



The relationship between role overload and job stress: the moderating roles of job variety and perceived organizational support

Bachelor Thesis Human Resource Studies

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Abstract

Job stress is becoming a common phenomenon in the Netherlands, increasingly more organizations are experiencing difficulties with the effects of job stress. Therefore, the aim of this study was to examine the relationship between role overload and job stress. In addition, the moderating roles of job variety and perceived organizational support (POS) are investigated. On basis of the Job Demands Resource Model (JD-R model), it is hypothesized that role overload has a positive effect on job stress. In accordance to the JD-R model, it is hypothesized that job variety and POS will positively moderate the relationship between role overload and job stress. Data was collected by convenience sampling using a questionnaire and was conducted among 461 respondents using a cross-sectional design. The results indicated that there is a significant positive relationship between role overload and job stress. However, the expected moderating effect of job variety and POS is not supported in this study. This study contributed to the existing literature, because there is a focus on two perspectives. An organizational perspective by including POS in the relationship between role overload and job stress and focus on the content of the job by including job variety in this relationship. It also contributes to theory by giving insights in the role of organizational support and job variety in organizations.

Keywords: role overload, job stress, job variety, perceived organizational support

Introduction

In the past few years, the amount of physical and psychological complaints caused by work, such as job stress, burnout, and emotional exhaustion, has increased. In the Netherlands, 1.7 million employees experience job stress, which has become a common phenomenon (University of Twente, 2017). Moreover, research from the independent research organization TNO found that thirty-six percent of work-related absenteeism in the Netherlands is caused by job stress (TNO, 2014). Job stress has negative consequences for employees and organizations as it contributes to negative outcomes such as turnover, absenteeism and employee dissatisfaction (Beehr & Newman, 1978). The costs of absenteeism caused by job stress amount to 1.8 billion euros that have to be paid by Dutch employers (TNO, 2014). As job stress and its costs are increasing, it is important to gain more insights in the antecedents of job stress.

Thirty-eight percent of the antecedents of job stress are related to high job demands such as role overload (TNO, 2014). Previous research has shown that role overload has a significant effect on job stress (Coverman, 1989; Lambert, Hogan, Paoline, & Clarke, 2005). Bakker and Demerouti (2007) implemented the job demands-resources (JD-R model) model, where working conditions are divided into job demands and job resources. Role overload can be defined as a job demand, because it is a psychological aspect of the job that involves psychological costs (Bakker & Demerouti, 2007). According to the JD-R model, employees who experience high job demands (e.g. role overload) have a higher chance of experiencing health problems. This is referred to as the health-impairment process. Therefore, this study assumes that there is a positive effect of role overload on job stress.

In addition, the motivation process underlying the JD-R model states that job resources motivate employees and could lead to high work engagement, low cynicism and excellent performance (Bakker & Demerouti, 2007). Thereby, job resources may buffer the impact of job demands on job stress (Bakker, Demerouti, & Euwema, 2005). Job variety can be defined as a job resource as it is a functional aspect of the job, which will stimulate personal growth, learning and development (Bakker & Demerouti, 2007). It is expected, that the positive relationship between role overload and job stress will weaken when high levels of job variety are present in the job. Therefore, job variety will be taken into account as a moderator in the relationship between role overload and job stress.

Previous research has shown that organizations could benefit from assumptions of the social exchange theory in effectively managing perceived organizational support in organizations (Blau, 1964). This theory is about mutual obligations and reciprocity within social relationships (Blau, 1964). Perceived organizational support (POS) is the perception of

employees to what degree they are supported by their organization (Eisenberger et al., 2001). In this study, POS will be taken into consideration as a moderator of the relationship between role overload and job stress. According to the JD-R model, POS can be classified as a job resource, because it is similar to other forms of social support (e.g. supervisor and co-worker support) (Bakker & Demerouti, 2007). Job resources may buffer the impact of job demands on job stress (Bakker et al., 2005). Therefore, it is expected that the positive relationship between role overload and job stress will weaken when employees experience a high level of POS.

The aim of this study is to further clarify how job stress is developing and to investigate whether job variety and POS can help the employee in coping with job stress that is caused by high role overload. To contribute to the existing literature of coping with job stress, the focus in this study is divided into two categories. There is a focus on the organizational perspective by including POS in the relationship between role overload and job stress. In addition, there is a focus on the content of the job by including job variety in this relationship. Two different types of job resources are examined as a moderator in the relationship between role overload and job stress. The results of this study can help to determine whether POS and job variety are helping to reduce job stress. Furthermore, the results can contribute to determine whether role overload is a hindrance demand or a challenge demand.

