Role Overload and Job Stress:

The Role of Perceived Organizational Support

Kristie Bakker (761981)

Supervisor: N.F. Gibson BSc

Bachelor Thesis Personeelwetenschappen (PEW)

February 2017 – June 2017

Tilburg University 2016 – 2017

Abstract

This research examines the relation between role overload and job stress. Furthermore, the moderation of perceived organizational support (POS) is researched. The Job Demands-Resources (JD-R) model is used as a theoretical basis for the hypothesized positive relation between role overload and job stress. Besides, the JD-R model and more specific, the health impairment process, is used for the second hypothesis, stating that POS negatively moderates the relation between role overload and job stress. This research made use of an employee questionnaire about well-being at work, conducted among 461 respondents. To analyse the data, a principal factor analysis and a hierarchical multiple regression was performed. The results showed a significant positive relation between role overload and job stress, confirming the first hypothesis. However, the moderation of the relation between role overload and job stress by POS was not confirmed, rejecting the second hypothesis. Finally, several limitations, recommendations and implications are discussed.

Keywords: Job stress, role overload, perceived organizational support, JD-R model, health impairment process

Introduction

The amount of employees in the Netherlands that regularly needs to work with a high speed and under great time pressure has risen since the 90's (CBS, 1999). High work pressure and insufficient control can lead to job stress (CBS, 1999). Job stress occurs when job-related factors interact and change the psychological and, or physiological condition of an employee (Beehr & Newman, 1978). These changes force the employee to deviate from his or her normal functioning (Beehr & Newman, 1978). Job stress is the most prominent cause for illnesses at work, 36 percent of work disease is caused by job stress (TNO & CBS, 2014). Besides contributing to health-related problems, job stress is also related to organizational problems such as dissatisfaction, alienation, low productivity, absenteeism and turnover (Parker & DeCotiis, 1983). This leads to a lot of costs for organizations, namely between ten and twenty billion dollars per year (Parker & DeCotiis, 1983). Therefore, Dutch employees and employers want to reduce job stress (TNO & CBS, 2014).

Jha, Balaji, Yavas and Babakus (2017) found that employees who perceive a lot of role overload are very likely to also experience job stress. Role overload occurs when an employee faces a lot of obligations and is not able to fulfil those in the available time (Sales, 1970). As a theoretical basis, the job demands-resources (JD-R) model and, in specific, the health impairment process will be used to explain the relationship between role overload and job stress. The JD-R model by Demerouti, Bakker, Nachreiner and Schaufeli (2001) is often used to study the relationships between job features and job outcomes (Schaufeli & Taris, 2013). In short, the JD-R model assumes that jobs have job demands and job resources; job demands are physical, social or organizational aspects of a job and require a lot of mental and physical effort (Demerouti et al., 2001). Job resources are physical, social or organizational aspects of a job that are functional in obtaining work objectives, reduce job demands or improve personal growth and development (Demerouti et al., 2001). An example of a job demand is work pressure, and an example of a job resource is social support (Schaufeli & Taris, 2013). Job demands are not necessarily stressful, only when they are too high or when there is not enough time to recover (Schaufeli & Taris, 2013). According to the health impairment process, when job demands, such as role overload, are too high, this will lead to the depletion of energy, health problems and also job stress (Bakker, Demerouti, & Schaufeli, 2003; Schaufeli & Taris, 2014; Bakker & Demerouti, 2006). Furthermore, job demands are associated with physiological and psychological costs, such as exhaustion (Demerouti et al., 2001). Thus, when employees experience a lot of role overload (i.e. high job demand), this will lead to job stress.

However, employees can recover from high job demands when they possess a high amount of job resources (Schaufeli & Taris, 2013). Perceived organizational support (POS) is an example of a job resource. POS is a general perception of how well an organization supports the employees (Eisenberger, Fasolo, & Davis-LaMastro, 1990). The organizational support theory suggests that the growth of perceived organizational support is based on the tendency of employees to see favourable or unfavourable treatment as a sign of how the organization favours or disfavours employees (Luxmi & Yadav, 2011). In this way, beliefs arise about how organizations value the contribution of employees and how much the organization cares about the wellbeing of employees (Luxmi & Yadav, 2011). The organizational support theory is based on the social exchange theory and states that employees will put more effort into their work and be more loyal to their organization in return for social rewards (Luxmi & Yadav, 2011).

The main theoretical perspective that will be used to explain the moderation of POS on the relationship between role overload and job stress is the JD-R model. The JD-R model shows a buffer-effect of job resources. It predicts that when an employee has a high level of job demands, such as role overload and at the same time a low level or a lack of job resources (e.g. POS), employees experience a lot of job stress which can even lead to a burnout (Bakker & Demerouti, 2006). However, when an employee has a high level of job demands and at the same time a high level of job resources, this does not result in high levels of job stress (Bakker & Demerouti, 2006). Thus, POS (job resource) buffers the effect of job demands on job stress (Bakker & Demerouti, 2006).

The aim of this study is to find out about the relationship between role overload and job stress and how this relationship is moderated by perceived organizational support. This research will contribute theoretically, because while there is a lot of interest in investigations on job stress in organizations, there are little empirical studies conducted (Parker & DeCotiis, 1983). Furthermore, examining moderators of job stress is relevant, because only a few variables have been identified to diminish or buffer the negative consequences of job stress (AbuAlRub, 2004). Besides the scientific contribution, this paper is useful for society, organizations, and employees, because stress is very costly and therefore, there is a need to explore ways how to diminish job stress (Parker & DeCotiis, 1983). To achieve the aim of this study, the following research question will be examined: *"To what extent does role overload influence job stress and is this relationship moderated by perceived organizational support?"*.

In the following section, the definitions of the three variables will be explained. Furthermore, the next section clarifies the theoretical perspectives and reviews earlier empirical

evidence. Lastly, the next section will provide and clarify the hypotheses and the hypothesized relations will be presented in a conceptual model (Figure 1).

