The Effect of Environmental Awareness on Work Engagement and Employment Resilience

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Abstract

A crucial aspect that employees must have is resilience as well as high work engagement. Employees who are actively involved and resilient in difficult situations at work will make higher contributions than employees with low resilience and engagement, who tend to be passive. Unfortunately, work engagement and resilience can also be influenced by environmental awareness. This study aims to see the influence of environmental awareness on work engagement and work resilience in employees, especially mining employees. The type of research used is quantitative research with a saturated sampling method. The population in this study amounted to 302 people. The subjects selected were mine employees—data analysis techniques using simple linear regression tests. The results showed that, individually and jointly, environmental awareness affected work engagement and work resilience in mining employees. The results of this study answer the assumption that workers experience a dilemma. Otherwise, environmental awareness still makes employees have high work engagement and resilience even though they work in mining companies.

Key words: environmental awareness, mine employees, work engagement, work resilience

Introduction

Human resources are currently in the spotlight for companies to survive in an increasingly competitive job market. Human resources have an important role as drivers of activities in a company. Sufficient resources can be important in increasing the progress and success of a company (Ulfah et al., 2019). Good resource management will make employees feel comfortable, which will lead to work involvement in the company. According to Wingerden & Poell (2019), when someone feels involved in their work, they will tend to improve the quality of their work to create a work environment that suits them.

Work engagement is a condition where an individual is completely immersed in work activities and feels full of energy and enthusiasm. Madyaratri and Izzati (2021) define work engagement as an individual’s role or utilization through their work in a company where individuals or employees express themselves physically, cognitively, emotionally and mentally during their work period. Employees do not quickly feel tired of all the workload they face. However, the results of a survey conducted by Subekti & Kurniawati (2022) entitled Global Workforce Study (GWS) in Indonesia found that 38% of employees who were not involved tended to leave their jobs within two years.
while only around 21% of employees who had work involvement with the company %. This data will strengthen the close relationship between work engagement and the company, where employees who are involved tend to choose to stay. Supported by the human recruitment portal page, it has released the results of a survey conducted by Gallup Indonesia which states that 76% of workers in Indonesia are categorized as not involved at work, 11% are actively disengaged, and only 13% of workers are not involved at work. fully involved (Kurniawan & Nurtjahjianti, 2017).

Work involvement is an important part of the company. If employees have high work involvement, it will make the organization healthier. According to Tanjung (2019), employees who are involved in their work usually work harder through increasing levels with the freedom to choose what efforts to make compared to employees who are not involved.

Work engagement is also based on intrinsic motivation which increases proactive work behavior by strengthening the determination to achieve goals with high enthusiasm and pride in work (Hafiz & Kurniawan, 2018). Engaged employees can be seen consistently performing their work and duties to the best of their ability. Employees are enthusiastic and loyal to the company and always want to be productive. They have strong emotions towards the company and feel driven to succeed. Employees engaged in work can generally be seen as exercising discretionary effort; This means that when employees have a choice, they will act in the interests of the company (Yudiani, 2017). Employees who have high work involvement are people who are fully involved in their work. Based on the explanation above, work involvement is a positive feeling, such as a feeling of enthusiasm and immersion in work and a feeling that work is important for themselves. However, their involvement in work may make them feel a dilemma regarding awareness of the work environment. Some people who feel uncomfortable with their work environment prefer to resign from the company.

Being an employee who works in mining compared to an office employee in government, for example, will certainly be different because mining employees often feel a dilemma in maintaining environmental awareness, considering that their work has the potential to damage the environment. Mining workers who are very aware of their damaged environment will feel the pressure of working in an unhealthy environment. At the same time, they feel that their work is important to meet their financial needs. It is uncommon for some employees to experience cognitive dissonance because there are two conflicting critical values. The impact of cognitive dissonance experienced by employees will choose to leave their jobs.

News quoted from the Kaltim Today (2021) page stated that the demonstration on December 18 2021 was carried out by environmental activists who rejected the PT Kaltim Prima Coal (KPC) contract extension. They stated that the ecological crimes committed by the KPC company for almost four decades in East Kutai should be a consideration for the government not to renew KPC’s contract or operational permit. Because environmental damage due to coal mining activities causes various negative impacts on society. The impacts include decreasing land productivity, increasing soil density, erosion, sedimentation, land movement or landslides, and changes in microclimate (Listiyani, 2017).

