The added value of cognitive job crafting

A quantitative study examining the association between (cognitive) job crafting and job performance, via authenticity

Master thesis

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Summary

This cross-sectional study examined the relation between cognitive job crafting with job performance, over and above the contribution of behavioural job crafting. Additionally, the mediating effect of authenticity between job crafting and job performance was examined. Data were collected among 361 participants via the database of the consultancy organisation Derks & Derks. Linear regressions using bootstrapping (5000 samples) showed direct associations between organisation focused cognitive job crafting and both contextual and task job performance, over and above the contribution of behavioural job crafting. Mediating effects were found with the PROCESS Macro from Hayes (2013) using bootstrapping (5000 samples) for organisation focused cognitive job crafting on task performance, via authenticity. As for behaviour job crafting, significant mediating effects were found for authenticity between three subscales of behavioural job crafting - structural job recourses, hindering job demands and challenging job demands - and task performance. Subsequently, authenticity also significantly mediated the effect between hindering job demands and contextual performance. This study is among the first to examine the relationship between cognitive job crafting and job performance via authenticity. Lastly, the theoretical and practical implications are discussed.

Keywords: cognitive job crafting; behavioural job crafting; authenticity; job performance.

Introduction

An increasing number of organisations consider well-being and motivation of employees as important organizational goals. Job redesign approaches have been influential in this shift (Demerouti & Bakker, 2014). Over the years, however, research found there is no such thing as 'one best way' jobs to achieve these goals. Instead, bottom-up approaches are found to be more effective, these approaches acknowledge active employees who autonomously change or customize their own jobs (Bipp & Demerouti, 2015; Demerouti & Bakker, 2014). A popular bottom-up approach that is suggested in the current literature is job crafting (Demerouti & Bakker, 2014). Job crafting is defined by Wrzesniewski and Dutton as shaping the task boundaries of a job, either physically or cognitively, and/ or shaping the relational boundaries (Wrzesniewski & Dutton, 2001).

A job can thus be crafted in three different ways: *behavioural (task) crafting* changes the physical or temporal tasks around the job, like adding or dropping tasks. *Relational crafting* changes the relational boundaries and interpersonal interactions incorporated in job performance. This can for example create or sustain relationships with others at work. *Cognitive crafting* adjusts the cognitive boundaries of an employee's job, as it ascribes the meaning or purpose to the tasks and relationships of their jobs. This comprises how employees perceive and interpret their tasks, relationships, or jobs as a whole (Wrzesniewski, LoBuglio, Dutton & Berg, 2013). By pro-actively altering any of these dimensions' employees alter their job design and their social work environment within the boundaries of the specific job tasks. This creates a better fit between the employees and their jobs (Tims, Bakker & Derks, 2012; Tims et al., 2012; Wrzesniewski & Dutton, 2001). Current research to job crafting has mainly been conducted with the job crafting scale designed by Tims et al. (2012). This scale focuses on behavioural job crafting, ignoring the dimension of cognitive job crafting while the assessment is of this dimension is of equal importance. Employees perceive their work differently as a result of cognitive job crafting, and therefore change the meaning of their work (Wrzesniewski & Dutton, 2001). If people perceive their work as more meaningful to themselves or to society, it may lead to a better work identity. Work identity consists of the attributes and more holistic conceptions that people have of themselves at work, which is also of great importance for their social identity. A better sense of work identity, social identity and meaning of work leads to important positive outcomes like well-being and performance (Van den Bosch & Taris, 2014b, Wrzesniewski & Dutton, 2001).

If both cognitive and behavioural job crafting are examined, the full range of antecedents and consequences of job crafting can be clarified. Furthermore, additional studies examining the extent to which dimensions of job crafting vary in their association with different outcomes can be conducted (Slemp & Vella-Brodrick, 2013). This study, therefore, makes a clear distinction between cognitive and behavioural job crafting. Research to the outcomes of job crafting are still at their infancy, however several positive effects for both employees and organisations were found (Bakker & Demerouti, 2007). One important outcome that was found is between behavioural job crafting and job performance (Demerouti & Bakker, 2014; Petrou, Demerouti & Schaufeli, 2015; Tims, Bakker & Derks, 2015; Wrzesniewski & Dutton, 2001). This study will therefore examine the association between cognitive job crafting and job performance, to obtain more clarity about the positive effects of cognitive job crafting. Moreover, with this knowledge people might improve their job performance using cognitive job crafting.

In addition to the latter, this study examines the association between job crafting and authenticity. When employees craft their job, they match their jobs with their own preferences and values. This match between themselves and their job (person-job fit), might lead to an increased feeling of authenticity (Wrezniewski & Dutton, 2001; Van den Bosch & Taris, 2014a). Several studies also found a positive association between authenticity and job performance (Van den Bosch & Taris, 2014a; Van den Bosch et al., 2018). Thus, when employees craft their job in accordance with their own preferences and values, it might increase their authenticity, which in turn increases job performance. Therefore, this study also examines the mediating effects between job crafting and job performance. When more knowledge is obtained about this, employees are able to use job crafting to feel more authentic within their job and increase their job performance accordingly.

Job crafting

The two constructs examined within this study are cognitive job crafting and behavioural job crafting. As stated above, cognitive job crafting adjusts the cognitive boundaries of employees within their jobs (Wrzesniewski & Dutton, 2001). The effectiveness can be explained by the power of mind-set, as employees reframe how they perceive their jobs to increase the value and significance of their work. This makes their job more meaningful and simultaneously creates a better person-job fit (Wrzesniewski, LoBuglio, Dutton & Berg, 2013).

One way to cognitively craft a job is to *expand the employee's perceptions*. By changing their perceptions of the impact or purpose of their overall job, and keeping this holistic purpose in mind, employees are more motivated and perceive their job as more meaningful. Another way is that employees *focus their perceptions* on parts of the job that are valuable to them. By narrowing their mental scope to the meaningful parts of their job, the job becomes more significant and bearable. Lastly, by *linking perceptions*. Employees draw mental connections between specific job tasks, relations, job outcomes and meaningful aspects of their identity. These mental connections increase the meaningfulness of the job too (Wrzesniewski, LoBuglio, Dutton & Berg, 2013).

Behavioural job crafting is the opposite of cognitive job crafting and focuses on the physical or temporal tasks around the job instead. It is mainly examined with the behavioural job crafting scale of Tim et al. (2012; Wrzesniewski & Dutton, 2001). They state that job crafting increases the person-job fit of employees, because people craft their job characteristics. This generates a better balance between their job demands and job resources. Job demands are aspects of the job that are associated with psychological or physiological costs. Where job resources may reduce job demands and stimulate personal development (Demerouti & Bakker, 2014; Bipp & Demerouti, 2015). Hence, Tims et al. define (behavioural) job crafting as: "the changes that employees may make to balance their job demands and job resources with their personal abilities and needs" (Tims et al., 2012, p. 174). In their study they found four dimensions of behavioural job crafting. The first dimension is *increasing social job resources*, this refers to the job resources: social support, supervisory, coaching and feedback. They influence the social aspects of the job to stimulate personal growth and development. The second dimension *increasing structural job resources* refers to the resources: variety, opportunity for development, and autonomy. This impacts the job design because it generates more responsibility and knowledge about the job. The third dimension is *challenging demands*, this suggests changes in job demands to realize stimulation (Bipp & Demerouti, 2015; Tims et al., 2012). The last dimension is *reducing hindering job demands* which consist of the reduction of hindering demands, like minimizing emotionally, mentally or physically demanding aspects of the job or reducing one's workload (Demerouti & Bakker, 2014; Bipp & Demerouti, 2015; Tims et al., 2012).

Job Crafting and Job Performance

Several studies have found an association between behavioural job crafting and job performance (Demerouti & Bakker, 2014; Petrou, Demerouti & Schaufeli, 2015; Tims, Bakker & Derks, 2015). When employees craft their job, they adjust their job demands and resources in order to match with their own abilities and needs. This results in a better person-job fit, and this is positively associated with job performance (Tims et al., 2016). Job performance can be distinguished in task and contextual performance. Task performance is defined as the direct tasks that are described in the function description. Contextual performance is not directly related to tasks, as it forms the social, organizational and psychological context for task activities and procedures (Goodman and Svyantek, 1999).

