

# **The usefulness of job crafting**

*A study on the relationships between regulatory focus, job crafting,  
career competencies and positive work outcomes.*



**Universiteit Utrecht**

Faculteit Sociale Wetenschappen

Master thesis Arbeids- en Organisationspsychologie

Author: Anouk Pondman (3825086)

First assessor: Dr. Veerle Brenninkmeijer

Second assessor: Dr. Elianne van Steenbergen

Date: June 16, 2015

Word count: 8144

## **Abstract**

The purpose of this study was to examine the relationships between regulatory focus, job crafting, work engagement and perceived employability. In addition, it was expected that career competencies would moderate relationships between job crafting, work engagement and perceived employability. Data were gathered using an online survey on social media and among candidates of a consultancy bureau in the life sciences ( $N = 441$ ). As hypothesized, promotion focus was positively related to crafting structural resources and challenges, and social resources. Crafting hindering demands was negatively related to promotion focus and positively related to prevention focus. Furthermore, crafting resources and challenges was positively related to work engagement and perceived employability. Moderation effects of career competencies were found for perceived employability, but not for work engagement. The findings of the present study suggest that job crafting could be beneficial and has implications for management practice and future research.

*Keywords: job crafting, regulatory focus, work engagement, perceived employability, career competencies.*

## **Samenvatting**

Het doel van huidig onderzoek was om inzicht te verschaffen in de relatie tussen regulatiefocus, job crafting, bevlogenheid en waargenomen inzetbaarheid. Daarnaast is onderzocht of loopbaancompetenties een modererend effect hebben op de relaties tussen job crafting, bevlogenheid en waargenomen inzetbaarheid. De gegevens werden verzameld met behulp van een online-enquête die verspreid is op social media en onder kandidaten van een adviesbureau in de life sciences ( $N = 441$ ). Zoals verwacht hing promotiefocus positief samen met het craften van resources en uitdagingen. Het craften van hinderende demands hing negatief samen met promotiefocus en positief met preventiefocus. Daarnaast lieten de resultaten zien dat het craften van resources en uitdagingen over het algemeen positief samenhangt met bevlogenheid en waargenomen inzetbaarheid. Moderatie effecten van loopbaancompetenties zijn gevonden voor waargenomen inzetbaarheid, maar niet voor bevlogenheid. De bevindingen suggereren dat job crafting nuttig kan zijn en implicaties heeft voor zowel de praktijk als vervolgonderzoek.

*Keywords: job crafting, regulatiefocus, bevlogenheid, inzetbaarheid, loopbaancompetenties.*

## **1. Introduction**

The economic crisis, globalization, rapid technological developments and demographic changes have put us in an uncertain environment that affects the way we work (De Graaf, Peeters & Van der Heijden, 2011). Lifelong job stability, fixed vertical career paths and classic work designs are becoming less common (Albrecht, 2010). Nowadays, careers are considered to be boundary-less, whereby horizontal steps between organizations are made more often (Forrier & Sels, 2003). The changed environment requires employees to be proactive and take responsibility for their own development and career success (Crant, 2000). Proactive individuals actively search for learning opportunities and develop competencies for future work demands (London & Mone, 1999). Therefore, proactive employees are crucial for modern organizations to adapt to the changing environment and to maintain their competitive position (Bindl & Parker, 2010).

A specific form of proactive behavior is job crafting, which refers to self-initiated behaviors of employees to align job characteristics with their preferences and motivations (Wrzesniewski & Dutton, 2001). The purpose of the present study is to examine job crafting in relation to potential antecedents and outcomes. Tims and Bakker (2010) proposed that regulatory focus is a possible antecedent of job crafting. Regulatory focus refers to the way individuals pursue their goals in alignment with personal values and beliefs (Higgins, 1997). This theory distinguishes between a promotion focus, which is based on hopes, accomplishments and gains, and a prevention focus, based on safety, responsibilities and non-losses. Because both foci are based on other motivations, it is expected that their relationship with job crafting will differ. Furthermore, work engagement and employability will be examined as work outcomes of job crafting. Research indicates that successful adaptation to change, for example through job crafting, has a positive effect on work engagement (Van den Heuvel, Demerouti, Bakker & Schaufeli, 2010) and can enhance sustainable employability (Tims, Bakker & Derks, 2012). In addition, the present study will examine whether career competencies with respect to reflection on motivation, reflection on qualities and career control can strengthen the relationship between job crafting, work engagement and perceived employability.

Research on the previous mentioned relationships is still relatively scarce. Therefore, the central aim of the present study is to expand this knowledge in hope it will stimulate and guide future research regarding these relationships. In detail, this study will provide insight in which individuals are more inclined to engage in specific forms of job crafting, and whether

these job crafting behaviors are associated with work engagement and perceived employability. Furthermore, it provides knowledge on the influence of career competencies on the relationship between job crafting and work outcomes. In practice, this knowledge may be used by managers to encourage employees to implement certain job crafting behaviors, while taking their regulatory focus into account.

### **1.1 Job crafting**

Wrzesniewski and Dutton (2001, p. 179) introduced the term job crafting and defined it as “the physical and cognitive changes individuals make in the task or relational boundaries of their work”. Firstly, physical changes refer to adjusting the number or content of tasks. Secondly, employees can change their cognitions about aspects of their work. Finally, relational changes refer to changing relationships at work such as the frequency or intensity of contact with colleagues (Wrzesniewski & Dutton, 2001). However, the current study will follow a more recent conceptualization of Tims and Bakker (2010) based on the Job Demands-Resources model (Bakker & Demerouti, 2007). The JD-R model categorizes job characteristics in either job demands or resources. Job demands refer to aspects that acquire sustained mental or physical effort and are therefore associated with psychological/physical costs. Job resources refer to aspects that contribute to goal achievement, reduce psychological/physical costs of job demands and/or stimulate personal growth (Bakker & Demerouti, 2007). According to Tims and Bakker (2010), job crafting are changes that employees initiate to align their job demands and resources with personal skills and needs.

Based on the JD-R model, Tims and colleagues (2012) distinguished four dimensions of job crafting. Firstly, structural job resources refer to job design aspects such as autonomy, development and skill variety. Secondly, social job resources point to social aspects such as support and feedback. Thirdly, challenging job demands are demands that stimulate employees to reach difficult tasks or goals. Finally, hindering demands refer to demands that cause stress and form barriers for success and personal growth, such as role ambiguity and home-work interference.

### **1.2 Job crafting and work engagement**

Job crafting is positively associated with work engagement (Bakker, Tims & Derks, 2012). Work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption” (Schaufeli, Salanova, Gonzalez-Roma &

Bakker, 2002, p.74). Vigor stands for the great levels of energy, effort and perseverance. Dedication is characterized by being involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, and pride. Absorption refers to being fully concentrated and happily engrossed in one's work, whereby one has difficulties with detaching oneself from work (Schaufeli et al., 2002).

Several studies reported that job resources and challenging demands were positively related to work engagement (Schaufeli, Bakker & Van Rhenen, 2009; Crawford, LePine & Rich, 2010). Resources affect engagement through (1) an intrinsic motivational role by fostering growth and development, or (2) an extrinsic motivational role by providing instrumental help for successful task completion (Bakker & Demerouti, 2007). In addition, challenging demands affect work engagement because they are perceived as opportunities that contribute to personal growth and development (Berg, Dutton & Wrzesniewski, 2008). It follows, that employees who maintain and expand their job resources and challenging demands (i.e. job crafting) create resourceful and stimulating environments that facilitate work engagement (Demerouti & Cropanzano, 2010). For example, Bakker and colleagues (2012) reported that crafting job resources and challenging demands stimulates enthusiasm and absorption: the dimensions of work engagement. Furthermore, recent studies showed that crafting structural and social job resources, and challenging demands was positively related to work engagement (Petrou et al., 2012; Tims et al., 2013; Brenninkmeijer & Hekkert-Koning, 2015). These studies provide evidence for the positive relationships between crafting job resources, challenging demands and work engagement. Therefore, the following hypothesis is formulated:

*Hypothesis 1: Crafting structural job resources, social job resources and challenging job demands will be positively related to work engagement.*

Crawford and colleagues (2010) reported that hindering job demands were negatively related to work engagement. Hindering job demands are perceived as barriers that thwart personal growth and trigger negative and less effective emotions and coping styles. However, several studies based on crafting hindering job demands found no significant (positive) relationship with work engagement (Tims et al., 2013; Kroon, Kooij & Van Veldhoven, 2013). A possible explanation given by Tims and colleagues (2013) is that crafting hindering demands reduces stress but not automatically increase work engagement. In addition, Petrou et al. (2012)

suggested that hindering job demands create challenging environments, thereby stimulating work engagement. In line with this suggestion, several studies reported negative associations between crafting hindering job demands and work engagement (Petrou et al., 2012; Brenninkmeijer & Hekkert-Koning, 2015). Due to the conflicting results of the previously mentioned studies, the present study will examine the relationship between crafting hindering job demands and work engagement exploratory.

### **1.3 Job crafting and perceived employability**

Nowadays, employees need to be proactive and take responsibility for their career development in order to remain employable (Fugate, Kinicki & Ashforth, 2004). Van der Heijde and Van der Heijden (2006, p. 143) defined employability as “continuously fulfilling, acquiring or creating work by optimally using one’s competencies”. This definition emphasizes the importance of objective factors like knowledge, skills and adaptability (Cuyper, Bernhard-Oettel, Berntson, Witte & Alarco, 2008). However, the perception of one’s employability may also be important. Therefore, the present study will examine *perceived employability*, which is defined as “the individual’s perception of his or her possibilities to achieve a new job” (Berntson, Sverke, & Marklund, 2006, p. 225).

Fugate and colleagues (2004) emphasized the value of individual factors, especially regarding proactive behavior, in explaining why some individuals are more employable than others. Research has shown that proactive behavior leads to better performances (Crant, 1995) and more successful careers (Seibert, Crant, & Kraimer, 1999), which is positively associated with employability (De Graaf et al., 2011). Since job crafting is a form of proactive behavior, it can be expected that job crafting contributes to an individuals’ employability. Indeed, several studies revealed that crafting resources and challenging demands has a positive effect on employability (Tims et al., 2012; Bakker et al., 2012). However, it should be noted that the relationship between job crafting and (perceived) employability depends on the form of job crafting. Various studies found no relationship between crafting hindering job demands and (perceived) employability (Tims et al., 2012; Van de Riet, Le Blanc & Oerlemans, 2015). Based on the previous mentioned findings, the following hypothesis is formulated:

*Hypothesis 2: Crafting structural job resources, social job resources and challenging job demands will be positively related to perceived employability.*

#### **1.4 Regulatory focus and job crafting**

Tims and Bakker (2010) suggested that regulatory focus might be a possible antecedent of job crafting. The regulatory focus theory of Higgins (1997) is based on the motivational principle that humans are instinctual seeking pleasure and avoiding pain. Two types of foci are distinguished: promotion and prevention focus. Individuals with a promotion orientation seek to satisfy their needs for growth, advancement and development (Crowe & Higgins, 1997). They are particularly sensitive to the presence of pleasurable outcomes and focus on progress, ideals and ambitions (Gorman et al., 2012). Individuals with a prevention orientation are focused on their responsibilities and need for security and safety (Crowe & Higgins, 1997). They are primarily sensitive to the presence of negative outcomes and have a more external focus, such as not disappointing others and feeling obligated to perform well (Gorman et al., 2012). Higgins (1997) considered promotion and prevention focus as orthogonal constructs, meaning that the two foci are conceptualized as two independent dimensions instead of opposite ends of a spectrum.

