Job demands-resources, work engagement, and organizational commitment: Study among employees in a state-owned enterprise

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ABSTRACT

This study presents the Job Demands-Resources (JD-R) model to investigate employees’ organizational commitment. The purpose of this study is to examine the effect of job demands and job resources on organizational commitment, as well as the mediating effect of work engagement, in the context of Indonesian state-owned enterprise. Data were gathered using questionnaire from 115 employees of a state-owned enterprise. Partial Least Squares - Structural Equation Modeling (PLS-SEM) was performed to analyze data. Results of data analysis indicate the negative influence of job demands and positive influence of job resources on organizational commitment. Also, work engagement mediates the effect of job demands and job resources on organizational commitment. The results of this study give contribution to both theoretical and practical viewpoint. At the theoretical level, this study contributes to the literature on organizational commitment theory and the JD-R model. From the practical viewpoint, the study findings offer an insight for Indonesian state-owned enterprises management to enhance employees’ organizational commitment by considering job demands, job resources, and work engagement of employees.

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Introduction

In both developed and developing countries, state-owned enterprises (SOE) play important role in policy, trade, and commerce (Naqvi & Ginting, 2020, p. 1). Approximately 10 percent of global gross domestic product (GDP) is contributed by these business entities (Peng et al., 2016). Subsidies, favorable loans, debt waivers, and protection against bankruptcy are some of privileges that SOEs have (Kim & Ali, 2017). In Indonesia, state-owned enterprise is called Badan Usaha Milik Negara (BUMN). In 2019, total BUMNs assets amounted to IDR 8,723,25 trillion (Badan Pusat Statistik, 2020), and in the same year BUMNs contributed IDR 415 trillion from IDR 1,957 trillion in state revenue (Kementerian BUMN, 2019). It implies that Indonesian government relies on BUMNs to power the economy.

Despite having many privileges, state-owned enterprises are facing demands and problems. There are two challenges faced by state-owned enterprises, the challenge of very competitive market and bureaucracy (Aharoni, 1981). There is an assumption that BUMNs
are inefficient and have low profitability, as they were originally established to meet public needs and sustain public welfare rather than to earn profit (Nugroho & Writakno, 2008, p. 37).

The total net profit of BUMNs was IDR 181.51 trillion in 2018, and IDR 164.03 trillion in 2019, decreased by 9.63 percent. In 2019, 23 BUMN companies suffered losses and 56 companies experienced decrease in net income. Return of equity (ROE) of BUMN companies continued to decline: 7.69 percent in 2017, 7.08 percent in 2018, and 6.17 percent in 2019. The decline also occurred in return on assets (ROA): 2.58 percent in 2017, 2.22 percent in 2018, and 1.88 percent in 2019 (Badan Pusat Statistik, 2020). This decline in profitability is a signal for BUMN administrators to improve companies’ performance.

With the fact that state-owned enterprises play important role in economy, the investment in human resources is needed to create and maintain competitive advantages. Human resources are a crucial element of organization. The management of human resources is a complex task and needs to look at many aspects.

Organizational commitment is a construct that deserves to be considered in human resource management. There are differences in outcomes of committed employees compared to non-committed employees (Roe, Solinger, & Van Olffen, 2009, p. 136). Organizational commitment has accepted as important construct in studies of human resources. It has significant impact on various work attitudes such as work engagement (Cao et al., 2019), turnover intention (Zhou, Li, & Gao, 2020), organizational citizenship behavior (Teresa, Yasmina, & Sangwon, 2020), and performance (Yousef, 2000). Research in management and psychology has identified many antecedents of organizational commitment. Of the many factors, two of which are job demands and job resources (Bakker, Van Veldhoven, & Xanthopoulou, 2010; Boyd et al., 2011; Kuusio et al., 2010).

Job demands and job resources are components of the Job Demands-Resources (JD-R) model introduced by Demerouti et al. (2001). This model was originally proposed to explain the antecedents of burnout. Every job has characteristics which can be divided into two categories, namely job demands and job resources. The JD-R model illustrates that job demands lead to burnout and job resources lead to engagement.