Since cognitive job crafting also affects work motivation and the person-job fit, it can be expected that this dimension of job crafting is also associated with job performance (Wrzesniewski & Dutton, 2001). The meaning of a job increases when employees cognitively craft their job. This forms a positive self-image, because they appreciate the broader effects of their work more and they recognise the value of the job in their lives (Slemp & Vella-Brodrick, 2013). A positive self-image is important for self-enhancement, a fundament for social and work identity (Wrzesniewski & Dutton, 2001). Moreover, when employees perceive their jobs as something that serves an important purpose, it also increases their work identity (Demerouti & Bakker, 2014; Wrzesniewski & Dutton, 2001). The social identity theory states when people identify themselves with a group, they tend to internalize its interests. So, when people experience work identity or social identity at their jobs, they are motivated to internalize these interests. At work, these interests are among other things the organisational goals (Van Knippenberg, 2000). Hence, it can be expected that cognitive job crafting leads to more motivation to internalize the organizational interests, which leads to better job performance.

H1a: Cognitive job crafting is positively associated with job performance

Moreover, since behavioural and cognitive job crafting lead to different motives to increase job performance, and change different aspects of the job. It is expected that cognitive job crafting has an association with job performance, over and above the contribution of behavioural job crafting.

H1b: Cognitive job crafting is positively associated with job performance, over and above the contribution of behavioural job crafting.

Mediating Effect of Authenticity

When employees craft their job, they create a better person-job fit, increase the meaningfulness of the job and are more able to create a social and work identity. The congruence that arises between the employees and their work (environment) is called work authenticity (Van den Bosch & Taris, 2014a). Authenticity has a long history of definitions in a variety of perspectives, among other things the discussions whether authenticity is a state or a trade. This study uses the approach of Van den Bosch and Taris (2014b), they say that authenticity is a state, because authenticity at work is a subjectively experienced phenomenon that can vary over time from being fully authentic to fully inauthentic. They define authenticity as: "The degree of which a person acts in agreement with one's true self" (Van den Bosch & Taris, 2014a, p. 1 - 2).

Current research states authenticity as a person-centred concept, in which authenticity is a tripartite construct. The first level is the experience of one's actual physiological states, emotions and deep level cognitions. The second level is their symbolized awareness, which is one's conscious awareness of physiological states, emotions and cognitions. The third level is a person's outward behaviour and communication, thus one's behaviour and emotional expression (Van den Bosch & Taris, 2014a; Wood et al., 2008). Whether employees feel authentic at work, is the result of congruence between these three levels. When (mis)matches occur, and an incongruence appears, people feel less authentic. The (mis)matches originate from three different aspects of authenticity.

The first authenticity aspect transpires from the (mis)match between the conscious awareness and the actual experience of the employee (Van den Bosch & Taris, 2014a; Wood et al., 2008). This level is called *self-alienation* which is defined as: "The subjective experience of not knowing who one is" (Van den Bosch & Taris, 2014a, p. 3). The second aspect transpires from the (mis)match between symbolized awareness and outward behaviour and communication. This level is called *authentic living* and is defined as: "the degree to which individuals are true to themselves in most situations and live in accordance with their own values and beliefs" (Van den Bosch & Taris, 2014a, p. 3). Lastly, the third aspect of authenticity is to which extent an individual accepts external influence and the belief to conform to the expectations of others (Van den Bosch & Taris, 2014a; Wood et al., 2008).

Thus, if employees craft their job and increase the congruence between themselves and these authenticity levels, a better person-job fit is created and the employees experience a higher level of authenticity (Van den Bosch & Taris, 2014a; Van den Bosch et al., 2018). Hence, it is expected that job crafting is positively associated with authenticity.

H2a: Job crafting has a positive association with authenticity.

In addition to the latter, an association between authenticity and job performance is expected. Job performance is partly based on the introspection of the employees, therefore an evaluation of their own perceptions. Thus, when a job matches their own authentic self, it is expected to lead to an increased perception of their job performance (Van den Bosch & Taris, 2014a; Van den Bosch & Taris, 2014b). Moreover, when employees experience high levels of authenticity they will more often engage in work activities because they enjoy these activities and are intrinsically motivated, therefore job performance might increase as well (Van den Bosch & Taris, 2018). Hence, it is expected that authenticity has a positive association with job performance.

H2b: Authenticity has a positive association with job performance.

Summarizing, both cognitive and behavioural job crafting are expected to influence the person-job fit, which contributes to the level of authenticity (Van den Bosch & Taris, 2014b; Van den Bosch et al., 2018). Moreover, if employees experience a higher level of authenticity, they are expected to have a better job performance (Metin et al., 2016; Van den Bosch & Taris, 2014a; Van den Bosch & Taris, 2014b). Hence, it is expected that authenticity has a mediating effect on the association between overall job crafting and job performance.

H3: Authenticity mediates the association between cognitive and behavioural job crafting and job performance.

Figure 1.0 Research model. Indirect effect (ab), Total effect (c).

Indirect effect (ab)
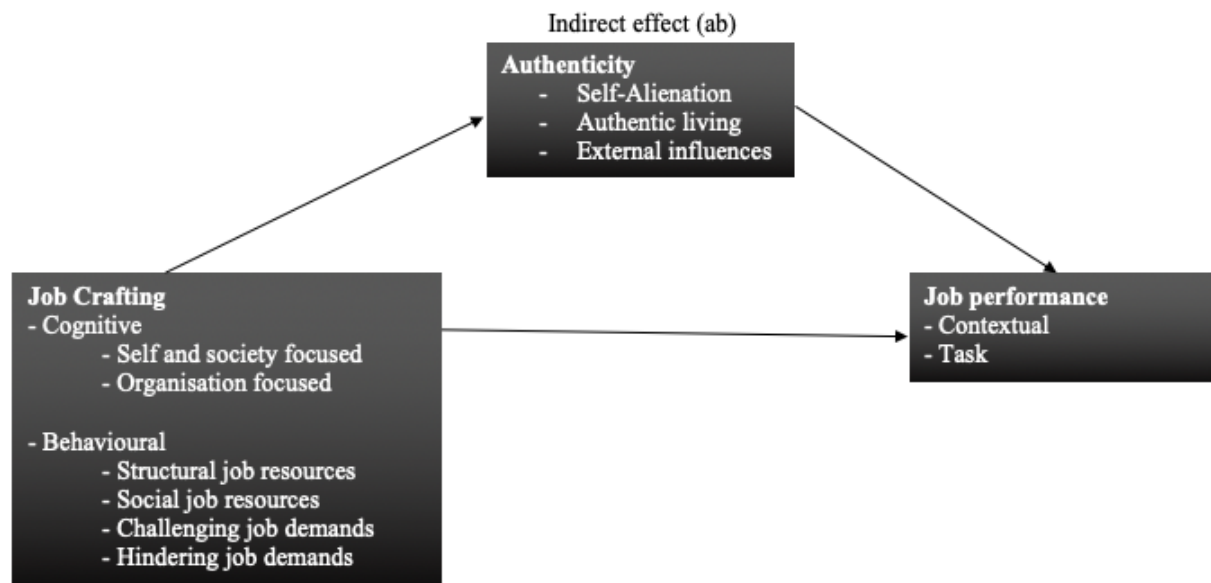
Method

Procedure

To examine the hypothesis a questionnaire was created on the online platform Qualtrics (Appendix 2.0 Questionnaire). This questionnaire consisted of 61 questions and was distributed in cooperation with the consultancy organization Derks & Derks on the 28th of March 2019. They distributed the questionnaire within their database by email, their newsletter and LinkedIn. The data were additionally collected using convenient sampling through social media accounts of the researchers. If people decided to participate, they firstly had to confirm the informed consent after reading the introduction (Appendix 1.0 Informed Consent). Secondly, they entered a unique anonymized code for future research. Lastly, they answered the questions. The requirements to be included in the research were that the participant confirmed the informed consent, they (had) worked and that all the questions were answered. At the 22nd of April the online questionnaire was closed.

Participants

361 participants opened and started the questionnaire, a total of 107 participants were excluded due to incomplete questionnaires. 117 men (46,7 %) and 137 women (53,9%) participated, the average age of the 254 participants was 44.17 years ($SD= 12.28$). 230

participants (90.6%) were highly educated. Furthermore, 34 participants were self-employed and the 216 participants working under a contract had an average of 34,48 contract hours (SD= 7,42). [1] Overall 202 (79.5%) participants had 10 years or more work experience. Lastly, 163 (64.2%) participants were reached by Derks and Derks, 32 participants (12.6%) were reached personally by the researchers and the other 59 (23.2%) participants by social media or different.

Table 1.

Descriptives of *Education, Year of work experience, Function group* and *Branch* (N=254).