Liberman and colleagues (1999) reported that individuals with a promotion focus are more open to change than individuals with a prevention focus. Therefore, Tims and Bakker (2010) supposed that individuals with a promotion focus are more likely than individuals with a prevention focus to craft their job. Promotion oriented individuals will take the opportunity to change (i.e. job crafting), because it can lead to personal growth and success, while individuals with a prevention focus will be less likely to change their situation, because of their preference for stability and security. In line with these suggestions, Brenninkmeijer and Hekkert-Koning (2015) found positive relationships between promotion focus and crafting structural job resources, social job resources and challenging demands. However, it is less likely that individuals with a promotion orientation will craft their hindering demands. They need these demands for the great levels of challenge, but also to meet their high goals and ambitions (Petrou et al., 2012). Therefore, the following hypotheses are formulated:

*Hypothesis 3a: promotion focus will be positively related to crafting structural job resources, social job resources and challenging demands.*

*Hypothesis 3b: promotion focus will be negatively related to crafting hindering job demands.*

As previously described, individuals with a prevention focus are less likely to take the risk of changing their environment (Tims & Bakker, 2010). However, when hindering job demands become a risk for their stability and security, they might craft these demands in order to maintain their status quo. A recent study by Brenninkmeijer and Hekkert-Koning (2015) showed that prevention focus is indeed positively related to crafting hindering job demands. Therefore, the following hypothesis is formulated:

*Hypothesis 3c: prevention focus will be positively related to crafting hindering job demands.*

### **1.5 Career competencies and job crafting**

Individuals increasingly need career competencies to help them manage their career in the changing work environment (Van der Heijde & Van der Heijden, 2006). Akkermans and colleagues (2012, p. 5) defined career competencies as “Knowledge, skills and abilities related to career development, which can be influenced and developed by the individual”. Based on previous research, Kuijpers and Scheerens (2006) distinguished three dimensions of career competencies. Firstly, reflective career competencies refer to the awareness and reflection on personal skills and motivations. Secondly, communicative career competencies refer to increasing one’s chance of career success by communicating effectively with relevant people. Finally, behavioral career competencies are based on actively forming one’s career. Several career competencies within these dimensions mainly focus on behaviors related to the external environment, such as networking. The present study is more interested in personal reflection and the competence to plan a career, therefore only the following career competencies will be examined: “reflection on motivation”, referring to reflection on values and motivations in one’s career, “reflection on quality”, referring to reflection on one’s strengths and skills, and “career control”: actively influencing learn- and work processes by setting and planning goals (Akkermans et al., 2012). The term reflection competencies and career control will be used in this study.

Several studies showed that employees with a broad set of competencies and skills are more employable and engaged (Van der Heijde & Van der Heijden, 2006; Salanova, Schaufeli, Xanthopoulou & Bakker, 2010). We also expect that reflection competencies and career control can have a moderating effect on the relationship between job crafting, work engagement and employability. Firstly, reflection on motivation leads to consciousness of ambitions and values. It supports employees in making good and realistic choices regarding



their career (Meijers, Kuijpers & Gundy, 2013). It seems likely that this can help the employee in determining which job resources and demands to craft to enhance their engagement and employability. Secondly, reflection on qualities creates a realistic view of one's capabilities (Meijers et al., 2013). As a result, unachievable goals and tasks that hinder work engagement and employability are avoided (Kuijpers, Schyns & Scheerens, 2006). Reflection on qualities could support employees in crafting resources and demands that suit their capabilities, which can foster effective and successful job crafting behaviors that increase work engagement and employability. Finally, career control helps employees to actively influence learn processes and plan goal achievement (Meijers et al., 2013). This can create self-directedness by being adaptive in learning processes (Raemdonck et al., 2012). Carefully planning one's career and selecting jobs and tasks that support personal development may help the employee craft his job by enabling him to decide and plan which resources and demands to craft in order to reach goals. Therefore, it seems likely that career control will enhance the effect of job crafting on work engagement and employability. The following hypotheses are formulated:

*Hypothesis 4a: the relationship between job crafting and work engagement will be moderated by reflection competencies and career control.*

*Hypothesis 4b: the relationship between job crafting and employability will be moderated by reflection competencies and career control.*

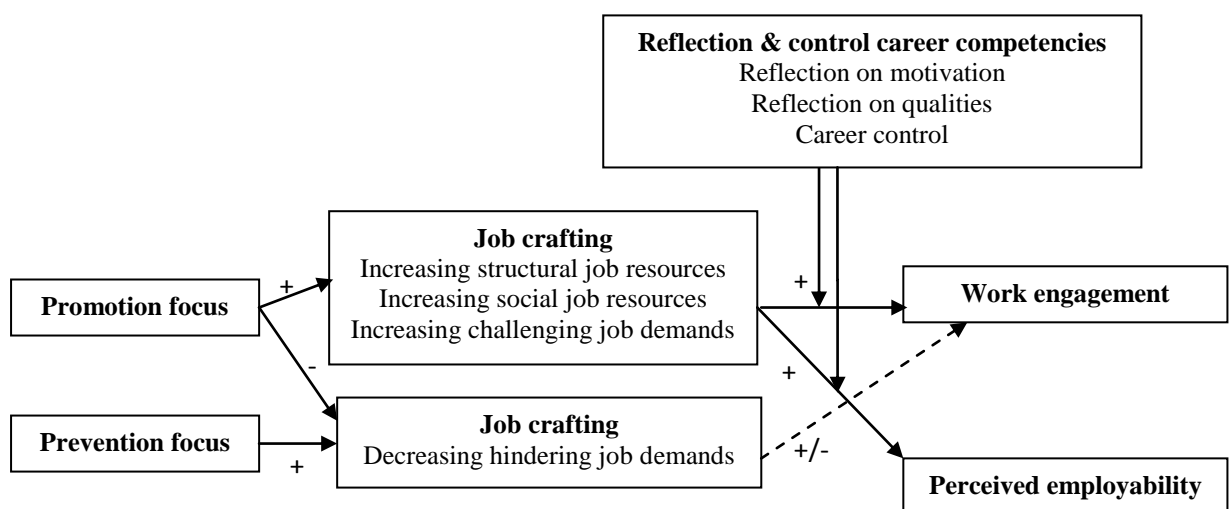


Figure 1. The expected relationships between regulatory focus, job crafting, career competencies, work engagement and perceived employability.

## 2. Method

### 2.1 Procedure

The data for this study were gathered among contacts on LinkedIn and Twitter and candidates who were registered at the company Derks & Derks B.V., a HR consultancy bureau for recruitment, assessment, coaching, and HR research. This bureau is particularly active in the Life Sciences and focuses on highly educated professionals. In January 2015 the participants received a newsletter by email that contained a short introduction to the study. On the 4<sup>th</sup> of March the participants received a pre-announcement of the study. This briefing included information about the purpose of the study and emphasized the anonymity and confidentiality of the data. A week later they received the actual link to the online survey, which was followed by a reminder the week after.

### 2.2 Participants

A total of 441 participants completed the questionnaire, of whom 174 (39.5%) were woman and 267 (60.5%) were man. Ages ranged from 21 to 84 years with an average age of 46.34 ( $SD = 9.95$ ). Most participants (84.1%) had more than 10 years of work experience. The average level of education of the participants was relatively high: 90% has a Bachelor or Master degree. Table I shows the branches in which the participants were employed.

Table 1. *Descriptive statistics (n = 441)*

|                          | Category               | n   | %    |
|--------------------------|------------------------|-----|------|
| Education level          | MAVO, LBO, VMBO        | 7   | 1,6  |
|                          | HAVO, MBO              | 31  | 7,0  |
|                          | VWO                    | 6   | 1,4  |
|                          | HBO                    | 196 | 44,4 |
|                          | WO                     | 201 | 45,6 |
| Years of work experience | 0 to 2                 | 14  | 3,2  |
|                          | 2 to 5                 | 17  | 3,9  |
|                          | 5 to 10                | 39  | 8,8  |
|                          | > 10                   | 371 | 84,1 |
| Branches                 | Food                   | 46  | 10,4 |
|                          | Pharmacy/Biotechnology | 142 | 32,2 |
|                          | Healthcare             | 52  | 11,8 |
|                          | Medical devices        | 27  | 6,1  |
|                          | Other                  | 174 | 39,5 |

### 2.3 Measurement

*Job crafting* was measured with the 21-item Job Crafting Scale developed by Tims et al. (2012). All the items were scored on a 5-point frequency scale ranging from (1) = ‘never’ to (5) = ‘often’. Four dimensions are measured in the Job Crafting Scale: increasing structural job resources (e.g., “I try to develop my capabilities”), increasing social job resources (e.g., “I ask my supervisor to coach me”), increasing challenging job demands (e.g., “When an interesting project comes along, I offer myself proactively as project co-worker”) and decreasing hindering job demands (e.g., “I try to ensure that my work is emotionally less intense”). A principal component analysis with oblique promax rotation showed that four components had eigenvalues over Kaiser’s criterion of 1, with an explained variance of 51.17%. However, these components differed from the original dimensions. The Rotated Pattern Matrix showed that structural job resources and challenging job demands loaded on the same factor. Furthermore, all the intended items had significant loadings on the intended factors, except for question 3 of the social job resources dimension. After removal of this item, the principal component analysis showed three factors with an explained variance of 47.18%. The intended items loaded on the factors social job resources and hindering job demands. The items of structural job resources and challenging demands still had loadings on one factor. Therefore, the present study will distinguish three dimensions: social job resources ( $a = .72$ ), hindering job demands ( $a = .76$ ) and structural resources and challenges ( $a = .83$ ).

*Work engagement* was measured with the shortened 9-item version of the Utrecht Work Engagement Scale (Schaufeli, Bakker & Salanova, 2006). All the items were scored on a 7-point Likert scale ranging from (0) = ‘never’ to (6) = ‘always’. The scale consists three underlying dimensions of work engagement: vigor (e.g., “At my job, I feel strong and vigorous”), dedication (e.g., “My job inspires me”) and absorption (e.g., “I feel happy when I am working intensely”). The internal consistency is high for both the total scale ( $a = .93$ ) and the three dimensions vigor ( $a = .88$ ), dedication ( $a = .91$ ) and absorption ( $a = .81$ ).