On the basis of this study, evidence can be collected for job variety or POS being beneficial for organizations. Based on the outcome, HR-managers can adjust their policies to further diminish job stress. Based on the aforementioned, the following research question is formulated: *“To what extent is role overload related to job stress and to what extent is this relationship influenced by job variety and perceived organizational support?”*

The following section starts with an explanation of the variables job stress and role overload and their relationship, on the basis of the JD-R model. The variables job variety and POS will be examined as moderator in the relationship between role overload and job stress on basis of the JD-R model. Last, the hypothesized relations are illustrated within a conceptual model.

Theoretical Framework

Job stress

Job stress describes the awareness or feeling of an individual's dysfunction as a result of perceived conditions or happenings in the work-setting (Parker & DeCotiis, 1983; Beehr & Newman, 1978). Job stress can be divided into two dimensions, time stress and anxiety. Time stress occurs when an employee is experiencing substantial time pressure in the job. The second dimension is anxiety, which is associated with anxiety caused by job-related feelings, for example feelings of fidgety or nervousness (Parker & DeCottiis. 1983). In addition, the duration, intensity, number of stressors and the ability of the individual to cope with the feelings of stress results in whether job stress is short term with no lasting outcomes or more lasting with second level outcomes (e.g. arousal) (Parker & DeCotiis, 1983).

Role overload

Role overload is defined as the feeling of employees that their work roles are overloaded (Jenssen, Patel, & Messersmith, 2013) and having too many role demands and too little time to fulfill them (Coverman, 1989). An employee feels overloaded when expectations of work exceed his/her resources (e.g. time) or personal capability (Jensen et al., 2013). Role overload is often compared to role conflict, which exists when a person experiences pressures in one role that are incompatible with the pressures that exist in another role (Rizzo, House, & Lirtzman, 1964). While role conflict and role overload overlap, they are different concepts. Role overload can lead to role conflict, when the job demands of one role make it difficult to fulfill the demands of another role (Coverman, 1989).

The relationship between role overload and job stress

The job demands-resources model (JD-R model) can be used to explain the relationship between role overload and job stress. The JD-R model suggests that whereas every occupation may have its own specific risk factors associated with job stress, all these factors can be classified in two aspects of work, job demands and job resources (Bakker & Demerouti, 2007). Job demands refer to the physical, psychological, social or organizational aspects of the job that require sustained physical and psychological costs, e.g. time pressure, high work pace, high work effort and role overload (Bakker, Demerouti, & Verbeke, 2004). Karasek (1979) states that high job demands are not necessarily negative as described in other studies. By means of his job demands-control model, he shows that when high job demands are combined with high job control, it can lead to challenge in the workplace (Karasek, 1979). Although job demands are not necessarily negative, they can turn into job stressors if the demands are too high to be met by the usual working effort (Schaufeli & Bakker, 2004). The consequences of job stressors

can be defined as job stress (Lambert, Hogan, Moore, Tucker, Jenkins, Stevenson, & Jiang, 2009). This is consistent with the JD-R model, which suggests that job stress arises when an employee experiences a high level of job demands (Bakker & Demerouti, 2007). In addition, the link between role overload and job stress has often been investigated. Coverman (1989) suggests that role overload affects role satisfaction negatively, which in turn affects job stress positively. Moreover, Lambert et al. (2005) have found that role overload had a statistically significant positive effect on job stress.

The second aspect of work are job resources. They refer to physical, physiological, social or organizational aspects of the job that are functional in achieving work goals, reduce job demands and the associated costs and stimulate personal growth, learning and developing (Bakker & Demerouti, 2007). In the JD-R model, two underlying psychological processes are presented. The first process is the health-impairment process, which is related to high job demands. In this process, high job demands exhaust employees' mental and physical resources and lead to job stress and, consequently to health problems (Bakker & Demerouti, 2007). Role overload can be defined as a job demand and will, therefore, be positively related to predicting job stress according to the health impairment process of the JD-R model (Bakker et al., 2005). Accordingly, employees who experience a high level of role overload will have higher levels of job stress. Previous findings suggest that role overload affects role satisfaction, which will in turn affect job stress (Coverman, 1989). For these reasons, this study states the following hypothesis:

Hypothesis 1: The higher the employees' levels of role overload, the higher their job stress will be.

Job variety

Job variety can be defined as the degree of variation in a job (Hackman & Oldham, 1976). Jobs with a low job variety only consist of repetitive tasks (Lambert et al., 2009). The second process of the JD-R model is the motivational process, which suggests that job resources motivate employees and consequently lead to high work engagement, low cynicism and excellent performance (Bakker & Demerouti, 2007). In addition, exposure to the same tasks leads to lower levels of arousal, resulting in less satisfaction and greater boredom which could be a job stressor for some employees (Kass, Vodanovich, & Callender, 2001; Lambert et al., 2009).

In contrast, when job variety is higher, the job requires the multitude of skills an employee has and also requires a certain complexity (Van Veldhoven & Meijman, 1994). Therefore, jobs with high variety can be a resource for employees to avoid boredom (Lambert

et al., 2009). Moreover, job variety allows employees to learn new skills, employ themselves and fulfills more employee's needs (Lambert et al., 2009).