Category	Subcategories	% of the participants
Education	MAVO, LBO, VMBO[2]	0.8
	HAVO, MBO[3]	7.5
	VWO[4]	1.2
	Applied sciences	39.4
	University	51.2
Years of work experience	0 - 2	4.7
	2 - 5	7.5
	5 - 10	8.3
	>10	79.5
Function group	Regulatory affairs	10.2
	Sales/ marketing	14.2
	Medical expert	2.8
	IT	2.4
	HRM	11.8
	Purchase	2.0
	Finance	1.2
	Administrative	3.1
	Planning/ Logistic	3.1

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[1] Four values of contract hours were >300 hours, they are therefore plausibly filled in incorrectly. and coded as 'missing value'.

[2] MAVO: General secondary education; LBO: Lower vocational education; VMBO: Preparatory secondary vocational education.

[3] HAVO: Higher general secondary education; MBO: Secondary vocational education

[4] VWO: Pre-university education

	R&D	3.9
	QC/ Laboratory	1.6
	Management/ board	19.3
	Different	23.6
	Non-applicable	0.8
Branch	Food industries	4.7
	Biotechnology industries	29.9
	Healthcare	52.4
	Medical devices	4.3
	Different	41.3
	Non-applicable	2.0

Measures

      Cognitive job crafting. In this research a combined scale of 12 items from validated questionnaires of IJbema & Brenninkmeijer (2018) and Slemp & Vella-Brodrick (2013) were used (e.g. "Think about how your job gives your life purpose"). All items were measured on a 5-point Likert scale from "Never" (1) to "Very often" (5). To construct and validate the questionnaire, a factor analysis rotated with Oblimin with Kaiser Normalisation was conducted. The factor analysis was expected to load on one factor. The overall questionnaire, however, loaded on three different factors. Item 11 and 12 plausibly loaded on the third factor because they were formulated in the past tense, as the other variables were formulated in present tense. Therefore, these two items were deleted.

      After deleting these two items, the scale distinguished two newly discovered variables. Items 6 and 9 loaded high on both factors and were therefore deleted, leaving a questionnaire of eight items explaining 63.4% of the variance. Four items measured '*Organisation focussed cognitive job crafting'* (α=.79, e.g. "I am aware of the meaning of my work") and four items measured '*Self and society focussed cognitive job crafting' (α=.73,* e.g. "I think about the way my work positively affected my life") (See appendix 3.0 Factor analysis cognitive job crafting).

      Behavioural job crafting. The dimension behavioural job crafting was examined with the job crafting scale of Tims et al. (2012). This scale consisted of 21 questions measuring four aspects of the JD-R model. 5 items measured *structural job resources* (α=.72, e.g. "I try to develop my capabilities"), 6 items measured *decreasing hindering job demands* (α=.75, e.g.

"I make sure that my work is mentally less intense"), 5 items measured *increasing social job resources* (α=.77, e.g. "I ask my supervisor to coach me"), 5 items measured *increasing challenging job demands* (α=.73, e.g. "When an interesting project comes along, I offer myself proactively as project co-worker"). These items were measured on a 5-point Likert scale from 'never' (1) to 'very often' (5).

Authenticity. The Individual Authenticity Measure (I.A.M.) questionnaire from Van den Bosch and Taris (2014a) was used to measure authenticity. In total 12 questions were included, 4 items measured *Authentic living* (α=.64, e.g. "I am true to myself at work in most situations"). To increase the reliability of this subscale item 4 of 'authentic living' was deleted, resulting in a higher alpha (α=.73). 4 items measured *Self-alienation* (α=.89, e.g. "At work, I feel alienated"), and 4 items were used to measure *Accepting external influences* (α=.72, e.g. "At work, I feel the need to do what other expect me to do"). All items were measured on a 5-point Likert scale from 'never' (1) to 'very often' (5). It was decided to make an overall authenticity variable containing all the items of the subscales, this variable was thus measured by 11 items and had an alpha of (α=.82). Lastly, a factor analysis was conducted to measure the explained variance after deleting item 4. The explained variance increased from 63.3% to 66.8%, and the factor analysis represented the items loading on three factors corresponding with their subscales (See appendix 4.0 Factor analysis authenticity).

Job performance. Job performance was examined with the questionnaire of Goodman and Svyantek (1999). Their original questionnaire consisted of 25 questions. This study, however, excluded the questions of consciousness. Resulting in 16 questions in which both task and contextual performance were examined. *Task performance* was measured with 9 items (α=.84, e.g. "Achieves the objectives of the job"), *Contextual performance* is measured with 7 items (α=.74, e.g. "You volunteer to do things not formally required by your job"). They were both examined on a 4-point Likert-scale from 'completely disagree' (1) to 'completely agree' (4).

Analyses

This research used SPSS statistics version 24.0 to conduct the analyses. Linear regressions were used to control for the assumptions regarding outliers, normality, homoscedasticity, multicollinearity, and linearity, all the assumptions were met. The total effects were examined with linear regressions, the indirect (mediating) effects were computed using the PROCESS macro by Hayes (2013). To increase statistical power and to compensate for the shortcomings

of the normality assumption, the indirect and total effects were all examined using bootstrapping (5000 samples) (Field, 2013; Hayes, 2013). See Figure 1.0 for the Research model.

Results

Descriptives

Table 2 shows that the mean of self and society focused and organisation focused cognitive job crafting both were higher in comparison to challenging and hindering job demands and social job resources. Suggesting that employees tend to craft their job more cognitively than behaviourally, except for the variable of behavioural job crafting 'structural job resources'.

Table 2 also shows the correlations between the variables. Most correlations were not worthy of appointment. Self and society focused cognitive job crafting, however, had a low non-significant correlation with task and contextual job performance and authenticity, which is contrary to the expectations. Moreover, crafting social job resources had a non-significant correlation with authenticity, which is also not in line with the expectations.

Table 2. Descriptives study variables: Range, Mean, SD and correlations of the study variables (N=254).

	Range	*M*	SD	1	2	3	4	5	6	7	8	9
1.Structural Job resources JC	1 - 5	3.81	0.60	-	-.14*	.46**	.52**	.33**	.50**	.31**	.29**	.25**
2.Hindering Job Demands JC	1 - 5	2.03	0.59		-	.13*	-.06	.13*	-.04	-.24**	-.11	-16*
3.Social Job Resources JC	1 - 5	2.78	0.71			-	.42**	.36**	.35**	.03	.18**	.24**
4.Challenging Job Demands JC	1 - 5	3.27	0.71				-	.24**	.48**	.19**	.39**	.43**
5.Self and society-focused cognitive JC	1 - 5	3.39	0.80					-	.48**	-.04	.07	.06
6.Organisation focused JC	1 - 5	3.55	0.75						-	.29**	.34**	.41**
7.Authenticity	1 - 5	3.73	0.61							-	24**	.17**
8.Task performance	1 - 4	3.21	0.42								-	.55**
9.Contextual performance	1 - 4	3.20	0.38									-

*Note: * p<.05, **p<.01*

job crafting and job performance

To examine the Hypothesis *H1a: 'Cognitive job crafting is positively associated with job performance',* and Hypothesis *H1b: 'Cognitive job crafting is positively associated with job performance, over and above the contribution of behavioural job crafting'* hierarchical multiple regressions with bootstrapping (5000 samples) were conducted.

Task performance. The first model consisted of the two subscales of cognitive job crafting, for this model a significant equation was found on task performance ($F(2,251)=18.42$, $p<.001$) with $R^2= .13$. A significant positive association was found between organisation focused cognitive job crafting and task performance ($b=0.22$, $p<.001$). No significant association was found for self and society focused cognitive job crafting and task performance ($b=-0.06$, $p=.076$) (see Table 3).

The second model, consisting of the two subscales of cognitive job crafting and the four subscales of behavioural job crafting also had a significant equation on task performance ($F(6,247)=10.39$, $p<.001$) with $R^2=.20$. Significant associations with task performance were found for organisation focused cognitive job crafting ($b=0.13$, $p<.01$) and behavioural job crafting challenging job demands ($b=0.15$, $p<.01$). No significant associations were found for self and society focused cognitive job crafting ($b=-0.07$, $p=.059$), nor for behavioural job crafting structural job resources ($b=0.04$, $p=.352$), social job resources ($b=0.01$, $p=.845$) and hindering job demands ($b=-0.04$, $p=.311$) (See Table 3).

Table 3. Linear hierarchical multiple regression job crafting predicting task performance, with 95% bias corrected and accelerated confidence intervals. Confidence intervals and standard errors based on 5000 bootstrap samples (N=254).

