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Thesis

Does Job Crafting Increase Sustainable Employability?

A cross-sectional study regarding the influence of job crafting on sustainable employability and the mediating role of Burn-Out and Work Engagement.

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Abstract

The average life expectancy has strongly increased over the past 70 years and this trend is expected to continue. As newcomers cannot make up for the higher share of older employees, it becomes increasingly important that employees continue working until their retirement age, but this is not the case. Therefore, the remaining question is how to increase the sustainable employability? Theoretical background and empirical findings have shown that optimizing the work environment by proactively changing job characteristics could be a promising element in job design. This is called job crafting. Research has shown that job crafting may reduce burn-out risk and improve work engagement, which indirectly increases sustainable employability. The relationship between job crafting and sustainable employability is rarely examined and therefore an interesting topic to explore.

In this study 191 participants were included. All participants were 18 years or older and employed when filling in the questionnaire. This study showed that individuals, who crafted their job more, were more engaged and had a higher sustainable employability than individuals who crafted their job less. No relationship was found between job crafting and burn-out. Finally, when examining mediation of the relationship between job crafting and sustainable employability by burn-out or work engagement, there was no relationship found.

This study showed that job crafting could help organisations to increase sustainable employability, which is not only good for the organisations, but also for the employees and society.

Keywords: job crafting, sustainable employability, burn-out, work engagement, JD-R model, job demands, job resources.

Introduction

Since 1950 the average life expectancy in The Netherlands has increased from 70.3 to 80.4 years for men and for women from 72.6 to 83.6 years (Poos & Van der Wilk, 2020). This trend is expected to continue. To control for related higher retirement cost, the Dutch government decided to increase the legal retirement age from 65 in 2013 to 67 in 2024 (Kok, Kroon, Lammers & Luiten, 2019, p. 1). As newcomers to the labour market cannot make up for the higher share of older employees (Kooij, 2016; CBS Bevolkingsstatistiek, 2021), it would be important that people work until their legal retirement age. Unfortunately, this is not the case: a large number of older employees still choose to retire early (Van Belle, Van den Broek & De Witte, 2017). In 2021, only 79.4% of men and 62.6% of women between the age of 55-65 were working. This can be explained by health complaints and / or decreased work engagement that can negatively affect the ability to keep on working continuously until the normal retirement age (Hag, 2018; Ifran & Qadeer, 2021) . According to research, employees have to be healthy, motivated, inspired, and satisfied to keep them on the labour market until their retirement age (Jacobs, 2011; Armstrong-Stassen and Templer. 2005). This is in line with the term sustainable employability. It refers to the ability to keep on working continuously throughout the working life while retaining good health and well-being (Van der Klink et al., 2016; Hag, 2018). The following question that remains is; how to increase sustainable employability?

Armstrong-Stassen (2008) stated that job design has a big influence on an employee's decision to retire early or not. Subsequently, organisations should have a high interest to develop a design that meets the needs of this target group to keep them longer on the labour market (Kooij, de Lange, Jansen & Dijkers, 2008). A lot of research has focused on top-down processes, where organisations design the jobs for their employees (Appelbaum, Bailey, Berg & Kalleberg, 2000). However, in recent years it has become more common that employees can give their own input in designing their jobs (Parker, Bindl & Strauss, 2010; Parker & Collins, 2010). The term for this is job crafting. Job crafting refers to proactively optimizing the work environment by making physical and cognitive changes in the job characteristics in line with individual preferences, motives and passions (Wrzesniewski & Dutton, 2001). These changes enable a better fit between the job, the personal needs and the abilities of an individual (Kristof-Brown, Zimmerman & Johnson, 2005). Examples of job crafting may include changes in tasks individuals must fulfil; changes in interpersonal work relationships; reframing the cognitive attitude towards work by changing the way they think about work; and making changes in job

demands and job resources (Tims, Bakker & Derks, 2012; Tims, Bakker & Derks, 2013; Karatepe & Eslamlou, 2017). Optimizing your own work proactively could be an innovative way to increase the sustainable employability of the workforce (Le Blanc, Demerouti & Bakker, 2017).

The Job Demands-Resources Model (JD-R model) clarifies the relationship between job crafting and sustainable employability (Schaufeli & Bakker, 2004). The JD-R model specifies what employees do when they craft their jobs and how this influences the work-related outcomes for both the employee and the organisation (Tims, Bakker & Derks, 2012; Tims et al., 2016). Amongst others, this model states that every job has different job characteristics that can be divided into two categories; job demands and job resources. Job crafting allows employees to proactively change these job demands and resources with the intent to optimize the fit between the individual and the job (Schreuder, 2020; Tims & Bakker, 2010; Tims et al., 2012). Job demands are aspects (physical, psychological, social/ organisational) of the job that require prolonged effort and are therefore associated with certain physical and/or psychological costs (Jones & Fletcher, 1996). Job resources, on the other hand, refer to aspects (physical, psychological, social/ organisational) of the job, that are functional in achieving work goals, stimulate personal growth, learning and development, and reduce job demands that go along with certain costs (Hobfoll, 2002).

The influence of job demands and job resources on personal work-related outcomes can be explained through two different processes (Schaufeli & Bakker, 2004). First, the health impairment process assumes that high job demands lead to high strain such as burn-out. Burn-out can be defined as a work-related state of exhaustion that occurs among employees. It is characterized by extreme tiredness, reduced ability to regulate cognitive and emotional processes and mental distancing (Schaufeli, De Witte & Desart, 2019). High strain like burn-out reduces the health of employees (Schreuder, 2020), which in turn decreases the sustainable employability (Hag, 2018). The other process is the motivational process. This process assumes that high job resources lead to more work engagement (Schaufeli & Bakker, 2004). Work engagement can be defined as a positive, fulfilling, work-related state of mind characterized by vigour, dedication and absorption (Siddiqi, 2015). When individuals design a resourceful and challenging job, it initiates a motivational process, that activates a spiral leading to more resources and increases sustainable employability (Ifran & Qadeer, 2021; Bakker & Demerouti, 2018).

Empirical research on this relationship is limited. Sustainable employability is an under-researched and less developed subject (Van der Klink et al., 2016). Additionally, research on the different antecedents or consequences of job crafting is also limited (Rudolf, Katz, Lavigne & Zacher, 2017). Subsequently, the direct and indirect relationship between job crafting and sustainable employability is also not sufficiently researched. There are some studies stating that there must be a balance between job demands and job resources in order to create a sustainable environment for employees (Bakker, Demerouti & Verbeke, 2004; Demerouti et al., 2001; Karasek & Theorell, 1990). According to Ybema, Geuskens and Oude Hengel (2009) it would be helpful for older employees to make small changes in their jobs to facilitate employment until a later age. Studies also showed that a higher work engagement and a lower level of burn-out are related to a more sustainable employability (Hag, 2018; Ifran et al., 2021). These findings suggest a relationship between individuals who craft their job and sustainable employability.

To make this relationship even more specific, the term job crafting can be divided in different dimensions. The JD-R includes four out of five dimensions of job crafting including structural job resources, social job resources, challenging job demands and hindering job demands. Structural job resources can positively influence the job design itself by gaining more responsibility such as increasing autonomy, variety in tasks or knowledge such as development of opportunities (Tims, Bakker & Derks, 2012). Social job resources increase the social aspects of the job and the satisfaction level of interaction. These resources entail developing or keeping positive relations with colleagues through, for example, asking for feedback, coaching or providing/receiving social support (Tadić Vujčić, 2019; Tims et al., 2012). According to the JD-R model, increasing structural and social job resources would foster work engagement and decrease the likelihood of burn-out. This is in line with empirical evidence of Schreuder (2020), who found, that when employees within the military increased their structural and social job resources this was related to more work engagement and to less burn-out. Schreuder examined this relationship in a cross-sectional study.

The other two dimensions are challenging job demands and hindering job demands. When individuals craft their jobs, they try to increase challenging job demands while decreasing hindering job demands. Employees view challenging job demands as obstacles that need to be overcome by learning and achievement (Cavanaugh, Boswell & Roehling, 2000). Increasing challenging job demands can lead to personal gain or growth (Lazarus & Folkman, 1984). Examples are workload and time pressure. In contrast, hindering job demands limit personal

growth and goal attainment and are therefore experienced as stressful hampering optimal functioning (Bakker & Sanz-Vergel, 2013; LePine, Podsakoff & LePine, 2005). Challenging as well as hindering demands absorb energy, which can coincide with feeling tired. However, challenging job demands also go along with potential gains, while hindering job demands do not (Van den Broeck, De Cuyper, De Witte & Van Steenkiste, 2010). When individuals increase challenging job demands, it strengthens their work engagement and decreases burn-out, which is confirmed by various studies. According to Bakker, Demerouti and Sanz-Vergel (2014), crafting challenging job demands increased well-being, and the diary study of Petrou, Demerouti, Peeters, Schaufeli and Hetland (2012) showed that on days when employees used more job resources and challenges, they were more engaged in their jobs compared to days when they did not. In another study, challenging job demands such as an increased work pressure and complex tasks seemed to relate to more work engagement among working individuals (Crawford, LePine & Rich, 2010). According to JD-R model, one could expect that when individuals decrease hindering job demands, the work engagement increases and burn-out decreases. However, empirical evidence showed otherwise. Schreuder (2020) found that decreasing hindering demands is related to lower work engagement and more burn-out among working individuals. Based on these mixed findings this study will explore this relationship through explorative research.

