Work engagement of high-risk occupation employees: The role of self-efficacy and perceived organizational support

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ABSTRACT

Engagement is vital for every employee at work, especially in occupations with high demands and risks, such as National Agency for Disaster Countermeasure employees. This study aimed to test the contribution of self-efficacy and perceived organizational support on work engagement among employees of the National Agency for Disaster Countermeasure. A quantitative correlational approach was applied in this study, with the population being National Agency for Disaster Countermeasure in The Special Region of Yogyakarta and Central Java employees in a minimum of a one-year working period. Eighty-eight National Search and Rescue Agency employees participated in this study after selecting through a purposive sampling technique. The data was collected using the modified Utrecht Work Engagement Scale (UWES), self-efficacy scale, and perceived organizational support scale and was then analyzed with multiple linear regression. The results show self-efficacy and perceived organizational support contribute simultaneously to work engagement. Self-efficacy positively contributes to work engagement; likewise, perceived organizational support positively contributes to work engagement. Therefore, this study concludes that self-efficacy and perceived organizational support contribute more to work engagement than self-efficacy. To enhance work engagement among employees of high-risk occupations, perceived organizational support is needed more than self-efficacy.

Keywords
high-risk occupations; perceived organizational support; self-efficacy; work engagement.

Introduction

The United Nations International Strategy of Disaster Reduction (UNISDR) explained that Indonesia was ranked first globally, with 4,535 fatalities caused by natural disasters in 2018. The Meteorology, Climatology, and Geophysics Agency (BMKG, 2019) conveyed the data that Indonesia has always had a high potential for natural disasters. Therefore, the role of an institution in handling disasters that occur in Indonesia is crucial.

One of the institutions established in the disaster management context in Indonesia is National Agency for Disaster Countermeasure, as a non-ministerial government institution responsible and under the President and is led by the Head. The National Agency for Disaster Countermeasure focuses on finding, helping, and saving the lost human lives, which are open to being lost, facing danger in shipping and aviation disasters or other disasters. Therefore, the work as an employee of the National Agency for Disaster Countermeasure is an occupation with high demands and risks.
Psychologically, individuals’ high demands, tasks, and risks will likely make them experience burnout. Bakker et al. (2014) stated burnout occurs due to increased job demands. However, when workers have high work engagement, workers will tend to be able to survive and not experience burnout. This argument aligns with what was conveyed by Bakker & Leiter (2010) that workers with high work engagement will have resilience and are not easily burnout at work, even though their work is categorized as a high-risk occupation (Christianity & Widyaningtanti, 2016). Therefore, work engagement is essential for individuals, especially those who work with high demands or risks.

Regarding work engagement, Schaufeli et al. (2002) describe work engagement as a positive, satisfying state of mind and a condition where individuals are bound to work characterized by vigor, dedication, and absorption. Vigor is a spirit characterized by energy and high mental resilience, a desire to work, and determination even in the face of adversity. Dedication is a reasonably strong involvement in work characterized by enthusiasm, inspiration, pride, and a feeling of being challenged in working. While the last dimension is absorption, it is characterized by a concentration filled with pleasure when doing the work; it seems that time passes quickly, and they feel somewhat challenging to detach from their occupation (Schaufeli et al., 2006).

Gallup (2013) explains that individual engagement in work will affect individual performance, such as low rate of absence, low turnover, low work safety incidents, and increased productivity and profits. In addition, Robinson et al. (2004) also reveal that the behaviors shown by individuals with high work engagement include having positive thoughts about work and the organization and having a sense of trust in the organization. Similarly, Kahn (1990) explains that engaged workers will make various work efforts because they identify themselves with the work.

Work engagement is influenced by several factors, including personal resources (Bakker & Demerouti, 2008). Furthermore, self-efficacy is an important factor in personal resources (Bakker & Leiter, 2010). Bakker & Leiter (2010) revealed that high self-efficacy would also affect high employee work engagement. Parallel to the statement, Aulia et al. (2019) explained that self-efficacy has a positive relationship with the work engagement of the Indonesian Army members. Tanurezal & Tumanggor (2020) found a similar research result among teachers. Andamari (2020) also revealed that self-efficacy positively correlates with work engagement. Accordingly, high confidence from individuals toward their ability to complete tasks or overcome problems at work will make individuals more motivated to behave and engage with their work. Individuals’ beliefs determine how they can feel, think, motivate, and conduct (Feist & Feist, 2009).

Another factor influencing one’s engagement is the organization’s role (Steers & Porter, 1991). Organizational factors, in this case, are related to the support such as contributions, care, and welfare provided by the organization to workers, which is called perceived organizational support. Saks (2006) stated that work engagement is influenced by perceived organizational support (POS).

The results of previous research showed a positive correlation between perceptions of organizational support and the work engagement of the Indonesian Army members (Aulia et al., 2019). Similarly, previous research also found that perceived organizational support has a direct and positive relationship with work engagement (Sulea et al., 2012; Tanudjaja, 2013). Organizations that pay attention to and care about employee welfare make employees more developed and engage employees in the company (Dabke & Patole, 2014).