According to Andianti (2022), the case in Samarinda resulted in environmental damage, 70% of which was caused by mining and 30% of which was land clearing which could cause flooding. Other consequences felt by the community because the opening of new mining land in every Sangatta area causes losses to the community, such as forest burning activities and periodic deforestation.

The impact was felt directly by the community, such as the former mining hole being left open without reclamation, resulting in dozens of children dying as a result of drowning in the former mining hole. Based on information from Komnas HAM, which received many reports regarding mining companies in East Kalimantan, especially in Samarinda City, which did not pay attention to the holes dug from the mine in 2011–2016, causing 27 victims to die because they fell into the mine hole which was covered by flooding when rain (Marennu, 2019).

Protecting the environment is not just a company’s responsibility. However, individuals can also increase their understanding of environmental problems so that they can act to optimize the environment so that it is free from natural disasters. According to Mkumbachi et al. (2020), environmental awareness can have a more significant impact if applied in real life.

Environmental awareness can be broadly defined as attitudes related to the environmental impacts of human behavior. According to Ham (2015), starting from the definition of attitude, environmental awareness is the tendency to react to environmental problems in a certain way. In line with the understanding of Munawar et al. (2019), high environmental awareness will encourage a person to behave positively to support environmental sustainability.

A study conducted by Ababneh (2021) views employee involvement in environmental awareness initiatives as a new mechanism that explains how and why employees can demonstrate an environmentally caring attitude at work. The emergence of employee cognitive awareness, recognition, assessment and management of environmental problems will also be strengthened by employee involvement. Employees can positively increase their awareness of the meaningfulness of tasks, encourage them to make extra efforts and show a responsible attitude and commitment when dealing with environmental problems (Grobelna, 2019).

Previous research from Thompson and Barton (2010) stated that there are two motives or reasons why people Ecocentrists will value nature for its own sake and, therefore, believe that nature is worth protecting because of
Work engagement.

This can indirectly increase productivity and work quality as well as improve overall employee welfare. One impact of poor work engagement, where employees who do not have work engagement have the potential to damage nature. Environmental awareness is a desire that grows within individuals to protect the environment.

According to Cop et al., (2020) organizational commitment can be influenced by several factors, one of which is environmental awareness. Employees with high environmental awareness tend to be more disengaged and have low work motivation. However, employees with low environmental awareness can become attached to their work because they need to care about the impact of their work on the environment. It can be concluded that environmental awareness is a trait possessed by individuals who take the initiative to create or maintain a living environment so that a clean, beautiful and healthy condition is created. Conscious action is needed to manage the environment by maintaining or improving the quality of the environment so that human needs can be met.

Work Resilience is a challenge for workers to remain productive and focused on the tasks at hand, even in challenging conditions. Work Resilience is a development characterized by the attitude shown in facing and growing professionally by an individual after experiencing difficulties in the workplace (Caza & Milton, 2012).

Work resilience includes the ability of an individual or organization to remain productive and adaptive when facing challenges, stress and unexpected changes. According to Cop et al., (2020), work resilience in corporate organizations must be faced and resolved personally and organizationally to gain resilience at work. This resilience is related to negotiating, managing, and adapting to significant sources of stress or trauma in the workplace.

Work Resilience shows that people can survive or continue to be in the company because they are happy with the factors that form resilience. On the other hand, people who plan to leave their jobs are low in satisfaction. Work resilience is arguably the most important positive resource for coping with turbulent and stressful workplaces (Cooke et al., 2019). Taking the view of Wang et al. (2014) argue that employee resilience can be seen as a range of skills and attitudes that can be developed through appropriate human resource interventions.

It can be concluded that a person’s resilience in working at a company and not moving to another company results in an adaptation process that they go through from the beginning of the entry process to becoming an established employee at that company with all the dynamics of statutory regulations. According to Astika and Saptoto (2018), employees can use personal resources, one of which is resilience, to involve themselves in their work. This can indirectly increase productivity and work quality as well as improve overall employee welfare. One way for individuals to survive in a company is to be involved in what they do or have an attitude of work involvement.

Research was also conducted by Iswanto (2016) that work involvement will fluctuate every day. This will cause the company’s work engagement to fluctuate every day. A survey conducted by Fermin (2014) stated that there are 13 impacts of poor work engagement, where employees who do not have work engagement have the potential to spend more than 500 million US Dollars per year in America. Employees who are able to survive and overcome all forms of bad events in the organization tend to have high work engagement. Mining workers can have high work involvement because their promising careers make them improve their performance to be retained in the company. The results of research from Kašpárková et al. (2018) stated that high employee resilience will be followed by high work engagement.