Job variety as a moderator between role overload and job stress

The JD-R model suggests that many different types of job demands and job resources may interact in predicting job stress (Bakker & Demerouti, 2007). According to the JD-R model, job variety can be defined as a job resource (Bakker et al., 2005). Previous research found that job variety would lead to increased job satisfaction (Lambert et al., 2009). Because job resources may buffer the impact of job demands on job stress (Bakker et al., 2005), this study suggests that when employees experience a high level of role overload, they will feel less job stress in case of high levels of job variety. This results in the following hypothesis:

Hypothesis 2: The positive relationship between role overload and job stress is moderated by job variety, so that it is weaker when high levels of job variety are experienced by employees.

Perceived Organizational Support

According to Rhoades and Eisenberger (2002), POS refers to an employee's general perception of how well the organization supports him or her (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). This perception is an indication for employees whether the organization favors or disfavors their effort (Rhoades & Eisenberger, 2002). POS stems from the social exchange theory, which explains mutual obligations within social relationships. For example, an employee who works extra hard, can be rewarded with a bonus by the organization. This reciprocation is one of the basic assumptions of the social exchange theory (Blau, 1964). POS can be used to buffer the negative effects of role stress on important employee work outcomes (Stamper & Johlke, 2003). Therefore, when people feel that they have social support from others, they report less psychological distress or strain (Jawahar, Stone, & Kisamore, 2007).

Perceived organizational support as a moderator between role overload and job stress

Based on the JD-R model, POS can be classified as a job resource (Bakker & Demerouti, 2007). Previous research has mainly focused on the moderating role of social support on job stress (Viswesvaran, Sanchez, & Fisher, 1999), but has not examined the potential moderating role of perceived organizational support on the relationship between role overload and job stress. Perceptions of POS could help employees to gain confidence in their ability to cope with the job demands, for example role overload (Jawahar et al., 2007). Therefore, this study suggests that the positive relationship between role overload and job stress will be moderated by perceived organizational support. It is expected that the relationship is weaker when high levels of perceived organizational support are experienced

by employees. In other words, employees with high levels of role overload will feel less job stress when they perceive high organizational support. This leads to the following hypothesis: *Hypothesis 3: The positive relationship between role overload and job stress is moderated by perceived organizational support, so that it weakens when high levels of perceived organizational support are experienced by employees.*

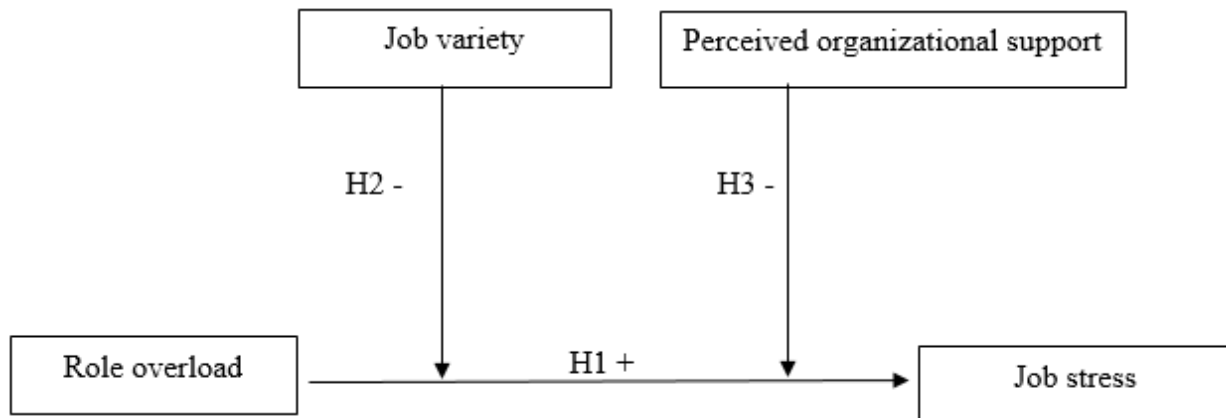


Figure 1. *Conceptual model*

Method

Population and sample

This study uses a cross-sectional design. In order to answer the research question, data was gathered by setting out questionnaires to employees from 101 different departments, selected in 82 organizations. 461 questionnaires were collected, which equals a response rate of 91.3%. This study focuses on the individual level of the employee. The questionnaires were handed out to 505 employees, 461 employees filled in and returned the questionnaire. In order to exclude missing values, a list wise missing value analysis was executed. Only respondents who filled in all questions of the questionnaire were selected for this study. Furthermore, an outlier analysis was performed to ensure that no outliers were included in the research. Eventually, 417 respondents were selected ($n=417$). The average age of the respondents was 40 years ($SD=12.9$). The majority of the respondents were female, namely 60.2%. Furthermore, 1% of the respondents completed only elementary education, 13% basic education, 34% middle education, 32% higher education, and 20% academic education. The majority of the organizations were very large (>1000 employees) with 43%. After these organizations, the micro/small organizations (<25 employees) were the second-largest group with 21%.