The Work Regulatory Focus Scale from Neubert and colleagues (2008) was used to measure *regulatory focus*. The scale consists of 18 questions, half of which measures prevention focus ( $a = .84$ ; e.g., “I focus my attention on avoiding failure at work”) and the other half promotion focus ( $a = .83$ ; e.g., “I tend to take risks at work in order to achieve success”). Participants responded to these items using a 5-point Likert scale ranging from (1) = ‘totally disagree’ and (5) = ‘totally agree’. The principal component analysis with

orthogonal varimax rotation showed four components with eigenvalues over Kaiser's criterion of 1 and an explained variance of 60.19%. However, two factors consisted prevention items (clear distinction between security and duties/responsibilities) and the other two consisted promotion items (distinction between ambition/growth and taking risks/opportunities). The PCA fixed on two factors showed that all items had significant loadings on the intended factors with an explained variance of 40.09%.

A modified 8-item scale from De Cuyper and De Witte (2008) made by Akkermans (2013) was used to measure *perceived employability* (e.g., "I am optimistic that I would find another job if I looked for one"). Participants were asked to score the items on a 5-point Likert scale, ranging from (1) = 'totally disagree' and (5) = 'totally agree'. The internal consistency of the scale was good ( $\alpha = .84$ ).

*Career competencies* were measured using subscales of the Career Competencies Questionnaire developed by Akkermans, Brenninkmeijer, Huibers and Blonk (2012). Responses to items were given on a 5-point Likert scale, (1) = 'totally disagree' and (5) = 'totally agree'. In this study the subscales reflection on motivation ( $\alpha = .79$ ; e.g., "I know what I like in my job"), reflection on qualities ( $\alpha = .88$ ; e.g., "I know what my strengths are in my work") and career control ( $\alpha = .89$ ; e.g., "I know how to make a plan for what I want to achieve in my career") were used.

## **2.4 Data analyses**

Statistical Program for Social Sciences (SPSS) 22.0 was used to analyze the data. Before analyzing, all scales were tested for outliers, normality, multicollinearity and linearity and homoscedasticity of residuals. Generally these assumptions were met. Multiple regressions were used to examine the relationships between regulatory focus, job crafting, work engagement and employability. To examine the moderating effect of career competencies, separate hierarchical regression analyses were used to shield the effects from potentially disconfirming evidence (Edwards & Lambert, 2007). These analyses were conducted using the procedure of Aiken and West (1991).

### 3. Results

#### 3.1 Correlations

Means, standard deviations and intercorrelations among the studied variables are presented in table 2. All correlations were in the expected direction, except for prevention focus with promotion focus, crafting social and structural resources, and challenging demands.

Furthermore, correlations between the subscales of career competencies were relatively high, especially for reflection on motivation and reflection on qualities. To avoid multicollinearity, these two variables were merged.

Table 2. Means, standard deviations and intercorrelations between the study variables ( $N = 441$ ).

|                             | Range | <i>M</i> | <i>SD</i> | 2     | 3      | 4     | 5     | 6      | 7     | 8      | 9      | 10    |
|-----------------------------|-------|----------|-----------|-------|--------|-------|-------|--------|-------|--------|--------|-------|
| 1. Struc Res. and Chall.    | 1-5   | 3.98     | 0.54      | .41** | -.33** | .50** | .13** | .43**  | .28** | .38**  | .36**  | .32** |
| 2. Social JR                | 1-5   | 3.38     | 0.74      |       | -.04   | .32** | .23** | .35**  | .19** | .22**  | .16**  | .24** |
| 3. Hindering JD             | 1-5   | 2.32     | 0.65      |       |        | -.08  | .21** | -.20** | -.10* | -.25** | -.23** | -.09  |
| 4. Promotion focus          | 1-5   | 3.59     | 0.64      |       |        |       | .19** | .27**  | .30** | .30**  | .24**  | .41** |
| 5. Prevention focus         | 1-5   | 3.47     | 0.65      |       |        |       |       | .19**  | .00   | .11*   | .08    | .09   |
| 6. Work engagement          | 0-6   | 4.24     | 1.03      |       |        |       |       |        | .21** | .41**  | .33**  | .36** |
| 7. Employability            | 1-5   | 3.13     | 0.79      |       |        |       |       |        |       | .14**  | .17**  | .28** |
| 8. Reflection on motivation | 1-5   | 4.17     | 0.66      |       |        |       |       |        |       |        | .67**  | .57** |
| 9. Reflection on qualities  | 1-5   | 4.26     | 0.55      |       |        |       |       |        |       |        |        | .42** |
| 10. Career control          | 1-5   | 3.35     | 0.88      |       |        |       |       |        |       |        |        |       |

Note: \*  $p < .05$  and \*\*  $p < .01$ .

#### 3.2 Regression analyses

##### 3.2.1 Job crafting and work engagement

Table 3 shows the results of the multiple regression analysis that was conducted to examine the associations between job crafting and work engagement. A positive relationship was expected between crafting structural and social resources, challenging demands and work engagement (hypothesis 1). The dimensions of job crafting explained 22.9% of the variance in work engagement,  $F(3, 437) = 43.23, p < .001$ . In line with hypothesis 1, work engagement appeared to be positively related to crafting structural resources and challenges ( $\beta = .32, p < .001$ ) and social job resources ( $\beta = .22, p < .001$ ). The relationship between crafting hindering job demands and work engagement was examined in an exploratory manner. No significant relationship was found ( $\beta = -.09, ns$ ).

### 3.2.2 Job crafting and perceived employability

Table 3 also presents the findings of the multiple regression analysis that examined the relationship between job crafting and perceived employability. Hypothesis 2 expected a positive relationship between crafting structural and social resources, challenging demands and perceived employability. The dimensions of job crafting explained 8.4% of the variance in perceived employability,  $F(3, 437) = 13.27, p < .001$ . Positive associations were found between crafting structural resources and challenges and perceived employability ( $\beta = .23, p < .001$ ), but not for crafting social job resources ( $\beta = .10, p = ns$ ). Therefore, hypothesis 2 was partly confirmed. Furthermore, no significant relationship between crafting hindering job demands and perceived employability was found ( $\beta = -.02, ns$ ).

Table 3. Summary of regression analyses of job crafting, work engagement and perceived employability ( $N = 441$ ).

|                        | Work engagement |          |     |        | Perceived employability |          |     |        |
|------------------------|-----------------|----------|-----|--------|-------------------------|----------|-----|--------|
|                        | $\beta$         | <i>B</i> | SE  | $R^2$  | $\beta$                 | <i>B</i> | SE  | $R^2$  |
| Model                  |                 |          |     | .23*** |                         |          |     | .08*** |
| Struc. Res. and Chall. | .32***          | .61      | .09 |        | .23***                  | .34      | .08 |        |
| Social JR              | .22***          | .30      | .06 |        | .10                     | .10      | .05 |        |
| Hindering JD           | -.09            | -.13     | .07 |        | -.02                    | -.03     | .06 |        |

Note: \*  $p < .05$ , \*\*  $p < .01$ . and \*\*\*  $p < .001$

### 3.2.3 Regulatory focus and job crafting

Table 4 shows the results of the multiple regression analysis that was conducted to examine the associations between regulatory focus and job crafting. Regulatory focus explained 25.5% of the variance in job crafting,  $F(2, 438) = 74.85, p < .001$ . Hypothesis 3A expected a positive relationship between promotion focus and structural job resources, social job resources and challenging demands. In line with this hypothesis, positive associations were found between promotion focus and structural resources and challenges ( $\beta = .50, p < .001$ ), and social job resources ( $\beta = .29, p < .001$ ). Hypothesis 3B expected a negative relationship between promotion focus and crafting hindering demands. The results confirmed this expectation ( $\beta = -.13, p < .01$ ). Furthermore, positive associations were found between prevention focus and crafting hindering demands ( $\beta = .23, p < .001$ ), which is in line with hypothesis 3C. However, in contrast with our expectations, prevention focus was also positively related to crafting social job resources ( $\beta = .18, p < .001$ ).

Table 4. *Summary of regression analyses of regulatory focus and the dimensions of job crafting (N = 441).*

|             | Struc. Res. & Chall. |          |     |        | Social JR |          |     |        | Hindering JD |          |     |        |
|-------------|----------------------|----------|-----|--------|-----------|----------|-----|--------|--------------|----------|-----|--------|
|             | $\beta$              | <i>B</i> | SE  | $R^2$  | $\beta$   | <i>B</i> | SE  | $R^2$  | $\beta$      | <i>B</i> | SE  | $R^2$  |
| Model       |                      |          |     | .26*** |           |          |     | .13*** |              |          |     | .06*** |
| Prom. focus | .50***               | .42      | .04 |        | .29***    | .34      | .05 |        | -.13**       | -.13     | .05 |        |
| Prev. focus | .03                  | .03      | .03 |        | .18***    | .20      | .05 |        | .23***       | .23      | .05 |        |

Note: \*  $p < .05$ , \*\*  $p < .01$ . and \*\*\*  $p < .001$

### 3.3 Moderation effects

#### 3.3.1 Moderation effect of reflection competencies and career control on work engagement

Table 5 shows the results of the hierarchical multiple regressions that were conducted to examine the influence of reflection competencies and career control on the relationship between job crafting and work engagement. Hypothesis 4A expected that career competencies would have a moderating effect on the relationship between job crafting and work engagement. The addition of the main effects to the prediction of work engagement (Model 2) led to a statistically significant increase in  $R^2$  of .277,  $F(5, 432) = 34.99, p < .001$ . The addition of the interaction terms (Model 3) had no significant increases in  $R^2$  (see Table 5). Therefore, no supporting evidence was found for hypothesis 4A.