High work engagement can also contribute to the company’s efforts to maintain a safe and conducive work environment. Employees who feel involved in their work and their company will pay more attention to the condition of the environment around them and take action to preserve it. Therefore, mining companies need to pay attention to efforts to increase work resilience and work engagement among their employees by implementing organizational commitment. From research conducted by Meyer (1991), organizational commitment theory emerged which explains that employees who have a high level of commitment to their company will have greater work involvement and higher work resilience.

According to Cop et al., (2020) organizational commitment can be influenced by several factors, one of which is environmental awareness. Employees with high environmental awareness tend to be more disengaged and have low work motivation. However, employees with low environmental awareness can become attached to their work because they need to care about the impact of their work on the environment. It can be concluded that environmental awareness is a trait possessed by individuals who take the initiative to create or maintain a living environment so that a clean, beautiful and healthy condition is created. Conscious action is needed to manage the environment by maintaining or improving the quality of the environment so that human needs can be met.

This research investigates employees who work at mining sites. Bearing in mind that mining workers will most likely feel a dilemma when there is low environmental awareness of their workplace which has the potential to damage nature. Environmental awareness is a desire that grows within individuals to protect the environment. The focus of this research is to examine the influence of environmental awareness on work engagement and work resilience.

Based on the description above, this research examines the effect of environmental awareness on work engagement and resilience. The problem formulation obtained in this research aims to determine whether there is an influence of...
environmental awareness on work engagement and work resilience. Thus, the benefits of this research can be used to develop new knowledge and theories in industrial organizations. This can also be used as a basis for policy making to overcome problems or problems regarding the environment at mining locations.

**Method**

This research uses quantitative methods, which is a scientific methods with principles, namely empirical, objective, measurable, rational and systematic, and the research data used is in the form of numbers and analysis using statistics (Sugiyono, 2018).

**Participants**

The subject population in this study were employees who worked at the mining company PT Kaltim Prima Coal (KPC), with the criteria being men and women aged 18–55 years. The sampling technique used in this research is saturated sampling, which, according to Sugiyono (2017), is a sampling technique where all member populations are the samples. In this study, the total number of subjects obtained was 302 people.

**Research Instruments**

The Environmental Awareness variable is arranged based on aspects of environmental awareness: Cognitive, Affective and Conative. This research instrument can be tested using the Environmental Awareness scale (environmental awareness), totalling 13 items compiled by Latifah (2020). Measurement uses a Likert scale with options 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree), 1 (Strongly Disagree). The validity of this scale ranges between 0.798 and 0.829, with a reliability value of 0.827.

Then, on the Work Engagement variable (Y1), the scale used from the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2006), contains 17 items which refer to three main aspects or dimensions, namely vigour (spirit), dedication (dedication), and absorption (complete of appreciation). Of all the items calculated in the item correlation discriminability test, 12 items making up the construct were declared good discriminability in the exploratory construct analysis. However, it turns out that there are 4 invalid items. Thus, the remaining 13 items have been adopted by Hafiz (2021); the overall work engagement scale has a validity value range of 0.752–0.89 and a reliability value of 0.781. The tool for measuring the totality of work has quite good reliability.

Finally, the Work Resilience variable (Y2) or employee resilience can be reflected in behaviour that indicates the identification and utilization of resources and behaviour that is oriented towards learning and change (Caniëls & Baaten, 2019). The work resilience scale refers to 3 aspects: resilience, resources, and optimism, using nine items compiled by Naswal (2019) and is best used as a one-dimensional scale. The range of validity values is 0.764–0.811, and this is also supported by reliability analysis, which shows that internal consistency (cronbach’s alpha) has a reliability value of 0.797.

**Data Analysis Techniques**

In the data analysis stage, the researcher collects all data that has been processed raw (raw data) from Excel and can then be tested to analyze using simple regression in SPSS media. After the data has been analyzed, the researcher discusses and concludes the research results.