Procedure

The present study was conducted within a broader research practicum on employee well-being, job stress and performance by students of Human Resource Studies at Tilburg University. The chosen departments belonged to a wide range of organizations within and outside the Netherlands from various different sectors. Organizations and the corresponding departments were recruited by convenience sampling within students' own networks. Each student was responsible for approaching two different departments each consisting of at least seven employees. Before the students handed out the questionnaires to the employees of the departments, a sample frame was set up on the basis of job tenure and birth date. Job tenure was the key factor for this sample. In addition, implicit stratified random sampling was used to select five employees per department as respondents for this study. After the respondents filled in the questionnaires, they signed a verification form. This was filled in to control for every student that the questionnaires are not faked and to ensure the reliability of the collected questionnaires. A cover letter was sent along with the questionnaire to explain the aim of the study to the respondents and to emphasize the confidentiality. In order to collect data two types of questionnaires were used; an employee and a manager questionnaire. The questionnaire consisted of 115 questions and was distributed in English and Dutch, depending on the locations of the organizations and the language the respondent was speaking. For the present study, only the data obtained from the employee questionnaire was used.

Measures

All respondents were asked to rate themselves in terms of role overload, job stress, job variety and perceived organizational support. The answers of the items were all measured on a 5-point Likert scale. The principal axis factor analysis was conducted to examine how many components loaded on one factor, to ensure the construct validity of the concepts. Eigenvalues were used to determine the number of factors. The scree plot confirms if only the factor with the highest Eigenvalue should be taken into account or to take multiple factors into consideration. Varimax rotation was used in analyzing the data and to test whether the data was suited for a principal factor analysis, the Kaiser-Meyer-Olkin (KMO) had to exceed .6 and Bartlett's test of sphericity had to be significant (Cramer, 2004). Reliability analysis was conducted after the factor analysis. Cronbach's alpha (α) had to exceed .6 to be considered as acceptable (Peterson, 1994). In addition, Cronbach's alpha if-item deleted was taken into consideration. If Cronbach's alpha if-item deleted is higher than the Cronbach's alpha of the scale, this item should be excluded from the scale to make sure each item contributes positively to its scale.

Job stress. Job stress was measured on a 5-point Likert scale with answering possibilities ranging from 1= 'strongly disagree' to 5= 'strongly agree'. This scale was developed by Parker and DeCotiis (1983) and consisted of 6 items. An example of an item in the questionnaire was: "I have felt fidgety or nervous as a result of my job" (Parker & DeCotiis, 1983, p.169). The KMO for this scale was .861 (>.6) and Bartlett's test of sphericity was significant (Chi-square= 971.259, $df= 15$). The principal factor analysis revealed the presence of one component (Eigenvalue= 3.439). The reliability of the scale was good ($\alpha= .842$). When deleting the item (item 87 in the questionnaire) "I feel guilty when I take time off from job" the scale will increase to a Cronbach's α of .852. Nevertheless, this item was not deleted, because the difference (.10) was considered as negligible.

Role overload. Role overload was measured on a 5-point Likert scale with answer categories ranging from 1= 'strongly disagree' to 5= 'strongly agree'. This scale was developed by Jensen et al. (2013) and consisted of eight items. An example of an item in the questionnaire was: "I am pressured to work long hours" (Jensen et al., 2013, p.1708). The assumptions for factor analysis were satisfied, as the KMO measure was .889 (>.6) and Bartlett's test of sphericity was significant (Chi-square= 1471.466, $df= 28$). Eigenvalue analysis suggested one component in the scale (Eigenvalue= 4.397). Scale reliability was good ($\alpha= .881$) and Cronbach's α if item-deleted were not exceeding this value of Cronbach's α .

Job variety. Job variety was measured on a 5-point Likert scale with answering possibilities ranging from 1= 'strongly disagree' to 5= 'strongly agree'. The four items of the "VBBA" developed by Van Veldhoven and Meijman (1994) were used to measure this variable. An example of an item in the questionnaire was: "My work is varied" (Van Veldhoven & Meijman, 1994). The assumptions for factor analysis were satisfied. The KMO for this scale was .717 (> .6) and Bartlett's test of sphericity was significant (Chi-square= 616.166, $df = 6$). Eigenvalue analysis suggested one component in the scale (Eigenvalue = 2.546). Scale reliability was good ($\alpha = .805$) and Cronbach's α if item-deleted were not exceeding this value of Cronbach's α .