Previous research results show that self-efficacy and perceived organizational support affect work engagement. Therefore, in this study, the contribution of self-efficacy and
perceived organizational support to work engagement will be examined in other jobs related to high-risk jobs among the National Agency for Disaster Countermeasure employees. This study is essential as no previous research has been conducted among National Agency for Disaster Countermeasure employees. Based on the previous explanation, this study aimed to determine the contribution of self-efficacy and perceived organizational support to the work engagement of the National Agency for Disaster Countermeasure employees in The Special Region of Yogyakarta and Central Java.

**Method**
A quantitative approach with a correlational design was applied in this study. The aim was to explore the contribution of each predictor variable to the criterion variable.

**Participants**
The population in this study were employees of the National Agency for Disaster Countermeasure in The Special Region of Yogyakarta and Central Java with a minimum one-year working period. In this study, purposive sampling was applied. Therefore, the sample in this study were employees of the National Agency for Disaster Countermeasure who worked in the rescuer or operations and standby section in The Special Region of Yogyakarta and Central Java. The rescuers were selected as research samples because they had the highest job demands and risks compared to other fields. The sample consists of 88 National Search and Rescue Agency employees representing The Special Region of Yogyakarta and Central Java rescuers.

**Instruments**
Three scales were used to collect the data in this study. The adopted Utrecht Work Engagement Scale (UWES) (Aulia et al., 2019), based on vigor, dedication, and absorption dimensions (Schaufeli & Bakker, 2003), was used to measure work engagement. The adopted UWES has a reliability coefficient of α=.898.

The measurement of self-efficacy attributes used the adopted self-efficacy scale (Aulia et al., 2019), based on self-efficacy dimensions consisting of level, strength, and generality (Bandura, 1997). The adopted self-efficacy scale has a reliability coefficient of α=.873.

Meanwhile, the perceived organizational support attributes were measured with the adopted perceived organizational support scale (Aulia et al., 2019) based on dimensions of justice, supervisor support, and awards from the organization and working conditions (Rhoades & Eisenberger, 2002). The reliability coefficient of the adopted perceived organizational support scale is α=.913. Based on the reliability coefficients of the three scales, the study deduced that the three instruments are reliable and feasible to be used in this study.

**Data Analysis**
Multiple regression analysis was applied to analyze the data with SPSS software. The multiple regression analysis was conducted to explore the contribution of each predictor variable to the criterion variable.
Results

The analysis results show the coefficient value of $R=.570$, $F=20.405$ ($p<.01$). These results reveal that self-efficacy and perceived organizational support simultaneously contributed to the work engagement among employees of the National Search and Rescue Agency in the Special Region of Yogyakarta and Central Java. Furthermore, the effective contribution of self-efficacy and perceived organizational support to work engagement is 32.4%. Table 1 shows the results of the partial analysis.

Table 1
Product Moment Correlation

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy*work engagement</td>
<td>.360</td>
<td>3.953</td>
<td>.437**</td>
</tr>
<tr>
<td>Perceived organizational support*work engagement</td>
<td>.374</td>
<td>4.101</td>
<td>.447**</td>
</tr>
</tbody>
</table>

Self-efficacy affects work engagement, with $\beta=.360$ and $t=3.953$ ($p<.01$). Furthermore, perceived organizational support also affects work engagement, with $\beta=.374$ and $t=4.101$ ($p<.01$). The analysis was followed by testing the partial relationship between each independent variable and the dependent variable. The Pearson product-moment correlation test of self-efficacy with work engagement is $r=.437$ ($p<.01$). The result implies self-efficacy has a significant positive relationship with work engagement. Meanwhile, Pearson's product-moment correlation test of perceived organizational support and work engagement is $r=.447$ ($p<.01$). The result means perceived organizational support has a significant positive relationship with work engagement. The analysis process is continued by processing the sample data into categories based on descriptive statistics. Table 2 shows the categorization of each variable. The majority of respondents have high work engagement, high self-efficacy, and positive perceived organizational support, with 64.77%, 76.14%, and 62.50%, respectively.

Table 2
Descriptive Data

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interval</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work engagement</td>
<td>X &lt; 24</td>
<td>2</td>
<td>2.28</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>24 ≤ X &lt; 48</td>
<td>29</td>
<td>32.95</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>X ≥ 48</td>
<td>57</td>
<td>64.77</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>X &lt; 16</td>
<td>0</td>
<td>0</td>
<td>Low</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>16 ≤ X &lt; 32</td>
<td>21</td>
<td>23.86</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>X ≥ 32</td>
<td>67</td>
<td>76.14</td>
<td>High</td>
</tr>
<tr>
<td>Perceived</td>
<td>X &lt; 16</td>
<td>3</td>
<td>3.41</td>
<td>Negative</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>16 ≤ X &lt; 32</td>
<td>30</td>
<td>34.09</td>
<td>Neutral</td>
</tr>
<tr>
<td></td>
<td>X ≥ 32</td>
<td>55</td>
<td>62.50</td>
<td>Positive</td>
</tr>
</tbody>
</table>

Discussion

The study results revealed that self-efficacy and perceived organizational support simultaneously contribute to work engagement among National Search and Rescue Agency employees as part of the National Agency for Disaster Countermeasure. This finding explains
that high job demands do not always cause workers to experience burnout and low work engagement, as Bakker et al. (2014). Not all jobs with high demands and risks cause workers to experience burnout, so they have low work engagement. Furthermore, increasing workers' self-efficacy and positive perceptions of the organization's support can enhance employees' work engagement in high-risk jobs. This study's results correspond to the previous study among the Indonesian Army that self-efficacy and perceived organizational support were jointly proven to have a relationship with work engagement (Aulia et al., 2019).