**Results and Discussion**

**Results**

Table 1 shows that there are 302 employees, consisting of 165 men at a percentage of 55% and 137 women at a percentage of 45%. In this research, four age categories are starting from 18–20 years with a total of 16 employees with a percentage of 5%, then in the 21–30-year-old category with a total of 198 employees with a percentage of 66%, then in the 31–40 age category there are 54 employees. With a percentage of 18%, and the last in the 41–55 category with a total of 33 with a percentage of 11%. In this study, there were 257 employees with a length of service of 1–10 years with a percentage of 85%, 35 employees with a period of 10–20 years with a percentage of 12% and a period of >20 years with a percentage of 10 employees with a percentage of 3 %.
Based on the results of Table 2, there are three variables, each of which has two categories: high and low. On environmental awareness, there is a mean value of 52 with a high categorization of 41.5% and a total of 167 employees, then a low categorization value of 33.6% for a total of 135 employees. On the work involvement variable, there is a mean value of 51 with a high categorization of 43.3% and a total of 174 employees, then a low categorization value of 31.8% with a total of 128 employees. The work resilience variable has a mean value of 38 with a high categorization of 65.2% and a total of 262 employees and a low categorization value of 10.0% with 40 employees.

From the results of the simple linear regression test above, it can be seen that the calculated F value = 10,120 with a significance level of p of 0.002 < 0.05, so there is an influence between environmental awareness and work involvement. With a coefficient of determination (R square) of 0.033, the influence of environmental awareness on work engagement is 33%. So, other factors or dimensions influence the remaining 67% of this quantity.
Table 4. Simple Linear Regression Test X and Y2

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>738,742</td>
<td>1</td>
<td>738,742</td>
<td>44,806</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>4946.242</td>
<td>300</td>
<td>16,487</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5684.983</td>
<td>301</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Work Engagement

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized</th>
<th>Std. Error</th>
<th>Standardized</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>27,519</td>
<td>1,556</td>
<td>17,683</td>
<td>&lt;0.000</td>
<td></td>
</tr>
<tr>
<td>Environmental Awareness</td>
<td>-199</td>
<td>0.360</td>
<td>0.360</td>
<td>6,694</td>
<td>&lt;0.000</td>
</tr>
</tbody>
</table>

Note $R^2 = 0.130$

From the results of the simple linear regression test above, the calculated F value = 44,806 with a significance level of p of 0.000 < 0.05; in other words, there is an influence between environmental awareness and work resilience with a coefficient of determination (R square) of 0.130, which means that the influence of environmental awareness on work resilience is 13%. So, other factors or dimensions influence the remaining 87% of this quantity.

Discussion

The research conducted aims to determine whether there is an influence of environmental awareness on work engagement and work resilience in employees who work in mining. The data was analyzed using a simple linear regression test showed that the calculated F value = 10.120 and p = 0.002 for the work involvement variable. The calculated F value = 44.806 and p = 0.000 for the work resilience variable, so the hypothesis is accepted from this test, namely that there is an influence of environmental awareness on work resilience. In this research, the variable that researchers use, namely environmental awareness, is still relatively new in industrial psychology.

Environmental awareness is generally an awareness or belief that individuals must carry out greening movements and activities related to nature conservation. Environmental awareness arises from the individual’s understanding or awareness of environmental issues. Research conducted by Jamil et al. (2021) revealed that individuals who have environmental awareness tend to pay attention to problems related to the environment.

In line with research conducted by Mackay & Schmitt (2019), the results explained that employees who have high environmental awareness will feel that efforts to protect and restore the environment do not only depend on schemes or regulations provided by the government. However, it can be emphasized on simple things such as how they behave towards the environment, what they consume, or what they are willing to sacrifice for the environment.

In this study the subject population studied was mining employees. The environmental awareness of employees who work in mining will pose a dilemma that can interfere with individual thoughts and beliefs. The reason is, that their work directly creates damage to the environment. Meanwhile, awareness of the environment contradicts their daily work behavior.

It is confirmed by another research result, which confirmed that only 41.5% of employees have environmental awareness in the high category. With the simultaneous results of high scores, mining employees realize that their work can potentially damage the natural environment. If an employee strongly believes in protecting the environment, he may be uncomfortable and choose not to stay in his job. Most employees experience dissonance, which is a situation when someone engages in behaviour that is inconsistent with their beliefs and experiences discomfort with the behaviour itself (Fadholi et al., 2020).

According to Nazarenko and Kolesnik (2018), activities carried out by humans in the environment can impact the environment itself, and their awareness plays a vital role in maintaining the balance and sustainability of nature. The statement of research results from Swim et al. (2011) confirms that the lower environmental quality caused by massive exploitation has affected the ecological structure of the environment and is considered normal because of the general belief of the community that consideration of excessive use of the environment is an inevitability in the development process.