	Model 1				Model 2			
Variable	*B*	*SE B*	*β*	*p*	*B*	*SE B*	*β*	*p*
Self and society focused cognitive JC	-.06	0.04	-.12	.076	-0.07	0.04	-.29	.059
Organisation focused cognitive JC	.22	.03	.24	.000	0.13	0.04	.24	.001
Structural job resources behavioural JC					0.04	0.05	.06	.352
Hindering job demands behavioural JC					-0.04	0.04	-.06	.311
Social job resources behavioural JC					0.01	0.04	.01	.845
Challenging job demands behavioural JC					0.15	0.05	.26	.001
R^2	.13				.20			
F for change in R^2	18.42**				5.69**			

*Note: **p<.001*

Contextual performance. A significant equation was found for the first model, which consisted again of the two subscales of cognitive job crafting on contextual performance ($F_{(2,251)}=29.02$, $p<.001$) with $R^2=.19$. A significant positive association was found for organisation focused cognitive job crafting (b=0.24, p<.001). Unexpectedly, self and society focused had a negative significant association with contextual performance ($b=-0.08$, $p<.05$) (see Table 4). This was contrary to the expectation, because it was found in Table 2 that self and society focused cognitive job crafting had no significant correlation with contextual performance (.06). Since there was no multicollinearity found, a suppressor effect was considered. Self and society focused had a high significant correlation with organisation focused cognitive job crafting (.48**) (See Table 2). After conducting a single linear regression using bootstrap (5000 samples) for both organisations focused cognitive job crafting ($b=0.20$, $R^2=.16$, $P<.001$) and self and society focused cognitive job crafting ($b=0.03$, $R^2=.00$ $p=.380$), it could be seen that that self and society focused cognitive job crafting did not have a positive association with contextual job performance in a bivariate linear regression, however, it did have a negative significant association in the multiple regression. Subsequently, in the multiple regression the associations and explaining variance (R^2) increased for organisation focused cognitive job crafting. Thus, self and society focused cognitive job crafting acts as a suppressor effect in this multiple regression model for organisation focused cognitive job crafting (Ludlow & Klein, 2014).

The second model included the two subscales of cognitive job crafting and the four subscales of behavioural job crafting had a significant equation on contextual performance ($F_{(6,247)}=16.47$, $p<.001$) with $R^2=.29$. A significant association was found for organisation focused cognitive job crafting (b=0.17, $p<.001$), again a negative significant association was found for self and society focused cognitive job crafting ($b=-0.08$, $p<.05$) suggesting a suppressor effect. Significant associations for behavioural job crafting were found for hindering job demands ($b=-0.09$, $p<.05$), and challenging job demands ($b=0.16$, $p<.001$). Another unexpected negative significant association was found for structural job resources ($b=-0.06$, $p<.05$). No significant association was found for social job resources ($b=0.06$, $p=.094$) (see Table 4).

Table 4. Linear hierarchical multiple regression job crafting predicting contextual performance, with 95% bias corrected and accelerated confidence intervals. Confidence intervals and standard errors based on 5000 bootstrap samples.

	Model 1				Model 2			
Variable	*B*	*SE B*	*β*	*p*	*B*	*SE B*	*β*	*p*
Self and society focused cognitive JC	-.08	0.04	-.17	.036	-0.08	0.04	-.18	.030
Organisation focused cognitive JC	0.24	0.03	.49	.000	0.17	0.33	.34	.000
Structural job resources behavioural JC					-0.06	0.04	-.09	.017
Hindering job demands behavioural JC					-0.09	0.04	-.13	.030
Social job resources behavioural JC					0.06	0.04	.12	.094
Challenging job demands behavioural JC					0.16	0.04	.30	.000
R^2	.19				.29			
F for change in R^2	29.01**				8.47**			

*Note: **p<.001*

Authenticity and Job performance

To examine the hypothesis *H2a: 'Authenticity has a positive association with job performance'* the three subscales: self-alienation, authentic living, and external influences were examined on job performance with a multiple regression using bootstrap (5000 samples).

Task performance. The associations that were found for self-alienation (*b*=0.03, *p*=.378), authentic living (*b*=0.09, *p*=.050), and external influences (*b*=0.05, *p*=.129) on task performance were not significant. A positive equation was found for (F(3,250)=5.55, *p*<.01) with R^2=.06 for the three subscales on task performance (see Table 5)

Contextual performance. For contextual job performance, only one significant positive association was found for authentic living, (*b*=0.92, *p*<.05). No significant associations were found for self-alienation (*b*=0.04, *p*=.333), and external influences (*b*=0.00, *p*=.996). A positive equation was found for (F(3,250)=4.22, *p*<.01) with R^2=.05 for the three subscales on contextual performance (see Table 5).

Table 5. Linear multiple regression subscales authenticity predicting job performance, with 95% bias corrected and accelerated confidence intervals. Confidence intervals and standard errors based on 5000 bootstrap samples (N=254).

	Task performance					Contextual performance			
Variable	*B*	*SE B*	*β*	*p*		*B*	*SE B*	*β*	*p*
Authentic living	0.09	0.01	.15	.050		0.92	0.05	.17	.046
Self-alienation	0.03	0.04	.07	.378		0.04	0.33	.08	.333
External influences	0.05	0.03	.10	.129		0.00	0.03	.00	.996

Note: R^2=.06   *Note: R^2=.05*

Since only one of the subscales of authenticity - authentic living - had a significant association with contextual job performance, and no associations were found for task performance. It was decided to only include the 'total authenticity' variable in the sequel of this study. Total authenticity (b=0.16, p<.01) had a significant equation with task performance ($F(1,525)$=15.40, p<.001) with R^2=.06. Also a significant equation was found for total authenticity (b=0.11, p<.05) with contextual performance ($F(1,252)$=9.08, p<.01) with R^2=.04 (see Table 6).

Table 6. Linear multiple regression total authenticity predicting job performance, with 95% bias corrected and accelerated confidence intervals. Confidence intervals and standard errors based on 5000 bootstrap samples (N=254).

	Task performance					Contextual performance			
Variable	*B*	*SE B*	*β*	*p*		*B*	*SE B*	*β*	*p*
Authenticity total	0.16	0.05	.24	.002		0.11	0.05	.19	.013

Note R^2=.06   *Note: R^2=.04*

Job crafting and authenticity

The hypothesis *H2b: 'Job crafting has a positive association with authenticity'* was calculated with hierarchical multiple regressions using bootstrap (5000 samples). The first model

included both subscales of cognitive job crafting and had a significant positive equation on authenticity (F (2, 251)=5.82, p<.001) with a R^2=.35. A significant association was found for organisation focused cognitive job crafting (b=0.32, p<.001). Unexpectedly, a negative association was found for self and society focused cognitive job crafting (b=-0.17, p<.01). (See Table 7). This effect was unexpected, because in Table 2 it could be seen there was no significant correlation between self and society focused cognitive job crafting and authenticity (-.04). After conducting single linear regressions using bootstrapping (5000 samples), it was found that organisation focused job crafting had a significant association with authenticity for (b=0.24, R^2=.08, p<.001), but no significant association was found for self and society focused cognitive job crafting (b=-0.03, R^2=.00, p=.567). Therefore, self and society focused cognitive job crafting acted again as a suppressor, strengthening the predictor organisation focused cognitive job crafting and largely increasing the explaining variance (Ludlow & Klein, 2014).

For the second model the four subscales of behavioural job crafting were added to the model, which led to another significant equation on authenticity (F(6,247)=3.28, p<.001) with R^2=.46 (See Table 7). Significant associations were found for organisation focused cognitive job crafting (b=0.23, p<.001), a negative significant association was found for self and society focused cognitive job crafting (b=-0.15, p<.01), suggesting it was a suppressor effect. Significant associations were found for behavioural job crafting structural job resources (b=0.27, p<.01) and hindering job demands (b=-0.17, p<.05). Moreover, no significant associations were found for social resources (b=-0.08, p=.286) and challenging job demands (b=-0.00, p=.989) (See Table 7).

Table 7. Linear hierarchical multiple regression job crafting predicting authenticity. Confidence intervals and standard errors based on 5000 bootstrap samples (N=254).

Variable	Model 1				Model 2			
	B	*SE B*	*β*	*p*	*B*	*SE B*	*β*	*p*
Self and society focused cognitive JC	-0.17	0.05	-.22	.001	-0.15	0.06	-.20	.007
Organisation focused cognitive JC	0.32	0.06	.39	.000	0.23	.06	.28	.000
Structural job resources behavioural JC					0.27	0.08	.26	.001
Hindering job demands behavioural JC					-0.17	0.06	-.16	.011
Social job resources behavioural JC					-0.08	0.08	-.10	.286

Challenging job demands behavioural JC		-0.00	0.08	-.00	.989
R^2	.35		.46		
F for change in R^2	17.41**		6.53**		

*Note: **p<.001*

Mediating effect job crafting and job performance.