Previous studies have found significant direct effect of job demands and job resources on organizational commitment (Bakker et al., 2010; Bakker, Van Veldhoven, & Xanthopoulou, 2010; Bowling et al., 2015; Boyd et al., 2011; Chen & Yu, 2014; Collie, Granziera, & Martin, 2018; Geisler, Berthelsen, & Muhonen, 2019). However, other studies did not find significant effects (Bakker, Demerouti, & Schaufeli, 2003; Carlson et al., 2017; Hakanen, Bakker, & Schaufeli, 2006; Park, 2018; Salu & Hartijasi, 2018). This is gap that underlies the need for further research.

Work engagement has been identified as a predictor of outcome aspects such as organizational commitment, job satisfaction, and organizational citizenship behavior (Saks, 2006). It is important welfare indicator of employees and organizations. As stated in Bakker (2011), engaged employees are more open to new information, more productive, willing to go extra mile, and proactively change the work environment in order to stay engaged. In the JD-R model, job resources and personal resources are main predictors of engagement. In studies using the JD-R model, work engagement was often associated with job resources, but few researchers linked it directly with job demands. This is due to assumption that burnout (health problems) and engagement (motivation) are two different processes (Demerouti et al., 2001).

Results of several studies showed that job demands and job resources have significant effect on work engagement (Halinski & Harrison, 2020; Huynh, Xanthopoulou, & Winefield, 2014; Montgomery et al., 2015; Ugwu & Onyishi, 2020; Vander Elst et al., 2016; Wolter et al., 2019). On the other hand, several studies did not find significant effects (Ayu, Maarif, & Sukmawati, 2015; Radic et al., 2020; Schaufeli & Bakker, 2004; Syailendra & Soetjipto, 2017). This is also gap in the literature which needs to be clarified in study.

Present study applies the Job Demands–Resources model to investigate how different categories of job characteristics (job demands and job resources) influence organizational commitment among state-owned enterprise employees through work engagement. The aims of this study are: (1) to examine the effect of job demands and job resources on employee’s organizational commitment; (2) to examine the mediating roles of work engagement. Data was collected from employees of PT Pelindo Marine Service, a subsidiary of an Indonesian state-owned enterprise PT Pelindo III. Data analysis was conducted using PLS-SEM.

This study offers both theoretical and practical contributions. For academic point of view, this study presents a framework and empirical evidence on the relationship among job demands, job resources, work engagement, and organizational commitment, which is adopted from JD-R model, so that it extends this model. For practical viewpoint, this study offers an insight for state-owned enterprise administrators to strengthen employee’s organizational commitment by looking at job demands, job resources, and work engagement.
Literature Review

Conceptual Background and Hypothesis Development

Organizational Commitment

Organizational commitment is defined as “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday, Steers, & Porter, 1979). It is indicated by: (1) strong belief in and acceptance of the organization’s goals and values; (2) willingness to exert considerable effort on behalf of the organization; and (3) strong desire to maintain membership of the organization (Mowday, Porter, & Steers, 1982, p. 27). Organizational commitment has strong relationship with turnover intention (Zhou, Li, & Gao, 2020). It not only affects employee retention, but also affects how employees spend their time at workplace. Change in commitment has impact on employees’ morale, motivation, performance, as well as organizational success (Meyer, Allen, & Topolnytsky, 1998). Several studies have revealed the influence of organizational commitment on work engagement (Cao et al., 2019), employees’ loyalty (Yao, Qiu, & Wei, 2019), turnover intention (Rawashdeh & Tamimi, 2020), and organizational citizenship behavior (Teresa, Yasmina, & Sangwon, 2020).

Meyer and Allen (1991) identified three forms of organizational commitment, namely: affective, continuance, and normative. Affective commitment refers to the emotional attachment, identification, and involvement of employees in the organization. Employees with a strong affective commitment continue to work with the organization because they want to. Continuance commitment is related to awareness of the costs associated with leaving the organization. Employees whose primary relationship with organization is based on continuance commitment remain with organization because they need to. Normative commitment expresses feeling of obligation to continue working with organization. Employees with high level of normative commitment feel that they must stay with the organization, such as feelings of indebtedness.

