The Moderating Effect of Job Demands on Relationship Between Perceived Organizational Support and Psychological Capital to Work Engagement

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Keywords: Job Demands, Perceived Organizational Support, Psychological Capital, Sales, Work Engagement.

Abstract: Distribution business today needs more than sales with good selling skill, it also requires sales who is able to provide good quality service in order to compete in achieving target. Previous research showed that employees who have a high level of work engagement are positively associated with better customer service quality as well as increasing profitability through productivity. This study examined the effect of perceived organizational support and psychological capital on work engagement with job demands as a moderator. The hypotheses were tested using multiple regression analysis. In total, 77 sales representatives participated in this study. This study found that job demands moderate the effect between perceived organizational support and psychological capital on work engagement. Furthermore, when job demands are high, it reduces the effect between perceived organizational support and psychological capital on work engagement. This study also showed that both perceived organizational support and psychological capital have positive and direct effects to work engagement. This study offers contribution to our understanding about interaction of work engagement, perceived organizational support, psychological capital and job demands in organizational setting. The implication and limitation of this research are discussed in detail.

1 INTRODUCTION

Work engagement is defined as an affectivemotivational, work-related state of fulfillment in employees that is characterized by vigor, dedication and absorption (Schaufeli & Bakker, 2004). Engaged employees, who have high levels of energy, are enthusiastic about their work, and they are often fully immersed in their job so that time flies (Macey & Schneider, 2008; May, Gilson, & Harter, 2004). Importantly, recent studies have indicated that engagement related positively to customer satisfaction (Salanova, Agut, & Peiró, 2005), in-role performance (Schaufeli, Taris, & 2006b), returns Bakker, and financial (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009).

For these reasons, fostering employees' work engagement is an important asset for organizations. In line with this perspective, many scholars have tried to identify its antecedents. Based on the job demands and resources model (JD-R) (Bakker & Demerouti, 2007), lies the assumption that whereas every occupation may have its own specific risk factors associated with job stress, these factors can be classified into two general categories (i.e. job demands and job resources), thus, it constitutes an overarching model that may be applied to various occupational settings, regardless of the particular demands and resources involved.

Job resources refer to those physical psychological, social, or organizational aspects of the job that are either/or functional in achieving work goals, reducing job demands and the associated psychological and physiological costs, and stimulating personal growth, learning, and development (Bakker & Demerouti, 2007). Some prior studies showed that job resources and particularly social support play an important role in the development of work engagement (Llorens, Bakker, Schaufeli, & Salanova, 2006). In line with this idea, Eisenberger and Stinglhamber (2011) have suggested that perceived organizational support (POS) has a positive influence on work engagement, amongst others by reinforcing employees' intrinsic interest in their tasks. POS is defined as employees'

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general beliefs regarding the extent to which "the organization values their contributions and cares about their well-being" (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Surprisingly, few studies have empirically tested the positive relationship between POS and employees' work engagement (e.g.,Kinnunen, Feldt, & Makikangas, 2008; Sulea et al., 2012).

Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) efforts or skills and are therefore associated with certain physiological and/or psychological costs (Demerouti et al., 2001). Examples are a high work pressure, an unfavorable physical environment, and emotionally demanding interactions with clients. However, in addition to resources, a number of theories have suggested that job demands play a role in engagement, typically by reducing available resources and, thus, reducing engagement (Schaufeli & Bakker, 2004).

Further, Bakker & Demerouti (2008) in their advance studies have focused on state-like personal resources as predictors of work engagement. Personal resources are positive self-evaluations that are linked to resiliency and refer to individual's sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis, & Jackson, 2003). Luthans, Youssev, and Avolio (2007b) proposed a concept that is similar to personal resources called psychological capital (PsyCap). PsyCap is defined as an individual's positive psychological state of development characterized by self-efficacy, optimism, hope, and resilience (Luthans et al., 2007). Luthans and Sweetman (as cited in Bakker & Leitter, 2010) found that PsyCap becomes a positive predictor for work engagement.

Importantly, recent studies by Hewit Associates (as cited in Smith & Marckwick, 2009) mentioned that there is a positive relationship between work engagement and sales productivity so that it gains higher profit. Gallup (as cited in Smith & Marckwick, 2009) also found that employees will be more productive and contribute financially to the company if they feel involved and engaged. In addition, Harter, Schmidt, and Hayes (as cited in Bakker & Schaufeli, 2010) reported that there is a positive relationship between employee engagement with profits earned by the company.