Table 5. *Summary of Hierarchical Multiple Regression analyses of the moderating effect of reflection competencies and career control on the relation between job crafting, work engagement and perceived employability (N = 441).*

|                     | Work engagement |          |     |        |              | Perceived employability |          |     |        |              |
|---------------------|-----------------|----------|-----|--------|--------------|-------------------------|----------|-----|--------|--------------|
|                     | $\beta$         | <i>B</i> | SE  | $R^2$  | $R^2$ Change | $\beta$                 | <i>B</i> | SE  | $R^2$  | $R^2$ Change |
| Model 1             |                 |          |     | .04*** | .04***       |                         |          |     | .07*** | .07***       |
| Gender <sup>1</sup> | -.03            | -.07     | .10 |        |              | -.14**                  | -.22     | .08 |        |              |
| Age                 | .18***          | .02      | .01 |        |              | -.28***                 | -.02     | .00 |        |              |
| Model 2             |                 |          |     | .32*** | .28***       |                         |          |     | .22*** | .14***       |
| Stru. Res. & Chal.  | .21***          | .21      | .05 |        |              | .19***                  | .15      | .04 |        |              |
| Social JR           | .22***          | .22      | .05 |        |              | .05                     | .04      | .04 |        |              |
| Hindering JD        | -.04            | -.04     | .05 |        |              | -.04                    | -.03     | .04 |        |              |
| Reflection comp.    | .16**           | .16      | .05 |        |              | .01                     | .01      | .04 |        |              |
| Career control      | .14**           | .15      | .05 |        |              | .23***                  | .18      | .04 |        |              |

<sup>1</sup> (1) = male, (2) = female

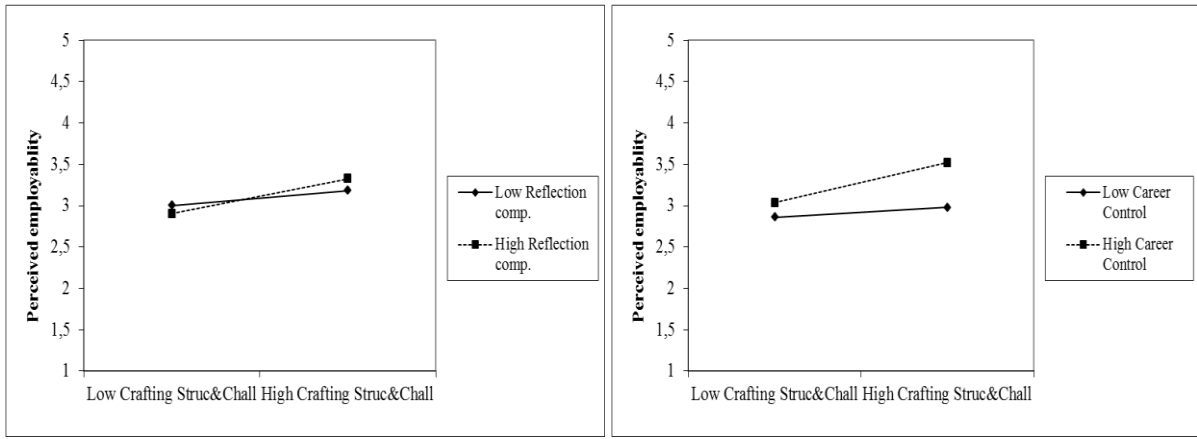
|                    |      |      |     |        |     |        |      |     |        |       |
|--------------------|------|------|-----|--------|-----|--------|------|-----|--------|-------|
| Model 3            |      |      |     | .32*** | .00 |        |      |     | .23*** | .02** |
| Stru. Res & chal.  | .06  | .03  | .02 |        |     | .13**  | .06  | .02 |        |       |
| x Reflection comp  |      |      |     |        |     |        |      |     |        |       |
| Model 3            |      |      |     | .32*** | .00 |        |      |     | .23*** | .02** |
| Stru. Res & chal.  | -.00 | -.00 | .04 |        |     | .13**  | .09  | .03 |        |       |
| x career control   |      |      |     |        |     |        |      |     |        |       |
| Model 3            |      |      |     | .30*** | .00 |        |      |     | .23*** | .01** |
| Social JR x        | .03  | .03  | .04 |        |     | .11**  | .08  | .03 |        |       |
| Reflection comp.   |      |      |     |        |     |        |      |     |        |       |
| Model 3            |      |      |     | .32*** | .00 |        |      |     | .22*** | .01   |
| Social JR x Career | .04  | .03  | .04 |        |     | .08    | .06  | .03 |        |       |
| control            |      |      |     |        |     |        |      |     |        |       |
| Model 3            |      |      |     | .30*** | .00 |        |      |     | .22*** | .00   |
| Hindering JD x     | .02  | .02  | .03 |        |     | -.04   | -.02 | .03 |        |       |
| Reflection comp.   |      |      |     |        |     |        |      |     |        |       |
| Model 3            |      |      |     | .32*** | .00 |        |      |     | .22*** | .02** |
| Hindering JD x     | .05  | .05  | .04 |        |     | -.13** | -.10 | .03 |        |       |
| Career control     |      |      |     |        |     |        |      |     |        |       |

Note: \*  $p < .05$ , \*\*  $p < .01$ . and \*\*\*  $p < .001$

### 3.3.2 Moderation effect of reflection competencies and career control on perceived employability

Table 5 also shows the results of the hierarchical multiple regressions that were conducted to examine the influence of reflection competencies and career control on the relationship between job crafting and perceived employability. Hypothesis 4B expected that career competencies would have a moderating effect on the relationship between job crafting and perceived employability. The addition of the main effects to the prediction of perceived employability (Model 2) led to a statistically significant increase in  $R^2$  of .144,  $F(5, 432) = 15.83$ ,  $p < .001$ . The addition of the interaction terms (Model 3) led to significant increases in  $R^2$  for reflection competencies and career control on crafting structural resources and challenges, reflection competencies on crafting social job resources, and career control on crafting hindering job demands (see table 5). Figures 2a, b, c and d show the nature of the interaction effects. In general, the relationship between job crafting and perceived employability was more positive under the condition of high career competencies. However, the moderating effect of career control on the relationship between crafting hindering job demands and perceived employability shows a different effect (figure 2d), whereby the relationship was more negative under the condition of high career control. These results partially confirm hypothesis 4B.

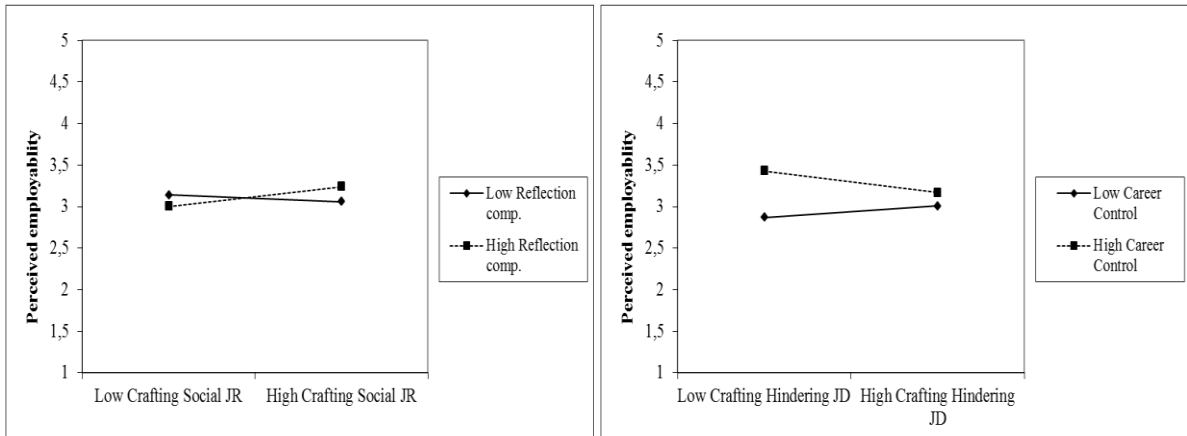




(a)

(b)

Figure 2a and 2b. Reflection competencies (a) and career control (b) as moderators between the relationship of crafting structural resources and challenges and perceived employability.



(c)

(d)

Figure 2c and 2d. Reflection competencies as a moderator between the relationship of crafting social job resources and perceived employability (c), and career control as a moderator between the relationship of crafting hindering job demands and perceived employability (d).

## 4. Discussion

This study examined the relationships between job crafting, work engagement and perceived employability. Regulatory focus was examined as a possible antecedent of job crafting. Furthermore, the moderating effect of career competencies on the relation between job crafting, work engagement and perceived employability was examined. Research on these relationships is still relatively scarce. Therefore, the aim of the present study is to expand knowledge on these relationships. Data were gathered using an online survey on social media and among candidates of a consultancy bureau in the life sciences ( $N = 441$ ).

### 4.1 Theoretical contributions

#### *Job crafting and work outcomes*

As expected, crafting job resources and challenging demands were positively related to work engagement and perceived employability. These findings suggest that it is effective to proactively change and seek resources and challenges to enhance work engagement and employability. This view is supported by Tims and Bakker (2010), who argue that job crafting fosters one's engagement and performance through proactively aligning resources and demands with abilities and needs. However, it should be noted that the relationship between crafting social job resources and perceived employability was not significant.

Recent studies reported that crafting hindering demands was unrelated (Tims et al., 2012; Tims et al., 2013) or negatively related (Petrou et al., 2012; Brenninkmeijer & Hekkert-Koning, 2015) to work engagement and perceived employability. The results of the present suggest that they are unrelated. Tims and colleagues (2014) concluded that crafting hindering demands is not related to motivation and performance, because demands are more associated with negative work and health outcomes (Hakanen, Schaufeli & Aalola, 2008). Therefore, it seems likely that crafting hindering demands will be more strongly related to exhaustion or stress rather than engagement and employability (Tims et al., 2014). However, it is also possible that participants reported lower scores on crafting hindering demands because they perceive this as socially undesirable (Tims et al., 2013), or that it may be difficult to craft hindering demands. Hakanen and colleagues (2006) suggested that resources are alterables and open to intervention, whereas job demands are givens and inherent to the job context. Therefore, job demands are harder to craft than job resources. Future (longitudinal) research should examine in more detail how crafting hindering job demands is related to positive and negative work outcomes.

### *Regulatory focus and job crafting*

As expected, promotion focus was positively related to crafting social job resources and structural and challenging opportunities. These findings suggest that individuals with a high promotion orientation are inclined to shape their resources and challenges. Since promotion oriented individuals are motivated to reach desired situations rather than comply with existing tasks (Tims & Bakker, 2010), they will be more likely to implement changes to their jobs. In addition, it was expected that individuals with a high promotion focus would be less likely to craft their hindering job demands, because these demands can contribute to their personal development and achievement of high goals (Petrou et al., 2012). The present study confirmed a negative relationship between promotion focus and crafting hindering demands.

Furthermore, a positive relationship between prevention focus and crafting hindering job demands was found, suggesting that employees with a high prevention focus are more inclined to lower their hindering demands. Although prevention oriented individuals are less likely to change their environment (Lieberman et al., 1999), they may lower these demands in order to preserve their need for stability and security (Tims & Bakker, 2012). The results show that individual differences may affect the way that employees craft their job.

### *Career competencies as moderator*

The moderation effect of career competencies on the relationships between job crafting, work engagement and perceived employability was also examined. Unlike expected, no moderation effect was found between job crafting and work engagement. These findings suggest that the effect of job crafting on work engagement is equal for employees with low and high career competencies. The results regarding the moderation effect between job crafting and perceived employability did show some significant effects, suggesting that individuals with high career competencies are more capable of crafting their job in a manner that increases their employability. By maintaining and expanding their career competencies they can prepare for future tasks and challenges that support career success (Kuijpers, Schyns & Scheerens, 2006). The results also suggest that crafting one's job has little or no effect on the perceived employability of employees with low career competencies.

Furthermore, it should be noted that the results showed a different (negative) effect for career control in the relationship between crafting hindering demands and perceived employability. These results suggest that crafting hindering job demands has a negative effect on employees with high career control because it decreases their perceived employability.