Perceived organizational support (POS). POS was measured on a 5-point Likert scale with answering possibilities ranging from 1= 'strongly disagree' to 5= 'strongly agree'. This scale was a shortened version of the scale developed by Eisenberger, Fasolo and Davis-LaMastro (1990). An example of an item in the questionnaire was: "My work unit shows very little concerns for me" (Eisenberger et al., 2001, p.45). This is also the one item of the scale that needed to be recoded before performing the factor analysis and the reliability analysis. After recoding, the assumptions of the factor analysis were tested. KMO was .743 (> .6) and Bartlett's

test of sphericity was significant (Chi-square= 478.198, $df= 6$). The principal factor analysis with Varimax rotation revealed the presence of one component (Eigenvalue= 2.420). The reliability analysis showed a Cronbach's alpha of .775 and Cronbach's α if item-deleted were not exceeding this value of Cronbach's α .

Control variables. Two control variables were included in this study in order to rule out any spurious relationships. The control variables were the following: gender and level of education. Previous research shows that females express significant higher levels of job stress in the same job, as compared to men (Gardiner & Tiggemann, 1999). Therefore, this study includes gender as a control variable. Second, the level of education was included because higher levels of job stress are related to a higher level of education (Bonanno, Galea, Bucciarelli & Vlahov, 2007). The two control variables were included as dummy-variables in the analysis as they are measured on nominal (gender) and ordinal (level of education) scale. The answer categories of gender were coded as 0= male and 1=female. Level of education was divided into 5 categories, coded as 1= elementary education, 2= basic education, 3= middle education, 4= higher education and 5= academic education. For every answer category, a dummy was created (0= not the stated education level, 1= the education level)

Analysis

Bivariate correlation (Pearson's r) analysis was performed to describe the strength and direction of the linear relationships between role overload, job stress, job variety, perceived organizational support and the control variables. Hypothesis 1 is tested using the Pearson r correlation. Pearson r is used, because it is designed for continuous variables (Pallant, 2016). The correlations of this study are presented in table 1, the size of the value provides an indication of the strength of the relationship. In addition, the correlation matrix shows which control variables are significantly related to role overload, job stress, job variety and perceived organizational support. Furthermore, a multiple regression analysis was used to examine whether the expected interaction effects of job variety and POS were significant. Multiple regression is based on correlation, but allows a more detailed exploration of the interrelationships among a set of variables (Pallant, 2016). Therefore, hypothesis 2 and 3 are tested using the multiple regression analysis. The regression analysis was performed twice, once with job variety as a moderator and the second time with POS as a moderator. Both models are presented in the results section.

Results

In this paragraph, the results of this study are discussed. In table 1, the correlation matrix including means, standard deviations and correlations is presented. Job stress is positively and significantly related to role overload ($r = .52, p = .000$). Furthermore, job stress is negatively related to job variety ($r = -.04, p = 0.238$) and negatively and significantly related to POS ($r = -.22, p = .000$). Role overload and POS are significantly and negatively related ($r = -.19, p = .000$). In addition, there is a significant and positive relationship between role overload and job variety ($r = .12, p = .007$). Moreover, the control variables are significantly correlated with job stress. Gender correlates positively with job stress. Basic and middle education are negatively related to job stress, however higher and academic education are positively related to job stress. Finally, not all the control variables correlated significantly to job stress, role overload, job variety and POS, however they were included in the multiple regression analysis to control for their possible effects.

Table 1

Correlation matrix (N = 417)

<i>Measures</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Job Stress	2.16	.71	-										
2. Role overload	2.55	.75	.52**	-									
3. Job Variety	3.87	.68	-.04	.12**	-								
4. Perceived organizational support	3.73	.58	-.22**	-.19**	.29**	-							
5. Elementary education	.01	.11	.01	-.10*	-.04	.01	-						
6. Basic education	.13	.34	-.16**	-.11*	.02	.01	-.04	-					
7. Middle education	.34	.47	-.11*	-.17**	-.07	-.04	-.08	-.28**	-				
8. Higher education	.32	.47	.12**	.21**	.07	-.01	-.07	-.27**	-.48**	-			
9. Academic education	.20	.40	.13**	.08*	-.01	.05	-.06	-.20**	-.36	-.34**	-		
10. Gender (female)	60.2%		.12**	.06	.07	.01	.05	-.08	-.03	-.03	.11**	-	

Note ** $p < .01$ two-tailed. * $p < .05$ two-tailed

In this study, a multiple regression analysis was performed to explore the relationship between role overload, job stress, job variety and POS. Multiple regression is used because it is designed for the investigation of complex real-life research questions (Pallant, 2016). In advance of performing the multiple regression analysis, this study tested if the assumptions of multiple regression were met. The first assumption that was checked for was collinearity, which refers to the relationship among the independent variables. When the independent variables (role overload, job variety and POS) are highly correlated ($> .9$), multicollinearity exists (Pallant, 2016). In addition, the VIF factor should not exceed 10. In the regression analysis collinearity should not be present. The second assumption that was checked for was normality, the errors should be normally distributed (Pallant, 2016). The third assumption is that, the relationship between the predictors and job stress should be linear (Pallant, 2016). The last assumption that was checked for was homoscedasticity, the variance of the errors should be the same for all predicted scores (Pallant, 2016). The assumptions were met and regression analysis was used as a valid tool to perform the analyses.