In the present study, effects of job demands, perceived organizational support, and psychological capital on work engagement were studied on sales representative profession. Sales representative have to deal with high volume demands and many kind of clients. Job demands in this study can be explored using the JD-R model that has not been considered in previous research. The JD-R model thus appears to offer a useful starting point for organizing the diverse set of factors, derived from multiple theory bases that have been shown to influence selling outcomes; importantly, in addition to being integrative, the JD-R framework provides strong guidance regarding why and how these demands and resource factors are affecting sales work engagement in achieving selling outcomes.

2 CONCEPTUAL FRAMEWORK

2.1 The Moderating Effect of Job Demands on Relationship between Perceived Organizational Support and Psychological Capital on Work Engagement

Work engagement is defined as an affectivemotivational, work-related state of fulfillment in employees that is characterized by vigor, dedication and absorption (Schaufeli & Bakker, 2004). According to Demerouti et al (2011) factors that affecting work engagement can be explained through JD-R model. JD-R model sets two specific working conditions, job demands and job resources on its prediction of work engagement. Additionally, several authors have investigated the relationship between personal resources and work engagement. Xanthopulou et. al. (2007) found that personal resources can positively predict work engagement. This relationship has been incorporated in an overall model of work engagement (Bakker & Demerouti, 2008). In the present study, we focused on specific job resources, namely perceived organizational support (POS); and personal resources, namely psychological capital (PsyCap).

According to the extended JD-R model (Bakker & Demerouti, 2008), job resources, and particularly social support, may reinforce employees' work engagement by increasing their intrinsic motivation (*i.e.*, by fostering growth and development) as well as extrinsic motivation (*i.e.*, by offering instrumental assistance to employees to help them attain their professional goals). Surprisingly, within the literature on the JD-R model, few scholars have examined the positive influence of POS (*i.e.*, a job resource) on work engagement. Nevertheless, Eisenberger and Stinglhamber (2011) suggested that

by reinforcing employees' intrinsic interest in their task, POS would increase work engagement. More precisely, according to Eisenberger and POS would increase Stinglhamber (2011), employees' interests for their tasks in several ways; by creating the belief and the expectation among employees that their organization will provide them with the help and the material or emotional resources when needed; by creating among employees the expectation that they will be rewarded for high performance; by fulfilling their socio-emotional needs such as their need for selfesteem or for approval, and by reinforcing their selfefficacy.

Llorens *et. al.* (as cited in Xanthopulou *et al.*, 2007) showed that POS and PsyCap hold an important role in explaining work attachment. When support from organization is available and rated well by employees then employees will feel that they are able to achieve the goal of work, where feeling capable of achieving this work is in line with the concept in capital psychological (self- efficacy, hope, optimism, resilience). Also, employees who have high and valuable POS and PsyCap will create a work environment that is capable of optimizing usage resource. Thus, the condition is capable of directing employees on work engagement (Xanthopulou et al., 2009).

In addition, the JD-R model delineates that job demands moderate the resources-engagement relationship (Bakker & Demerouti, 2008). Demerouti et. al. (2001) defined job demands as physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are, therefore, associated with certain physiological and/or psychological costs. Bakker and Demerouti (2007) explained that high job demands exhaust employee's mental and physical resources leading to job burnout and eventually to ill-health. In general, job demands and resources are negatively correlated because high job demands may prevent the mobilization of job resources. The JD-R model then proposes that high job demands and lack of resources may create a fertile breeding ground for work engagement and reduced work engagement respectively (Schaufeli & Bakker, 2004).

From these findings in literature, the main hypotheses was formed:

H1: POS and PsyCap have an effect on work engagement.

H2: Job demands have a moderating effect on relationship between POS and PsyCap on work engagement.

3 RESEARCH METHOD

3.1 Procedure and Participants

The present study was part of a thesis project that took place in a distribution company in Sidoarjo, Indonesia. Employees were sales representative from three different segmentations (modern trade, wholesaler, and general trade). The anonymity of their answers was assured. This research used a total population study, because the amount of subjects is relatively small. In total, 77 sales representatives participated in this study. Sales representatives who participated in this study have worked at least for 1 year.