Job Demands-Resources Model

Job Demands-Resources (JD-R) model was proposed by Demerouti et al. (2001) to describe the antecedents of burnout. Every job has characteristics which can be classified into two categories, namely job demands and job resources. Researchers have applied the JD-R model to study various constructs, such as performance (Bakker & Heuven, 2006), organizational commitment (Bakker, Van Veldhoven, & Xanthopoulou, 2010), organizational citizenship behavior (Shin & Hur, 2019), presenteeism (Demerouti et al., 2009), absenteeism (Bakker, Demerouti, & Schaufeli, 2003), turnover intention (Huynh, Xanthopoulou, & Winefield, 2014), and work-home interference (Bakker et al., 2011).

Job demands are physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort and are related with certain physiological and/or psychological costs. Examples are high work pressure, role overload, and poor work environment (Bakker et al., 2003). Job demands are exhausting, especially when available work resources are limited (Bakker, 2015).

Several studies denoted that job demands have negative effect on organizational commitment. Kuusio et al. (2010) stated that work-related psychosocial factors, such as high job demands, low job control, and poor colleague consultation, are factors for low organizational commitment. Research conducted by Bakker, Van Veldhoven, and Xanthopoulou (2010) revealed that employees’ commitment to organization is negatively affected by job demands, namely workload and emotional demands. In a meta-analysis study, Bowling et al. (2015) stated that job demands have negative impact on affective organizational commitment and have positive impact on turnover intention. Job demands such as workload can negatively affect several psychological and physical wellbeing indicators, as well as affective commitment. Geisler, Berthelsen, and Muhonen (2019) reported the negative effect of job demands such as role conflict and work-family conflict on organizational commitment and work attitude.

H1. Job demands have negative effect on organizational commitment.

Job resources are physical, psychological, social, or organizational aspects of the job that: (1) useful in attaining work goals; (2) reduce job demands as well as associated physiological and psychological costs; or (3) stimulate personal growth and development. Examples are autonomy, career opportunities, performance feedback, and social support (Bakker, Demerouti, & Verbeke, 2004). Job resources can buffer the negative impact of job demands on burnout (Bakker & Demerouti, 2007). Employees will enjoy their tasks and be committed to the organization if high job demands are accompanied by high job resources (Bakker, Demerouti, & Euwema, 2005; Bakker, Van Veldhoven, & Xanthopoulou, 2010). Previous studies found that job resources play an important role in affecting organizational commitment. For example, research conducted by Bakker et al. (2010) on Australian academics obtained results showing that occupational resources predict organizational commitment. Similarly, in a study on university staff, it was confirmed that job resources positively predict organizational commitment and negatively predict psychological stress (Boyd et al., 2011). Allen and Shanock (2013) stated that employee organizational commitment is influenced by formal and informal job resources. The example is perceived organizational support which has positive influence on organizational commitment. Results of research by Collie, Granzieria, and Martin (2018) showed that organizational commitment of teachers is affected by perceived autonomy support. The significant effect of job demand personal resources was also reported in a study on civil servants (Borst, Kruyen, & Lako, 2019).

H2. Job resources have positive effect on organizational commitment.
Work Engagement

Engagement is defined as “the harnessing of organization members’ selves to their work roles”. In engagement, people employ and express themselves physically, cognitively, and emotionally during role performances (Kahn, 1990). Work engagement is positive, satisfying, work-related state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). It is an important indicator of the welfare of employees and organizations. Employees who are physically, cognitively, and emotionally connected to work roles, feel full of energy, are dedicated to achieving work-related goals, and are often immersed in work (Bakker, 2011). Poor work engagement can be detrimental to the organization by decreasing employee welfare and productivity. Work engagement has positive relationship with levels of personal achievement and psychological well-being. Employees with higher levels of engagement tend to have lower levels of emotional exhaustion and depersonalization (Shuck & Reio, 2014).