The PROCESS macro from Hayes (2013) calculated the mediation effects using bootstrap (5000 samples). H3 hypothesized that authenticity would mediate the relationship between cognitive job crafting and job performance, and behavioural job crafting and job performance.

   Task performance. For cognitive job crafting the expected mediating effect was found for organisation focused cognitive job crafting (b=0.04, p<.05) (See Table 8). Strikingly, no significant mediating effect was found for self and society focused cognitive job crafting (See Table 8).

   As for behavioural job crafting significant mediating effects of authenticity were found between structural job resources (b=0.05, p<.05); hindering job demands (b=-0.06, p<.05); challenging job demands (b=0.03, p<.05) and task performance. No significant effect was found for social job resources (See Table 8).

Table 8. Mediating and total effect of cognitive and behavioural job crafting on task performance, mediated by total authenticity. Confidence intervals and standard errors based on 5000 bootstrap samples (N=254).

	b	SE	95%CI
Organisation-focused cognitive job crafting			
Total effect (c)	0.19**	0.03	[0.453, 0.341]
Indirect effect (ab)	0.04*	0.03	[0.001, 0.010]
Self and society focused cognitive job crafting			
Total effect (c)	0.03	.0.03	[-0.031, 0.098]
Indirect effect (ab)	-0.01	0.02	[-0.040, 0.029]
Structural job resources behavioural job crafting			
Total effect (c)	0.20**	0.04	[0.482, 0.288]
Indirect effect (ab)	0.05*	0.03	[0.005, 0.107]
Social job resources behavioural job crafting			

Total effect (c)	0.11**	0.04	[0.351, 0.179]
Indirect effect (ab)	0.01	0.02	[-0.023, 0.040]
Hindering job demands behavioural job crafting			
Total effect (c)	-0.08	0.04	[-0.166, 0.012]
Indirect effect (ab)	-0.06*	0.02	[-0.102, -0.017]
Challenging job demands behavioural job crafting			
Total effect (c)	0.23**	0.03	[0.160, 0.294]
Indirect effect (ab)	0.03*	0.02	[0.003, 0.081]

*Note: CI = confidence interval, * p<.05, **p<.01*

Contextual job performance. No significant mediating effect was found for authenticity between cognitive job crafting and contextual performance. Neither for organisation focused cognitive job crafting, nor for self and society focused cognitive job crafting (See Table 9).

As for the mediating effect of authenticity between behavioural job crafting and contextual job performance, the only significant effect that was found was for hindering job demands (b=-0.04, p<.05). Strikingly, no significant mediating effect was found between structural job resources, social job resources and challenging job demands and contextual job performance (See Table 9).

Table 9. Mediating and total effect of cognitive and behavioural job crafting on contextual performance, mediated by total authenticity. Confidence intervals and standard errors based on 5000 bootstrap samples (N=254).

	b	SE	95%CI
Organisation-focused cognitive job crafting			
Total effect (c)	0.20**	0.03	[0.146, 0.259]
Indirect effect (ab)	0.02	0.02	[-0.011, 0.069]
Self and society focused cognitive job crafting			
Total effect (c)	0.03	.0.03	[-0.02, 0.084]
Indirect effect (ab)	-0.01	0.01	[-0.034, 0.023]
Structural job resources behavioural job crafting			
Total effect (c)	0.16**	0.04	[0.081, 0.232]
Indirect effect (ab)	0.02	0.02	[-0.003, 0.057]

Social job resources behavioural job crafting			
Total effect (c)	0.13**	0.05	[0.064, 0.192]
Indirect effect (ab)	0.01	0.01	[-0.001, 0.017]
Hindering job demands behavioural job crafting			
Total effect (c)	-0.10*	0.04	[-0.180, -0.022]
Indirect effect (ab)	-0.04*	0.02	[-0.089, -0.004]
Challenging job demands behavioural job crafting			
Total effect (c)	0.23**	0.03	[0.169, 0.287]
Indirect effect (ab)	0.02	0.02	[-0.003, 0.059]

*Note: CI = confidence interval, * p<.05, **p<.01*

Discussion

Most research to job crafting has been conducted with the behavioural job crafting scale of Tims et al. (2012), this scale leaves out the dimension of cognitive job crafting. Therefore, this study aimed to obtain more knowledge about the association between cognitive job crafting and job performance, over and above the contribution of behavioural job crafting. Moreover, the mediating effects of authenticity between job crafting and job performance were examined. The direct associations were calculated with multiple hierarchical regressions using bootstrapping (5000 samples), the indirect effects were calculated with PROCESS macro from Hayes (2013), also using bootstrapping (5000 samples). Data were collected among 361 participants via, among other things, the database of the consultancy organisation Derks & Derks.

Subscales cognitive job crafting

Unexpectedly, two new subscales of cognitive job crafting were discovered, namely self and society focused cognitive job crafting and organisation focused cognitive job crafting. Self and society focused cognitive job crafting comprises to what extent employees perceive their job as valuable for themselves or for society. This variable might be explained through the "other-oriented" approach of employees. Employees tend to make their job more valuable for society. As a significant percentage of individuals with jobs not directly involved in social service, incorporate social responsibility themes when they talk about their work (Dik, Duffy & Eldridge, 2009). When employees craft their job in such a way they perceive it as more valuable for the society, it is found to have positive outcomes like an increased sense of

meaningfulness and employee's well-being (Dik, Duffy & Eldridge, 2009; Wrezniewski & Dutton, 2001).

Organisation focused cognitive job crafting comprises to what extent employees perceive their jobs and work tasks as valuable for the organisation. When employees perceive their job as valuable for the organisation, it might increase their self-esteem. Self-esteem is to what extent people perceive themselves to be capable, significant and worthy. Studies show that the implicit signals sent by macro-organizational structures, e.g. job design, the messages sent by significant others in one's social environment, e.g. feedback from supervisors; and the individuals own experiences, establish self-esteem. Thus, when employees craft their job in such a way they perceive it as more valuable for the organisation, and the organisational structures and managers reinforce this, it increases their self-esteem, which leads to positive outcomes like an increased sense of meaningfulness and importance of their jobs (Gardner & Pierce, 1998).

Job crafting and job performance

Hypothesis h1a: *cognitive job crafting has a positive association with job performance.* Was partly confirmed, as positive associations were found for organisation focused cognitive job crafting with task and contextual job performance. This is in line with the social and work identity theory (Van den Bosch & Taris, 2014b). Employees may experience an increased self-image and see that their job has important value to the organisation. Therefore, they plausibly identify themselves with their work, and also derive a social identity from their work. This means they are motivated to internalize the organisational interests and thus perform better (Van Knippenberg, 2000).

The other form of cognitive job crafting (self and society focused cognitive job crafting) did not have a significant association with contextual job performance. It could be speculated that the self and society focused variable had no relation by itself with contextual performance, because this subscale does not focus on how a job is valuable for the organisation, but on the societal and personal added value of the job. In this way, cognitively adjusting the job to the values of oneself or to society, might result in a job that does not perceive the organisational interests as priority. Moreover, the values of oneself or society might not collide with the organisational interests. Hence, this might not influence the job performance of an employee (Van Knippenberg, 2000). As for task performance, self and society focused cognitive job crafting seemed to act as a suppressor. It might be expected that

this effect arose, due to conflicting internalized norms. When employees perceive their job as valuable for the organisation, and internalise the organisational goals, but no conflicting goals for society or the self are present. The decrease of the society or self-norms might reinforce the work identity with organisational goals of employees (Van Knippenberg, 2000, Ludlow & Klein, 2014).

Additionally, this study partly confirmed hypothesis h1b since organisation focused cognitive job crafting had a significant positive association with both task and contextual performance, over and above the contribution of behavioural job crafting (Goodman & Svyantek, 1999). Furthermore, this study found that if employees also craft their work physically (behavioural job crafting), a positive association was found with both task and contextual job performance. This is in line with Wrzesniewski and Dutton, who stated that both cognitive and behavioural job crafting increase the meaningfulness of a job, subsequently an increased person-job fit arises, which results in better job performance (Wrzesniewski & Dutton, 2001).

Mediating effect of authenticity on job crafting and job performance

Job crafting and authenticity. This study partly confirmed the Hypothesis H2a: *Job crafting has a positive association with authenticity.* As for cognitive job crafting a positive association was found for organisation focused job crafting. This is in line with the expectations when employees craft the value of their job within the organisation, or perceive the utility of their tasks, it increases the work identity and improves the person-job fit, increasing the feeling of authenticity (Van Knippenberg, 2000).