Theoretical Framework

Role Overload and Job Stress

Central in this section is the relationship between role overload and job stress. First of all, role overload reflects the feeling of an employee that his or her work roles are overloaded (Jensen, Pankaj, Patel, & Messersmith, 2013). An employee will feel role overload when the expectations of work exceed the available time, resources, or his/her personal capabilities (Jensen et al., 2013). Secondly, job stress can be described as "the feeling of a person who is required to deviate from normal or self-desired functioning in the work place as the result of opportunities, constraints, or demands relating to potentially important work-related outcomes" (Parker & DeCotiis, 1983, p. 165). Furthermore, job stress consists of two dimensions, a time dimension and an anxiety dimension. The time dimension of stress is about time pressure and examples are "crisis management" and "too much to do, too little time" (Parker & DeCotiis, 1983, p. 167). The anxiety dimension of stress is more about the negative consequences of feeling stress and the job-related feelings of anxiety (Parker & DeCotiis, 1983, p. 169).

The job demands-resources (JD-R) model and the health impairment process can be used to explain the relationship between role overload and job stress. First of all, the JD-R model assumes that conditions at work can be divided into two categories: job demands and job resources (Demerouti et al., 2001). The JD-R model proposes that job demands and job resources evoke a psychological process: the health impairment process (Llorens, Bakker, Schaufeli, & Salanova, 2006). This process states that job stress is a consequence of high job demands, such as role overload (Hakanen & Roodt 2010). When a job has a lot of demanding aspects (e.g. role overload), this will lead to a constant overtaxing, a breakdown of the energy resources of employees and consequently to job stress, poor health and even burnout (Bakker, Demerouti & Verbeke, 2004; Llorens et al., 2006). Thus, when employees try to meet all the job demands, this leads to an energy depletion process and this process leads to increased job stress (Crawford, LePine, & Rich, 2010). Nevertheless, job demands do not necessarily need to be negative, however, when meeting the job demands requires excessive efforts, this elicits negative responses, such as job stress and burnout (Hakanen & Roodt, 2010).

Job demands may be the main cause of job stress as employees find it difficult to manage meeting all their job demands (Karimi, Omar, Alipour, & Karimi, 2014). Earlier research

confirms the positive relationship between role overload and job stress (e.g. Beehr, Walsh, & Taber, 1976; Karimi et al., 2014). Furthermore, previous research also found support for the JD-R model and the health impairment process (Hakanen & Roodt, 2010). Thus, the JD-R model and, in specific, the health impairment process shows that high job demands, like role overload, lead to job stress. Therefore, the first hypothesis is as follows:

H1: The higher the employees' level of role overload, the higher their job stress will be.

Role Overload, Job Stress and the Moderation by Perceived Organizational Support

In this section, the moderation of the role overload – job stress relationship by perceived organizational support (POS) is central. POS can be defined as a general perception of how well an organization supports all employees (Eisenberger, Fasolo, & Davis-LaMastro, 1990). The JD-R model also serves as a theoretical basis for the expected moderation. The JD-R model has already been partly explained in the previous section. To include perceived organizational support (POS) in this model, the buffer-effect of job resources is important. The JD-R model assumes that when an employee does not have enough job resources, he or she is not able to adapt to job demands (Schaufeli & Taris, 2013). Also, Bakker et al. (2004) state that when the organization does not provide enough job resources, employees cannot reduce the negative influence of high job demands. Furthermore, the model states that job resources can weaken the positive effect of job demands on job stress (Schaufeli & Taris, 2013). This is also known as the buffer-effect. Thus, job resources can buffer the effects of job demands (Bakker et al., 2004). As previously mentioned, perceived organizational support is an example of a job resource. Support from the organization is an important situational variable that can act as a buffer against job stress (Bakker et al., 2004). Other research states that POS is also seen as an assurance for employees that help will be available from the organization when this is needed to execute their jobs effectively and also to deal with stress at work (Rhoades & Eisenberger, 2002). Thus, when employees experience high job demands, such as role overload, POS might buffers the positive effect on job stress so that the level of experienced job stress will be lower.

Earlier research found that POS enhances the subjective well-being of employees by, for example, reducing job stress (Stinglhamber et al., 2016). Moreover, support was found for the buffer-effect of job resources on job stress and general health (Van den Tooren & De Jong, 2014). Furthermore, earlier research found that support of the organization diminishes the positive relationship between job demands, such as role overload, and job stress (Van Woerkom, Bakker, & Nishii, 2016). The JD-R model and its empirical evidence lead to the expected moderation of perceived organizational support on the relationship between role overload and job stress. Therefore, the second hypothesis states:

H2: The positive relationship between role overload and job stress is moderated by perceived organizational support, so that it will weaken when high levels of perceived organizational support are implemented.
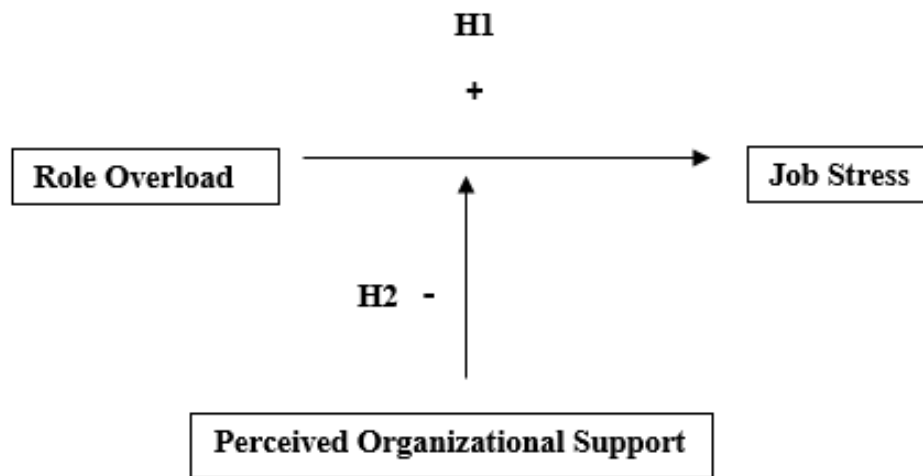

Figure 1: Conceptual model.