Bakker & Demerouti (2008) suggested that there are at least four reasons why engaged employees perform better than non-engaged employees, those are: (1) engaged employees often experience positive emotions, such as happiness and enthusiasm; (2) experience better health; (3) create their own job and personal resources; (4) transfer their engagement to others. Engaged workers have personal resources such as optimism, self-efficacy, self-esteem, resilience, and active coping style, which help them control their work environment.

Several studies have found the role of job demands in affecting employees’ engagement on work. Although several studies found no significant effect (Radic et al., 2020; Schaufeli & Bakker, 2004; Syailendra & Soetjipto, 2017), other studies found negative effect. For example, Ugwu and Onyishi (2020) reported negative relationship between workload and work engagement in Nigerian hospital nurses. Vander Elst et al. (2016) found that workload and emotional demands negatively affect work engagement of nurses in Belgium. In a longitudinal study, Sonnentag, Binnewies, and Mojza (2010) observed the contribution of job demands at Time 1 to work engagement at Time 2. People with high job demands at Time 1 experience decrease in work engagement at Time 2. Montgomery et al. (2015) reported the influence of workload, organizational demands, and emotional demands on two dimensions of work engagement (enthusiasm and dedication).

H3. Job demands have negative effect on work engagement.

There were studies that reported relationship between job resources and work engagement. Kunte and Rungruang (2019) observed the positive effect of skill variation, task identity, task significance, autonomy, and feedback on work engagement. A study by Kotzé and Nel (2020) revealed that organizational respect and employee care have significant positive effect on work engagement and organizational commitment. Mostert, Peeters, and Rost (2011) identified job resources (autonomy, colleague support, supervisor support) as positive predictors of work engagement. Halinski and Harrison (2020) reported that work engagement is positively influenced by job supervisor support and organizational support. Moreover, Grover et al. (2018) examined the various roles of personal resources (psychological capital) in the JD-R model, where one of the findings was that job resources positively affect work engagement. In a study on police officers, the positive effect of social support (supervisor and coworker support) on work engagement was confirmed (Wolter et al., 2019). In research on school teachers, Musenze et al. (2020) stated that work engagement is positively affected by perceived organizational support and self-efficacy.

Hypothesis 4. Job resources have positive effect on work engagement.

The relationship between work engagement and organizational commitment has been studied in several researches. In a study on two multinational companies, Farndale et al. (2014) found that work engagement has positive impact on affective commitment. Jung and Yoon (2016) conducted a study on hotel and restaurant employees in South Korea and found that engagement positively affects organizational commitment. Based on research conducted by Orgambidez, Borrego, and Vázquez-Aguado (2019) on nursing personnel in Andalusia, self-efficacy and work engagement are predictors of affective organizational commitment. Rameshkumar (2020) conducted a study on ship staffs in India to identify factors that contribute to employee work engagement and their relationship to three dimensions of commitment. The results of this study showed that work engagement positively influences the affective and normative form of organizational commitment.

H5. Work engagement has positive effect on organizational commitment.

H6. Work engagement mediates the effect of job demands on organizational commitment.

H7. Work engagement mediates the effect of job resources on organizational commitment.

Research and Methodology

The design of this research was quantitative, cross-sectional one. The respondents of this study were employees of PT Pelindo Marine Service, a subsidiary of Indonesian state-owned enterprise PT Pelindo III. Research hypotheses were tested by collecting data from employees using survey questionnaire containing items based on literature and previous studies. Inclusion criteria were as follows: (i) permanent employee; (ii) has been working in PT Pelindo Marine Service and/or Pelindo III for three years or more. A total of 115 questionnaires were usable. The survey was held during August-September 2021.
The questionnaire consisted of two sections. The first section collected information about demographic profile of respondents, including age, sex, education level, tenure, employee types, and division or department where respondents are working. The second section measured the constructs examined in this study, consisted of 54 items. Participants responded on a six-point scale ranging from 1 (totally disagree) to 6 (totally agree), without midpoint.