As for self and society focused cognitive job crafting a negative association with authenticity was found. This is contrary to the expectations, but the aforementioned results suggest a suppressor effect. Therefore, this variable does not have an association with authenticity, however it does strengthen the effect of the organisation focused cognitive job crafting variable. Since it contains an unexpected suppression effect, it is not possible within this study to explain this effect (Ludlow & Klein, 2014).

Lastly, positive associations between behavioural job crafting and authenticity were found. As expected did structural job resources positively associate with authenticity, thus when employees create more variety in their job tasks it is positively associated with authenticity. Another association was found for hindering job demands, thus minimizing emotionally, mentally or physically demanding aspects of the job is associated with

authenticity (Bipp & Demerouti, 2015; Tims et al., 2012). These findings were line with the expectations, because when employees craft their job demands and recourses to match it with their own talents and needs within their job it increases their person-job fit, which influences the feeling of authenticity. No associations were found for social job resources and challenging job demands on authenticity (Tims et al., 2012; Tims et al., 2016). That no effect was found can possibly be explained by the fact that the total authenticity variable was used, which included all three subscales of authenticity.

In this study Hypothesis H2b: *Authenticity is positively associated with job performance* was confirmed. This was in line with the expectations as it was expected authentic employees perceive their performance better. Moreover, when employees experience high levels of authenticity they will more often engage in work activities because they enjoy these activities and are intrinsically motivated, therefore increasing their job performance (Van den Bosch & Taris, 2018).

Mediating effect. In this study Hypothesis H3: *Authenticity mediates the association between cognitive and behavioural job crafting and job performance* was partly confirmed. As a mediating effect was found for organisation focused cognitive job crafting and task performance. No mediating effect was found, however, for contextual job performance. This was not in line with the expectations. Moreover, no mediating effects were found between self and society focused cognitive job crafting and neither contextual nor task job performance. The non-significant mediating effects might be explained by the aforementioned non-significant associations between self and society focused cognitive job crafting and the construct's 'authenticity' and 'job performance'.

For behavioural job crafting mediating associations on task performance via authenticity were found for structural job resources, crafting challenging demands and hindering job demands. The latter was an expected negative effect as it was negatively associated with their feeling of authenticity and therefore has a negative association with their task and contextual performance. These effects were in line with the expectations, however no mediating effects were found for structural job resources and challenging demands and contextual performance via authenticity. Moreover, no mediating effect was found between social job resources and neither contextual nor task job performance. The latter might be explained due to the low non-significant correlations between social job resources and authenticity.

It is striking that the mediating effects are mainly found for task performance, suggesting that cognitive and behavioural job crafting mainly have an association on the direct tasks of the employee, via authenticity.

Study limitations

For this study some limitations need to be taken into account. First of all, the cross-sectional design of this study needs to be considered (Field, 2013). Due to this design, the associations found in this study could also be reversed effects. Meaning, for example when employees perform better they are more likely to craft their job (Bakker, 2011). Therefore, a longitudinal study needs to be conducted to examine these causal effects.

Secondly, over ninety percent of the participants is highly educated. Wrzesniewski and Dutton (2001) state that higher educated people are more likely to craft their jobs. Therefore, the generalizability of this study to the whole working population should be considered. A study performed with lower educated people could therefore be conducted to overcome this limitation.

Thirdly, the authenticity scale is measured on a 5-point Likert scale, instead of a 7-point Likert scale used in the official I.A.M. questionnaire from Van den Bosch and Taris (2014a). This might have resulted in a lower reliability of the subscale *authentic living*, to increase this reliability an item was deleted. The reliability of 'total authenticity' was $\alpha=.8$ and all items loaded on the right factors. However, deleting this item might have affected the results of this study regarding the authenticity subscales and total authenticity. In future research the validated I.A.M. authenticity questionnaire on a 7-point Likert scale should be used to exclude this possibility.

Study implications

Theoretical implications. The aforementioned results show no associations for self and society focused cognitive job crafting and job performance. It can, however, be expected that this form of cognitive job crafting influences other outcome variables e.g. work engagement. Since research shows that when a job is valuable to one-self or more meaningful to society, it increases positive self-evaluations and refers to individuals' sense of their ability to successfully control and have impact on their environment. Thus, when employees craft their job to match themselves with the environment, it increases their feeling of control. Therefore, increasing the self-efficacy, self-esteem and optimism of employees. Which leads

to increased work engagement (Bakker, 2011; Petrou, Demerouti & Schaufeli, 2015). Examining these effects would interesting for future research.

Practical implications. The results of this study confirm that organisation focused cognitive job crafting is of added value to positive outcomes like authenticity and job performance. Therefore, managers could consider to conduct mind-fulness trainings, where employees actively perceive their job and the added value of their job to the organisation. In these sessions the employers might also explain how they perceive the jobs of the employees and their value to the organisation, since this is found to have positive associations with the self-esteem of employees and other positive outcomes (Gardner & Pierce, 1998; Shapiro, Carlson, Astin & Freedman, 2006).

Conclusion

In this study two subscales for cognitive job crafting were discovered. It showed that organisation focused cognitive job crafting, thus perceiving your job as important for the organisation, had a contribution on job performance, over and above the contribution of behavioural job crafting. Moreover, the mediating effects of authenticity were found mainly on task performance, for both behavioural and organisation focused cognitive job crafting. Hopefully these insights show the undeniable contribution of cognitive job crafting to both authenticity and job performance, over and above the contribution of behavioural job crafting. Underlining that the positive effects of cognitive job crafting are just one mind-set away!

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Appendix

1.0 Informed consent

Start of Block: Intro + achtergrondinformatie

Geachte deelnemer,
Hartelijk dank dat u (wederom) meewerkt aan het onderzoek naar job crafting! Het doel van huidig onderzoek is inzicht krijgen in de relatie tussen 'job crafting' (de manier waarop een individu zelf zijn/haar baan vormgeeft), het gevoel u zelf te kunnen zijn, uw prestaties en welzijn. Aan het begin van de vragenlijst worden een aantal achtergrondgegevens gevraagd. De overige vragen hebben betrekking op uw werk. Indien u op dit moment niet werkzaam bent, denk dan terug aan de functie die u voor het laatst uitgeoefend heeft. De informatie die u verstrekt, zal geheel anoniem en strikt vertrouwelijk behandeld worden. Dit betekent dat de resultaten alleen verwerkt worden door de Universiteit Utrecht en niet worden gekoppeld aan (uw inschrijving bij) Derks & Derks B.V.
Het invullen van de vragenlijst neemt ongeveer 10 minuten van uw tijd in beslag. Over uw antwoorden hoeft u niet lang na te denken, het gaat om uw eerste ingeving. Bovendien bestaan er geen goede of foute antwoorden. Let op: u kunt geen vragen overslaan. Voor de verwerking van de data is het van belang dat u alle vragen invult. Wanneer u de vragenlijst heeft ingevuld, is het voor de verwerking van antwoorden noodzakelijk deze te verzenden door op het zwarte pijltje naar rechts te drukken. Tijdens het invullen kunt u eventueel terug keren naar een vorige vraag, door op het pijltje naar links te drukken.
Uiteraard is deelname geheel vrijblijvend en kunt u gedurende het onderzoek op elk moment stoppen. Uw gegevens worden dan niet verwerkt. Wanneer u voor, tijdens of na het onderzoek vragen of suggesties heeft, kunt u ons bereiken via Lucas@derksenderks.nl of G.e.a.eekhoutte@uu.nl. Alvast hartelijk dank voor uw deelname!
Met vriendelijke groet,
Lucas Eijkemans, Masterstudent Social, health and organisational psychology aan de Universiteit Utrecht en stagiair bij Derks & Derks B.V. en Gythe Eekhoutte, Masterstudent Social, health and organisational psychology aan de Universiteit Utrecht
In samenwerking met: dr. Veerle Brenninkmeijer, Onderzoeksbegeleidster Universiteit Utrechten Jan Derks, Directeur Derks & Derks B.V.

Indien u de introductie heeft gelezen en mee wilt doen aan dit onderzoek, klik dan onderstaand op 'Ik ga akkoord' om door te gaan met het onderzoek. Mocht u niet akkoord gaan, kunt u helaas niet deelnemen aan dit onderzoek. In dat geval kunt u de vragenlijst nu sluiten.