The fifth dimension of job crafting is called cognitive job crafting and refers to changing the way employees perceive their job (Nielsen & Abildgaard, 2012). This dimension is not mentioned in the JDR-model, because it consists of only psychological changes in job characteristics. However, this dimension is important, because thinking about the meaning of work could also influence the health of an individual in a positive way (Tims & Bakker, 2010; Schutte, 2017; Eijkemans, 2020). Also, the empirical evidence of Schreuder (2020) showed that cognitive job crafting leads to more engagement. This is also reinforced by Eijkemans (2020), who found that cognitive job crafting was related to more work engagement and less burn-out among employees.

In summary, the Dutch population is aging, which increases the importance of sustainable employability. Theory and empirical findings have shown that job crafting could possibly increase the sustainable employability. Therefore, is it desirable to do more research on this subject. Based on previous studies it is expected that more job crafting, broken down in

different dimensions, is related to more work engagement and less burn-out, which could in turn result in higher sustainable employability. The following hypotheses have been formulated;

- *Hypothesis 1: Job crafting is negative related to burn-out*
 - o *1a: Increasing structural resources is negatively related to burn-out.*
 - o *1b: Increasing social resources is negatively related to burn-out.*
 - o *1c: Increasing challenging demands is negatively related to burn-out.*
 - o *1d: cognitive job crafting is negatively related to burn-out.*

- *Hypothesis 2: Job crafting is positive related to work engagement.*
 - o *2a: Increasing structural resources is positively related to work engagement.*
 - o *2b: Increasing social resources is positively related to work engagement.*
 - o *2c: Increasing challenging demands is positively related to work engagement.*
 - o *2d: Cognitive job crafting is positively related to work engagement.*

- *Hypothesis 3:*
 - o *3a: There is a positive relationship between job crafting and sustainable employability.*
 - o *3b: The positive relationship between job crafting and sustainable employability is mediated by lower burn-out.*
 - o *3c: The positive relationship between job crafting and sustainable employability is mediated by higher work engagement.*

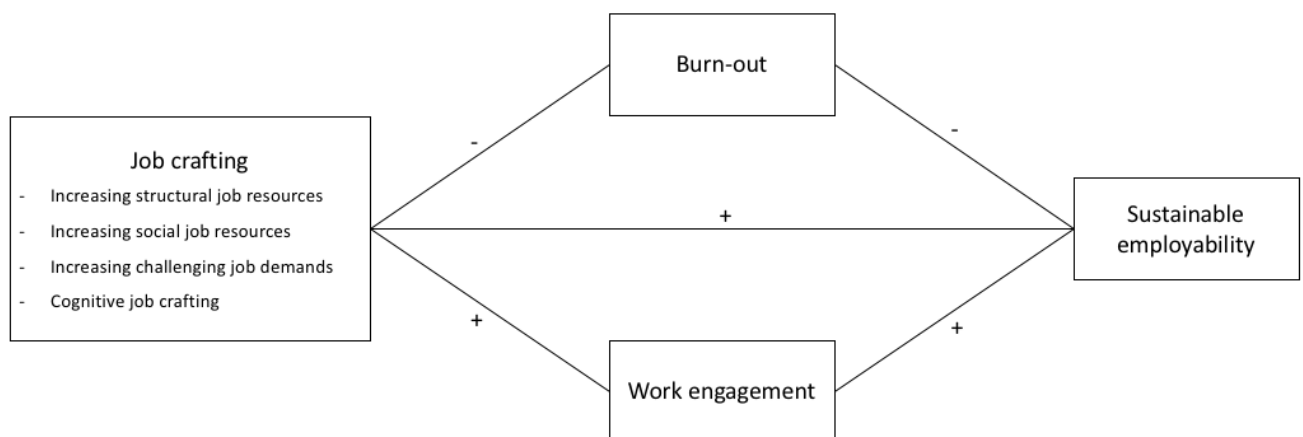


Figure 1. Model of the influence job crafting on sustainable employability mediated by burn-out and work engagement.

Method

Research population

The study employed a cross-sectional design with 219 participants. After data inspection, 28 participants were excluded due to missing data or non-conformance with the requirements such as minimum age of 18 or being employed when taking the survey. This reduced the total number of included participants to 191. Table 1 shows the number of participants specified by gender, part-time vs full-time, age, education and employment level.

Table 1

Number (N) and percentage, specified by gender, part-time vs full-time, age, education level and employment level.

		<i>N</i>	<i>%</i>
Gender	Men	62	32.5
	Women	129	67.5
Parttime/Fulltime	Part-time	92	48.2
	Full-time	99	51.8
Age	18-25	62	32.5
	26-35	25	13.1
	36-45	11	5.8
	46-55	56	29.3
	56-older	37	19.4
Education level	Low educated	6	3.1
	Medium educated	47	24.6
	High educated	138	72.3
Employment level	No managing position	124	64.9
	Managing position	67	35.1
Total		<i>191</i>	<i>100</i>

Material

The questionnaire used in this study consisted of the following components;

Demographic data. Demographical data (e.g. gender, age, working hours per week, education level and occupation) of participants were asked. The education level is divided in 3 groups, low educated (no education, primary education and VMBO), middle educated (HAVO, VWO and MBO), and high educated (HBO and WO). This distribution is based on Rijksinstituut voor Volksgezondheid en Milieu (Blokstra et al., 2012).

Job crafting. Job crafting was measured using two surveys. The first questionnaire was the Job Crafting Scale, which consisted of 21 items with four different job crafting dimensions

(Tims, Bakker & Derks, 2012). The first dimension was increasing *structural job resources* (e.g. 'I try to develop my capabilities'; $\alpha = .70$). The second dimension was increasing *social job resources* (e.g. 'I ask my supervisor to coach me'; $\alpha = .78$). The third dimension was increasing *challenging job demands* (e.g. 'When an interesting project comes along, I offer myself proactively as project co-worker'; $\alpha = .73$), and the last dimension was decreasing *hindering job demands* (e.g. 'I organize my work so as to minimize contact with people whose expectations are unrealistic'; $\alpha = .76$). This questionnaire was scaled on a five-point Likert scale, from '1 = Never' to '5 = Very often'. The dimensions increasing structural job resources, increasing social job resources, and increasing challenging job demands taken together resulted in a cronbach's alfa of $\alpha = .83$.

Cognitive job crafting was measured using a Dutch translation of the cognitive job crafting questionnaire ($\alpha = .76$). In this study 6 items were used, (e.g. 'Think about how your job gives your life purpose') (Slemp & Vella-Brodrick, 2013), scaled on a five-point Likert scale from '1 = Hardly ever' to '6 = Very often'.

Burn-out complaints. Burn-out complaints were measured using the work-related version of the Burnout Assessment Tool (BAT; Schaufeli, De Witte & Desart, 2019). Four dimensions (23 items) of this questionnaire were used: exhaustion (e.g. 'At work, I feel mentally exhausted'; $\alpha = .86$), mental distance (e.g., 'I struggle to find any enthusiasm from my work'; $\alpha = .76$), cognitive impairment (e.g. 'At work, I have trouble staying focused'; $\alpha = .87$), and emotional impairment (e.g. 'At work, I feel unable to control my emotions'; $\alpha = .85$). The items were scaled on a five-point Likert- scale, from '1 = Never' to '5 = Always'. In this study the four dimensions were measured as one variable, namely burn-out ($\alpha = .91$).

Work engagement Work engagement was measured with a shortened version of Utrecht Work Engagement Scale ($\alpha = .92$) (UWES-9, Schaufeli, Bakker & Salanova, 2006). The UWES consisted of 9 items (e.g. 'At my work, I feel bursting with energy'). Scaled on a seven-point Likert scale, from '1 = never' to '7 = always'.

Sustainable employability. Sustainable employability was measured using the Sustainable Employability Scale (Ybema, 2015; Koel, 2015; Brokerhof, Ybema & Bal, 2020). This scale consisted of 6 items (e.g. 'I expect that until the official retirement age, I will physically be able to work', $\alpha = .82$). Scaled on a five-point Likert scale, from '1 = Certainly not' to '5 = Certainly'.