Method

Procedure

The research took place within a broader research practicum from students of Tilburg University, with the subject well-being at work. For this research, a quantitative, cross-sectional design was used. The collection of the data took place between February and March 2015. Departments of a wide range of organizations within and outside the Netherlands contributed to the research. Convenience sampling and implicit stratified random sampling were the two phases of the sampling design. First of all, the students selected two departments of their choice. The only restriction was that participating departments needed to consist of at least seven employees. The students of Human Resource Studies, both Dutch and non-Dutch, approached 82 organizations and 101 corresponding departments to take part in the research. For drawing the sample, a sample frame was set up, based on job tenure and date of birth, where job tenure was the key factor. By implicit stratified random sampling, five employees per department were selected. This way of sampling was done to acquire a representative set of employees, from each department and with a high variety of employees' tenure. Furthermore, a cover letter was sent next to the survey to clarify the aim of the research, the procedure and to emphasize the confidentiality. Also, all respondents needed to sign a verification form to ensure reliability. The survey consisted of two questionnaires, one for employees and one for managers. However, this research only used the questionnaires filled in by employees. Besides, questionnaires were

available in Dutch or in English. 505 employees were approached to participate in the research and in the end 461 employees filled in and returned their questionnaires.

Population and Sample

The response rate of the questionnaires for employees was 91.1%. List-wise deletion of missing values was used to exclude questionnaires with missing values. Thereby, 41 cases were excluded, resulting in a final sample of 420 respondents. Furthermore, concerning the demographic characteristics of the sample, 36% of the respondents was female and 64% was male. Moreover, employees had an average age of 38 years. The distribution of the different kind of contracts was: 64% of the respondents had an open ended contract, 27% a fixed contract, 2% was employed by an employee agency or employee posting and 7% had a different kind of contract. Finally, regarding education, 46% of respondents completed higher education, 28% academic education, 26% middle education, 6% basic education and no respondent had only completed elementary education.

Measures

Every respondent was asked to rate him- or herself in terms of role overload, job stress, and perceived organizational support and the answers were measured all using a 5-point Likert scale. To make sure that all scales were reliable and valid, the individual scales were tested on construct validity and reliability. Construct validity was tested by conducting a Principal Component Analysis (PCA) with Varimax rotation. Furthermore, to meet the criteria for FA, the Kaiser-Meyer-Olkin (KMO) measure needed to be higher than .6 ('good') and the Bartlett's test of sphericity needed to be significant (Cramer, 2004). Also, to identify the amount of components or scales, Eigenvalues were used; Eigenvalues needed to be at least 1. Next, reliability analyses were performed. Cronbach's alpha and Cronbach's alpha if-item-deleted were both used to determine the reliability of the scales. For Cronbach's alpha to be considered as good and sufficient, the number needed to be bigger than .6 and/or .7 (Evers, Van Vliet-Mulder, & Groot, 2000). Also, Cronbach's alpha if-item-deleted needed to be lower than the scale's Cronbach's alpha to ensure that every item contributes positively to its component.

Role overload. First of all, to measure the variable role overload, the eight-item scale of Jensen, Patel and Messersmith (2013) was used. A 5-point Likert scale was used, with 1 being 'strongly disagree', 2 'disagree', 3 'neutral', 4 'agree' and 5 'strongly agree'. An example of an item was: "I have to work very fast" (Jensen et al., 2013, p. 1708). The assumptions for FA were tested and were considered as good. The KMO measure was .887 ('good'), which was bigger than .6 and the Bartlett's test of sphericity was also significant (Chi square = 1568.311; $df = 28$). Furthermore, the analysis of the Eigenvalue showed one component in the scale

(4.367) and the scale reliability was also good (α = .880). Finally, all items had a lower Cronbach's alpha if-item-deleted, than the Cronbach's alpha of the scale (.880).

Job stress. To measure the variable job stress, six items from a scale by Parker and DeCotiis (1983) was used. A 5-point Likert scale was used, with 1 being 'strongly disagree', 2 'disagree', 3 'neutral', 4 'agree' and 5 being 'strongly agree'. An example of an item was: "I have felt fidgety or nervous as a result of my job" (Parker & DeCotiis, 1983, p. 169). The assumptions for FA were tested and were considered as good. The KMO measure was .860 ('good'), which was bigger than .6 and the Bartlett's test of sphericity was also significant (Chi square = 1093.464; *df* = 15). Furthermore, the analysis of the Eigenvalue showed one component in the scale (3.477) and the scale reliability was also good (α = .845). However, Cronbach's alpha if-item-deleted (.859) was for one item higher, namely item 87 of the questionnaire ("I feel guilty when I take time off from job"). Nevertheless, the item was not deleted, because the difference was very small (.014) and was considered as negligible.

Perceived organizational support (POS). The variable perceived organizational support (POS) was measured by using four items from the perceived organizational support scale by Eisenberger et al. (1990). A 5-point Likert scale was used, with 1 being 'strongly disagree', 2 'disagree', 3 'neutral', 4 'agree' and 5 'strongly agree'. An example of an item was: "My work unit strongly considers my goals and values" (Eisenberger et al., 1990, p. 52). Before performing the FA and the reliability analysis, one item of the scale needed to be recoded, namely the item: "My work unit shows very little concerns for me" (Eisenberger et al., 1990, p. 52). After this, the assumptions for FA were tested. The assumptions for FA were considered as good; the KMO measure was .753, which was bigger than .6 and the Bartlett's test of sphericity was also significant (Chi square = 536.456; *df* = 6). Next, the analysis of the Eigenvalue showed one component in the scale (2.446). Furthermore, the scale reliability was good (α = .780). Lastly, all items had a lower Cronbach's alpha if-item-deleted, than the Cronbach's alpha of the scale (.780).