Table 2

Results of regression analysis on job stress

	Model 1	Model 2	Model 3	Model 4
	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>
Gender	.10*	.08	.08*	.09*
Elementary education ¹	.02	.05	.05	.05
Basic education	-.08	-.08	-.07	-.07
Higher education	.15**	.02	.03	.03
Academic education	.15**	.07	.08	.07
Role overload		.51**	.52**	.43
Job variety			-.10*	-.15*
Moderating effect ²				.10
R	.25	.55	.56	.56
R ²	.05**	.29**	.30**	0.30**
F	5.52	29.07	26.05	22.76
F change	5.52**	137.65**	5.84*	0.15

Note. Job stress is the dependent variable

* $p < .05$ two-tailed, ** $p < .01$ two-tailed

¹Middle education is frame of reference

²Moderating effect is role overload x job variety

Table 3*Results of regression analysis on job stress*

	Model 1	Model 2	Model 3	Model 4
	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>
Gender	.10*	.08	.08	.08
Elementary education	.02	.05	.06	.06
Basic education	-.08	-.08	-.07	-.08
Higher education	.15**	.02	.03	.04
Academic education	.15**	.07	.08	.09
Role overload		.51**	.48**	.12
Perceived organizational support			-.13**	-.32*
Moderating effect ²				.37
R	.25	.55	.56	.56
R ²	.06**	.30**	.32**	.32**
F	5.52	29.07	26.91	23.85
F change	5.52**	137.65**	10.11**	1.97

Note. Job stress is the dependent variable

* $p < .05$ two-tailed, ** $p < .01$ two-tailed

¹Middle education is frame of reference

²Moderating effect is role overload x perceived organizational support

Hypotheses testing

This paragraph explains whether the proposed hypothesis will be supported or rejected by using the significance level of .05 and .01. The first hypothesis suggests that the higher the role overload an employee experiences, the higher their level of job stress. Results from the correlation matrix confirmed that role overload has a significant positive effect on job stress ($r = .52, p = .000$). In addition, results from the regression analysis (See table 2, model 2) confirmed this relationship ($B = .51, p = .000$). Therefore, when an employee experiences high role overload, this employee will experience more job stress as compared to an employee who experiences low role overload. Thus, the first hypothesis is supported.

In table 2, the F change of model 4 when the moderating effect of job variety is entered, is not significant ($B = .15, p = .703$. see table 2, F change). Role overload, job variety and the control variables explain 30% of the variance in job stress ($R^2 = .30$. see table 2, model 3). Respectively, in table 3, the F change of model 4, when the moderating effect of POS is entered, is not significant ($B = 1.97, p = .161$. see table 3, F change). Role overload, POS and the control

variables explain together 32% of the variance in job stress ($R^2 = .32$ see table 3, model 3). Thus, in both tables model 3 will be maintained as the best fitted model, as the F change of model 3 exceeds the not significant F change of model 4.

Furthermore, table 2 (see model 3) shows a significant direct effect of job variety on job stress ($B = -.10$ $p = .016$). Therefore, when employees experience more job variety, they experience less job stress. The second hypothesis state, that job variety has a moderating effect on the relationship between role overload and job stress. As described above, there is a direct effect between job variety and job stress. However, the results do not show a significant moderating effect of job variety on role overload and job stress ($B = .10$, $p = .703$. see table 2, model 4). Moreover, there was no significant improvement of the model's fit when job variety was added to the model as a moderator (F change = $.15$, $p = .703$. see table 2, model 4) and therefore the second hypothesis is rejected.

Hypothesis 3 suggested a moderating role of POS on the relationship between role overload and job stress. The results for POS were similar to the results of job variety. Table 3 (see model 3) showed a direct effect of POS on job stress ($B = -.13$, $p = .002$). Therefore, when employees experience more support from the organization, they experience less job stress. However, the results do not show a significant moderating effect of POS on the relation between role overload and job stress ($B = .37$, $p = .161$. see table 3, model 4). The total of variance explained by the independent variables stayed the same, when adding POS as moderator ($R^2 = .32$ see table 3, model 4). In addition, F -change was not significant which means that there was no improvement of the model when POS was added as a moderator (F change = 1.97 , $p = .161$. see table 3, model 4) and, therefore, the third hypothesis is not supported.