Procedure

This study was ethically approved by the Faculty Ethical Review Board of Utrecht University of the Netherlands. Participants were invited to fill out the questionnaire via e-mail, LinkedIn, WhatsApp or flyer. These invitations consisted of a link or a QR-code that led them to Qualtrics, where they could fill out the survey. Participants filled out this questionnaire on their cell phone or other device (e.g. laptop). The questionnaire started with a short introduction and an informed consent, where participants were informed that participation is voluntary, that they were allowed to stop anytime they wanted and that results remained anonymous and confidential. After the informed consent was signed, participants could fill out the questionnaire. Data collection took place from March 22 until April 29.

Power analysis

A power analysis in G*power 3.1 analysis was performed to find out how many working participants (age 18- 65) were required (Faul, Erdfelder, Buchner, & Lang, 2009). Job performance was used as an indicator for sustainable employability. Van Hooff (2016) found a relationship between job crafting and job performance. Results stated that four dimensions of job crafting explained $R^2 = 10\%$ on job performance, including the control variables gender, type of contract and human resource development. The effect size together with a power of .80 resulted in 113 participants.

Data- analysis

The data were analysed using SPSS Statistic 24.

Data inspection. After the data collection, data inspection took place regarding variance and missing values. 24 of the participants skipped one or a few questions. Therefore, the data of these participants was not sufficient for analysis and has been removed (Field, 2013, p. 107-108). Furthermore, four participants who stated that their occupation was student were removed. In total 28 participants were eliminated from the data-analyses.

Thereafter, some of the demographical data were recoded. The occupation was recoded into the employment levels, managing position or no managing position, and working hours were recoded into part-time or full-time work. Individuals who worked 36 hours a week or more were scaled under full-time work. After analysing the demographical data, reliability analyses on the internal consistency with the use of Cronbach's Alpha (α), were executed. This study

relied on COTAN-standards that are classified as sufficient for individual use in a work context when they are higher than .70 (Evers, Sijtsma, Lucassen, & Meijer, 2010). Results showed that all variables were reliable.

Testing the hypotheses. To test the relationships between variables without adjusting for other predictors relations, Pearson correlations were computed. This study chose for a Pearson correlation (r) because this correlation was more consistent with later computed regression analyses. Values between 0.1 and 0.3 were regarded as weak relationships, between 0.3 and 0.5 were regarded as medium relationships and between more than 0.5 as large relationships (Field, 2013, p. 82).

To test the hypotheses, linear regression analyses were computed. The assumptions of normality, linearity, independent errors and homoscedasticity were met. The check for absence of outliers showed some outliers were detected, but there were no grounds to remove the extreme scores (Field, 2013, pp. 165-172; Frost, 2021). Since age was related to the dependent as well as to the independent variable, this variable was used as a control variable (Jacobs, 2011; Schreuder, 2020). Within the regression analyses the variable increasing structural job resources, increasing social job resources and increasing challenging resources were taken together, because of the substantive overlap between the job crafting dimensions. The separate dimensions did not contribute unique variance to the regression of sustainable employability when controlling for each other.

Finally, to discover whether the relationship between job crafting and sustainable employability was mediated by burn-out and work engagement (hypotheses 3b and c), mediation-analyses with bootstrapping (model 4 in PROCESS, 1000) was used (Field, pp 414).

Explorative research. To examine the relationship between the demographic variables, the independent and dependent variables, Pearson correlations were executed. For explorative research, the variable decreasing hindering job demands was also added to the correlation analyses, linear regression analyses as well as to the mediation analyses to examine the causal relationship between this variable and sustainable employability.

Results

Descriptives and correlation analysis

The correlations between the different variables are shown in Table 2 below specified to means, standard deviations and Pearson correlations.

Table 2

Means (M), standard deviations (SD), and Pearson correlations between job crafting dimensions and work-related outcomes.

Measurements	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11	12	
1. Incr. structural job resources	-												
2. Incr. social job resources	.28**												
3. Incr. challenging job demands	.54**	.39**											
4. Cognitive job crafting	.46**	.23**	.34**										
5. Burn-out	-.09	.12	.02	-.03									
6. Work engagement	.35**	.14	.25**	.36**	-.49**								
7. Sustainable employability	.19**	.10	.19**	.14*	-.41**	.32**							
<i>Explorative research</i>													
8. Decr. hindering job demands	-.08	.08	-.03	.02	.40**	-.13	-.16*						
9. Gender *a	-.04	.06	-.06	.02	.07	.02	.01	-.06					
10. Age *b	-.03	-.29**	-.06	-.00	-.24**	.16*	.10	-.14	-.24**				
11. Parttime/fulltime *c	.16*	.16*	.28**	.08	.06	.10	-.05	-.07	-.40**	.21**			
12. Employment Level *c	-.00	-.11	.13	.06	.02	.02	.05	-.15	-.22**	.37**	.38**		
13. Education level *e	.14	.20**	.16*	.09	.04	.08	.03	.02	-.17*	.11	.21**	-.03	
14. M	3.78	2.55	3.05	4.22	1.93	5.69	4.14	1.88	.68	1.90	.52	.35	1.69
15. SD	.59	.71	.76	.83	.49	1.06	.64	.57	.47	1.58	.50	.48	.53
16. Range	2.80	3.00	3.20	4.18	2.52	6.00	3.67	2.83	1.00	4.00	1.00	1.00	2.00

Note. *a) Gender; 0 = men; 1 = women, *b) Age; 0= 18-25; 1 = 26-35; 2= 36-45; 3= 46-55; 4 = 56-older; *c) Parttime/Fulltime; 0 = parttime; 1 = fulltime, *d) Employment Level: 0 = no managing level 1 = managing level, *e) 0 = low educated 1 = middle educated; 2 = high educated. Incr; increasing, Decr; decreasing . ** $p < .01$ * $p < .05$ (2-tailed).

Based on these findings, it appeared that cognitive job crafting ($M= 4.22$) was the most applied job crafting dimension. Increasing social job resources was much less applied ($M= 2.55$). It also appeared that the average work engagement among these working individuals was relatively high ($M = 5.69$) as well as sustainable employability ($M=4.14$).

Contrary to what was expected, there was no correlation found between job crafting and burn-out. The results indicated that individuals who crafted their job more by increasing structural and social job resources, by increasing challenging job demands and by cognitive job crafting, did not experience lower burn-out (H1a, 1b, 1c, 1d). However, explorative research did

find a correlation between decreasing hindering job demands and burn-out. The results showed that individuals who crafted their job more by decreasing hindering job demands, were related to lower burn-out. This correlation is regarded as a medium relationship.

As expected, there was a correlation found between job crafting and work engagement. Results indicated that working individuals, who crafted their job more by increasing structural and challenging job demands and by cognitive job crafting, were more engaged in their work (H2a, 2c, 2d). However, increasing social job resources did not correlate with work engagement. In this case, working individuals who applied more job crafting by increasing their social job resources were not more engaged in their work (H2b)

The results showed that job crafting was correlated with sustainable employability. Working individuals who applied higher levels of job crafting by increasing their structural job resources, challenging job demands or cognitive job crafting, were related to higher sustainable employability (H3a). However, when working individuals crafted their job more by increasing their social job resources, this was unrelated to sustainable employability (H3a).

Finally, the results showed that sustainable employability negatively correlated with burn-out and positively with work engagement. This means that as employees experience higher levels of sustainable employability, burn-out was lower and work engagement was higher.

Hypothesis testing results

Table 3

Regression analyses of work-related outcomes on control variable and job crafting dimensions (H1,2,3)

Antecedents	Burn-out		Work engagement		Sustainable employability	
	<i>b</i>	95% [LLCI, ULCI]	<i>b</i>	95% [LLCI, ULCI]	<i>b</i>	95% [LLCI, ULCI]
1. (Constant)						
Age	-.08*		.11*		.04	
2. (Constant)						
Age	-.06*	[-.10, -.02]	.12*	[.03, .21]	.04	[-.01, .10]
Seeking resources/challenges <i>(incr. structural resources, social resources & challenging demands)</i>	.02	[-.11, .15]	.45*	[.16, .74]	.24*	[.04, .42]
Cognitive job crafting	-.03	[-.11, .06]	.34**	[.15, .52]	.05	[-.07, .17]
Decr. hindering job demands	.32**	[.20, .43]	-.20	[-.45, .04]	-.16	[-.32, .00]
3. (Constant)						
Age					.01	[-.04, .06]
Seeking resources/challenges <i>(incr. structural resources, social resources & challenging demands)</i>					.23*	[.05, .41]
Cognitive job crafting					.02	[-.09, .13]
Decr. hindering job demands					.01	[-.15, .17]
Burn-out					-.50**	[-.71, -.28]
Work engagement					.04	[-.06, .13]
R ² Model 1	.06*		.02*		.01	
R ² Model 2	.20**		.20**		.08*	
R ² Model 3					.22**	

Note. Control variables = age. Independent variables = dimensions job crafting. Incr = increasing, Decr = decreasing. Results are presented in unstandardized beta's (*b*). CI = confidence interval, LL = lower limit, UL = upper limit. ** $p < .01$; * $p < .05$.