○ Ik ga akkoord (1)

Page Break

2.0 Questionnaire

Qualtrics Thesis Lucas & Gythe

Persoonlijke code
   Hieronder vragen wij u of u een persoonlijke code aan wilt maken. Met behulp van deze code kunnen we de antwoorden koppelen aan eventueel eerder gegeven antwoorden (indien u vorig jaar heeft meegewerkt aan het onderzoek) of bij eventueel vervolgonderzoek. Op deze manier blijft uw anonimiteit gewaarborgd. Deze code wordt niet verbonden aan Derks & Derks en zal uitsluitend beheerd worden door de Universiteit Utrecht. De persoonlijke code is geheel geanonimiseerd en bestaat uit de volgende onderdelen: de 4 cijfers van uw geboortedag de eerste letter van de voornaam van uw vader de eerste letter van de voornaam van uw moeder Voorbeeld: Is uw geboortedag 6 oktober, de voornaam van uw vader Bert en de voornaam van uw moeder Jannie, dan wordt uw persoonlijke code dus: 0610BJ.
   Indien u een persoonlijke code wilt aanmaken, vult u deze dan hieronder in:

De volgende vragen hebben betrekking op uw achtergrondgegevens.

Wat is uw geslacht?

○ Man (1)

○ Vrouw (2)

○ Anders (3)

Wat is uw leeftijd?

_____

Wat is uw hoogst afgeronde opleiding?

○ Lagere school (1)

○ MAVO, LBO, VMBO (2)

○ HAVO, MBO (3)

○ VWO (4)

○ HBO (5)

○ Universiteit (6)

Bent u zelfstandig ondernemer?

○ Ja (1)

○ Nee (2)

Voor hoeveel uur heeft u contractueel een aanstelling?

Hoeveel jaar bent u in totaal werkzaam over uw gehele leven?

○ 0 tot 2 jaar (1)

○ 2 tot 5 jaar (2)

○ 5 tot 10 jaar (3)

○ > 10 jaar (4)

Hoeveel jaar bent u werkzaam in uw huidige functie?
Indien dit niet van toepassing is, kunt u het volgende invullen: nvt

In welke branche bent u momenteel werkzaam?

○ Voedingsmiddelen industrie (1)

○ Farma / biotechnische industrie (2)

○ Gezondheidszorg (3)

○ Medical devices / laboratoriumbenodigdheden (4)

○ Anders, namelijk: (5) _____

○ N.v.t (6)

Tot welke functiegroep behoort uw functie?

○ QA / regulatory affairs

○ Sales / Marketing

○ Medisch expert

○ IT

○ HRM

○ Inkoop

○ Financiën

○ Administratief

○ Planning / logistiek

○ R&D

○ QC / laboratorium

○ Management / directie

○ Anders, namelijk: _____

○ N.v.t.

De volgende uitspraken gaan over uw gedrag op werk. Kies bij iedere stelling het antwoord dat op u van toepassing is.

Antwoordschalen:
1 = nooit
2 = soms
3 = regelmatig
4 = vaak
5 = heel vaak

	nooit (1)	soms (2)	regelmatig (3)	vaak (4)	heel vaak (5)
Ik zorg ervoor dat ik mijn capaciteiten optimaal benut	○	○	○	○	○
Ik zorg ervoor dat ik niet teveel hoef om te gaan met de personen wier problemen mij emotioneel raken.	○	○	○	○	○
Ik vraag collega's om advies	○	○	○	○	○
Ik probeer mezelf bij te scholen	○	○	○	○	○
Als er nieuwe ontwikkelingen zijn, sta ik vooraan om ze te horen en uit te proberen	○	○	○	○	○
Ik vraag of mijn leidinggevende tevreden is over mijn werk	○	○	○	○	○
Ik zorg ervoor dat ik zelf kan beslissen hoe ik iets doe	○	○	○	○	○
Ik zorg ervoor dat ik minder moeilijke beslissingen in mijn werk hoef te nemen	○	○	○	○	○
Ik probeer nieuwe dingen te leren op mijn werk	○	○	○	○	○
Ik vraag anderen om feedback over mijn functioneren	○	○	○	○	○
Ik zorg ervoor dat ik minder emotioneel inspannend werk moet verrichten	○	○	○	○	○

Ik zoek inspiratie bij mijn leidinggevende	○	○	○	○	○
Ik probeer mezelf te ontwikkelen	○	○	○	○	○
Ik neem geregeld extra taken op me hoewel ik daar geen extra salaris voor ontvan	○	○	○	○	○
Ik zorg ervoor dat ik niet teveel hoef om te gaan met mensen die onrealistische verwachtingen hebben	○	○	○	○	○
Als het rustig is op mijn werk, zie ik dat als een kans om nieuwe projecten op te starten	○	○	○	○	○
Ik vraag mijn leidinggevende om mij te coachen	○	○	○	○	○
Ik zorg ervoor dat ik minder geestelijk inspannend werk hoef te verrichten	○	○	○	○	○
Ik probeer mijn werk wat zwaarder te maken door de onderliggende verbanden van mijn werkzaamheden in kaart te brengen	○	○	○	○	○
Als er een interessant project voorbij komt, bied ik mezelf proactief aan als projectmedewerker	○	○	○	○	○

| Ik zorg ervoor dat ik me niet lange tijd achter elkaar hoef te concentreren | ○ | ○ | ○ | ○ | ○ |

De volgende uitspraken gaan over uw gedrag op werk. Kies bij iedere stelling het antwoord dat op u van toepassing is.

Antwoordschalen:
1 = nooit
2 = soms
3 = regelmatig
4 = vaak
5 = heel vaak

	nooit (1)	soms (2)	regelmatig (3)	vaak (4)	heel vaak (5)
Ik denk na over hoe mijn werk doel en betekenis geeft aan mijn leven.	○	○	○	○	○
Ik herinner mijzelf aan de betekenis van mijn werk voor het succes van de organisatie.	○	○	○	○	○
Ik herinner mijzelf aan het belang van mijn werk voor de maatschappij.	○	○	○	○	○
Ik denk na over de manier waarop mijn werk een positieve invloed heeft op mijn leven.	○	○	○	○	○
Ik denk na over de rol die mijn werk speelt in mijn algehele welzijn.	○	○	○	○	○

De volgende uitspraken gaan over uw gedrag op werk. Kies bij iedere stelling het antwoord dat op u van toepassing is.

Antwoordschalen:
1 = nooit
2 = soms
3 = regelmatig
4 = vaak
5 = heel vaak

	nooit (1)	soms (2)	regelmatig (3)	vaak (4)	heel vaak (5)
Ik denk na over de doelen die ik met mijn werk wil bereiken.	○	○	○	○	○
Ik ben me bewust van de betekenis van mijn werk.	○	○	○	○	○
Ik zie het nut van mijn werktaken.	○	○	○	○	○
Ik denk na over hoe mijn werktaken ook kunnen bijdragen aan mijn persoonlijke lange termijndoelen.	○	○	○	○	○
Ik denk na over hoe mijn werk bijdraagt aan de organisatie als geheel.	○	○	○	○	○
Ik heb geprobeerd te veranderen hoe ik tegen mijn werk aan kijk.	○	○	○	○	○
Ik heb geprobeerd nieuwe doelen te stellen in mijn werk.	○	○	○	○	○

De volgende stellingen hebben betrekking op uw meest recente werksituatie.

Antwoordschalen:
 1 = Helemaal niet op mij van toepassing
 2 =
 3 = Neutraal
 4 =
 5 = Helemaal op mij van toepassing

	Helemaal niet op mij van toepassing (1)	(3)	Neutraal (5)	(8)	Helemaal op mij van toepassing (9)
Andere mensen beïnvloeden mij sterk op werk	○	○	○	○	○
Op mijn werk gedraag ik me op de manier welke van mij wordt verlangd	○	○	○	○	○
Ik word sterk beïnvloed door wat anderen op mijn werk vinden	○	○	○	○	○
Ik vind het gemakkelijker om goed op te schieten met mensen op mijn werk wanneer ik mezelf ben	○	○	○	○	○
Ik houd op mijn werk vast aan de overtuigingen waar ik in geloof	○	○	○	○	○
Op mijn werk blijf ik trouw aan wie ik ben	○	○	○	○	○
Ik voel me op mijn werk niet verbonden met wie ik echt ben	○	○	○	○	○
Op mijn werk gedraag ik me in overeenstemming met mijn eigen waarden en overtuigingen	○	○	○	○	○
Ik voel me op mijn werk vervreemd van mijzelf	○	○	○	○	○
Op mijn werk voel ik me afgesloten van wie ik werkelijk ben	○	○	○	○	○

Op mijn werk heb ik de behoefte om te doen wat anderen van mij verwachten	○	○	○	○	○
Ik voel me op mijn werk niet zoals ik werkelijk ben	○	○	○	○	○

De volgende stellingen gaan over hoe u op uw werk functioneert. Kies bij elke uitspraak het voor u best passende antwoord.