Employees with high career control might need these demands in order to achieve their career goals. However, there may also be other explanations for this effect, so further investigation is needed. Research on the role of career competencies in the relationships between job crafting, work engagement and perceived employability is limited. Therefore, the current study adds to the existing literature by clarifying the role of career competencies. Future research should examine the moderating effect of career competencies on job crafting and work outcomes in more detail, especially by using longitudinal study designs.

#### **4.2 Limitations and future research**

The findings of the present study should be interpreted against some limitations. Firstly, due to the cross-sectional design of the current study no conclusions can be made regarding causality. Therefore, future research should use a longitudinal study design to examine causal effects between the studied variables.

Secondly, the results of the present study are only based on self-reports, which could influence the data (Podsakoff & Organ, 1986). Although the majority of organization research rely on self-reports, using diverse and objective measurements can add value. For example, future research could examine employability by including opinions of managers and colleagues about an individuals' employability. Furthermore, since the results of several studies regarding the relationship between crafting hindering job demands and work outcomes is somewhat ambiguous, interviews could perhaps provide more insight. By asking employees how (crafting) hindering job demands effect(s) their functioning, career success and motivation, it may become clear how they relate exactly.

Thirdly, a relatively large percentage of the participants is employed in the life sciences, and the average level of education is relatively high. Individuals with higher educations are perhaps more inclined to engage in job crafting because they often have more opportunities to craft (Wrzesniewski & Dutton, 2001). Due to the similarities in education and work setting among the participants, the sample is somewhat homogeneous. This has limitations for the generalizability of the results. Future research should examine job crafting in various work settings, and include employees with a lower level of education.

Finally, the factor analyses in the present study did not distinguish crafting structural resources from crafting challenging demands. Several other studies also reported concerns on the measurement of job crafting (Petrou et al., 2012; Brenninkmeijer & Hekkert-Koning, 2015). For example, Petrou et al. (2012) hypothesized and found a similar three-factor

structure for the job crafting scale as the present study. Although the Cronbach's alphas in the present study were still good, future research should examine and improve the validity and reliability of the dimensions of job crafting.

### **4.3 Practical implications**

In general, the findings of the present study suggest that employees who craft resources and challenges are more engaged and employable. Since these are favorable outcomes for as well the employee as employer, it could be useful for managers to stimulate and support these crafting behaviors. In addition, it will be interesting to take individual differences into account when job crafting is stimulated. Following this, it seems especially useful to stimulate employees with a low promotion focus because they are not naturally inclined to engage in beneficial crafting behaviors. Furthermore, the results indicate that career competencies could be relevant for effectively crafting one's job in order to increase employability. This knowledge can be used by managers to enhance the insight of employees in their motivations, abilities and career control. Employees can then use this insight to decide how to craft their job, with a positive effect on their employability. In addition, the findings of the current study can be used to design training programs for employees with a focus on how to craft one's job and/or develop career competencies in order to enhance work engagement and employability. It is also useful for organizations to create a culture that promotes proactive behavior, which stimulates job crafting behaviors.

### **4.4 Conclusion**

The current study provides a contribution to knowledge regarding the relationships between job crafting, regulatory focus, work engagement, perceived employability and career competencies. Results of this study show that individual differences between employees have an effect on the way they craft their job. Employees with a promotion focus tend to increase resources and challenges, while employees with a prevention focus tend to decrease their hindering job demands. Crafting resources and challenges were positively related to work engagement and employability. Furthermore, career competencies moderated the relationship between job crafting and perceived employability. These findings suggest that it could be important for managers to encourage employees to craft their job, while taking their regulatory focus and career competencies into account. This is especially important since job crafting is related to positive work outcomes of interest to both employee and employer.

## References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Akkermans, T.J. (2013). *Well begun is half done: investigating the work and career of the young workforce*. Enschede: Ipskamp Drukkers.
- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R. W. (2012). Competencies for the contemporary career: Development and preliminary validation of the Career Competencies Questionnaire. *Journal of Career Development, 40*(3), 245-267, DOI 0894845312467501.
- Albrecht, S.L. (Ed.). (2010). *Handbook of employee engagement: Perspectives, issues, research and practice*. Glos, England: Edward Elgar Publishing.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology, 22*(3), 309-328.
- Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human relations, 65*(10), 1359-1378.
- Berg, J.M., Dutton, J.E. and Wrzesniewski, A. (2008), "What is job crafting and why does it matter", available at: <http://positiveorgs.bus.umich.edu/wp-content/uploads/What-is-Job-Crafting-and-Why-Does-it-Matter1.pdf> (accessed 13 February 2014).
- Berntson, E., Sverke, M., & Marklund, S. (2006). Predicting perceived employability: human capital or labour market opportunities?. *Economic and Industrial Democracy, 27*(2), 223-244.
- Bindl, U., & Parker, S. K. (2010). Proactive work behavior: Forward-thinking and change-oriented action in organizations (Vol. 2, pp. 567-598). Washington, DC: American Psychological Association
- Brenninkmeijer, V., & Hekkert-Koning, M. (2015). To craft or not to craft: the relationships between regulatory focus, job crafting and work outcomes. *Career Development International, 20*(2), 147-162.
- Cooley, E., & Yovanoff, P. (1996). Supporting professionals-at-risk: Evaluating interventions to reduce burnout and improve retention of special educators. *Exceptional Children, 62*(4), 336-355.
- Crant, J. M. 1995. The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology, 80*: 532–537.

- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of management*, 26(3), 435-462.
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834.
- Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational behavior and human decision processes*, 69(2), 117-132.
- Cuyper, N. D., Bernhard-Oettel, C., Berntson, E., Witte, H. D., & Alarco, B. (2008). Employability and Employees' Well-Being: Mediation by Job Insecurity<sup>1</sup>. *Applied Psychology*, 57(3), 488-509.
- De Cuyper, N., & De Witte, H. (2008). Gepercipieerde kans op een baan versus een betere baan: Relaties met arbeidstevredenheid en welzijn. *Gedrag en Organisatie*, 21(4), 475-492.
- De Graaf, S., Peeters, M., & van der Heijden, B. (2011). De relatie tussen employability en de intentie tot langer doorwerken. *Gedrag en Organisatie*, 24(4), 375-391.
- Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. *Work engagement: A handbook of essential theory and research*, 147-163.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. *Psychological methods*, 12(1), 1.
- Forrier, A., & Sels, L. (2003). The concept employability: a complex mosaic. *International journal of human resources development and management*, 3(2), 102-124.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational behavior*, 65(1), 14-38.
- Gorman, C. A., Meriac, J. P., Overstreet, B. L., Apodaca, S., McIntyre, A. L., Park, P., & Godbey, J. N. (2012). A meta-analysis of the regulatory focus nomological network: Work-related antecedents and consequences. *Journal of Vocational Behavior*, 80(1), 160-172.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of school psychology*, 43(6), 495-513.

- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22, 224–241. Doi:10.1080/02678370802379432
- Higgins, E. T. (1997). Beyond pleasure and pain. *American psychologist*, 52(12), 1280.
- Kroon, B., Kooij, T. A. M., & van Veldhoven, M. J. P. M. (2013). Job crafting en bevlogenheid: Zijn er verschillen tussen teams met een restrictieve dan wel onbegrensde werkcontext?. *Gedrag en Organisatie*, 26(1), 46-65.
- Kuijpers, M. A. C. T., & Scheerens, J. (2006). Career competencies for the modern career. *Journal of career development*, 32(4), 303-319.
- Kuijpers, M. S., Schyns, B., & Scheerens, I. (2006). Career competencies for career success. *The Career Development Quarterly*, 55, 168-178.
- Liberman, N., Idson, L.C., Camacho, C.J., & Higgins, E.T. (1999). Promotion and prevention choices between stability and change. *Journal of Personality and Social Psychology*, 77(6), 1135-1145.
- London, M., & Mone, E. M. (1999). The changing nature of performance: Implications for staffing, motivation, and development. *Continuous Learning*, 119-153.
- Meijers, F., Kuijpers, M., & Gundy, C. (2013). The relationship between career competencies, career identity, motivation and quality of choice. *International Journal for Educational and Vocational Guidance*, 13(1), 47-66.
- Neubert, M.J., Kacmar, K.M., Carlson, D.S., Chonko, L.B., & Roberts, J.A. (2008). Regulatory focus as a mediator of the influence of initiating structure and servant leadership on employee behavior. *Journal of Applied Psychology*, 93(6), 1220-1233.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management*, 12(4), 531-544.
- Raemdonck, I., Tillema, H., de Grip, A., Valcke, M., & Segers, M. (2012). Does self-directedness in learning and careers predict the employability of low-qualified employees?. *Vocations and Learning*, 5(2), 137-151.
- Salanova, M., Schaufeli, W. B., Xanthopoulou, D., & Bakker, A. B. (2010). The gain spiral of resources and work engagement: Sustaining a positive worklife. *Work engagement: A handbook of essential theory and research*, 118-131.



- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire a cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies, 3*(1), 71-92.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*(7), 893.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. 1999. Proactive personality and career success. *Journal of Applied Psychology, 84*: 416–427.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology, 36*(2), 1-9.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior, 80*(1), 173-186.
- Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology, 18*(2), 230.
- Tims, M., Bakker, A. B., & Derks, D. (2014). Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology, (ahead-of-print)*, 1-15.
- Van de Riet, J. J., Le Blanc, P. M., & Oerlemans, W. G. (2015) Leadership and Job Crafting: Relationships with Employability and Creativity, available at [http://alexandria.tue.nl/extra2/afstversl/tm/Riet\\_2015.pdf](http://alexandria.tue.nl/extra2/afstversl/tm/Riet_2015.pdf)
- Van den Heuvel, M., Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2010). Personal resources and work engagement in the face of change. *Contemporary occupational health psychology: Global perspectives on research and practice, 1*, 124-150.
- Van der Heijde, C. M., & Van der Heijden, B. I. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human resource management, 45*(3), 449-476.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review, 26*(2), 179-201.

## Appendix 1. Briefing

### Aankondiging vervolgonderzoek ‘Job crafting: regie nemen in uw carrière’

Geachte relatie,

Hoe bevlogen bent u? Hoe maakt u uw eigen werk (nog) leuker, boeiender, uitdagender? U kunt hierin de regie nemen! Doet u dat ook?

Derks & Derks investeert voortdurend én met plezier in onderzoek naar aan ons vak gerelateerde arbeids- en organisatiepsychologische thema's. In samenwerking met de Universiteit Utrecht lanceren wij daarom binnenkort een vervolgonderzoek naar ‘Job crafting’: de mate waarin professionals zelf hun werk fysiek en mentaal aanpassen, zodat ze dit werk (nog) meer betekenis geven. De resultaten van het onderzoek van afgelopen jaar kunt [hier](#) u vinden.