Table 3 shows the results of the regression analyses.

Job crafting and burn-out. Results showed that the different job crafting dimensions including the control variable age, explained a significant proportion of burn-out among working individuals ($R^2 = .20$, $F(3, 184) = 10.44$, $p < .001$). Contrary to what was expected in Hypothesis 1, seeking more resources/challenges did not relate to lower burn-out among

working individuals ($t = .29, p = .77$). In addition, higher levels of cognitive job crafting did not relate to lower burn-out among working individuals either ($t = -.68, p = .50$). Decreasing hindering job demands, on the other hand, did relate to more burn-out ($t = 5.57, p < .001$).

Job crafting and work engagement. The job crafting dimensions, including the control variable age, did explain a significant proportion of work engagement, ($R^2 = .20, F(3, 186) = 14.03, p < .001$). In line with Hypothesis 2, as individuals sought for more resources/challenges they were more engaged in their work ($t = 3.05, p < .05$), and as individuals applied more cognitive job crafting they were more engaged to their work ($t = 3.59, p < .001$).

Job crafting and sustainable employability. Job crafting explained a significant proportion of sustainable employability, $R^2 = .08, F(3, 184) = 4.91, p < .05$. In line with Hypothesis 3a, when individuals sought for more resources/challenges, it related to higher sustainable employability ($t = 2.51, p < .05$). However, individuals who applied higher levels of cognitive job crafting did not experience more sustainable employability ($t = .35, p = .73$).

Mediations. When including work engagement and burn-out in this model, it explained 22% of the variance in sustainable employability ($R^2 = .22, F(2, 184) = 16.74, p < .001$). Higher burn-out significantly related to lower sustainable employability ($t = -4.56, p < .001$). However, higher work engagement was not related to a higher sustainable employability ($t = .76, p = .45$).

Contrary to what was expected in Hypothesis 3b, there was no mediation found. The relationship between seeking resources/challenges and sustainable employability was not negatively mediated by burn-out ($b = -.01, SD = .03, 95\% CI [-.08, .06]$). In addition, burn-out did not mediate the relationship between cognitive job crafting and sustainable employability ($b = .01, SD = .02, 95\% CI [-.03, .06]$). However, explorative research found an indirect effect between job crafting and sustainable employability. When individuals crafted their job more by decreased hindering job demands, it related to more burn-out, which was related to lower sustainable employability ($b = -.16, SD = .05, 95\% CI [-.26, -.08]$).

Hypothesis 3c was also not confirmed. The relationship between seeking resources/challenges and sustainable employability was not positively mediated by work engagement ($b = .02, SD = .03, 95\% CI [-.04, .07]$). Furthermore, the relationship between cognitive job crafting and sustainable employability was also not mediated by work engagement ($b = .01, SD = .02, 95\% CI [-.03, .06]$). An overview of the results of mediations analyses are shown in appendix D.

Additional explorative research. Explorative research showed that the control variable age was related to burn-out and work engagement. As individuals turn older it predicted lower burn-out ($b = -.06, t = -2.59 p < .05$) and higher work engagement ($b = .11, t = 2.48 p < .05$).

Discussion

This study examined the relationship between job crafting and sustainable employability, as well as the mediating role of burn-out and work engagement in this relationship.

In the first hypothesis it was expected that employees who craft their jobs more, would experience less burn-out. However, individuals who sought additional resources and challenges, and/or changed the way they viewed their job, did not experience lower burn-out. The explanation may be that job crafting mainly focusses on improving the meaning of the job and trying to increase the fit between work and personal skills, values and preferences. However, job crafting does not focus on coping with stressful situations (Wrzesniewski & Dutton, 2001; Sakuraya et al., 2017).

The explorative part of this research showed that when employees crafted their jobs by decreasing hindering job demands, they experienced higher burn-out. This is contrary to what was expected by the JD-R model. Based on the JD-R model, decreasing hindering demands would relate to lower burn-out (Schaufeli & Taris, 2004). A reversed relationship may be the explanation for this. When employees experience burn-out or high psychological distress, they probably experience high job demands and are therefore likely to decrease these hindering job demands or other proactive behaviour, which could lead to more strain, more demands and in the end exhaustion (Schreuder, 2020; Zhang & Parker, 2019).

Based on these findings, the relationship between job crafting and burn-out needs to be further researched. Especially, the finding between decreasing hindering job demands and burn-out is remarkable. Although the definition of job crafting by Wrzesniewski and Dutton (2001) is valid and often used as theoretical base, researchers have suggestions about improvements and adjustments in this existing scale (Lazazzara, Tims & De Gennaro, 2020). There is discussion about the opposite relationships between the different job crafting dimensions. Decreasing hindering demands, for example, shows more often a reversed relationship compared to the other job crafting dimensions (Tims et al., 2012) and to what is expected in theory (Schaufeli & Taris, 2004). This study confirmed the mixed findings, which leads to doubts about the use of this dimension of job crafting.

In the second hypothesis it was expected that as individuals craft their job more, they would experience higher work engagement. Results confirmed this expectation. Working individuals, who applied higher levels of job crafting, experienced more work engagement. These individuals sought more additional resources and challenges and changed the way they viewed their job. This is in line with the JD-R model of Schaufeli and Bakker (2004), which states that high job resources lead to more work engagement. These findings are also in line with empirical research of Travaglian, Babic and Hansez (2016), and Schreuder (2020), who found that individuals who crafted their job more, experienced more work engagement. When individuals craft their job, they try to increase the fit between work and personal skills, values and preferences, which supports that job crafting is related to work engagement (Wzresniewski & Dutton, 2001; Kristof-Brown, Zimmerman & Johnson, 2005; Chen, Yen, Tsai, 2004). However, higher work engagement was not related to more sustainable employability among working individuals.

Although no relationship was found between higher work engagement and sustainable employability, these findings are still beneficial in practice. Job crafting could be an effective element in organisational job designs to increase the work engagement among working individuals. An increased work engagement is related to a better performance, which is positive for the organisations. When individuals perform better it enhances the organisational effectiveness, which is also beneficial in reducing the impact of the aging gap (Kim, Kolb & Kim, 2013).

Finally, it was expected that as working individuals crafted their job more, they would experience higher levels of sustainable employability. Results confirmed this, when working individuals applied higher levels of job crafting, by seeking more additional resources and challenges, they experienced higher levels of sustainable employability. These results relate to the question how to increase the sustainable employability among working individuals to deal with the aging society and the high number of early retirees. It confirms that increasing the fit between the job and individuals, through job crafting could be an effective tool to help organisations to stimulate employees to work until their legal retirement age. Further research is needed to examine the exact relationship between job crafting and sustainable employability in order to come up with an effective intervention toolkit.

Findings also showed that lower burn-out was related to a higher sustainable employability among working individuals. Only one indirect effect was identified. When working individuals

crafted their job more by decreasing hindering job demands, this was related to higher burn-out, which was related to a lower sustainable employability. These results can be explained by the limited research that has been done so far. As mentioned earlier, sustainable employability is a complex, under-researched and less developed subject (Van der Klink et al., 2016). Sustainable employability consist, according to the Sociaal-Economische Raad (SER, 2014), of three component, such as vitality, work ability and employability. It could be that burn-out or work engagement is related to these specific components of sustainable employability (Schilt, 2017). For example, Airila and colleagues (2012) found that higher work engagement is related to more work ability. Moreover, research on the different antecedents or consequences of job crafting is limited (Rudolf, Katz, Lavigne & Zacher, 2017). This study is a good foundation for further research in examining the relationship between job crafting and sustainable employability. It shows that increasing the fit between the employee and the job does relate to more sustainable employability, but not through work engagement and burn-out.

Education and age could be potential moderators in the relationship between job crafting and sustainable employability. Literature showed that the opportunity and the amount of job crafting can differ between lower and higher educated individuals. Lower educated individuals may have less desire for further education and personal development, fewer opportunities for career growth, and to make changes in their work. Compared to higher educated individuals there is less room to make changes, in other words to craft their job (Sanders, Dorenbosch & Gründemann, 2011). Age could also be an interesting variable to examine in future studies. Age could moderate the relationship between job crafting and sustainable employability. Explorative research showed that the as employees turn older they increase their social job resources less. This may be explained by older workers having more established work routines and networks, which they can rely on for social support. On these grounds, they may not need to further increase their social resources (Zacher et al., 2016). It would be interesting to examine whether the types of job crafting are somehow linked to age. Some types of job crafting could be more important for younger workers, while others may be more important for older workers.