Antwoordschalen:
1 = helemaal mee oneens
2 = mee oneens
3 = mee eens
4 = helemaal mee eens

	Helemaal mee oneens (1)	Mee oneens (2)	Mee eens (3)	Helemaal mee eens (4)
U helpt collega's met hun werk als zij terugkeren van een periode van afwezigheid	○	○	○	○
U behaalt de doelen van uw functie	○	○	○	○
U biedt vrijwillig aan om dingen te doen die formeel gezien niet vereist worden door de functie die u bekleedt	○	○	○	○
U voldoet aan de normen voor goede prestaties	○	○	○	○
U neemt initiatief om nieuwe medewerkers wegwijs te maken, hoewel dit formeel gezien geen onderdeel van uw functie is	○	○	○	○
U laat zien een deskundige te zijn op alle onderdelen van uw werkzaamheden	○	○	○	○
U helpt collega's die kampen met een hoge werkdruk of die andere problemen hebben'	○	○	○	○
U vervult alle eisen die uw functie aan u stelt	○	○	○	○
U helpt uw collega's bij de uitvoering van hun werkzaamheden	○	○	○	○

U kunt meer aan dan er van u gevraagd wordt	○	○	○	○
U doet goede suggesties om de algehele kwaliteit van de afdeling/de organisatie te verbeteren	○	○	○	○
U lijkt geschikt voor een hogere positie	○	○	○	○
U bent bereid om dingen te doen die niet door de organisatie worden geëist, maar die goed zijn voor het imago van de organisatie	○	○	○	○
U bent competent op alle terreinen van uw functie	○	○	○	○
U presteert goed in uw functie doordat u de taken naar verwachting uitvoert	○	○	○	○
Ik organiseer en plan het werk om doelen te realiseren en deadlines te halen	○	○	○	○

De volgende uitspraken gaan over de manier waarop u uw werk beleeft en hoe u zich daarbij voelt. Kies bij elke uitspraak het voor u best passende antwoord.

Antwoordschalen: 0 = nooit1 = sporadisch (een paar keer per jaar of minder)2 = af en toe (eens per maand of minder)3 = regelmatig (een paar keer per maand)4 = dikwijls (eens per week)5 = zeer dikwijs (een paar keer per week)6 = altijd (dagelijks)

	Nooit	Sporadisch	Af en toe	Regelmatig	Dikwijls	Zeer Dikwijls	Altijd
Op mijn werk bruis ik van energie.	○	○	○	○	○	○	○
Als ik werk voel ik me fit en sterk.	○	○	○	○	○	○	○
Als ik 's morgens opsta heb ik zin om aan het werk te gaan.	○	○	○	○	○	○	○
Ik ben enthousiast over mijn baan.	○	○	○	○	○	○	○
Mijn werk inspireert mij.	○	○	○	○	○	○	○
Ik ben trots op het werk dat ik doe.	○	○	○	○	○	○	○
Ik ga helemaal op in mijn werk.	○	○	○	○	○	○	○
Mijn werk brengt mij in vervoering.	○	○	○	○	○	○	○
Wanneer ik heel intensief aan het werk ben, voel ik mij gelukkig.	○	○	○	○	○	○	○

De volgende uitspraken gaan over de manier waarop u uw werk beleeft en hoe u zich daarbij voelt. Kies bij elke uitspraak het voor u best passende antwoord.

Antwoordschalen: 0 = nooit1 = sporadisch (een paar keer per jaar of minder)2 = af en toe (eens per maand of minder)3 = regelmatig (een paar keer per maand)4 = dikwijls (eens per week)5 = zeer dikwijs (een paar keer per week)6 = altijd (dagelijks)

	Nooit	Sporadisch	Af en toe	Regelmatig	Dikwijls	Zeer Dikwijls	Altijd
Ik voel me mentaal uitgeput door mijn werk.	○	○	○	○	○	○	○
Een hele dag werken vormt een zware belasting voor mij.	○	○	○	○	○	○	○
Ik voel me 'opgebrand' door mijn werk	○	○	○	○	○	○	○
Aan het einde van de werkdag voel ik me leeg.	○	○	○	○	○	○	○
Ik voel me vermoeid als ik 's morgens opsta en er weer een werkdag voor me ligt.	○	○	○	○	○	○	○

Tot slot willen wij u vragen via welke weg u op de hoogte bent gesteld van deze vragenlijst.

◯ Derks & Derks B.V. (1)

◯ LinkedIn (2)

◯ Overige social media (3)

◯ Persoonlijk benaderd door de enquêteur (4)

◯ Anders, namelijk: (5) _____

Heeft u nog opmerkingen? Vult u deze hieronder in:

_____

_____

_____

_____

_____

Indien u geïnteresseerd bent in de resultaten van dit onderzoek, kunt u uw e-mailadres hieronder invullen. Uw e-mailadres wordt niet gekoppeld aan uw persoonlijke gegevens, waardoor anonimiteit gewaarborgd blijft. Naar verwachting ontvangt u de resultaten in Juli 2019.

_____

Als u in de toekomst wilt meewerken aan dit onderzoek, kunt u hieronder uw e-mailadres invullen. Wederom, Uw e-mailadres wordt niet gekoppeld aan uw persoonlijke gegevens, waardoor anonimiteit gewaarborgd blijft. Uw e-mailadres zal tevens uitsluitend worden gebruikt voor een eventuele vervolgmeting.

_____

Dit is het einde van de vragenlijst. LET OP: uw antwoorden zijn nog niet opgeslagen!

Door op het zwarte pijltje (naar rechts) te klikken, worden uw antwoorden verzonden. Hartelijk dank voor uw deelname.

3.0 Factor analysis Cognitive job crafting

Factor analyses Cognitive job crafting: Dutch questionnaire

	Organisation focused	Self and society focused	Factor 3
1. Ik denk na over hoe mijn werk doel en betekenis geeft aan mijn leven	**.852**	.163	.261
2. Ik herinner mijzelf aan de betekenis van mijn werk voor het succes van de organisatie	.150	**.516**	-.121
3. Ik herinner mijzelf aan het belang van mijn werk voor de maatschappij	**.654**	-.116	
4. Ik denk na over de manier waarop mijn werk een positieve invloed heeft op mijn leven	**.771**	-.116	
5. Ik denk na over de rol die mijn werk speelt in mijn algehele welzijn	**.792**		
6. Ik denk na over de doelen die ik met mijn werk wil bereiken	.358	-.520	
7. Ik ben me bewust van de betekenis van mijn werk	.164	-**.764**	
8. Ik zie het nut van de betekenis van mijn werk	.184	-**.865**	-.221
9. Ik denk over hoe mijn werktaken ook kunnen bijdragen aan mijn persoonlijke lange termijndoelen	.452	-.357	
10. Ik denk na hoe mijn werk bijdraagt aan de organisatie als geheel		-**.807**	.243
11. Ik heb geprobeerd te veranderen hoe ik tegen mijn werk aankijk	.119	.209	**.868**
12. Ik heb geprobeerd nieuwe doelen te stellen in mijn werk	-.106	-.292	**.825**

Note: Rotation Oblimin with Kaiser Normalisation

4.0 Factor analysis Authenticity

Factor analysis authenticity: Dutch questionnaire

	Self-alienation	External influences	Authentic living
1. Ik houd op mijn werk vast aan de overtuigingen waar ik in geloof	-,159	-.001	**.910**
2. Op mijn werk blijf ik trouw aan wie ik ben	.242	.059	**.676**
3. Op mijn werk gedraag ik me in overeenstemming met mijn eigen waarden en overtuigingen	.401	.031	**.549**
4. Andere mensen beïnvloeden mij sterk op werk	-.003	**.615**	.158
5. Op mijn werk gedraag ik me op de manier welke van mij wordt verlangd	-.067	**.743**	-.161
6. Ik word sterk beïnvloed door wat anderen op mijn werk vinden	.028	**.810**	.060
7. Ik voel me op mijn werk niet verbonden met wie ik echt ben	**,758**	.143	.002
8. Ik voel me op mijn werk vervreemd van mijzelf	**,937**	-.031	-.028
9. Op mijn werk voel ik me afgesloten van wie ik werkelijk ben	**,931**	-.044	-.039
10. Op mijn werk heb ik de behoefte om te doen wat anderen van mij verwachten	,095	**.724**	.013
11. Ik voel me op mijn werk niet zoals ik werkelijk ben	**,817**	.005	.056

Note: Rotation Oblimin with Kaiser Normalisation