Five job demands were included in this study: workload, mental demand, emotional demand, work-home conflict, and bureaucracy. Workload was assessed by three items based on Bakker, Demerouti, and Verbeke (2004), such as “I have a lot of work to do”. Mental demand was assessed by two items based on Llorens et al. (2019) and Schaufeli (2015). Example item is “My work requires a lot of attention and concentration”. Emotional demand was measured by two items based on Lequeurre (2013), including “In my work, I have to be able to convince or persuade people”. Work-home conflict was assessed by three items based on Geurts et al. (2005). Example item is “I find it difficult to fulfill my domestic obligations because I keep thinking about work”. Bureaucracy was measured by two items based on Borst, Kruyen, and Lako (2019), like “At the company I work for, guidelines and rules are more important than my experience or intuition”.

Six job resources were included in this study: autonomy, possibilities for development, role clarity, career opportunities, social support, and remuneration. Autonomy was assessed by two items adapted from Bakker, Demerouti, & Verbeke (2004) and Lequeurre et al. (2013), such as “I have freedom to decide how I do my work”. Possibilities for development was assessed by three items derived from Pejtersen et al. (2010). Example item is “I can learn new things through my work”. Role clarity was measured by two items based on Lequeurre et al. (2013), like “It is clear enough for me what tasks I have to do”. Career opportunities was assessed by one item based on Schaufeli (2015), that is “My job provides opportunities for promotion”. Social support was measured by five items adapted from Bakker, Demerouti, and Verbeke (2004) and Lequeurre et al. (2013). Sample item is “I can ask my colleagues for help if necessary”. Remuneration was assessed by two items based on Lequeurre et al. (2013), such as “I am paid enough for the work I do”.

Work engagement indicators were vigor, dedication, and absorption. This construct was assessed with twelve items based on Schaufeli et al. (2002b). Example items are “When I get up in the morning, I feel like going to work” and “I am enthusiastic about my job”. Organizational commitment was described through affective, normative, and continuance dimension. It was measured with fifteen items based on Meyer, Allen, and Smith (1993). Sample items include “I feel that this company’s problem are my own” and “This company deserves my loyalty”. In order to analyze the data, Partial Least Square - Structural Equation Modeling (PLS-SEM) was performed using SmartPLS 3 (Ringle, Wende, & Becker, 2015). Data analysis using PLS-SEM was conducted in three steps. (i) Outer model evaluation to examine validity and reliability of the measures. (ii) Inner model evaluation to examine the quality of structural model. The evaluation was based on criteria: coefficient of determination ($R^2$) and predictive relevance ($Q^2$). (iii) Hypotheses was tested using bootstrapping, which is resampling means to test the significance of relationship between latent variables. Alpha in the level of 5% ($\alpha = 0.05$) was set.

Result and Discussion

Demography

One hundred and fifteen respondents participated in this study. The demographic profile of respondents was illustrated in Table 1. It shows that 80.87% respondents were male, 55.65% respondents were aged between 31 and 40 years, 48.7% respondents had bachelor’s degree, and 84.35% respondents have been working in the company for at least five years.

Table 1: Demographic Profile of Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>93</td>
<td>80.87</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>19.13</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
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<tr>
<td>20-30 years old</td>
<td>13</td>
<td>11.30</td>
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<tr>
<td>31-40 years old</td>
<td>64</td>
<td>55.65</td>
</tr>
<tr>
<td>41-50 years old</td>
<td>28</td>
<td>24.35</td>
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<tr>
<td>Above 50 years old</td>
<td>10</td>
<td>8.70</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
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<tr>
<td>High school</td>
<td>34</td>
<td>29.57</td>
</tr>
<tr>
<td>Diploma</td>
<td>12</td>
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<tr>
<td>Bachelor</td>
<td>56</td>
<td>48.70</td>
</tr>
<tr>
<td>Master</td>
<td>13</td>
<td>11.30</td>
</tr>
<tr>
<td>Tenure</td>
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<td></td>
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<tr>
<td>3-4 years</td>
<td>18</td>
<td>15.65</td>
</tr>
<tr>
<td>5-10 years</td>
<td>70</td>
<td>60.87</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>27</td>
<td>23.48</td>
</tr>
</tbody>
</table>


Outer Model

Outer model evaluation was carried out to ensure the validity and reliability of measures. There were 14 items that were removed from model because they had outer loading below 0.5 (Chin, 1998, p. 325). Removed items consisted of eight items related to job demands (A_05, A_06, A_07, A_08, A_09, A_10, A_11, A_12), one item related to job resources (B_01), four items related to work engagement (C_01, C_02, C_10, C_11), and one item related to organizational commitment (D_08). Thereafter, the model was re-estimated. The revised results were illustrated in Table 2.