Control variables. Lastly, three variables were included as control variables for the analyses: gender, age and type of employment. The variables gender and type of employment were coded as dummy-variables as they were measured on a nominal scale. First of all, gender was chosen, because previous research had found that female employees perceived greater levels of job stress than male employees (Klassen & Chiu, 2010; Li, Wu, & Johnson, 2016). The answer categories of gender were "female" and "male". Secondly, age was chosen as a control variable, because previous research has found that the levels of job stress tend to increase with age (Pocnet et al., 2014). Moreover, younger and older employees should have

different management interventions regarding job stress (Mauno, Ruokolainen, & Kinnunen, 2012). Thus, perceived organizational support should be different with older and younger employees. Lastly, type of employment was chosen as a control variable, because previous research found that temporary employees (fixed-term) have greater job stress than employees with a permanent contract (Ye, Ko, Chang, & Chen, 2007). The answer categories of type of employment consisted out of the following categories: "open-ended contract", "fixed-term contract", "employment agency/employment posting" and "different".

Analysis

To assess the associations between role overload, job stress and perceived organizational support (POS), bivariate correlation (Pearson's r) were examined. Hypothesis 1 and hypothesis 2 were tested using the Pearson's r correlation. Furthermore, Pearson's r correlation was used to determine which control variables significantly correlated with role overload, job stress and, or POS. Thereafter, a hierarchical multiple regression analysis was executed to find out about the statistical significance of the interaction effect (Pallant, 2013). A hierarchical multiple regression is used to find out how much variance in a dependent variable was explained by the set of variables (Pallant, 2013).

Results

In Table 1 the correlation matrix can be found. This matrix shows the mean, standard deviations and correlations between the three variables, role overload, job stress, POS and the control variables (gender, age and type of employment). First of all, a significant positive relation was found between role overload and job stress (Pearson's $r = .493$, $p < .01$). Furthermore, a significant negative relation was found between the moderator POS and the dependent variable job stress (Pearson's $r = -.116$, $p < .05$). Furthermore, taking a look at the control variables: gender, age and type of employment, it was found that gender was significantly negatively related to job stress (Pearson's $r = -.158$, $p < .01$). As the reference category was "male", it can be concluded that women score significantly lower on job stress as compared to men. Secondly, age was found to be significantly positively related to role overload (Pearson's $r = .121$, $p < .05$). Lastly, type of employment was significantly negatively related to age (Pearson's $r = -.496$, $p < .01$).

Table 1

Shortened correlation matrix with means, standard deviations and bivariate correlations (Pearson's r).

	M	SD	1	2	3	4	5

	M	SD	1	2	3	4	5
1. Role Overload	20.448	5.997					
2. Job Stress	13.159	4.359	.493**				
3. POS	13.097	1.561	-.087	-.116*			
4. Gender	1.360	.480	-.024	-.158**	-.010		
5. Age	38.383	12.869	.121*	.001	.007	-.029	
6. Type of Employment	1.520	.853	-.061	-.044	-.017	-.044	-.496**

Note. **=Correlation is significant at the .01 level (2-tailed). *=Correlation is significant at the .05 level (2-tailed). POS=Perceived Organizational Support. M=Sample Mean. SD=Standard Deviation. Gender was coded 0 (man) and 1 (woman). Type of employment was coded 0 (open-ended contract), 2 (fixed-term contract), 3 (employment agency/employment posting) and 4 (different).

Regression Analysis

First of all, before performing the regression analysis, the data had to meet all the regression assumptions: collinearity, normality, linearity and homoscedasticity (Pallant, 2013). Firstly, to make sure that variables do not measure the same or similar construct(s), collinearity is checked (Pallant, 2013). Secondly, normality makes sure that errors are normally distributed (Pallant, 2013). Furthermore, linearity is measured to check for a linear relation between the independent variables and job stress (Pallant, 2013). Lastly, homoscedasticity is measured to check whether there are equal statistical variances (Pallant, 2013). After checking the assumptions, the regression analysis was performed. The relations of the different variables are shown in Table 2. Hypothesis 1 states that, the higher the role overload of an employee, the higher his or her level of job stress will be. The regression analysis confirmed that role overload is significantly and positively related to job stress ($B = .380$, $p < .01$, see Table 2, model 2). Moreover, 30.5% of the variance in job stress is explained by role overload ($R^2 = .305$, $p < .01$, see Table 2, model 2). Moreover, the model also shows a significant change from the null-model ($F\ change = 164.305$, $p < .01$). This indicates that the model including role overload is explaining significantly more variance in job stress than the model which included only the control variables. Therefore, hypothesis 1 is supported.

Secondly, hypothesis 2 proposes a moderating effect of POS on the relationship between role overload and job stress. The regression analysis did not show a significant effect of the moderation of POS on the relationship between role overload and job stress ($B = .015$, $p < .05$, see Table 2, model 3). Furthermore, the model including POS and the interaction term (Model 3) does not show a significant improvement as compared to model 2 ($F\ change = 1.857$, $p < .05$). This indicates that POS does not explain a significant amount of additional variance in job stress. Moreover, model 2 has the best fit ($F\ change = 164.303$, $p < .01$), and model 3 shows no significant F change ($F\ change = 1.857$, $p < .05$). Thus, model 2 is the best fitting model. Also,

a direct effect of POS on job stress was tested. The regression analysis showed that POS does not have a significant direct effect on job stress (B = -.514, $p < .05$, see Table 2, model 3). Thus, no moderation was found and also, no direct effect of POS on job stress was found. Concluding, employees who perceive a lot of role overload, but also have a high level of POS, do not show a low level of job stress. Furthermore, employees who perceive more POS do not experience a lower level of job stress. Thus, hypothesis 2 was not supported.