Previous research has linked chiefly environmental awareness with Pro-Environmental Behavior or Sustainable Behavior variables in the general public. Environmental awareness can give rise to an attitude to protect and preserve nature. In research, Kaffashi et al. (2015) show that individuals with higher environmental awareness show...
more caring behaviour towards their environment. As indicated, environmental awareness should lead to greater predictability of environmentally responsible behaviour.

This research found that the tested environmental awareness and work involvement variables had a sig value of 0.002 (p < 0.05). In other words, employees who have environmental awareness can also have good involvement with their work. The research results show that the influence of environmental awareness on work involvement in mining employees is 3.3%; other factors influence the rest. Even though they know the negative impact on the environment, it cannot be denied that employees' primary livelihood source is a large salary to meet their living needs. Research by Douw et al. (2021) reveals that salary is essential, regardless of whether you like the job or not, because people work to get compensation to fulfil their daily needs.

Work engagement is a condition where an individual is happy doing their work. According to Rosa (2021), work engagement is when employees feel full of energy and enthusiasm and will invest more than themselves in their work. In this study, employee work engagement was included in the high category with a percentage of 43.3%. In line with research conducted by Yudiani (2017), it was revealed that when the company experienced a coal price crisis, employees still felt engaged with the company and their work.

It is known that work involvement is related to work resilience because employees can overcome situations and conditions while working when they can be involved with their work. In line with research conducted by Malik and Garg (2020), resilient employees cannot only survive in the face of challenges but also show confidence in their abilities, ultimately leading to progress in increasing work engagement.

Employees with high work involvement can work resilience, which can be seen from how they face every problem and do not give up easily when facing the inside of the company; these employees will try their best to become an essential part of their company (Narosaputra, 2022). In a study conducted by Azadeh et al. (2018), it was found that work engagement can be an essential mediator between fear of losing one’s job and choosing to leave the organization.

The research results reveal that work resilience significantly influences environmental awareness. High work resilience and environmental awareness make it easier for employees to adapt to challenges and changes in their work. According to Tonkin et al. (2018), resilience is a combination of resources within an individual and the environment that facilitates the individual’s capacity to adapt in the face of adversity. With resilience, they can look for alternatives to reduce negative environmental impacts by proposing changes in company practices or looking for opportunities to contribute to improving efforts to care for the environment. The ability of employees to adapt to situations can help employees deal with pressure and increase work resilience.

**Conclusion**

The results of this study found that there is a significant influence on environmental awareness, work involvement, and work resilience. Especially for mining employees with environmental awareness, employees have high work involvement and resilience. It means that the higher the environmental awareness, the higher the work involvement and work resilience of mining employees.

The advantage of this research is that the construct studied, namely environmental awareness, is relatively new in environmental psychology, and few literature sources are still available. Few environmental awareness variables are connected to industrial psychology topics. This research aims to be able to fill the void of literature and become the latest reference source for further research to add new views on environmental psychology.

The weakness of this research is that the researcher carried out the analysis process repeatedly, thereby increasing errors in data collection. Data was taken online via Google Forms means researchers can’t witness or be directly involved in employee situations or conditions.

Researchers experience limitations in distributing it to all mining employees, and only a few have studied this research construct in the industrial sector. Therefore, the role of future research could focus more on exploring the role of environmental psychology in employees in other mining industries such as nickel, copper, gold, oil, and gas. Apart from that, researchers can also expand construction to include further learning of the mining industry in other regions.

**Implication**

The implications of this research will provide a new understanding of the relationship between environmental awareness possessed by workers in the mining industry and work engagement and resilience. They consider that the variable construct used still needs to be widely researched in environmental psychology. Companies can introduce green practices to preserve nature after mining and train employees to carry out green recovery movements again. That way, employees with high environmental awareness will realize that regardless of the work they like, they must also protect the surrounding environment. Suggestions that can be given to companies are maintaining an attitude of work involvement, work resilience, and environmental awareness among employees. In the future, we can improve the quality of employees working in their environment.
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Authors’ Contributions

The first author contributed to designing the study, taking and analyzing the data, and then writing the report. In addition, the second author also helped design the research and checked the report. Lastly, the third author checked the data analysis and research report and wrote and translated the article.

References