This research also had some limitations. The first limitation is that this study only used self-reports (one source), which increases the possibility that the found relationships might be influenced by a potential common method bias. This means that the variables could share a systematic variance (Jakobsen & Rensen, 2015, p. 6). For example, employees could systematically overstate their engagement to work and sustainable employability, or understate

their exhaustion, due to social desirability or a tendency to evaluate oneself in too positive a manner. Because of this, the found relationship between variables can be stronger or weaker than it actually is (Bakker, Demouriti, De Boer & Schaufeli, 2003; Jakobsen & Rensen, 2015, p. 6). Solutions to counter the common method bias were using validated questionnaires and using different scale types (Jakobsen & Rensen, 2015).

Another limitation is that the research population was specified to working individuals in general. Future research needs to be more specific when using the Job Crafting Scale (Tims, Bakker & Derks, 2012), because this study included all working individuals, not only salary employed individuals, but also entrepreneurs and individuals with a side job. This can slightly influence the results, because the Job Crafting Scale contains questions that are linked to supervisors, which entrepreneurs do not have. Future research should also investigate crafting options for more physical jobs like construction workers, who may be less suitable to work until their legal retirement age. The job crafting scale does not specifically focus on those physical demands or resources, which can also slightly influence the results of some participants (Tims, Bakker & Derks, 2012).

In conclusion, this study showed that job crafting would be a potentially suitable element in the job design in order to keep employees more engaged and more sustainable in their jobs until their legal retirement age. It would be interesting if future research further investigated this relationship and enabled the development of an effective intervention toolkit to reinforce work engagement and sustainable employability. Increasing sustainable employability and work engagement via job crafting is good for the employee on one hand, because job crafting increases the fit between the individual and the job. On the other hand, it would be good for organisations, because job crafting increases the work engagement which potentially strengthens performance. Finally, it would be beneficial for society, because it could bring the actual retirement age closer to the legal retirement age, hence reducing the economic burden of high pension costs.

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Appendix A

Information letter and Informed consent

Information letter

Beste participant,

Hartelijk dank voor uw interesse in dit onderzoek.

Het doel van dit onderzoek is om te kijken of het maken van (kleine) persoonlijke aanpassingen in het werk bevorderend is voor een werknemer om tot de pensioengerechtigde leeftijd, in 'gezonde' staat, door te blijven werken. Met andere woorden, de invloed van job crafting op sustainable employability. Daarnaast wordt de rol van bevlogenheid en burn-out klachten op deze relatie onderzocht.

Dit onderzoek wordt uitgevoerd door Emelie Kaiser, master student Arbeids- en Organisatiepsychologie aan de Universiteit Utrecht, en begeleid door Dr. Jan Fekke Ybema, universitair docent aan de Universiteit Utrecht, afdeling Sociale, Gezondheids- en Organisatiepsychologie.

U kunt deelnemen aan dit onderzoek nadat u toestemming heeft gegeven mee te willen werken aan dit onderzoek. Dit kunt u doen door de informed consent, onderaan deze pagina, in te vullen.

Uw deelname zal bestaan uit het invullen van een vragenlijst. Dit zal ongeveer 10-15 minuten duren. In deze vragenlijst zullen de eerdergenoemde onderwerpen aan bod komen. Ik ben geïnteresseerd in uw persoonlijke beleving. Er bestaan dan ook geen goede of foute antwoorden.

Aan de hand van de door u ingevulde gegevens is het mogelijk de onderzoeksvraag te beantwoorden. Data worden anoniem verzameld en vertrouwelijk behandeld. De antwoorden die u geeft, zijn niet tot u als persoon te herleiden. Deelname aan dit onderzoek is compleet vrijwillig. U kunt op elk moment stoppen met uw deelname aan het onderzoek, zonder een reden hiervoor op te geven.

De onderzoeksgegevens zullen, in overeenstemming met de Nederlandse wet, minimaal 10 jaar anoniem worden bewaard voor eventuele verdere onderzoeken.

U kunt deelnemen aan het onderzoek, wanneer u;

- 18 jaar of ouder bent.
- Op dit moment betaald werk heeft.

Bij vragen kunt u te allen tijde contact met mij opnemen, via het mailadres; e.p.kaiser@students.uu.nl.

Bij klachten of het stellen vragen aan een onafhankelijk persoon, die niet betrokken is bij het onderzoek, kunt u contact opnemen met Dr. Veerle Brenninkmeijer. Zij is coördinator master Work & Organisational Psychology van de Universiteit Utrecht. Dit kunt u doen via het mailadres; shop_workandorganisation@uu.nl.

Bij een officiële klacht over het onderzoek, kunt u contact opnemen met de klachtenfunctionaris van de faculteit sociale wetenschappen van de Universiteit Utrecht, via het mailadres; klachtenfunctionaris-fetsocwet@uu.nl.

Informed consent

Voordat u kunt deelnemen aan dit wetenschappelijke onderzoek, is het een vereiste om online te bevestigen dat u voldoende geïnformeerd bent en dat u mee wilt werken aan dit onderzoek.

Het onderzoek

Het doel van dit onderzoek is besproken in de bovenstaande informatiebrief. Bij het ondertekenen van deze informed consent, verklaart u de informatiebrief te hebben gelezen en te hebben begrepen.

Vertrouwelijke gegevens

De gegevens uit de ingevulde vragenlijst zullen enkel gebruikt worden voor wetenschappelijk onderzoek en u zult volledig anoniem blijven.

Deelname onderzoek

Deelname aan dit onderzoek is compleet vrijwillig. U kunt te allen tijde stoppen met uw deelname aan dit onderzoek, zonder een reden hiervoor op te geven. Als u vragen heeft kunt u contact met mij opnemen, via het mailadres; e.p.kaiser@students.uu.nl.

Administratieve gang van zaken

Als u akkoord gaat met deze informatie en als u mee wilt werken aan het onderzoek, dient u onderstaande informed consent te ondertekenen.

Hierbij geef ik toestemming om mee te werken aan dit onderzoek:

Appendix B Survey

Demographical data

1. Wat is uw geslacht?
 - a. Man
 - b. Vrouw
 - c. Anders

2. Wat is uw leeftijd?
 - a. 18-25
 - b. 26-35
 - c. 36-45
 - d. 46-55
 - e. 56-ouder

3. Wat is uw beroep? (open vraag)

4. Wat is uw hoogst afgeronde opleidingsniveau?
 - a. Geen opleiding/lager onderwijs/ basis onderwijs
 - b. MAVO/VMBO
 - c. HAVO
 - d. VWO
 - e. MBO
 - f. HBO
 - g. WO

5. Hoeveel uur per week bent u werkzaam? (open vraag)

Job crafting

	1	2	3	4	5
	Nooit	Soms	Regelmatig	Vaak	Heel vaak
1. Ik zorg ervoor dat ik mijn capaciteiten optimaal benut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Ik zorg ervoor dat ik niet te veel hoef om te gaan met personen wiens problemen mij emotioneel raken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ik vraag collega's om advies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ik probeer mezelf bij te scholen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Als er nieuwe ontwikkelingen zijn, sta ik vooraan om ze te horen en uit te proberen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Ik vraag of mijn leidinggevende tevreden is over mijn werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Ik zorg ervoor dat ik zelf kan beslissen hoe ik iets doe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Ik zorg ervoor dat ik minder moeilijke beslissingen in mijn werk hoef te nemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Ik probeer nieuwe dingen te leren op mijn werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Ik vraag anderen om feedback over mijn functioneren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Ik zorg ervoor dat ik minder emotioneel inspannend werk moet verrichten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ik zoek inspiratie bij mijn leidinggevende	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Ik neem geregeld extra taken op me hoewel ik daar geen extra salaris voor ontvang	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Ik probeer mezelf te ontwikkelen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Ik zorg ervoor dat ik niet te veel hoef om te gaan met mensen die onrealistische verwachtingen hebben	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Als het rustig is op mijn werk, zie ik dat als een kans om nieuwe projecten op te starten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Ik vraag mijn leidinggevende om mij te coachen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Ik zorg ervoor dat ik minder geestelijk inspannend werk hoef te verrichten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Ik probeer mijn werk wat zwaarder te maken door de onderliggende verbanden van mijn werkzaamheden in kaart te brengen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Als er een interessant project voorbij komt, bied ik mezelf proactief aan als projectmedewerker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Ik zorg ervoor dat ik me niet lange tijd achter elkaar hoef te concentreren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cognitieve job crafting