Table 2

Results of regression analysis on job stress and the moderation of POS.

	Model 1	Model 2	Model 3
	B	B	B
Gender	-1.468**	-1.390**	-1.424**
Age	.001	.001	.001
Type of Employment	-.224	-.138	-.148
Role Overload		.380**	.175
POS			-.514
Moderating Effect			.015
R	.182**	.553**	.558**
R^2	.033**	.305**	.312
F	4.790**	46.065**	31.455**
F Change	4.790**	164.303**	1.857

Note. Job stress is the dependent variable. **=$p < 0.01$ (2-tailed). *=$p < 0.05$ (2-tailed). POS=Perceived Organizational Support. Gender was coded 0 (man) and 1 (woman). Type of employment was coded 1 (open-ended contract), 2 (fixed-term contract), 3 (employment agency/employment posting) and 4 (different). Moderating effect is POS x Role overload.

Discussion

This research examined the relation between role overload and job stress, and also the moderation of perceived organizational support (POS) on the relation between role overload and job stress. The research question was: *"To what extent does role overload influence job stress and is this relationship moderated by perceived organizational support?"*. The design of the research was cross-sectional and data was collected from 461 employees of 82 different organizations. Hypothesis 1 was accepted. Thus, when employees experience a lot of role overload, job stress will also be high. Hypothesis 2, however, was not accepted. Thus, no moderation of POS was found on the relationship between role overload and job stress.

Hypothesis 1 was in line with the theory of the JD-R model and the health impairment

process, namely that job stress is a consequence of role overload, because role overload leads to constant overtaxing (Hakanen & Roodt, 2010; Bakker et al., 2004). When role overload becomes too high and, or there is not enough time to recover, employees feel low on energy and develop health problems and job stress (Schaufeli & Taris, 2013; Bakker et al., 2003; Schaufeli & Taris, 2014; Bakker & Demerouti, 2006).

Hypothesis 2, however, was rejected, which is not in line with the theory from the JD-R model. POS was not a significantly related moderator between the relationship of role overload and job stress. Thus, POS does not act as a buffer, as the theory stated. According to the buffer-effect, job resources can make the negative effects of job demands on job stress smaller. Thus, POS, a job resource, should weaken the negative effects of role overload, a job demand, on job stress (Schaufeli & Taris, 2013; Bakker et al., 2004). Furthermore, this research also did not find a direct relation between POS and job stress. A possible explanation for the non-significant moderation could be, that employees do not perceive support from the organization as something positive (Byrne & Hochwarter, 2008). Especially, employees who are already cynical do not experience support from their organization to be helpful and these employees even react negatively to support, because they do not know what the intentions of the organization are (Byrne & Hochwarter, 2008). Thus, employees can perceive organizational support as something negative, because employers and organizations do not clarify their intentions and employees think that support is only there to increase employees' performance (Byrne & Hochwarter, 2008). Besides, earlier research by Rhoades and Eisenberger (2002) only found a medium relationship between POS and job strains. In addition, Rhoades and Eisenberger (2002) found the strongest relationship of POS with commitment. Thus, the support from an organization leads to the creation of an emotional bond with the organization, but not to lower stress (Rhoades & Eisenberger, 2002). In short, POS creates a feeling of obligation to aid the organization and not a feeling of lower stress (Rhoades & Eisenberger, 2002). Furthermore, the limitations of this research could also play a part in the non-significance, which will be explained in the next section.

Limitations and Recommendations for Future Research

As stated earlier, the limitations of this research should be taken into account when interpreting the results. Furthermore, recommendations for future research will be suggested. The first limitation is the design of this research. A cross-sectional design was used, meaning that data was collected at only one point in time. This design does not show how a variable changes over time and can lead to wrong conclusions (Maxwell & Cole, 2007). Therefore, there is no evidence for a causal relationship between exposure and certain outcomes (Carlson &

Morrison, 2009). A recommendation could be to make use of a longitudinal design in the future, because this design can better provide proof for causality (Koys, 2001).

Secondly, the data of this research was obtained by convenience sampling, i.e. respondents were chosen based on their accessibility by the researcher. This type of sampling may lead to data that has poor quality and lacks credibility (Marshall, 1996). Instead of convenience sampling, future research could make use of other designs, like simple random samples. In a simple random sampling design every person has an equal chance to be selected in the sample from the population (Acharya, Prakash, Saxena, & Nigam, 2013). When the sample is drawn based on random sampling, the internal and external validity is high and this makes it easier to analyse the collected data (Acharya et al., 2013).

Thirdly, this research only took a look at the broad definition of perceived organizational support (POS) and did not look at different forms of POS. Individuals view POS individually, evaluate the form(s) they like of POS and this can be different for every employee (Wayne, Shore, & Liden, 1997; Shore & Shore, 1995). Future research could take the three different forms of POS into account i.e.: fairness, supervisor support, and organizational rewards and job conditions (Rhoades & Eisenberger, 2002).

Lastly, this research only examined the possible moderation of POS on the relation between role overload and job stress. This research did not look at other possible moderators and in specific did not look at other forms of support. In the future, other possible moderators could be researched. Instead of, or besides POS, other forms of support could be researched. Examples are workplace social support, work-family support, spousal support or work colleague support (Kossek, Pichler, Bodner, & Hammer, 2011; Aryee, Luk, Leunag, & Lo, 1999; Lim, 1997).