Demographic characteristics showed that 84.4% respondents is male and 15.65% is female; 57.1% respondents is in 21 - 30 age range, 39% is in 31 - 40 age range and 3.9% is in 41 - 50 age range; 61% respondents is in 1 - 5 year work period, 36.4% is in 6 - 10 year work period and 2.6% is in 11-15 year work period; 36.4% respondents is in modern trade segmentation and also 36.4% is in wholesaler segmentation, 27.3% is in general trade segmentation.

3.2 Measures

The questionnaire was divided into five sections. The variables that appear in the first section include the demographic profile. In the second part of the study, 17 questions of Utrecht Work Engagement Scale (UWES), developed by Schaufeli and Bakker (2003), was used. This scale consists of 17 items in statements form with Likert-scale style. Each (item) measured three dimensions of work engagement *i.e.* vigor, dedication, absorption. The third part measured POS variable. POS was measured with Survey of Perceived Organizational Support (SPOS) questionnaire short item version, 16 items developed by Eisenberger (1986). This scale measured three dimensions of POS *i.e.* fairness, supervisor support, rewards and job condition.

The fourth part of questionnaire measured PsyCap variable. PsyCap was measured with Psychological Capital Questionnaire (PCQ) developed by Luthans, Yousev, Avolio (2007). PCQ consists of 24 items, each item measured four dimensions of PsyCap, *i.e.* self-efficacy, hope, optimism, and resiliency. The fifth part and the last part measured job demands variable. Job demands variable were measured by Job-Demands Resource Questionnaire (JDR-Q) developed by Bakker (2014). The JDR-Q reflects underlying dimension, work pressure, cognitive demand, emotional demand, role conflict and hassles. Table 1 below shows the result of reliability test using stratified Cronbach Alpha in this study.

Table	1.	Reliability	test
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Measurement scale	Stratified alpha cronbach	
Work engagement	0.967	
Perceived organizational support	0.903	
Psychological capital	0.926	
Job demands	0.874	

3.2 Data Analysis

The statistical program SPSS version 21.0 was used in this study to perform the statistical analysis. Moderated regression analysis and multiple regression analysis were used to analyze data in this research.

In this study, first we conducted the classical assumption test to minimize errors prediction. The classical assumption test includes normality test, linearity test and multicollinearity test. Result showed that all variables fulfilled the requirements needed for regression analysis test.

4.1 Moderated Regression Analysis

The use of Moderated Regression Analysis (MRA) with two predictor variables (X) should be preceded by comparing the three regression equations for specifies the moderator variable type.

Model	R square	Coefficient B	T _{count}	Sig.
Constants	-	11.285	-	0.033
POS	0.506	0.294	3.376	0.001
PsyCap	0.300	0.292	5.807	0.000

Table 2 shows that the first test used POS and PsyCap as independent variables while the work engagement functioned as the dependent variable, so the first regression equation is:

$$Y = \alpha + \beta 1 X + \beta 2 X \varepsilon$$

Y = 11.285 + 0.294X + 0.292X \varepsilon (1)

First equation defined that coefficient B have positive value, it means that POS and PsyCap variables in this research have positive relationship with work engagement. Analysis result also showed (POS 3.376>1.66: that t_{count}>t_{table}. PsvCap 5.807>1.66), it means that there is a linear relationship between POS and PsyCap to work engagement. The findings obtained from the equation also showed that the linear combination values of POS and PsyCap predicts work engagement at a significant level ($R^2 = 0.506$, P < 0.05).

Table 3: Significance of equation 2.

Model	R Square	Coefficient B	F change	Sig. F Change
Constant		60.578		
POS	0.693	0.202	54.853	0.000
PsyCap		0.146		
Job Demands		-0.420		

Table 3 shows that the second (test) used POS, PsyCap and job demands as independent variables while the work engagement functioned as the dependent variable, so the second regression equation is:

$$Y = \alpha + \beta_1 X + \beta_2 X + \beta_3 Z$$

Y = 60.578 + 0.202 + 0.146 - 0.420 (2)

Second equation defined that job demands coefficient B have negative value, it means job demands variables are negatively associated to work engagement. That is, any increase in the unit of work demands will reduce the work attachment variable by 0.420. Result obtained from table 3 also showed that both variables are able to predict work engagement at a significant level ($R^2 = 0.693$, P <0.05). PsyCap demands POS. and job simultaneously have direct effect on work engagement at 69.3%, this effect increases from 50,6% (see Table 2).