Table 2: Outer Loadings, AVE, and Composite Reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Item</th>
<th>Outer loading</th>
<th>AVE</th>
<th>Composite reliability</th>
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<td>Job demands</td>
<td>Workload</td>
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<td>0.786</td>
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<td>0.847</td>
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<td>A_02</td>
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<td></td>
<td></td>
<td>A_03</td>
<td>0.797</td>
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<tr>
<td></td>
<td>Mental demand</td>
<td>A_04</td>
<td>0.618</td>
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<td>Job resources</td>
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<td>B_02</td>
<td>0.508</td>
<td>0.443</td>
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<td></td>
<td></td>
<td>B_03</td>
<td>0.641</td>
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<td></td>
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<td>B_04</td>
<td>0.626</td>
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<td></td>
<td>B_05</td>
<td>0.757</td>
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<td>Possibilities for</td>
<td>B_06</td>
<td>0.665</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>development</td>
<td>B_07</td>
<td>0.688</td>
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<td></td>
<td>Role clarity</td>
<td>B_08</td>
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<td>B_09</td>
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<td>Career opportunities</td>
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<td>B_11</td>
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<td>B_13</td>
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<td>D_05</td>
<td>0.744</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normative</td>
<td>D_06</td>
<td>0.632</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D_07</td>
<td>0.522</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D_09</td>
<td>0.691</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>D_10</td>
<td>0.625</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuance</td>
<td>D_11</td>
<td>0.757</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D_12</td>
<td>0.611</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>D_13</td>
<td>0.652</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>D_14</td>
<td>0.605</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D_15</td>
<td>0.519</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that outer loadings were above 0.5. All latent variables had composite reliability above 0.7, which is higher than recommended level (Hair, Ringle, & Sarstedt, 2011). Average variance extracted (AVE) values varied between 0.425 and 0.584. The recommended level of AVE is 0.5. Fornell and Larcker (1981) suggested that AVE below 0.5 is accepted if composite reliability is above recommended level. Based on these results, the validity and reliability of measures were adequate.
Inner Model

Table 3 shows the result of structural model testing. Structural model was assessed by checking coefficient of determination ($R^2$) and predictive relevance ($Q^2$). Chin (1998, p. 323) proposed that coefficient of determination value is classified into: weak (0.19), moderate (0.33), and substantial (0.67). Coefficient of determination ($R^2$) value of work engagement was 0.576 and considered moderate. Meanwhile, $R^2$ value of organizational commitment was 0.454, thus also considered moderate. Aside from $R^2$ evaluation, predictive relevance ($Q^2$) was examined. Predictive relevance describes the capacity of model to predict indicators of each endogenous latent variable (Hair, Ringle, & Sarstedt, 2011). Predictive relevance has two forms: cross-validated redundancy and communality. This study used cross-validated redundancy. As shown in Table 3, cross-validated redundancy values were positive and higher than zero, signifying the predictive relevance of structural model.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$R^2$ adjusted</th>
<th>$Q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work engagement</td>
<td>0.576</td>
<td>0.568</td>
<td>0.310</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>0.454</td>
<td>0.439</td>
<td>0.168</td>
</tr>
</tbody>
</table>