[Dr. Veerle Brenninkmeijer](#) van de Universiteit Utrecht begeleidt dit onderzoek dat door stagiaire Anouk Pondman uitgevoerd wordt.

Omdat u als professional ingeschreven staat in de database van Derks & Derks nodigen wij u binnenkort uit om aan dit onderzoek deel te nemen door online een vragenlijst in te vullen. Uiteraard gebeurt dit anoniem en worden uw antwoorden niet verbonden aan uw inschrijving bij Derks & Derks.

Dit onderzoek, onder de hoogopgeleide professionals uit onze database, is belangrijk. Uw deelname is nodig om dit thema nader te onderzoeken. U ondersteunt tevens stagiaire Anouk Pondman en draagt bij aan kennis over dit thema én aan de ontwikkeling van methoden en technieken om werk nóg boeiender te maken.

Wij stellen uw deelname zeer op prijs.

Met vriendelijke groet,

Jan Derks  
Directeur

Informatie: Anouk Pondman: [Anouk@derksenderks.nl](mailto:Anouk@derksenderks.nl), 033-4728087

*P.S. Please note that this is a Dutch study. If you can't read Dutch, you may consider this e-mail unsent. Sorry for the inconvenience*

## Appendix 2. Questionnaire

Geachte deelnemer,

Wij stellen het zeer op prijs dat u (wederom) meewerkt aan dit onderzoek! Deze vragenlijst start met een aantal vragen over uw persoonlijke gegevens en wordt gevolgd door vragen omtrent uw werk. Mocht u momenteel niet werkzaam zijn, denk dan terug aan eerdere functies die u bekleed heeft. De door u verstrekte informatie zal geheel anoniem en strikt vertrouwelijk verwerkt worden. De resultaten van de vragenlijst zullen door de Universiteit Utrecht verwerkt worden en zullen niet verbonden worden aan Derks & Derks B.V.

Het invullen van de vragenlijst vergt een investering van 10 - 15 minuten. Denk niet te lang na over uw antwoorden, het gaat om uw eerste ingeving. Er zijn geen goede of foute antwoorden in de vragenlijst. Let op: het is voor de verwerking van de data van belang dat u ALLE vragen invult, u kunt dus geen vragen overslaan. Daarnaast is het goed om te weten dat u NIET terug kunt naar een vorige pagina, u dient dus meteen antwoord te geven op alle getoonde vragen. Voor de verwerking van uw antwoorden is het noodzakelijk dat u aan het einde van de vragenlijst op 'Einde enquête' klikt.

Deelname is uiteraard geheel vrijblijvend, u kunt op elk moment stoppen gedurende het onderzoek. Uw gegevens worden dan echter niet verwerkt.

Aan het einde van deze vragenlijst wordt er een toelichting gegeven over het doel van het onderzoek. Wanneer u voor- of achteraf vragen of suggesties heeft, dan hoor ik die graag via [anouk@derksenderks.nl](mailto:anouk@derksenderks.nl). Zodra u naar de volgende pagina gaat stemt u in met de bovengenoemde voorwaarden van dit onderzoek. Alvast hartelijk dank voor uw deelname.

Met vriendelijke groet,

Anouk Pondman

(Studente Arbeids- en Organisatie Psychologie Universiteit Utrecht en stagiaire bij Derks & Derks B.V.)

dr. Veerle Brenninkmeijer

(Onderzoekbegeleidster Universiteit Utrecht)

drs. Jan Derks

(Directeur Derks & Derks B.V.)

### Hoofdsectie

---

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 uw antwoorden koppelen. Op deze manier blijft uw anonimiteit gewaarborgd. Deze code wordt uitsluitend door de Universiteit Utrecht beheerd en zal niet worden verbonden aan Derks &

Derks.

De persoonlijke code bestaat uit de 4 cijfers van uw geboortedag, de eerste letter van de voornaam van uw vader, gevolgd door 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 ons wilt helpen door een persoonlijke code aan te maken en uw anonimiteit te waarborgen, vul deze dan hieronder in.

.....

### **Achtergrondgegevens**

*Hieronder staan eerst een aantal vragen over uw persoonlijke situatie. Na het invullen kunt u op verder klikken, waarna u door de vragenlijst wordt geleid.*

|   |   |
|---|---|
| Wat is uw geslacht?   | Man / Vrouw   |
| Wat is uw leeftijd?   | .....   |
| Wat is uw hoogst afgeronde opleiding?                           | - Lagere school<br>- MAVO, LBO, VMBO<br>- HAVO, MBO<br>- VWO<br>- HBO<br>- WO |
| Heeft u een leidinggevende functie?                             | Ja / Nee  |
| Bent u zelfstandig ondernemer?                                  | Ja / Nee  |
| Voor hoeveel uur per week heeft u contractueel een aanstelling? | .....   |
| Hoeveel jaar bent u werkzaam?                                   | - 0 tot 2 jaar<br>- 2 tot 5 jaar<br>- 5 tot 10 jaar<br>- > 10 jaar            |

Hoeveel jaar bent u werkzaam in uw huidige functie? .....

Rond uw antwoord af op hele jaren.

Tot welke functiegroep behoort uw functie?

1. QA / regulatory affairs
2. Technisch
3. Sales/ marketing
4. Medische expert
5. IT
6. HRM
7. Inkoop
8. Financiën
9. Administratief
10. Planning / logistiek
11. R&D
12. QC / laboratorium
13. Management/ Directie
14. Overig

In welke branche bent u momenteel werkzaam?

1. Voedingsmiddelenindustrie
2. Farma/ Biotechnologie industrie
3. Gezondheidszorg
4. Medical Devices /  
Laboratoriumbenodigdheden
5. Overig

### **Job Crafting Scale**

---

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

1. Ik zorg ervoor dat ik mijn capaciteiten optimaal benut
2. Ik zorg ervoor dat ik niet teveel hoef om te gaan met personen wier problemen mij emotioneel raken
3. Ik vraag collega's om advies
4. Ik probeer mezelf bij te scholen

5. Als er nieuwe ontwikkelingen zijn, sta ik vooraan om ze te horen en uit te proberen
6. Ik vraag of mijn leidinggevende tevreden is over mijn werk
7. Ik zorg ervoor dat ik zelf kan beslissen hoe ik iets doe
8. Ik zorg ervoor dat ik minder moeilijke beslissingen in mijn werk hoeft te nemen
9. Ik probeer nieuwe dingen te leren op mijn werk
10. Ik vraag anderen om feedback over mijn functioneren
11. Ik zorg ervoor dat ik minder emotioneel inspannend werk moet verrichten
12. Ik zoek inspiratie bij mijn leidinggevende
13. Ik probeer mezelf te ontwikkelen
14. Ik neem geregeld extra taken op me hoewel ik daar geen extra salaris voor ontvang
15. Ik zorg ervoor dat ik niet teveel hoeft om te gaan met mensen die onrealistische verwachtingen hebben
16. Als het rustig is op mijn werk, zie ik dat als een kans om nieuwe projecten op te starten
17. Ik vraag mijn leidinggevende om mij te coachen
18. Ik zorg ervoor dat ik minder geestelijk inspannend werk hoeft te verrichten
19. Ik probeer mijn werk wat zwaarder te maken door de onderliggende verbanden van mijn werkzaamheden in kaart te brengen
20. Als er een interessant project voorbij komt, bied ik mezelf proactief aan als projectmedewerker
21. Ik zorg ervoor dat ik me niet lange tijd achter elkaar hoeft te concentreren

### **Utrecht Work Engagement Scale**

---

*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.*

1. Op mijn werk bruis ik van energie
2. Als ik werk voel ik me fit en sterk
3. Als ik 's morgens opsta heb ik zin om aan het werk te gaan
4. Ik ben enthousiast over mijn baan
5. Mijn werk inspireert me
6. Ik ben trots op het werk dat ik doe
7. Ik ga helemaal op in mijn werk

8. Mijn werk brengt me in vervoering
9. Wanneer ik heel intensief aan het werk ben, voel ik mij gelukkig

### **Work Regulatory Focus Scale**

---

*De onderstaande vragen gaan over uw persoonlijke houding ten opzichte van het werk. Kies bij elke uitspraak het voor u best passende antwoord.*

1. Ik concentreer mij op het correct volbrengen van mijn taken om mijn baan zekerheid te vergroten
2. Op het werk focus ik mij op het voltooien van de aan mij toegewezen taken.
3. Het vervullen van de plichten op mijn werk is erg belangrijk voor mij.
4. Op het werk streef ik ernaar mijn verantwoordelijkheden en plichten opgelegd door anderen, te volbrengen.
5. Op het werk ben ik vaak gefocust op taken die mijn behoefte aan veiligheid ondersteunen.
6. Ik doe er alles om mislukkingen op het werk te voorkomen.
7. Baanzekerheid is een belangrijke factor voor mij bij iedere zoektocht naar een baan.
8. Ik richt mijn aandacht op het vermijden van mislukking op mijn werk.
9. Ik let goed op dat ik mijzelf niet blootstel aan mogelijke mislukkingen op mijn werk.
10. Ik grijp mijn kansen op het werk om mijn doelen voor vooruitgang te vergroten
11. Ik heb de neiging om risico's te nemen in mijn werk om succes te bereiken.
12. Als ik de mogelijkheid had om mee te werken aan een zeer risicovol, maar zeer belonend project zou ik dat zeker doen.
13. Als mijn baan geen mogelijkheden gaf om door te groeien, dan zou ik waarschijnlijk een nieuwe baan zoeken.
14. De kans om te groeien is een belangrijke factor voor mij, bij iedere zoektocht naar een baan.
15. Ik focus mij op het volbrengen van taken die mij verder doen groeien in mijn baan.
16. Ik besteed veel tijd aan nadenken over hoe ik mijn ambities ga vervullen.
17. Mijn werkprioriteiten worden beïnvloed door een duidelijk beeld van hoe ik zou willen zijn.
18. Op mijn werk word ik gemotiveerd door mijn ambities en idealen.

## **Perceived Employability Scale**

---

*De volgende stellingen gaan over de mogelijkheden die u hebt in uw loopbaan. Kies bij iedere stelling het antwoord dat op u van toepassing is.*

1. Ik vind gemakkelijk een andere baan als ik mijn huidige baan verlies.
2. Ik zou snel ander werk kunnen vinden, als ik daar naar zou zoeken.
3. Ik ben in staat om bij een ander bedrijf een betere baan te vinden als ik daar naar zou zoeken.
4. Ik zou een andere, betere baan kunnen vinden als ik dat zou willen.
5. Ik ben in mijn huidige werk inzetbaar voor verschillende soorten werk.
6. Ik ben in staat om bij mijn huidige werkgever door te stromen naar andere functies.
7. Ik kan in mijn huidige baan hogerop komen.
8. Ik zou binnen mijn huidige organisatie door kunnen groeien naar een betere baan.