Discussion

The goal of this study was to examine the relationship between role overload and job stress, and to what extent job variety or POS can reduce the strength of this relationship. Therefore, the focus of this study is on the moderating effect of job variety and POS on the relationship between role overload and job stress. Two moderating effects are examined, because both effects focus on different job resources. Job variety focuses on the aspects of the job and POS is an organizational factor which could reduce job stress. A cross-sectional design was used to collect data from 461 employees within 82 organizations. The results showed that there is a significant positive relationship between role overload and job stress. However, both POS and job variety have no significant moderating effect on this relationship. In all analyses,

the control variables gender and level of education of the employees were included to rule out any spurious effects.

The findings of this study support the direct relationship between role overload and job stress, which means that employees, who perceive more role overload experience more job stress (H1). This confirms the health impairment process of the JD-R model, which states that high job demands (e.g. role overload) may exhaust employees' mental and physical resources, this leads to job stress and consequently health problems (Bakker & Demerouti, 2007).

The JD-R model suggests that job resources (e.g. job variety) may buffer the impact of job demands (e.g. role overload) on job stress (Bakker et al., 2005). Based on this theory it was expected that job variety has a moderating effect on the relationship between role overload and job stress. It was expected that job variety could reduce the level of job stress, caused by high levels of role overload. However, in this study no evidence was found for a moderating effect of job variety on the relationship between role overload and job stress (H2). In addition, POS has also no influence on the relationship between role overload and job stress (H3). Which means that the extent to which employees perceive POS has no significant influence on the relationship between role overload and job stress. This is not in accordance with the literature of Jawahar, Stone and Kisamore (2007) who suggested that perceptions of POS could help employees to gain confidence in their ability to cope with role demands, for example role overload. An explanation for the missing moderating effect, could be the existence of personal resources. In the present study, the role of personal resources is not investigated. Personal resources, such as self-efficacy and optimism, could play a significant role in the relationship between role overload and job stress. Personal resources moderate the relationship between job demands and exhaustion, which is associated with job stress (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Therefore, these personal resources could affect the moderating effect of job variety and POS could explain the nonexistence of these effects. Nevertheless, the moderating effect of job variety and POS could still exist, but this research could not confirm it. Concluding, higher levels of role overload are associated with higher levels of job stress, whereas conditional effects could not be detected. This study found that the more role overload an individual perceive, the more job stress he or she experiences. This relationship is not influenced by the way employees perceive support from the organization and the level of job variety their job has.

Limitations and recommendations

There are several limitations that need to be taken into consideration. The first limitation is the design of this research. The design of this research was cross-sectional, which means that

respondents were asked to fill in the questionnaire only once. Therefore, there cannot be drawn any conclusions on causality of the relationship between role overload and job stress (Straits & Singleton, 2011). This means that the directions of the relations between the variables in this study could be different than proposed in the conceptual model, for example job stress might also predict role overload, instead of role overload predicting job stress. By executing a longitudinal study, future research could solve the causality issue and improve the reliability of the study (Straits & Singleton, 2011).

Another limitation is the sample used for this study, which consisted mainly of Dutch respondents. Little other ethnicities were included in the sample. Therefore, it is important for future research to use a more diverse sample. In addition, the sample was compiled with convenience sampling within students' own network. This is a form where respondents are chosen based on their accessibility. Convenience sampling limits generalization. However, there were no indications of possible effects by using this form of sampling, but it should be taken into account when interpreting the results. Future research could be using random sampling, so the results could be generalized to the whole population of interest.

The way data was collected in this study should also be taken into account as a limitation. In this study, self-reported questionnaires were used, the scores were estimated by the respondents themselves. Self-reported measurement could lead to respondents answering in socially desirable ways, lead to some common method variance issues and so the reliability and validity of the data will be uncertain (Jackson, 1998). In addition, the questions were covered by all the needed questions to measure the variables. However, the questions only measure the overall opinion of the respondent, because the question is only answered at one certain time. Future research could use interviews, semi structured, together with the questionnaires to obtain more generalized information about the measured variables and improve the reliability of the data collection

Practical implications

This study confirms that role overload has a significant effect on job stress. Due to the increased costs of health problems in organizations, it is important to tackle these problems. Therefore, practitioners should be aware of the fact that job demands such as role overload increase the level of job stress and that to reduce job stress, they can focus on reducing role overload. Based on this study's findings, focusing on job resources to reduce job stress is not effective, when employees experience high levels of role overload. No moderating effects of job variety and POS on the relationship between role overload and job stress were found in this study. Job variety was not directly related to job stress. However, this does not mean that job

resources are not worth to invest in as the JD-R model shows how job resources could lead to high work engagement, low cynism and excellent performance (Bakker & Demerouti, 2007).

In addition, a negative direct effect between POS and job stress was found. Therefore, if organizations want to reduce job stress they can try to increase organizational support by for example encourage supervisor support (Ganster, Fusilier, & Mayes, 1986). Employers should be aware of the fact that POS could reduce job stress and implement practices to induce the perceived organizational support by employees.