The third equation, according to Table 4, used POS and PsyCap as independent variable, job demands as moderator and work engagement as dependent variable. As shown in Table 4, interactions between POS, PsyCap and job demands predict work engagement at a significant level ($R^2 = 0.735$, P < 0.05). Interactions of job demands between POS and PsyCap are negatively associated (coefficient B = -0.489). Indeed, results indicated that relationship between POS and PsyCap to work engagement will weaken when facing high job demands. The last equation for moderated regression analysis in this research is:

$$\begin{split} Y &= \alpha + \beta_1 X + \beta_2 X + \beta_3 Z + \beta_4 X^* Z + \epsilon \\ Y &= 63.958 + 0.291 + 0.208 - 0.354 - 0.489 + \epsilon \end{split} \tag{3}$$

Model	R Square	R Square Change	Coeffici ent B	Sig. F Chan ge
Constant			63.958	
POS	0.506		0.291	
PsyCap	0.506		0.208	0.000
Job Demands	0.693	0.187	-0.354	0.000
POS & PsyCap* Job demands	0.735	0.042	-0.489	0.018

Table 4: Significance of equation 3.

By comparing three regressions above, we found that all equations were significant. It can be concluded that job demands variable is quasi moderator variable. According to Sharma *et. al.* (1981), quasi moderator not only interacts with predictors, but it is also a predictor itself.

4.2 Hypothesis 1

In this research, to examine the effects of perceived organizational support (POS) and psychological capital (PsyCap) on work engagement, multiple regression analyses were done. Findings are shown in Table 2. The findings obtained from regression analysis revealed that the linear combination of POS and PsyCap predicts work engagement at a significant level ($R^2 = 0.506$, P < 0.05). Accordingly, it can be seen that POS and PsyCap explain the variance of work engagement by 50.6%, in other words, work engagement takes shape depending on POS and PsyCap by 50.6%. Equation model (1) defined that both POS and PsyCap have positive

value on work engagement, so it can be concluded that the higher POS and PsyCap, the higher work engagement. Thus, the hypothesis 1 was supported.

4.3 Hypothesis 2

Strong support was found for hypothesis 2 regarding moderating effect of job demands on relationship between perceived organizational support and psychological capital to work engagement. PsyCap and job demands predict work engagement at a significant level ($R^2 = 0.735$, P < 0.05). Interactions job demands between POS and PsyCap are negatively associated (coefficient B =-0.489). Indeed, results indicated that relationship between POS and PsyCap to work engagement will weaken when facing high job demands. Thus, the hypothesis 2 was supported.

5 CONCLUSION & DISCUSSION

The aim of this study was to examine the moderating effect of job demands on relationship between POS and PsyCap to work engagement. Firstly, this research showed that both POS as job resources and PsyCap as personal resources are predictors for work engagement in sales representatives. This finding is in line with the previous research by Halbesleben (2010), who explained that job resources and personal resources simultaneously work together to improve engagement. The more employees feel supported and valued by their organization, the more they develop a high self-efficacy and, consequently, the more they become absorbed by their tasks and do their jobs with vigor and dedication.

Further, POS that is considered as positive, such as support from supervisor, help/feedback available, awards, will build a positive environment where psychological capital will be stronger and more dynamic in providing personal resources (Hur, Rhee & Ahn, 2015). Moreover, Hur, *et al.* (2015) explained that research relating to the perception of organizational support as a job resource and psychological capital as a personal resource supports Baker & Demerouti's JD-R model theory (2008). The JD-R model suggests that organizational resources and personal resources are a predictor of work engagement (Bakker & Demerouti, 2008).

When support from organization are available and rated well by employees, then employees will feel that they are able to achieve the goal of work, where feelings capable of achieving this work is in line with the concept in PsyCap (self- efficacy, hope, optimism, resilience). Also, employees who have high and valuable POS and PsyCap will create a work environment that is capable of optimizing usage resource. Thus, the condition is capable of directing employees on work engagement (Xanthopulou *et. al.*, 2009).