## **Career Competencies**

---

*De volgende (en laatste) stellingen gaan over de motivatie en controle over uw carrière. Geef bij elke stelling aan in welke mate u zich in de stelling herkent.*

1. Ik weet wat ik leuk vind in mijn werk.
2. Ik weet wat voor mij belangrijk is in mijn loopbaan.
3. Ik heb duidelijk voor ogen wat mijn passies zijn.
4. Ik weet wat mijn sterke punten zijn in mijn werk
5. Ik ken mijn eigen beperkingen in mijn werk
6. Ik ben me bewust van mijn talenten in mijn werk
7. Ik weet over welke vaardigheden ik beschik
8. Ik kan duidelijke plannen maken voor mijn loopbaan.
9. Ik weet wat ik over een jaar bereikt wil hebben in mijn loopbaan.
10. Ik weet hoe ik een planning maak voor wat ik wil bereiken in mijn loopbaan.
11. Ik kan voor mezelf doelen stellen die ik wil bereiken in mijn loopbaan.



## Eindpagina

---

U bent nu aan het einde gekomen van dit onderzoek. We willen u hartelijk bedanken voor uw deelname!

Hier volgt een korte toelichting over de inhoud en het doel van het onderzoek:

In dit onderzoek wordt job crafting gemeten, of te wel: welke aanpassingen maakt u in uw werk, om uw werk (nog) meer betekenis te geven. Vervolgens wordt er gekeken of er een verband is met uw persoonlijke houding ten opzichte van het werk. Ziet u kansen en mogelijkheden waardoor u kunt verder groeien in uw werk, of focust u zich op het volbrengen van uw taken en het voorkomen van mislukkingen in uw werk? Het één sluit het ander niet uit, en beiden kunnen tot positieve uitkomsten leiden. Tenslotte worden de verbanden tussen bovenstaande constructen en de uitkomsten vermoeidheid, bevlogenheid en inzetbaarheid onderzocht.

Indien u verder geïnformeerd wilt worden over de resultaten van dit onderzoek, willen wij u vragen om uw e-mailadres hieronder in te vullen. Deze resultaten zult u in augustus 2015 ontvangen. Uw emailadres wordt niet gekoppeld aan uw persoonlijke antwoorden waardoor uw anonimiteit gewaarborgd blijft.

Vergeet niet op 'Einde enquête' te drukken!

Wilt u geïnformeerd worden over de resultaten van het onderzoek?      Ja/Nee

U kunt hier uw e-mailadres invullen:      .....

Wilt u ter bevestiging nogmaals uw emailadres invullen?      .....

Eventuele vragen en/of opmerkingen over het onderzoek kunt u hieronder achterlaten.

.....

### Appendix 3. SPSS syntax

*Eerst zijn er factoranalyses uitgevoerd op de schalen van job crafting en regulatiefocus.*

\*Factoranalyse job crafting: oblique, promax.

FACTOR

```
/VARIABLES JC1 JC2 JC3 JC4 JC5 JC6 JC7 JC8 JC9 JC10 JC11 JC12 JC13 JC14 JC15 JC16 JC17 JC18 JC19  
JC20 JC21  
/MISSING LISTWISE  
/ANALYSIS JC1 JC2 JC3 JC4 JC5 JC6 JC7 JC8 JC9 JC10 JC11 JC12 JC13 JC14 JC15 JC16 JC17 JC18 JC19  
JC20 JC21  
/PRINT INITIAL CORRELATION SIG KMO AIC EXTRACTION ROTATION  
/FORMAT SORT BLANK(.3)  
/PLOT EIGEN ROTATION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/CRITERIA ITERATE(25)  
/ROTATION PROMAX(4)  
/METHOD=CORRELATION.
```

\*Factoranalyse Job crafting zonder vraag 3 - promax (nadat er geforceerd is op 4 om te kijken of de originele factoren dan wel terug te vinden waren).

FACTOR

```
/VARIABLES JC1 JC2 JC4 JC5 JC6 JC7 JC8 JC9 JC10 JC11 JC12 JC13 JC14 JC15 JC16 JC17 JC18 JC19  
JC20 JC21  
/MISSING LISTWISE  
/ANALYSIS JC1 JC2 JC4 JC5 JC6 JC7 JC8 JC9 JC10 JC11 JC12 JC13 JC14 JC15 JC16 JC17 JC18 JC19  
JC20 JC21  
/PRINT INITIAL CORRELATION SIG KMO AIC EXTRACTION ROTATION  
/FORMAT SORT BLANK(.3)  
/PLOT EIGEN ROTATION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/CRITERIA ITERATE(25)  
/ROTATION PROMAX(4)  
/METHOD=CORRELATION.
```

\*Factoranalyse regulatiefocus orthogonal - VARIMAX.

FACTOR

```
/VARIABLES Reg_pre1 Reg_pre2 Reg_pre3 Reg_pre4 Reg_pre5 Reg_pre6 Reg_pre7 Reg_pre8  
Reg_pre9  
Reg_pro1 Reg_pro2 Reg_pro3 Reg_pro4 Reg_pro5 Reg_pro6 Reg_pro7 Reg_pro8 Reg_pro9  
/MISSING LISTWISE  
/ANALYSIS Reg_pre1 Reg_pre2 Reg_pre3 Reg_pre4 Reg_pre5 Reg_pre6 Reg_pre7 Reg_pre8  
Reg_pre9  
Reg_pro1 Reg_pro2 Reg_pro3 Reg_pro4 Reg_pro5 Reg_pro6 Reg_pro7 Reg_pro8 Reg_pro9  
/PRINT INITIAL CORRELATION SIG KMO AIC EXTRACTION ROTATION  
/FORMAT SORT BLANK(.30)  
/PLOT EIGEN ROTATION  
/CRITERIA MINEIGEN(1) ITERATE(25)
```

```
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.
```

\*Factoranalyse regulatiefocus gedwongen op 2 factoren VARIMAX.

```
FACTOR
/VARIABLES Reg_pre1 Reg_pre2 Reg_pre3 Reg_pre4 Reg_pre5 Reg_pre6 Reg_pre7 Reg_pre8
Reg_pre9
Reg_pro1 Reg_pro2 Reg_pro3 Reg_pro4 Reg_pro5 Reg_pro6 Reg_pro7 Reg_pro8 Reg_pro9
/MISSING LISTWISE
/ANALYSIS Reg_pre1 Reg_pre2 Reg_pre3 Reg_pre4 Reg_pre5 Reg_pre6 Reg_pre7 Reg_pre8
Reg_pre9
Reg_pro1 Reg_pro2 Reg_pro3 Reg_pro4 Reg_pro5 Reg_pro6 Reg_pro7 Reg_pro8 Reg_pro9
/PRINT INITIAL CORRELATION SIG KMO AIC EXTRACTION ROTATION
/FORMAT SORT BLANK(.30)
/PLOT EIGEN ROTATION
/CRITERIA FACTORS(2) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.
```

*Om de betrouwbaarheid van de schalen te meten zijn de Cronbach's alpha's berekend (dit was eigenlijk voor de factoranalyses gedaan, maar door de wijzigingen die daaruit kwamen heb ik ze voor het overzicht na de factoranalyses geplaatst).*

\*Cronbachs alpha van JC totaal zonder vraag 3.

```
RELIABILITY
/VARIABLES=JC1 JC2 JC4 JC5 JC6 JC7 JC8 JC9 JC10 JC11 JC12 JC13 JC14 JC15 JC16 JC17 JC18 JC19
JC20
JC21
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.
```

\*Cronbachs alpha voor challenging en structural samen.

```
RELIABILITY
/VARIABLES=JC5 JC14 JC16 JC19 JC20 JC1 JC4 JC7 JC9 JC13
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.
```

\*Cronbachs alpha van JC social zonder vraag 3.

```
RELIABILITY
/VARIABLES=JC6 JC10 JC12 JC17
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
```

```
/STATISTICS=DESCRIPTIVE SCALE CORR  
/SUMMARY=TOTAL.
```

\*Cronbachs alpha van JC hindering.

```
RELIABILITY  
/VARIABLES=JC2 JC8 JC11 JC15 JC18 JC21  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE SCALE CORR  
/SUMMARY=TOTAL.
```

\*Cronbachs alpha voor bevlogenheid schaal.

```
RELIABILITY  
/VARIABLES=Bevlogenheid1 Bevlogenheid2 Bevlogenheid3 Bevlogenheid4 Bevlogenheid5  
Bevlogenheid6  
Bevlogenheid7 Bevlogenheid8 Bevlogenheid9  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE SCALE CORR  
/SUMMARY=TOTAL.
```

\*Cronbachs alpha voor preventie focus schaal.

```
RELIABILITY  
/VARIABLES=Reg_pre1 Reg_pre2 Reg_pre3 Reg_pre4 Reg_pre5 Reg_pre6 Reg_pre7 Reg_pre8  
Reg_pre9  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE SCALE CORR  
/SUMMARY=TOTAL.
```

\*Cronbachs alpha voor promotie focus schaal.

```
RELIABILITY  
/VARIABLES=Reg_pro1 Reg_pro2 Reg_pro3 Reg_pro4 Reg_pro5 Reg_pro6 Reg_pro7 Reg_pro8  
Reg_pro9  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE SCALE CORR  
/SUMMARY=TOTAL.
```

\*Cronbach's alpha voor employability schaal.

```
RELIABILITY  
/VARIABLES=Employability1 Employability2 Employability3 Employability4 Employability5  
Employability6 Employability7 Employability8  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE SCALE CORR  
/SUMMARY=TOTAL.
```

\*Cronbach's alpha voor Career Competencies schaal.

```
RELIABILITY
```

```
/VARIABLES=CCM1 CCM2 CCM3 CCK1 CCK2 CCK3 CCK4 CCD1 CCD2 CCD3 CCD4
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.
```

\*Cronbach's alpha voor Career Competencies reflectie op motivatie schaal.

```
RELIABILITY
/VARIABLES=CCM1 CCM2 CCM3
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.
```

\*Cronbach's alpha voor Career Competencies reflectie op kwaliteiten schaal.

```
RELIABILITY
/VARIABLES=CCK1 CCK2 CCK3 CCK4
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.
```

\*Cronbach's alpha voor Career Competencies Career control schaal.

```
RELIABILITY
/VARIABLES=CCD1 CCD2 CCD3 CCD4
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.
```

*Erna zijn alle bijhorende items van de schalen en dimensies van job crafting, regulatiefocus, bevlogenheid, ervaren inzetbaarheid en loopbaancompetenties samengevoegd in variabelen.*

\*Variabele voor job crafting - structural en challenging als 1 factor.

```
COMPUTE JC_Strucenchall=MEAN(JC1,JC4,JC5,JC7,JC9,JC13,JC14,JC16,JC19,JC20).
VARIABLE LABELS JC_Strucenchall 'JC schaal struc en chall in 1'.
EXECUTE.
```

