilities
2. I try to develop myself professionally
3. I try to learn new things at work

4. I make sure that I use my capacities to the fullest
5. I decide on my own how I do things
6. I make sure that my work is mentally less intense
7. I try to ensure that my work is emotionally less intense
8. I manage my work so that I try to minimize contact with people whose problems affect me emotionally
9. I organize my work so as to minimize contact with people whose expectations are unrealistic
10. I try to ensure that I do not have to make many difficult decisions at work
11. I organize my work in such a way to make sure that I do not have to concentrate for too long a period at once
12. . I ask my supervisor to coach me
13. I ask whether my supervisor is satisfied with my work
14. I look to my supervisor for inspiration
15. I ask others for feedback on my job performance
16. I ask colleagues for advice
17. When an interesting project comes along, I offer myself proactively as project co-worker
18. If there are new developments, I am one of the first to learn about them and try them out
19. When there is not much to do at work, I see it as a chance to start new projects
20. . I regularly take on extra tasks even though I do not receive extra salary for them
21. I try to make my work more challenging by examining the underlying relationships between aspects of my job

SWING:

1. You are irritable at home because your work is demanding?
2. You do not fully enjoy the company of your spouse/family/friends because you worry about your work?
3. You find it difficult to fulfil your domestic obligations because you are constantly thinking about your work?
4. You have to cancel appointments with your spouse/family/friends due to work-related commitments?
5. Your work schedule makes it difficult for you to fulfil your domestic obligations?
6. You do not have the energy to engage in leisure activities with your spouse/family/friends because of your job?
7. You have to work so hard that you do not have time for any of your hobbies?
8. Your work obligations make it difficult for you to feel relaxed at home?
9. Your work takes up time that you would have liked to spend with your spouse/family/friends

JCQ:

1. Do you have to work very fast?
2. Do you have a lot of work to do?
3. Do you work hard to finish your tasks?
4. Do you have to work under high time pressure?
5. Do you have enough time to get your work done?
6. Do you decide for yourself how you conduct your work?
7. Do you decide the order of your work yourself?

8. Do you decide for yourself when you conduct a particular task?
9. Do you have the freedom to solve problems at work yourself?
10. Can you count on your colleagues when your work gets tough?
11. If needed, can you ask your colleagues for help?
12. Is your relationship with your colleagues good?
13. Do you have conflicts with your colleagues?
14. Do you feel valued by your colleagues in your work?
15. Are your colleagues friendly towards you?
16. Is there a pleasant atmosphere between you and your colleagues?