	1 Bijna nooit	2	3	4	5	6 Heel vaak
22. Ik geef voorrang aan werkzaamheden die passen bij mijn vaardigheden en interesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Ik denk na over hoe mijn werk doel betekenis geeft aan mijn leven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Ik herinner mijzelf aan de betekenis van mijn werk voor het succes van de organisatie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Ik herinner mijzelf aan het belang van mijn werk voor de maatschappij	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Ik denk na over de manier waarop mijn werk een positieve invloed heeft op mijn leven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Ik denk na over de rol die mijn werk spelt in mijn algehele welzijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Burn-out klachten

	Nooit	Zelden	Soms	Vaak	Altijd
<i>Uitputting</i>					
28. Op het werk voel ik me geestelijk uitgeput	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Alles wat ik doe op mijn werk, kost mij moeite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Ik raak maar niet uitgerust nadat ik gewerkt heb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Op het werk voel ik me lichamelijk uitgeput	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Als ik 's morgens opsta, mis ik de energie om aan de werkdag te beginnen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Ik wil wel actief zijn op het werk, maar het lukt mij niet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Als ik me inspan op het werk, dan word ik snel moe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Op het einde van de werkdag voel ik met mentaal uitgeput en leeg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Mentale distantie</i>					
36. Ik kan geen belangstelling en enthousiasme opbrengen voor mijn werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Op mijn werk denk ik niet veel na en functioneer ik op automatische piloot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Ik voel een sterke weerzin tegen mijn werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 39. Mijn werk laat mij onverschillig | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. Ik ben cynisch over wat mijn werk voor andere betekent | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Emotionele ontregeling

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 41. Op mijn werk heb ik het gevoel geen controle te hebben over mijn emoties | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. Ik herken mezelf niet in de wijze waarop ik emotioneel reageer op mijn werk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. Tijdens mijn werk raak ik snel geïrriteerd als de dingen niet lopen zoals ik dat wil | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 44. Ik word kwaad of verdrietig op mijn werk zonder goed te weten waarom | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 45. Op mijn werk kan ik onbedoeld te sterk emotioneel reageren | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Cognitieve ontregeling

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 46. Op het werk kan ik er mijn aandacht moeilijk bijhouden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 47. Tijdens mijn werk heb ik moeite om helder na de te denken | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 48. Ik ben vergeetachtig en verstrooid tijdens mijn werk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49. Als ik aan het werk ben, kan ik me moeilijk concentreren | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 50. Ik maak fouten in mijn werk omdat ik er met mijn hoofd 'niet goed bij ben' | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
-

Bevlogenheid

	0 Noo it	1 Een paar keer per jaar of minder	2 Eens per maand of minder	3 Een paar keer per maand	4 Eens per week	5 Een paar keer per week	6 Dageli jks
<i>Bevlogenheid</i>							
51. Op mijn werk bruis ik van energie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. Als ik werk voel ik me fit en sterk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. Ik ben enthousiast over mijn baan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. Mijn werk inspireert mij	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. Als ik 's morgens opsta heb ik zin om aan het werk te gaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. Wanneer ik heel intensief aan het werk ben, voel ik mij gelukkig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. Ik ben trots op het werk dat ik doe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. Ik ga helemaal op in mijn werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. Mijn werk brengt mij in vervoering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Duurzame inzetbaarheid

Ik verwacht dat ik tot aan de pensioengerechtigde leeftijd ...	<i>zeker niet</i>	<i>waarschijnlijk niet</i>	<i>misschien</i>	<i>waarschijnlijk wel</i>	<i>zeker wel</i>
1. Op mijn werk bruis ik van energie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Als ik werk voel ik me fit en sterk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ik ben enthousiast over mijn baan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Mijn werk inspireert mij	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Als ik 's morgens opsta heb ik zin om aan het werk te gaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Wanneer ik heel intensief aan het werk ben, voel ik mij gelukkig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Ik ben trots op het werk dat ik doe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Ik ga helemaal op in mijn werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Mijn werk brengt mij in vervoering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix C Syntax output.

* Encoding: UTF-8.

*Descriptives of all variables.

descriptives all.

*Filter missing data.

FILTER OFF.

USE ALL.

SELECT IF (Q12_6 > 0).

EXECUTE.

*Creating a dummy variable of demographic variable.

RECODE Q3 (1=0) (2=1) (3=2) INTO Q3.

VARIABLE LABELS Q3 'Man vs Vrouw'.

VALUE LABELS Q3

0 'Man'

1 'Vrouw'

2 'Anders'.

*Recode demographic variable of demographic variable.

RECODE Q4 (1=0) (2=1) (3=2) (4=3) (5=4) INTO Q4.

VARIABLE LABELS Q4 'Leeftijdscategorie'.

VALUE LABELS Q4

0 '18-25'

1 '26-35'

2 '36-45'

3 '46-55'

4 '56-ouder'.

RECODE Q5 (1=0) (2=0) (3=1) (4=1) (5=1) (6=2) (7=2) INTO Q5.

VARIABLE LABELS Q5 'Opleidingsniveau'.

VALUE LABELS Q5

0 'Laag opgeleid'

1 'Gemiddeld opgeleid'

2 'Hoog opgeleid'.

*Recode demographic data into different variables and frequencies of both variables.

RECODE Q7 ('1'=0) ('2'=0) ('3'=0) ('4'=0) ('5'=0) ('6'=0) ('7'=0) ('8'=0) ('9'=0) ('10'=0) ('11'=0)
('12'=0) ('13'=0) ('14'=0) ('15'=0)

('16'=0) ('17'=0) ('18'=0) ('19'=0) ('20'=0) ('21'=0) ('22'=0)

('23'=0) ('24'=0) ('25'=0) ('26'=0) ('27'=0) ('28'=0) ('29'=0) ('30'=0) ('31'=0) ('32'=0) ('33'=0)

('34'=0) ('35'=0) ('36'=1) ('37'=1) ('38'=1) ('39'=1) ('40'=1) ('41'=1) ('42'=1) ('43'=1) ('44'=1)

('45'=1) ('46'=1) ('47'=1) ('48'=1) ('49'=1) ('50'=1) ('51'=1) ('52'=1) ('53'=1) ('54'=1) ('55'=1)

('56'=1) ('57'=1) ('58'=1) ('59'=1) ('60'=1) ('50-60'=1) ('Gemiddeld 10 uur'=0) ('40-45'=1) ('7 '+
'uur'=0)

('36 uur'=1) ('32-40 '=1) ('Tussen de 40 en 50 uur in de week'=1) ('70'=1) ('12 '+ 'uur'=0) ('36-
40 uur'=1) ('10 uur'=0) ('Ongeveer 40'=1) ('40-60'=1) ('?'=0) ('0'=0) ('8,5'=0)

("Contractueel 24, maar in de praktijk zo'n 35"=0) ('40 of meer'=1) ('40+'=1) INTO
ParttimevsFulltime.

VARIABLE LABELS ParttimevsFulltime 'ParttimevsFulltime'.

VALUE LABELS ParttimevsFulltime

0 'Parttime'

1 'Fulltime'.

frequencies Q6.