Practical Implications

It is important for organizations to know that role overload leads to job stress and to also do something about it. Not only, because role overload and job stress lead to employees with health problems, but also because this leads to a lot of organizational problems. Examples are low productivity, absenteeism and turnover, which is also very costly for organizations (CBS, 1999; Parker & DeCotiis, 1983). For example, organizations might introduce analytical and problem-focused trainings on how to deal with stressful situations (Yip, Rowlinson, & Siu, 2008). This could be an effective intervention to prevent job stress (Yip et al., 2008). Definitely because, employees do indicate that role overload should be diminished to lower job stress, but often do not know how to diminish this and do not have concrete suggestions (Appendix A).

Furthermore, organizations need to think about whether they want to invest in POS at all, and if so, in what kind of POS. It might help if organizations invest in POS with the right intentions and also make sure that employees know that the organization has the right intentions and not just want to increase the performance of employees (Byrne & Hochwarter, 2008). As stated earlier, (cynical) employees might react negatively to support from organizations, because they believe the organization does not have good intentions (Byrne & Hochwarter, 2008).

In addition, based on the interviews that were held with Erik Bakker (financial manager) and Marian Erouw (HR-manager), several conclusions can be drawn. Firstly, to trust that the organization employees work in has the right intentions, it is of importance how tight a group of employees is with each other, but also with the rest of the organization, and how long they have been working together (Appendix A). Working together for years and with the same group of employees lead to a collegial atmosphere and also, managers and employees trust each other (Appendix A). This means that when employees face real problems they will find their way to their manager and also trust that the manager has good intentions (Appendix A). Lastly, this research did not find a significant moderating relationship by POS on the relation between role overload and job stress. However, not providing any support can lead to employees who feel they have to do it all alone (Appendix A). Furthermore, supervisor support can also be seen as an important variable in reducing job stress (Appendix A). Further research could specifically pay attention to this form of support in reducing job stress. In addition, uncertainty of a job can also be an important variable leading to job stress (Appendix A). Thus, not just POS, but also the certainty of a job, can be important in reducing job stress (Appendix A).

Conclusion

In conclusion, this research found that role overload leads to job stress. Furthermore, no moderating role of POS on the relationship between role overload and job stress was found. Besides, no direct effect of POS on job stress was found. This implies that further research is needed to find out whether POS is an important moderator and to examine whether other variables could play a moderating role in the relation between role overload and job stress. Finally, this research helped to better understand the variables that influence job stress and might give inspiration to other researchers, to study role overload and job stress, with possible other moderators than POS.

References

AbuAlRub, R. F. (2004). Job Stress, Job Performance, and Social Support Among Hospital Nurses. *Journal of Nursing Scholarship, 36*(1), 73-78.

Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and How of it? *Indian Journal of Medical Specialities, 4*(2), 330-333. doi: http://dx.doi.org/10.7713/ijms.2013.0032

Aryee, S., Luk, V., Leun, A., & Lo, S. (1999). Role Stressors, Interrole Conflict, and Well-Being: The Moderating Influence of Spousal Support and Coping Behaviors among Employed Parents in Hong Kong. *Journal of Vocational Behavior, 54*(2), 259-278.

Bakker, A. B., & Demerouti, E. (2006) The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology, 22*(3), 309-328. doi: 10.1108/02683940710733115

Bakker. A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call Centre: An application of the job demands – resources model. *European Journal of Work and Organizational Psychology, 12*(4), 393-417.

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). The Job Demands-Resources Model to Predict Burnout and Performance. *Human Resource Management, 43*(1), 83-104. doi: 10.1002/hrm.

Beehr, T., A., & Newman, J. E. (1978). Job Stress, Employee Health, And Organizational Effectiveness: A Facet Analysis, Model, And Literature Review. *Personnel Psychology, 31,* 665-699.

Beehr, T. A., Walsh, J. T., & Taber, T. D. (1976). Relationship of Stress to Individually and Organizationally Valued States: Higher Order Needs as a Moderator. *Journal of Applied Psychology, 61*(1), 41-47.

Blau, P. M. (1964). *Exchange and Power in Social Life*. New York, Wiley.

Byrne, Z. S., & Hochwarter, W. A. (2008). Perceived organizational support and performance: Relationships across levels of organizational cynicism. *Journal of Managerial Psychology, 23*(1), 54-72. doi: 10.1108/02683940810849666

Carlson, M. D. A., & Morrison, R. S. (2009). Study Design, Precision, and Validity in Observational Studies. *Journal of Palliative Medicine, 12*(1), 77-82. doi: 10.1108/02683940810849666

Centraal Bureau voor de Statistiek (CBS). (1999, 13 December). *Werkstress en gezondheid.* Retrieved from: https://www.cbs.nl/nl-nl/nieuws/1999/50/werkstress-en-gezondheid

Cramer, D. (2004). Advanced Quantitative Data Analysis. In A. Bryman (Ed.), *Understanding Social Research* (p. 13 – 45). Berkshire, England: Open University Press.

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), 834-848. doi: 10.1037/a0019364

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources Model of Burnout. *Journal of Applied Psychology, 86*(3), 499-512. doi: 10. 1037??0021-9010.86.3.499

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoade, L. (2001). Reciprocation of Perceived Organizational Support. *Journal of Applied Psychology, 86*(1), 42-51. doi: 10.1037//0021-9010.86.1.42

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51-59.

Evers, A., van Vliet-Mulder, J.C., Groot, C.J. (2000). *Documentatie van Tests en Testresearch in Nederland.* Assen, NL: van Gorcum & Comp. B.V.

Goodman, S. A., & Svyantek, D. J. (1999). Person-Organization Fit and Contextual Performance: Do Shared Values Matter. *Journal of Vocational Behavior, 55*, 254-275.

Hakanen, J. J., & Roodt, G. (2010). *Work Engagement: A Handbook of Essential Theory and Research.* In Bakker, A. B. , Leiter, M. P. By (EDS). *Using the job demands-resources model to predict engagement: Analysing a conceptual model,* (pp. 85-101). New York, United States: Psychology Press.