The categorization of work engagement among employees of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java shows that most employees have high work engagement, followed by quiet engage and low work engagement, 64.77%, 32.95%, and 2.28%, respectively. Based on this classification, it can be concluded that employees of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java tend to have a reasonably high work engagement. The study results indicate that the high demands and risks of occupation do not always lead individuals to low work engagement. On the contrary, high engagement can minimize the influence of high task demands. Bakker & Demerouti (2008) stated that work engagement could minimize work demands, leading to burnout. It means the organizations comprising employees with high work engagement can maintain and improve performance, even though the conditions around their work are not conducive.

This study's results show high occupational demands and risks of being an employee of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java do not cause burnout, which is the opposite of work engagement. This finding contradicts the previous theories (Bakker et al., 2014; Bakker & Leiter, 2010). The high demands of work and the risk of work do not always affect a person's low engagement in their work. Burnout will be lower when individuals have high work engagement, even though individuals work in high demands and risk situations.

The results also show that self-efficacy has a positive relationship with work engagement. This study result is in line with a previous study that found self-efficacy positively related to work engagement among Norwegian principals (Federici & Skaalvik, 2011). The results of previous research among bank employees in East China showed that employees with high self-efficacy would be more engaged in their work, make more effort, and be excellent in their duties, which should improve their work (Tian et al., 2019).

The categorization of self-efficacy among employees of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java shows that most employees have high self-efficacy (76.13%), followed by medium self-efficacy (23.86%). None of the employees has low self-efficacy. Thus, the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java employees' high self-efficacy indicates they have confidence in their ability to complete every job, from the easy to the most challenging jobs. The strength or weakness of the National Search and Rescue Agency employees' beliefs about their abilities can affect whether they will engage or disengage with their work. As Bakker & Demerouti (2008) stated, self-efficacy is one factor that affects work engagement. It means that when employees' self-efficacy in carrying out their work is relatively strong, they will more engage with it, and vice versa.

The results also show that perceived organizational support positively correlates with work engagement. This finding is in line with Saks (2006) that perceived organizational support is one-factor influencing work engagement. The results of this study conform with the previous research results, including a study conducted by Aulia et al. (2019) with research samples of Indonesian Army members that perceived organizational support
positively correlates with work engagement. Perceived organizational support is the degree to which employees believe the organization values their contribution and cares about their well-being (Robbins & Judge, 2017). When the organization pays attention and cares for the welfare of employees, employees will give positive feedback to the organization to carry out their responsibilities.

Based on the categorization, most of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java employees have perceived organizational support in the positive category, followed by the neutral and negative categories, 62.5%, 34.09%, and 3.40%, respectively. The National Search and Rescue Agency employees in The Special Region of Yogyakarta and Central Java tend to have a positive perception of all support provided by the organization, which in the end has implications for the high engagement in their work.

However, the limited sample in this study impacted the generalization of the results limited only to workers whose types of work were relatively the same as employees of the National Search and Rescue Agency as part of the National Agency for Disaster Countermeasure. Therefore, further studies need to be conducted on a broader population and more varied types of work.

**Conclusion**

Among employees of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java, self-efficacy and perceived organizational support simultaneously contribute to work engagement. This study explains that the high confidence of the National Search and Rescue Agency employees in their ability to face difficulties when carrying out their duties and positive perceptions of organizational support is essential to increasing work engagement. Thus, having confidence and positive thoughts related to their abilities and towards the organization must be continuously maintained and improved among employees. Likewise, self-efficacy positively correlates to the work engagement of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java employees. Furthermore, the perceived organizational support positively correlates to the work engagement of the National Search and Rescue Agency in The Special Region of Yogyakarta and Central Java employees. Perceived organizational support has a higher contribution to work engagement than self-efficacy. This study also concludes that not all types of work with high job demands and risks cause workers to be burnout. This study finding shows that the demands of work and the high risk of a job are excellent opportunities for National Search and Rescue Agency employees as part of the National Agency for Disaster Countermeasure. Employees will be actively engaged in their work as long as they positively perceive the organizational support and efficacy.

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**Declarations**

**Author contribution.** AA: develop research ideas, design study, direct the research process, prepare instruments, reconstruct article, and the revision is under AA's responsibility as a
corresponding author. AR and SNS collect data in the field, analyze the data, and draft the article.

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**Conflict of interest.** The authors declare no conflict of interest.

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