RECODE Q6 ('vp business development'=1) ('VP Commercial'=1) ('Opleidingsmanager'=1)
('Manager'=1) ('Social media manager'=1) ('Marketing Manager'=1) ('Office Manager'=1)
('Manager '+' bij een studentenbedrijf'=1) ('Sales Manager'=1)
('Casemanager Verzuim'=1) ('Teammanager '+' poliklinieken'=1) ('Officemanager
tandartspraktijk'=1) ('Manager luchtvaartmaatschappij'=1)
('Manager Academie'=1) ('PA/ office manager'=1) ('Brand manager'=1) ('Interim
Manager'=1) ('Art '+'director'=1) ('Directeur'=1) ('Verkoop directeur'=1)
('Schoolleiding'=1) ('Office en '+' operationeel manager'=1) ('Zelfstandig Commercieel directeur
levensmiddelen bedrijf'=1) ('IT '+' specialist'=0) ('Zelfstandig ondernemer'=1)
('Ondernemer '=1) ('CEO'=1) ('Strategisch '+' Consultant'=0) ('M&A consultant'=0) ('Finance
consultant'=0) ('Corporate finance '+' consultant'=0) ('Consultant/ recruiter '=0)
('Consultant'=0) ('IT-er'=0) ('Solution-/ '+' System engineer (IT)'=0) ('zelfstandige in
paardenhouderij'=1) ('HR consulent'=0) ('Ik werk in '+'HR'=0) ('Communicatie adviseur'=0)
('Adviseur '=0) ('Organisatie adviseur'=0) ('A&o'=0) ('Recruiter'=0) ('Zeevaart Compliance
Consultant'=0) ('Conceptontwikkelaar'=0)
('Projectontwikkelaar'=0) ('Medewerker delicatessen winkel'=0) ('Developer'=0) ('Verkoop '+'
'Snackbar medewerker'=0) ('Fastfood medewerker'=0) ('Student horeca'=0)
('Hondentrimster'=1) ('Restaurantmedewerker'=0) ('Horecamedewerker'=0)
('Marketeer '=0) ('Social media marketeer'=0) ('Leidinggevende detailhandel'=1) ('Teamleider
in de retail, en ondersteunend medewerker in de '+' hulpverlening'=1)
('Vervangend filiaalleider'=1) ('Student en teamleider bij een supermarkt '+' als bijbaan'=1)
('Kassa servicemedewerker'=0) ('Verkoper'=0) ('Correspondent'=0)
('Grafisch '+' vormgever'=0) ('Werk bij makelaar'=0) ('Controller'=0) ('Finance
ziekenhuisfarmacie'=0)
('Freelance hippisch journalist en contentschrijver, Eigenaar webshop in homeopatische
'+'verzorgingsproducten/ supplementen voor paarden en andere dieren'=1)
('Paardentrainer, '+' digitale marketing'=0) ('Winkelmedewerker'=0) ('Medewerker
detailhandel'=0) ('Verkoopprofessional'=0) ('Technical service sales'=0)
('Sales Assistent'=0) ('Marketing '+' communicatie strateeg'=0) ('Secretaresse'=0)
('Dossiermedewerker'=0) ('Logistiek '+' medewerker'=0) ('Wmo consulent'=0)
('Auditor'=0) ('KYC-analist'=0) ('VWPFS, '+' schadeafdeling'=0) ('Project manager'=1) ('Sales
manager'=1) ('Projectmanager'=1) ('Accountmanager'=1)
('Vastgoed taxateur'=0) ('Marketing stagair'=0) ('Stagiaire binnen Human '+' Capital Team'=0)
('Projectleider w&s'=1) ('Informatie analist'=0) ('Medewerker'=0)
('Onderzoekassistent'=0) ('Procesbegeleider'=0) ('Operational Coach - Packaging
department'=0)
('Pilot'=1) ('Medewerker bijzonder beheer achterstanden hypotheek'=0) ('Planner'=0)
('Communicatiemedewerker'=0) ('Financieel medewerker'=0) ('Service medewerker'=0)
('Administratief medewerker'=0) ('Servicedeskmedewerker'=0) ('webcare medewerker'=0)
('Secretariaat'=0) ('Afdelingssecretaresse'=0) ('Reserveringsmedewerker'=0) ('Telefoniste'=0)

('Geneeskundestudnet/ topsporter'=0) ('Prof hockeyster'=0) ('Hockeycoach'=0) ('Ambtenaar, '+adviseur milieu en duurzaamheid'=1) ('Officier bij defensie'=1) ('Jurist'=0) ('Jurist '+ 'arbeidsrecht'=0) ('Service medewerker in de zorg'=0) ('Juridische medewerker'=0) ('Student, '+ 'ggd bron en contact medewerker'=0) ('Bron en contactonderzoek medewerkster'=0) ('Politie'=0) ('Administratief'=0) ('Administratief/secretariaatmedewerker'=0) ('Servicemedewerker in de '+ 'zorg'=0) ('HR/officemanager'=1) ('Remedial teacher'=0) ('Ontspanningsmasseur'=0) ('X'=0) ('Bron en contactonderzoek GGD'=0) ('Bron- en contactonderzoeker bij de GGD'=0) ('Student '+ 'assistent'=0) ('Docent'=0) ('Docente LO en Salarisadministrateur'=0) ('Leerkracht '+ 'basisonderwijs'=0) ('Lerares'=0) ('Lerares basisschool'=0) ('Fysiotherapeut en chiropractor '+ 'voor paarden '=1) ('Coach'=0) ('Paardenarts'=1) ('Fysiotherapeut'=0) ('Verpleegkundige'=0) ('Bemonsteraar bij de GGD'=0) ('Endoscopieverpleegkundige'=0) ('arts'=0) ('Verloskundige'=0) ('Hulpverlener'=0) ('Research associate'=0) ('Trainee consultant'=0) ('psycholoog'=0) ('Consultant/recruiter'=0) ('Accountmanager'=1) ('Stagiair in de ggz'=0) ('Commercieel directeur '+ 'levensmiddelen bedrijf'=1) ('salesmanager'=1) ('communicatiemedewerker'=0) ('Research '+ 'Associate'=0) ('restaurantmedewerker'=0) ('Verkoopmedewerkster'=0) ('directeur'=1) ('paardentrainer, digitale marketing'=0) ('Marketing stagiair'=0) ('Office manager'=1) ('Paraveterinair en ondernemer'=1) ('Hoefsmid'=1) ('Zelfstandige in paardenhouderij'=1) ('Snackbar medewerker'=0) ('-99'=0) ('Student'=2) ('Ambtenaar bij ministerie van EZK'=1) ('Medisch specialist'=0) ('projectontwikkelaar'=0) ('sales coordinator in de it'=0) ('Stagair in '+ 'de ggz'=0) ('IT specialis'=0) ('Risk Manager'=1) ('Consultant/recruiter '=0) ('mode '+ 'stagair'=0) ('developer'=0) ('Salesmanager'=1) ('Onderzoeksassistent'=0) ('budgetcoach '+ 'maatschappelijke doelgroep'=0) ('Freelance hippisch journalist en contentschrijver, Eigenaar '+ 'webshop in homeopatische verzorgingsproducten/supplementen voor paarden en andere dieren'=1) ('Online marketer'=0) ('Geneeskundestudent / topsporter'=0) ('Juridisch medewerker'=0) ('Sales '+ 'Assistant'=0) ('PA/ office manager '=1) ('Paraveterinair en ondernemer.'=1) ('HR/officemanager'=1) ('Solution- / System engineer (IT)'=0) ('Administratief/secretariaatmedewerker'=0) ('CRM marketeer'=0) INTO EmploymentLevel. VARIABLE LABELS EmploymentLevel 'EmploymentLevel'. VALUE LABELS EmploymentLevel 0 'No managing function' 1 'Managing function'.

frequencies employmentlevel.

***Filter participants with occupations; student.**

FILTER OFF.

USE ALL.

SELECT IF (EmploymentLevel < 2).

EXECUTE.

***Frequencies, descriptives and total scores – demographic data.**

FREQUENCIES VARIABLES=Q3 Q4 Q5 ParttimevsFulltime EmploymentLevel

/STATISTICS=RANGE SEMEAN MEAN

/ORDER=ANALYSIS.

***Reliability analyses.**

RELIABILITY

```
/VARIABLES=Q8_1 Q8_4 Q8_7 Q8_9 Q8_14  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q8_3 Q8_6 Q8_10 Q8_12 Q8_17  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q8_5 Q8_13 Q8_16 Q8_19 Q8_20  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q8_2 Q8_8 Q8_11 Q8_15 Q8_18 Q8_21  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q8_1 Q8_3 Q8_4 Q8_5 Q8_6 Q8_7 Q8_9 Q8_10 Q8_12 Q8_13 Q8_14  
Q8_16 Q8_17 Q8_19 Q8_20  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q9_1 Q9_2 Q9_3 Q9_4 Q9_5 Q9_6  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q10_1 Q10_2 Q10_3 Q10_4 Q10_5 Q10_6 Q10_7 Q10_8  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q10_9 Q10_10 Q10_11 Q10_12 Q10_13  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q10_14 Q10_15 Q10_16 Q10_17 Q10_18  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q10_19 Q10_20 Q10_21 Q10_22 Q10_23  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q11_1 Q11_2 Q11_3 Q11_4 Q11_5 Q11_6 Q11_7 Q11_8 Q11_9  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q12_1 Q12_2 Q12_3 Q12_4 Q12_5 Q12_6  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

RELIABILITY

```
/VARIABLES=Q10_1 Q10_2 Q10_3 Q10_4 Q10_5 Q10_6 Q10_7 Q10_8 Q10_9 Q10_10  
Q10_11 Q10_12 Q10_13  
Q10_14 Q10_15 Q10_16 Q10_17 Q10_18 Q10_19 Q10_20 Q10_21 Q10_22 Q10_23  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=MEANS.
```

***Compute variables and value labels of the different job crafting dimensions, burn-out scales, work engagement and sustainable employability.**

```
COMPUTE StrJResources=(Q8_1 + Q8_4 + Q8_7 + Q8_9 + Q8_14) / 5.
```

```
EXECUTE.
```

```
VALUE LABELS StrJResources
```

- 1 'Nooit'
- 2 'Soms'
- 3 'Regelmatig'
- 4 'Vaak'
- 5 'Heel vaak'.