Hypothoses Testing

Figure 1 and Table 4 summarize the results of hypotheses test. Relationships with $t$ statistic above 1.96 and $p$ value less than 0.05 are considered significant (Fisher, 1934, p. 45). Negative path coefficient ($\beta$) means negative relationship, and positive path coefficient means positive relationship.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>$\beta$</th>
<th>$t$ statistic</th>
<th>$p$</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>JD $\rightarrow$ OC</td>
<td>-0.276</td>
<td>2.445*</td>
<td>0.015</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>JR $\rightarrow$ OC</td>
<td>0.491</td>
<td>4.482*</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>JD $\rightarrow$ EN</td>
<td>0.339</td>
<td>2.847*</td>
<td>0.005</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>JR $\rightarrow$ EN</td>
<td>0.523</td>
<td>4.149*</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>EN $\rightarrow$ OC</td>
<td>0.382</td>
<td>3.504*</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>JD $\rightarrow$ OC$\rightarrow$ EN</td>
<td>0.130</td>
<td>2.105*</td>
<td>0.036</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>JR $\rightarrow$ EN$\rightarrow$ OC</td>
<td>0.200</td>
<td>2.377*</td>
<td>0.018</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*Significant at $p < 0.05$

JD: Job demands; JR: Job resources; EN: Work engagement; OC: Organizational commitment

As shown in Table 4, job demands have negative effect on organizational commitment ($\beta = -0.276; t = 2.445$) and positive effect on work engagement ($\beta = 0.339; t = 2.847$). So, Hypothesis 1 is supported and Hypothesis 3 is rejected. Job resources have positive effect on organizational commitment ($\beta = 0.491; t = 4.482$) and work engagement ($\beta = 0.523; t = 4.149$). These results support Hypothesis 2 and Hypothesis 4. Work engagement positively affects organizational commitment ($\beta = 0.382; t = 3.504$), thus Hypothesis 5 is supported. Work engagement mediates the effect of job demands on organizational commitment ($\beta = 0.13; t = 2.105$) and the effect of job resources on organizational commitment ($\beta = 0.20; t = 2.377$). Therefore, Hypothesis 6 and Hypothesis 7 are supported. Both mediation effects are partial mediation.
The present study applied the Job Demands-Resources (JD-R) model to study employees’ organizational commitment in the context of Indonesian state-owned enterprises. The JD-R model describes two categories of job characteristics, namely job demands and job resources, which predict burnout and engagement, respectively. This model was slightly modified in the present study by adding organizational commitment as an outcome variable. Also, linking job demands to work engagement directly, which had been done in only a few studies. This study aimed to investigate the effect of job demands and job resources on organizational commitment, and the mediating effect of work engagement.

Results of data analysis showed that all hypotheses were supported except Hypothesis 3. It was showed that job demands positively affect work engagement. This finding does not support previous studies which mentioned that job demands have a negative influence on work engagement (Montgomery et al., 2015; Sonnentag, Binnewies, & Mohr, 2010; Ugwu & Onyishi, 2020, Vander Elst et al., 2016). On the other hand, several studies did not find a significant relationship between job demands and work engagement (Demerouti et al., 2001; Radic et al., 2020; Schaufeli & Bakker, 2004). The positive relationship between job demands and work engagement is likely because job demands can drive employees to work harder, hence they are carried away by their work. Radic et al. (2020) pointed out that insignificant negative effects of job demands on work engagement may be caused by individual efforts such as coping, recovery from work-related effort, and compensation. Employees were aware of demands in their job and have prepared the mental and efforts to deal with them. Crawford, Lepine, and Rich (2010) and Van Den Broeck et al. (2010) provided an overview of the nature of the relationship between job demands and work engagement. This relationship is positive when job demands are seen by employees as challenge, and negative when job demands are seen as hindrance. The direct effect of job demands on job engagement depends on the type of work and job demands being tested.

Regarding the negative influence of job demands on organizational commitment, the finding supports previous studies by Bakker, Van Veldhoven, and Xanthopoulou (2010), Kuuipo et al. (2010), and Geisler, Berthelsen, and Muonen (2019). Park (2018) stated that job demands negatively influence organizational commitment, which then encourages employees to look for work elsewhere. Job demands can result in burnout, causing employees to have a negative perception towards work and organization, thus promoting intention to leave organization.