Jensen, J. M., Patel, P. C., & Messersmith, J. G. (2013). High-Performance Work Systems and Job Control: Consequences for Anxiety, Role Overload, and Turnover Intentions. *Journal of Management, 39*(6), 1699-1724. doi: 10.1177/0149206311419663

Jha, S., Balaji, M. S., Yavas, U., & Babakus, E. (2017). Effects of frontline employee role overload on customer responses and sales performance: Moderator and mediators. *European Journal of Marketing, 51*(2), 282-303. doi: 10.1108/EJM-01-2015-0009

Karimi, R., Omar, Z. B., Alipour, F., & Karimi, Z. (2014). The Influence of Role Overload, Role Conflict and Role Ambiguity on Occupational Stress among Nurses in Selected Iranian Hospitals. *International Journal of Asian Social Science, 4*(1), 34-40.

Kawakami, N., Kobayashi, F., Araki, S., Haratani, T., & Furui, H. (1995). Assessment of Job Stress Dimensions Based on the Job Demands-Control Model of Employees of Telecommunication and Electric Power Companies in Japan: Reliability and Validity

of the Japanese Version of the Job Content Questionnaire. *International Journal of Behavioral Medicine, 2*(4), 358-375.

Klassen, R. M., & Chiu, M. M. (2010). Effects on Teachers' Self-Efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress. *Journal of Educational Psychology, 102*(3), 741-756. doi: 10.1037/a0019237

Kossek, E. E., Pichler, S., Bodner, T., & Hammer, L. B. (2011). Workplace Social Support and Work-Family Conflict: A Meta-Analysis Clarifying the Influence of General and Work-Family-Specific Supervisor and Organizational Support. *Personnel Psychology, 64*(2), 289-313. doi: 10.1111/j.1744-6570.2011.01211.x

Koys, D. J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology, 54*(1), 101-114. doi: 10.1111/j.1744-6570.2001.tb00087.x

Li, C., Wu, K. C., & Johson, D. E. (2016). The impact of balance-focused attitudes on job stress: Gender differences evidenced in American and Chinese samples. *International Journal of Psychology, 1,* 1-9. doi: 10.1002/ijop.12254

Lim, V. K. G. (1997). Moderating effects of work-based support on the relationship between job insecurity and its consequences. *Work & Stress: An International Journal of Work, Health & Organisations, 11*(3), 251-266.

Llorens, S., Bakker, A. B., Schaufeli, W., & Salanova, M. (2006). Testing the Robustness of the Job Demands-Resources Model. *International Journal of Stress Management, 13*(3), 378-391.

Luxmi, D., & Yadav, V. (2011). Perceived Organizational Support as a Predictor of Organizational Commitment and Role Stress. *Institute of Management Technology, 15*(1-2), 39-47.

MacKenzie, S.B., Podsakoff, P. M., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons' performance. *Organizational Behavior and Human Decision Processes, 50*, 123-150.

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice, 13*(6), 533-626. doi: https://doi.org/10.1093/fampra/13.6.522

Mauno, S., Ruokolainen, M., & Kinnunen, U. (2012). Does aging make employees more resilient to job stress? Age as a moderator in the job stressor-well-being relationship in three Finnish occupational samples. *Aging & Mental Health, 17*(4), 411-422.

Maxwell, S. E., & Cole, D. A. (2007). Bias in Cross-Sectional Analyses of Longitudinal Mediation. *Psychological Methods, 12*(1), 23-44. doi: 10.1037/1082-989X.12.1.23

Motowidlo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational Stress: Its Causes and Consequences for Job performance. *Journal of Applied Psychology, 71*(4), 618-629.

Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence That Task Performance Should Be Distinguished From Contextual Performance. *Journal of Applied Psychology, 79*(4), 475-480.

Pallant, J. (2013). *SPSS Survival Manual.* McGraw-Hill Education (UK).

Parker, D. F., & DeCotiis, T. A. (1983). Organizational Determinants of Job Stress. *Organizational Behaviour and Human Performance, 32*(2), 160-177.

Pocnet, C., Antonietti, J. P., Massoudic, C. Györkör, J., Becker, G. P., De Bruin, J. R. (2014). Influence of individual characteristics on work engagement and job stress in a sample of national and migrant workers in Switzerland. *Personality and Individual Differences, 60*, 1-82.

Rhoades, L., & Eisenberger, R. (2002). Perceived Organizational Support: A Review of the Literature. *Journal of Applied Psychology, 87*(4), 698-714. doi: 10.1037//0021-9010.87.4.698

Sales, S. M. (1970). Some effects of role overload and role underload. *Organizational Behavior and Human Performance, 5*(6), 592-608.

Schaufeli W., & Taris, T. (2013). *A Critical Review of the Job Demands-Resources Model: Implications for Improving Work and Health*. In Bauer, G. F., & Hämmig, O. By (EDS.) *Bridging Occupational Organizational and Public Health, (*pp. 43-68). Dordrecht, The Netherlands: Springer Netherlands.

Schaufeli, W., & Taris, T. (2013). Het Job Demands-Resources model: een overzicht en kritische beschouwing. *Gedrag & Organisatie, 26*(2), 182-204.

Shore, L. M., & Shore, T. H. (1995). Perceived organizational support and organizational Justice. In R. Cropanzano & K. M. Kacmar (Eds.), *Organizational politics, justice and Support: Managing social climate at work:* 149-164. Westport, CT: Quorum Press.

Stinglhamber, F., Caesens, G., Clark, L., & Eisenberger, R. (2016). In Meyer, J. P. (Ed.), *Handbook of Employee Commitment* (p. 333-345). Ontario, Canada: Edward Elgar.