```
COMPUTE SocJResources=(Q8_3 + Q8_6 + Q8_10 + Q8_12 + Q8_17) / 5.
```

```
EXECUTE.
```

```
VALUE LABELS SocJResources
```

- 1 'Nooit'
- 2 'Soms'
- 3 'Regelmatig'
- 4 'Vaak'

5 'Heel vaak'.

COMPUTE ChallengingJD Demands=(Q8_5 + Q8_13 + Q8_16 + Q8_19 + Q8_20)/5.

EXECUTE.

VALUE LABELS ChallengingJD Demands

1 'Nooit'

2 'Soms'

3 'Regelmatig'

4 'Vaak'

5 'Heel vaak'.

COMPUTE HinderingJD Demands=(Q8_2 + Q8_8 + Q8_11 + Q8_15 + Q8_18 + Q8_21) / 6.

EXECUTE.

VALUE LABELS HinderingJD Demands

1 'Nooit'

2 'Soms'

3 'Regelmatig'

4 'Vaak'

5 'Heel vaak'.

COMPUTE Workengagement=(Q11_1 + Q11_2 + Q11_3 + Q11_4 + Q11_5 + Q11_6 + Q11_7 + Q11_8 + Q11_9) / 9.

EXECUTE.

VALUE LABELS Workengagement

1 'Nooit'

2 'Een paar keer per jaar of minder'

3 'Eens per maand of minder'

4 'Een paar keer per maand'

5 'Eens per week'

6 'Een paar keer per week'

7 'Dagelijks'.

COMPUTE ExhaustionBO=(Q10_1 + Q10_2 + Q10_3 + Q10_4 + Q10_5 + Q10_6 + Q10_7 + Q10_8) / 8.

EXECUTE.

VALUE LABELS ExhaustionBO

1 'Nooit'

2 'Zelden'

3 'Soms'

4 'Vaak'

5 'Altijd'.

COMPUTE MentalDistanceBO=(Q10_9 + Q10_10 + Q10_11 + Q10_12 + Q10_13) / 5.

EXECUTE.

VALUE LABELS MentalDistanceBO

1 'Nooit'

2 'Zelden'

3 'Soms'

4 'Vaak'

5 'Altijd'.

COMPUTE CognImpairmentBO=(Q10_14 + Q10_15 + Q10_16 + Q10_17 + Q10_18) / 5.
EXECUTE.

VALUE LABELS CognImpairmentBO

- 1 'Nooit'
- 2 'Zelden'
- 3 'Soms'
- 4 'Vaak'
- 5 'Altijd'.

COMPUTE EmoImpairmentBO=(Q10_19 + Q10_20 + Q10_21 + Q10_22 + Q10_23) / 5.
EXECUTE.

VALUE LABELS EmoImpairmentBO

- 1 'Nooit'
- 2 'Zelden'
- 3 'Soms'
- 4 'Vaak'
- 5 'Altijd'.

COMPUTE SustainableEmployability=(Q12_1 + Q12_2 + Q12_3 + Q12_4 + Q12_5 + Q12_6) / 6.

EXECUTE.

VALUE LABELS SustainableEmployability

- 1 'Zeker niet'
- 2 'Waarschijnlijk niet'
- 3 'Misschien'
- 4 'Waarschijnlijk wel'
- 5 'Zeker wel'.

COMPUTE CognitiveJCrafting=(Q9_1 + Q9_2 + Q9_3 + Q9_4 + Q9_5 + Q9_6) / 6.
EXECUTE.

VALUE LABELS CognitiveJCrafting

- 1 '1 = bijna nooit'
- 2 '2'
- 3 '3'
- 4 '4'
- 5 '5'
- 6 '6 = heel vaak'.

COMPUTE Burnout=(Q10_1 + Q10_2 + Q10_3 + Q10_4 + Q10_5 + Q10_6 + Q10_7 + Q10_8 + Q10_9 + Q10_10 + Q10_11 + Q10_12 + Q10_13 + Q10_14 + Q10_15 + Q10_16 + Q10_17 + Q10_18 + Q10_19 + Q10_20 + Q10_21 + Q10_22 + Q10_23) / 23.

EXECUTE.

VALUE LABELS Burnout

- 1 'Nooit'
- 2 'Zelden'
- 3 'Soms'
- 4 'Vaak'
- 5 'Altijd'.


```

COMPUTE SeekingResCha=(Q8_1 + Q8_3 + Q8_4 + Q8_5 + Q8_6 + Q8_7 + Q8_9 +
Q8_10 + Q8_12 + Q8_13 + Q8_14 + Q8_16 + Q8_17 + Q8_19 + Q8_20) /15.
VARIABLE LABELS SeekingResCha 'SeekingResCha'.
EXECUTE.
VALUE LABELS SeekingResCha
1 'Nooit'
2 'Soms'
3 'Regelmatig'
4 'Vaak'
5 'Heel vaak'.

```

***Pearson correlation analysis.**

```

CORRELATIONS
/VARIABLES=StrJResources SocJResources ChallengingJD Demands CognitiveJCrafting
Burnout Workengagement SustainableEmployability HinderingJD Demands Q3 Q4
ParttimevsFulltime EmploymentLevel SeekingResCha Q5
/PRINT=TWOTAIL NOSIG
/STATISTICS DESCRIPTIVES
/MISSING=PAIRWISE.

```

***Range of variables used in correlation analysis.**

```

DESCRIPTIVES VARIABLES=StrJResources SocJResources ChallengingJD Demands
CognitiveJCrafting Burnout Workengagement SustainableEmployability HinderingJD Demands
Q3 Q4 ParttimevsFulltime EmploymentLevel
SeekingResCha Q5
/STATISTICS=MEAN STDDEV RANGE MIN MAX.

```

***Examine outliers for regression analyses.**

```

EXAMINE VARIABLES=Workengagement
/PLOT BOXPLOT STEMLEAF
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

```

```

EXAMINE VARIABLES=Burnout
/PLOT BOXPLOT STEMLEAF HISTOGRAM
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

```

```

EXAMINE VARIABLES=SustainableEmployability
/PLOT BOXPLOT STEMLEAF
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES

```

```
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.
```

***Regression analyses for dependent variables.**

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Burnout
/METHOD=ENTER Q4
/METHOD=ENTER Q4 SeekingResCha HinderingJD Demands CognitiveJCrafting
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Workengagement
/METHOD=ENTER Q4
/METHOD=ENTER Q4 StrJResources SocJResources ChallengingJD Demands
HinderingJD Demands CognitiveJCrafting
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Workengagement
/METHOD=ENTER Q4
/METHOD=ENTER Q4 SeekingResCha HinderingJD Demands CognitiveJCrafting
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Burnout
/METHOD=ENTER Q4
```

```
/METHOD=ENTER Q4 StrJResources SocJResources ChallengingJDemands  
HinderingJDemands CognitiveJCrafting  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT SustainableEmployability  
/METHOD=ENTER Q4  
/METHOD=ENTER Q4 StrJResources SocJResources ChallengingJDemands  
HinderingJDemands CognitiveJCrafting  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

***Final regression presented in thesis.**

REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT SustainableEmployability  
/METHOD=ENTER Q4  
/METHOD=ENTER Q4 SeekingResCha HinderingJDemands CognitiveJCrafting  
/method enter burnout workengagement  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

***Short variables for Process.**

```
compute SE = SustainableEmployability.  
compute WE = Workengagement.  
compute SRC = SeekingResCha.  
compute cogjc = CognitiveJCrafting.  
compute hindjc = HinderingJDemands.
```

***Mediation analyses hayes.**

*** Before running the mediation analyses the Process syntax should run in SPSS.**

```
Process vars = SE SRC WE burnout cogjc hindjc Q4  
/y = SE /x = SRC /m = WE BurnOut /model = 4.
```

```
Process vars = SE SRC WE burnout cogjc hindjc Q4  
/y = SE /x = cogJC /m = WE BurnOut /model = 4.
```

```
Process vars = SE SRC WE burnout cogjc hindjc Q4  
/y = SE /x = hindJC /m = WE BurnOut /model = 4.
```

Appendix D Tables and figures

Table 3

Mediation analyses between job crafting and sustainable employability, via burn-out and work engagement (H3b, H3c)

Antecedents	<i>Burn-out</i>			<i>Work engagement</i>		
	<i>b</i>	<i>SD</i>	<i>95% [LLCI, ULCI]</i>	<i>b</i>	<i>SD</i>	<i>95% [LLCI, ULCI]</i>
1. Seeking resources/challenges <i>(incr. structural resources, social resources & challenging demands)</i>	-.01	.03	[-.08, .06]	.02	.03	[-.04, .07]
2. Cognitive job crafting	.01	.02	[-.03, .06]	.01	.02	[-.03, .06]
3. Decr. hindering job demands	-.16*	.05	[-.26, -.08]	-.01	.02	[-.05, .02]

Note. Control variables = age. Independent variables = dimensions job crafting. Incr = increasing, Decr = decreasing. Results are presented in unstandardized beta's (*b*). CI = confidence interval, LL = lower limit, UL = upper limit. ** $p < .01$; * $p < .05$.