Conclusion

In conclusion, this study examined the relationship between role overload and job stress and gave insight in the moderating role of job variety and POS in this relationship. This is important because job stress, as well as the costs associated with job stress are increasing in the Netherlands (TNO, 2014). Furthermore, job stress is associated with negative consequences for employees and organizations as it contributes to health-related problems (Beehr & Newman, 1978). The results show that there is only a direct effect between role overload and job stress, higher levels of role overload results in more job stress. However, there was no evidence in this study for the moderating roles of job variety and POS in the relationship between role overload and job stress. The moderating effects could still exist, but this study could not confirm it. Furthermore, POS has a direct negative effect on job stress, so it is still important for organizations to encourage POS as it will reduce job stress. Finally, to keep employees healthy, organizations should focus on keeping job demands such as role overload at appropriate levels and increase the level of organizational support.

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Appendix A

De onderzoeksvraag van deze scriptie is beantwoord aan de hand van een data-analyse en literatuur. Maar de vraag blijft, hoe het in de praktijk tot zijn recht zou komen. Om meer inzicht te krijgen in de variabelen van deze studie in de praktijk, is er gesproken met een HR-manager (Agnes Vermeulen) en een werknemer binnen dezelfde organisatie (Annemarie Buijs). Beide werkzaam binnen SHL-groep, een organisatie die ondersteunende diensten levert aan zorgprofessionals, zoals huisartsen en verloskundigen. De taken van de HR-manager zijn voornamelijk het toezicht houden op procedures, strategieën bedenken, vormgeven van HR-praktijken en het helpen van werknemers met problemen. De werknemer voert de dagelijkse werkzaamheden uit, in dit geval voornamelijk het contact houden met klanten.

De eerste variabele die centraal stond in beide interviews was job stress. Hoe kijkt een organisatie aan tegen job stress en hoe vertaalt job stress zich in de organisatie. Agnes gaf aan dat job stress zeker aanwezig is binnen de organisatie. Het bedrijf zit midden in een fusie, waardoor er meer wordt verwacht van de werknemers. Functieomschrijvingen zijn niet meer helemaal duidelijk, waardoor werknemers niet meer weten wat er precies van ze wordt verwacht en dit levert stress op. De directe link tussen role overload en job stress die werd gevonden in deze studie, is dus ook te begrijpen vanuit een organisatie perspectief. Maar er blijken in de praktijk ook nog andere factoren een rol te spelen. Dit wordt ook benoemd door Annemarie, zij geeft aan dat de job stress in de jaren dat ze er werkt is toegenomen. Zij denkt dat dit voornamelijk komt door een tekort aan werknemers, er zijn veel collega's verdwenen maar het werk is hetzelfde gebleven. De onduidelijkheid over verwachtingen kunnen zorgen voor meer role overload, waardoor job stress binnen de organisatie stijgt. Agnes ziet vooral ook een grote rol voor de thuissituatie van werknemers. Het meenemen van problemen thuis naar het werk zorgt ook voor meer job stress bij werknemers.

In deze studie is geen moderatie effect gevonden van zowel job variety als POS. Agnes geeft aan dat dit vanuit de praktijk niet altijd zo hoeft te zijn. De werknemers die aangeven dat ze zich gewaardeerd voelen, laten ook zien dat ze iets extra's willen doen voor de organisatie. Dit leidt volgens Agnes tot meer verbondenheid met de organisatie, maar vermindert volgens haar ook de job stress. Ook Annemarie gaf aan dat de support die zij van de organisatie ontvangt voor haar erg van belang is. Alleen door tijden van fusie en onzekerheid is deze support niet erg duidelijk meer zichtbaar en neemt hierdoor ook de job stress niet af. De variabele job variety als moderator speelt binnen SHL niet een hele grote rol, omdat het gaat

over werk dat al heel gevarieerd is. Een toename van job variety zal in de ogen van Agnes niet tot minder job stress leiden. Wel ziet ze het belang van POS binnen een organisatie, maar geeft ze ook aan dat POS hoge verwachtingen met zich mee kan brengen. Werknemers kunnen zich verplicht voelen om meer terug te doen voor de organisatie en daardoor kunnen de werkeisen stijgen. Het blijft een vicieuze cirkel, waarbij aan de ene kant POS kan zorgen voor minder job stress, maar aan de andere kant leidt het weer tot meer werkeisen die die job stress zullen verhogen. Daarom moet volgens Agnes niet alleen naar POS worden gekeken als een organisatie job stress wil verminderen, maar moet er gekeken worden naar wat een werknemer individueel nodig heeft en daarop moet worden ingespeeld. Daarbij speelt ook de organisatiecultuur en contact met leidinggevenden en collega's volgens haar een grote rol.