Toegepast-Natuurwetenschappelijk Onderzoek (TNO), & CBS. (2014). *Werkstress, Burn-out & Verzuim in cijfers.* Retrieved from: https://www.rijksoverheid.nl/documenten/publicaties/2015/11/16/werkstress-burn-out-en-verzuim-in-cijfers

Van den Tooren, M., & De Jong, J. (2014). Job demands-resources and employee health and

well-being: The moderating role of contract type. *Career Development International, 19*(1), 101-122. doi: 10.1108/CDI-05-2013-0058

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived Organizational Support and Leader-Member Exchange: A Social Exchange Perspective. *Academy of Management Journal, 40*(1), 82-111.

Van Woerkom, M., Bakker, A. B., & Nishii, L. H. (2016). Accumulative Job Demands and Support for Strength Use: Fine-Tuning the Job Demands-Resources Model Using Conservation of Resources Theory. *Journal of Applied Psychology, 101*(1), 141-150.

Wright, T. A., & Bonett, D. G. (1997). The Contribution of Burnout to Work Performance. *Journal of Organizational Behavior, 18*(5), 491-499.

Yeh, Y. J. Y., Ko, J. J. R., Chang, Y. S., & Chen, C. H. V. (2007). Job stress and work attitude between temporary and permanently employed nurses. *Stress & Health, 23*(2), 111-120. doi: 10.1002/smi.1128

Yip, B., Rowlinson, S., & Siu, O. L. (2008). Coping strategies as moderators in the relationship between role overload and burnout. *Construction Management and Economics, 26*(8), 871-882.

Appendix A

Interviews financial manager and HR-manager.

Erik Bakkers' function is a Division Financial Controller (Business Support & Analysis-Europe). Erik makes margin analyses for all the industrial segments within the European division of Synthomer. He also supports the business and financial decision making of Synthomer. He recognises role overload and job stress, mainly in the beginning of the month, because there is a lot of time pressure to analyse numbers and to rapport them. There are a lot of deadlines and this can lead to role overload and job stress. In the beginning of the month he does not have time to do other tasks and also hopes that other tasks will not come through, because he is extremely occupied with the financial analyses. He also feels that role overload leads to job stress in his case, because extra tasks lead to a lot of stress, because he has to deal with deadlines.

Furthermore, we talked about perceived organizational support (POS). Erik notices that the company Synthomer offers a lot less support of facilitating functions, such as HR, IT and Finance, compared to Hexion, the organization he worked at before. He often needs to find out about certain matters on his own. He perceives this as negative, because he does not know where he needs to go to for certain matters, such as IT and questions about his pension. He used the metaphor of swimming; You do not know in which swim lane or in which direction you should swim and when you are done it is told that you did not do it the right way and that you should start all over again. Furthermore, he does not get any training on how to do it the right way. Thus, Erik does not agree with POS as a not significant variable to reduce job stress. No access to and support from IT, HR and Finance gives him a lot of stress. The only way he knows how to reduce job stress is to just keep on working really hard and not to worry too much in advance. He feels that his organization should invest more in POS and also thinks that this will reduce stress. Also, his boss is really occupied and does not have a lot of time for his employees. Thus, support from your supervisor is also important.

Lastly, he felt like he needed to start all over again, when he started working at Synthomer. In his former organization, Hexion, he had built up a certain reputation. Other colleagues appreciated him and trusted him. In this company he needs to begin again. Furthermore, in the beginning, he did not know if he was going to keep his job at Hexion and this also resulted in a lot of uncertainty and stress. Now, this uncertainty is almost gone and the stress about this is also gone. Thus, the certainty of his job or in this case uncertainty, was also an important factor for Erik, which led to a lot of job stress.

Secondly, Marian Erouw is the HR-director of Hexion Europe. She based her answers on the HR-policy in the Belgian location, which has thirty employees. The Belgian location deals mostly with Research and Development (R&D) profiles, sales and marketing profiles, and management. Her function in the Belgian location is HR-manager and she is this for approximately twenty percent of the time. A part of the employees experiences role overload. The reason for this is that in 2015 it was decided that labour activities needed to be moved to Germany and thus also meaning that the employees needed to move to the German location. However, the picking up of tasks in Germany has not yet been fully succeeded. As a result, the employees who stayed in Belgium have additional tasks, which actually are not their responsibility, but they still need to be done. This has become a structural problem. On the other hand, another part of the employees actually have a shortage of work and this reflects not well in their well-being and also leads to a form of stress.

To date, Marian only had to start one supportive course for an employee (of all thirty employees) to deal with job stress. Other employees do indicate that they would like to see change in the role overload and do show, from time to time, signs of job stress. However, when Marian asks in which ways Hexion could offer support, employees do not have concrete suggestions.

Marian thinks that role overload can give rise to job stress, but also thinks that this must be accompanied with a number of additional factors that are lacking, such as a good relationship with your supervisor, degree of autonomy and independence at work, degree of pleasure and appreciation at work.

Furthermore, we discussed POS. In Belgium, the employees are a small and close group, who have been working together for many years. As a result, there is an atmosphere of collegiality. Also, the organization is very flexible, wherever possible. Working from home and flexible working are possibilities for a lot of employees. In addition, Marian feels that as an HR-manager, concerning Belgium, she also stands close enough to the employees and has a good relationship with the employees and a lot of trust. This means that when employees face real problems they will find their way to her. At this moment, Hexion is working on a 'Happy@Work' project, stimulating initiatives in the chemical sector to make work more 'workable', for example increasing flexibility, more working from home, creating the right working environment and sports initiatives.

In addition, she does not really know if POS leads to less stress in the Belgian location. The company does not make use of a satisfaction survey, but she does have absenteeism numbers. In the Belgian location, the absenteeism rate is 0.8%, which is far

below the national average, and she does not have employees who are absent, due to stress related complaints. She feels that POS can definitely provide a good framework to deal with stress. Lastly, she also perceives the development of employees and awareness around stress as facilitating measures.