The positive impact of job resources on work engagement and organizational commitment was proved, which is in line with previous studies (Allen & Shanock, 2013; Boyd et al., 2011; Chen & Yu, 2014; Grover et al., 2018, Halinski & Harrison, 2020; Kotze & Nel, 2020; Musenze et al., 2020). As stated by Bakker et al. (2003), employees who are able to utilize job resources, such as job control and participation in decision making, can be more motivated to work and have stronger commitment to the organization. As mentioned in Bakker, Demerouti, and Schaufeli (2003), employees who are able to utilize job resources, such as social support and performance feedback, are more dedicated to their work and more committed to organization, and are less likely to leave organization. Moreover, high job resources lead to high work engagement (Demerouti et al., 2001). Bakker (2011) stated that job resources predict work engagement and performance. Job resources are thought to have an intrinsic motivational role because they enhance individual learning and development, as well as an extrinsic motivational role because they facilitate work goals accomplishment. A work environment with adequate resources can encourage employees’ willingness to put in effort in their work.

This study confirmed that work engagement mediates the effect of job demands and job resources on organizational commitment. Job demands and job resources affected work engagement, which in turn influenced organizational commitment. Job demands positively affect work engagement, but negatively affect organizational commitment. This means that job demands must be able to positively influence engagement first before it enhances employees’ commitment to company. The role of work engagement as
mediator was studied by many researchers. In a study by Aboramadan et al. (2020), work engagement mediates relationship between human resource management practices (selection, recruitment, training, performance appraisal, compensation) and organizational commitment. Nazir and Islam (2017) denoted that perceived organizational support positively affects work engagement, which then positively influence affective commitment and employee performance. Hakanen, Bakker, and Schaufeli (2006) stated that job resources (job control, supervisor support, information, social climate, innovation) were able to predict organizational commitment through work engagement. Employees who are able to utilize job resources can be more enthusiastic and dedicated, attached to work, and feel stronger commitment. Engaged employees will be committed to organization because organization provides job resources that enable them to achieve work goals, as well as provide opportunities for learning and development.

Conclusion

The present study investigated the relationship the influence of job demands and job resources on organizational commitment, and the mediating role of work engagement. The results showed that organizational commitment is affected by job demands (negatively) and job resources (positively). The mediating role of work engagement was confirmed. This study did not find negative effect of job demands on work engagement, which leaves gap for definite relationship between these two constructs.

From theoretical point of view, this study has several implications. First, this study broadens the literature on Job Demands-Resources model by presenting framework which describing the relationship among job demands, job resources, work engagement, and organizational commitment, along with empirical evidence. Job Demands-Resources model can be applied to study human resources in state-owned enterprises. This study adds to scientific evidence regarding obscurity of the effect of job demands on work engagement, as has been investigated in previous studies. Second, this study develops organizational commitment theory by showing that job demands, job resources, and work engagement have impact on organizational commitment.

For practical implication, this study provides guideline for company managers, especially state-owned enterprises, to enhance employee organizational commitment. The company management needs to retain employees with high commitment to the company. There are various types of job demands and job resources experienced by employees of state-owned enterprise, which can affect organization outcomes. Because job demands can negatively affect organizational commitment, organization need to reduce or deal with this so as not to disserve individuals and organization itself. State-owned enterprises provide various benefits that are seen as job resources, such as salaries, facilities, social support, and clear work system. These work resources need to be maintained or even improved because they can help employees achieve work goals and balance the demands.

This study has several limitations. First, this study is cross-sectional one. Constructs used in this study may have causal and reciprocal relationships, as well as potential to change over time (Boyd et al., 2011; Sonnentag, Binnewies, & Moja, 2010; Xanthopoulou et al., 2009), thus longitudinal studies are needed. Second, respondents’ answers on questionnaire were self-reported, so common method bias is suspected and there might be shortcomings with validity and reliability. Third, this study used small sample from one company. Future studies are recommended to use bigger sample size and/or more than one company. Each company has its own characteristics, even for companies or organizations that have the same status (e.g., SOEs, Ministries). Company characteristics need to be considered. Fourth, the types (indicators) of job demands and job resources used in this study may not be applicable to all companies. This is one of the weaknesses of JD-R model. It is necessary to conduct a preliminary study of the company before using these constructs. Type of job demands and job resources in a company can be different from other companies. Fifth, the direct effect of job demands on work engagement remains inconsistent and unclear. Further study is needed on this matter.

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**Conflicts of Interest:** The authors declare no conflict of interest.

**References**


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