\*Variabele voor job crafting - social job resources (zonder vraag 3).

```
COMPUTE JC_social=MEAN(JC6, JC10, JC12, JC17) .
VARIABLE LABELS JC_social 'Gemiddelde JC social job resources'.
EXECUTE.
```

\*Variabele voor job crafting - hindering job demands.

```
COMPUTE JC_hinder=MEAN(JC2, JC8, JC11, JC15, JC18, JC21) .
VARIABLE LABELS JC_hinder 'Gemiddelde JC hindering job demands'.
EXECUTE.
```

\*Variabele voor bevlogenheid totaal.

```
COMPUTE Bevlo_total=MEAN(Bevlogenheid1, Bevlogenheid2, Bevlogenheid3, Bevlogenheid4,
    Bevlogenheid5,
    Bevlogenheid6, Bevlogenheid7, Bevlogenheid8, Bevlogenheid9).
VARIABLE LABELS Bevlo_total 'Gemiddelde bevlogenheid totaal'.
EXECUTE.
```

\*Variabele voor preventie focus totaal.

```
COMPUTE Pre_focus_total=MEAN(Reg_pre1, Reg_pre2, Reg_pre3, Reg_pre4, Reg_pre5, Reg_pre6,
    Reg_pre7,
    Reg_pre8, Reg_pre9).
EXECUTE.
```

\*Variabele voor promotiefocus totaal.

```
COMPUTE Pro_focus_total=MEAN(Reg_pro1, Reg_pro2, Reg_pro3, Reg_pro4, Reg_pro5, Reg_pro6,
    Reg_pro7,
    Reg_pro8, Reg_pro9).
VARIABLE LABELS Pro_focus_total 'Gemiddelde promotie focus totaal'.
EXECUTE.
```

\*Variabele voor employability totaal.

```
COMPUTE Employ_total=MEAN(Employability1, Employability2, Employability3, Employability4,
    Employability5, Employability6, Employability7, Employability8).
VARIABLE LABELS Employ_total 'Gemiddelde employability totaal'.
EXECUTE.
```

\*Variabele voor career competencies totaal.

```
COMPUTE Career_total=MEAN(CCM1, CCM2, CCM3, CCK1, CCK2, CCK3, CCK4, CCD1, CCD2, CCD3,
    CCD4).
VARIABLE LABELS Career_total 'Gemiddelde career competencies totaal'.
EXECUTE.
```

\*Variabele voor CC reflectie op motivatie schaal.

```
COMPUTE CC_motivatie=MEAN(CCM1,CCM2,CCM3).
VARIABLE LABELS CC_motivatie 'CC reflectie op motivatie schaal'.
EXECUTE.
```

\*Variabele voor CC reflectie op kwaliteit schaal.

```
COMPUTE CC_kwaliteit=MEAN(CCK1,CCK2,CCK3,CCK4).
VARIABLE LABELS CC_kwaliteit 'CC reflectie op kwaliteit schaal'.
EXECUTE.
```

\*Variabele voor CC career controle schaal.

```
COMPUTE CC_Contrôle=MEAN(CCD1,CCD2,CCD3,CCD4).
VARIABLE LABELS CC_Contrôle 'CC reflectie op career controle schaal'.
EXECUTE.
```

\*EXTRA door hoge correlatie: Variabele voor CC reflectie op motivatie en kwaliteit in 1.

```
COMPUTE CC_reflectie=MEAN(CCM1,CCM2,CCM3,CCK1,CCK2,CCK3,CCK4).
VARIABLE LABELS CC_reflectie 'Variabele voor reflectie motivatie en kwaliteit bijeen'.
```

EXECUTE.

*Erna is gecontroleerd of er een verschil is tussen ZZP'ers en niet ZZP'ers.*

\*ZZP als dummy maken.

```
RECODE ZZP (1=0) (2=1) INTO ZZPer.  
VARIABLE LABELS ZZPer 'ZZP dummy'.  
EXECUTE.
```

\*Regressie voor ZZP en niet-ZZP, controleren of er geen grote verschillen zijn.

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT ZZPer  
/METHOD=ENTER Career_total Employ_total Pro_focus_total Pre_focus_total Bevlo_total  
JC_hinder  
JC_chall JC_social JC_struct  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS DURBIN NORMPROB(ZRESID)  
/SAVE MAHAL COOK ZRESID.
```

*Vervolgens is er een correlatie analyse uitgevoerd om te kijken of er geen afwijkende of te hoge correlaties zijn tussen de variabelen.*

\*Assumptie normaal verdeeld gecontroleerd voor correlatiematrix.

```
EXAMINE VARIABLES=Career_total Employ_total Pro_focus_total Pre_focus_total Bevlo_total  
JC_hinder  
JC_chall JC_social JC_struct  
/PLOT HISTOGRAM NPLOT  
/STATISTICS NONE  
/CINTERVAL 95  
/MISSING LISTWISE  
/NOTOTAL.
```

\*Correlatiematrix.

```
CORRELATIONS  
/VARIABLES=JC_Strucenchall JC_social JC_hinder Bevlo_total Pre_focus_total Pro_focus_total  
Employ_total CC_motivatie CC_kwaliteit CC_Controle  
/PRINT=TWOTAIL NOSIG  
/STATISTICS DESCRIPTIVES XPROD  
/MISSING=PAIRWISE.
```

*De onderstaande multiple regressie analyses zijn uitgevoerd om de verbanden tussen job crafting, regulatiefocus, bevlogenheid en waargenomen inzetbaarheid te onderzoeken. Bij elke regressie is gecontroleerd op de assumpties (outliers, normality, multicollinearity and linearity and homoscedascity of residuals).*

\*Hypothese 1a en 1b: JC in relatie tot bevlogenheid.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Bevlo_total
/METHOD=ENTER JC_social JC_hinder JC_Strucenchall
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN NORMPROB(ZRESID)
/SAVE MAHAL COOK ZRESID.
```

\*Hypothese 2a en 2b: JC in relatie tot employability.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Employ_total
/METHOD=ENTER JC_social JC_hinder JC_Strucenchall
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN NORMPROB(ZRESID)
/SAVE MAHAL COOK ZRESID.
```

\*Hypothese 3: promotie en preventie focus en relatie tot structural &challenging opportunities.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT JC_Strucenchall
/METHOD=ENTER Pro_focus_total Pre_focus_total
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN NORMPROB(ZRESID)
/SAVE MAHAL COOK ZRESID.
```

\*Hypothese 3: promotie en preventie focus in relatie tot social.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT JC_social
/METHOD=ENTER Pro_focus_total Pre_focus_total
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN NORMPROB(ZRESID)
/SAVE MAHAL COOK ZRESID.
```

\*Hypothese 3: promotie en preventie focus in relatie tot hindering demands.

```
REGRESSION
```



```

/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT JC_hinder
/METHOD=ENTER Pro_focus_total Pre_focus_total
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS DURBIN NORMPROB(ZRESID)
/SAVE MAHAL COOK ZRESID.

```

*Als laatst zijn er nog hierarchical multiple regressie analyses uitgevoerd om het modererende effect van loopbaancompetenties te onderzoeken.*

\*Voor de moderatie de standardized values van de variabelen opslaan, oftewel de Z scores.  
DESCRIPTIVES VARIABLES=JC\_Strucenchall JC\_social JC\_hinder Bevlo\_total Employ\_total  
Career\_total CC\_motivatie CC\_kwaliteit CC\_Contrôle CC\_reflectie  
/SAVE  
/STATISTICS=MEAN STDDEV MIN MAX.

*Interactie variabelen aangemaakt:*

\*Interactie structural/challenging x career competenties reflectie op motivatie en kwaliteit bijeen.  
COMPUTE strucchall\_CCR=ZJC\_Strucenchall \* ZCC\_reflectie.  
VARIABLE LABELS strucchall\_CCR 'Interactie strucchall x CC motivatie en kwaliteit'.  
EXECUTE.

\*Interactie structural/challenging x career competenties career control.  
COMPUTE strucchall\_CCC=ZJC\_Strucenchall \* ZCC\_Contrôle.  
VARIABLE LABELS strucchall\_CCC 'Interactie strucchall x CC Contrôle'.  
EXECUTE.

\*Interactie social job resources x career competenties reflectie motivatie en kwaliteit bijeen.  
COMPUTE SocialJR\_CCR=ZJC\_social \* ZCC\_reflectie.  
VARIABLE LABELS SocialJR\_CCR 'Interactie social JR x reflectie motivatie en kwaliteit'.  
EXECUTE.

\*Interactie social job resources x career competenties career control.  
COMPUTE SocialJR\_CCC=ZJC\_social \* ZCC\_Contrôle.  
VARIABLE LABELS SocialJR\_CCC 'Interactie social JR x CC controle'.  
EXECUTE.

\*Interactie hindering job demands x career competenties reflectie motivatie en kwaliteit bijeen.  
COMPUTE hinder\_CCR=ZJC\_hinder \* ZCC\_reflectie.  
VARIABLE LABELS hinder\_CCR 'Interactie hindering x reflectie competenties ineen'.  
EXECUTE.

\*Interactie hindering job demands x career competenties career control.  
COMPUTE hinder\_CCC=ZJC\_hinder \* ZCC\_Contrôle.  
VARIABLE LABELS hinder\_CCC 'Interactie hindering x career control'.

EXECUTE.

\*Hypothese 4a en 4b getoetst met losse regressies.

\*Op bevlogenheid.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Bevlo_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER strucchall_CCR
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Bevlo_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER strucchall_CCC
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Bevlo_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER SocialJR_CCR
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Bevlo_total
/METHOD=ENTER Geslacht Leeftijd
```

```
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Controle  
/METHOD=ENTER SocialJR_CCC  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

#### REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Bevlo_total  
/METHOD=ENTER Geslacht Leeftijd  
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Controle  
/METHOD=ENTER hinder_CCR  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

#### REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Bevlo_total  
/METHOD=ENTER Geslacht Leeftijd  
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Controle  
/METHOD=ENTER hinder_CCC  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

\*Op employability.

#### REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Employ_total  
/METHOD=ENTER Geslacht Leeftijd  
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Controle  
/METHOD=ENTER strucchall_CCR  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)  
/SAVE MAHAL COOK.
```

#### REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP  
/CRITERIA=PIN(.05) POUT(.10)
```

```
/NOORIGIN
/DEPENDENT Employ_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER strucchall_CCC
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Employ_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER SocialJR_CCR
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Employ_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER SocialJR_CCC
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Employ_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER hinder_CCR
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```

REGRESSION

```
/MISSING LISTWISE
```

```
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Employ_total
/METHOD=ENTER Geslacht Leeftijd
/METHOD=ENTER ZJC_Strucenchall ZJC_social ZJC_hinder ZCC_reflectie ZCC_Contrôle
/METHOD=ENTER hinder_CCC
/SCATTERPLOT=(*ZRESID , *ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE MAHAL COOK.
```