Another findings in this research also showed that job demands moderated the relationship between POS and PsyCap to work engagement. Result obtained from this research showed that relationship between POS and PsyCap to work engagement will weaken when facing high job demands. This result supports previous research by Wang et. al. (2017) who found that work engagement is the result of interaction between job demands, POS, and PsyCap. Bakker and Demerouti (2007) explained that high job demands exhaust employees' mental and physical resources leading to job burnout. High job demands will burn energy resources and also, as a consequence, state engagement cannot be maintained (Sonnentag, Dormann & Demerouti, 2010).

Finally, high job demands lead to contrary conditions of work engagement, *i.e.* depression, anxiety and job burnout. Previous study proposed by Lee & Ashfort (as cited in Bakker, *et. al.*, 2014) found that job demands become an important variable that caused job burnout. With high work demands such as workload or emotional demands, employees will feel tired and psychologically disturbed which will affect their performance. This will also affect the engagement of employees to their work.

REFERENCES

- Albrecht, S. (2010). Handbook of employee engagement: Perspectives, issues, research and practice. UK: Edward Elgar Publishing.
- Bakker, A. B., Demerouti, E., & Euwema, M. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10, 170-180.
- 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, 393–417.
- Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal* of Vocational Behavior, 62, 341–356.

- Bakker, A.B. & Demerouti, E. (2014). Job demandsresource theory: in. C Cooper & P. Chen (Eds). Wellbeing: A complete reference guide. Chichester, UK: Willey-Blackwell.
- Bakker, A.B., & Demerouti, E. (2007). The job demandsresources model: State of the art. *Journal of mangerial Psychology*, 22, 309-328.
- Bakker, A.B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, Vol. 13, 3, 209-223.
- Bakker, A.B., & Leitter, M.P., (2010). Work engagement: A handbook of essential theory and research. New York, NY:New York Press.
- Demerouti, E., Nachreiner, F., Bakker, A.B., & Schaufeli, W.B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, Vol. 86, 3, 499-512.
- Eisenberger, R., & Rhoades, L., (2002). Perceived organizatonal support: A review of the literature. *Journal of Applied Psychology*, Vol. 87, 4, 698-714.
- Eisenberger, R., & Stinglhamber, F. 2011. *Perceived* organizational support: Fostering enthusiastic and productive employees. Washington, DC: American Psychological Association.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal* of Applied Psychology, 71, 500-507.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing Conservation of Resources theory. *Applied Psychology: An International Review, 50*(3), 337-370.
- Hur, Woon-Moo., Yoon, Seung Rhee., & Ahn, Kwang-Ho. (2017). Positive psychological capital and emotional labor in Korea: the job demands-resources approach. *The International Journal of Human Resource Management*. 27:5, 477-500.
- Luthans, F. & Youssef, C. M., & Avolio, B. J. (2007). *Psychologycal capital: developing the human competitive edge.* UK: Oxford University Press.
- Macey, W.H., Schneider, B., Marbera, K.M., Young, S.A. (2009). *Employee engagement: Tools for analysis, practice, and competitive advantage.* UK: Blackwell Publishing.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. Journal of Occupational and Organizational Psychology, 77, 11–37.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315.
- Schaufeli, W.B. (2011). Work Engagement: What do we know?. Workshop of Occupational Health Psychology. Timisoara: Utrecht University.
- Schaufeli, W.B. (2013). What is engagement? dalam Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice*. London: Routledge.

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- Schaufeli, W.B., Salanova, M., Gonzales-Roma, V., & Bakker, A.B. (2002). The measurement of engagement and burnout : two sample confirmatory factor analytic approach. *Journal of Happiness Studies* 3, 71-92
- Sonnentag, S., Dormann, C., Demeroutti, E. (2010). Not all days are created equal: The concept of state work engagement. *Work engagement: A Handbook of Essential Theory and Research* (pp. 25 – 38). New York: Psychology Press.
- Wang, X., Liu, L., Zou, F., Hao, J., & Wu, H. (2017). Associations of occupational stressors, perceived organizational support, and psychological capital with work engagement among chinese female nurses. *BioMed Research International*, Vol 2017.
- Xanthopulou, D., Bakker, A.B., Demerouti, E., & Schaufeli W.B. (2007). The role of personal resources in the job-demands resources model. *International Journal of Stress Management*, 14, 121-141.
- Xanthopulou, D., Bakker, A.B., Demerouti, E., & Schaufeli W.B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. Work engagement: A Handbook of Essential Theory and Research (pp. 85 – 101). New York: Psychology Press.