THE ROLE OF TRANSFORMATIONAL LEADERSHIP AND ORGANIZATIONAL CULTURE TOWARDS ORGANIZATIONAL COMMITMENT THROUGH JOB SATISFACTION AMONG MINING INDUSTRY EMPLOYEES

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Abstract: This study aimed to identify whether transformational leadership and organizational culture could be an appropriate basis for increasing organizational commitment through job satisfaction. This study was conducted through a survey of 320 employees in the mining industry in Jakarta, Indonesia by distributing questionnaires. The structural Equation Model is used to analyze data. The results indicate that there is a positive relationship between transformational leadership and job satisfaction, between organizational culture and job satisfaction, between organizational culture and organizational commitment, between organizational commitment and transformational leadership, and also between job satisfaction and organizational commitment in the mining industry employees. This study is expected to be a reference for further research on the influence of transformational leadership and organizational culture on organizational commitment through job satisfaction and can provide information for consideration in implementing effective human resource management.

Keywords: Organizational Culture, Job Satisfaction, Organizational Commitment, Transformational Leadership, Mining Industry


Business competition is increasing and becoming tighter in the current era of globalization and this has been a challenge for all companies. To be able to keep competing, the companies need to practice good human resource management which is the main key to organizational success. Chinomona and Dhurup (2014), showed empirical evidence that it would be more expensive to recruit new employees than to retain existing employees. Therefore, good human resource management in a company is not enough just by doing recruitment, training, and development of the human resources themselves, but companies need to maintain the existing qualified human resources they already have. To retain existing employees, companies can approach it through human resources
management which focused on organizational commitments (Rubel et al., 2018). Mathis and Jackson (2008), employees will be committed to the organization if they are satisfied with their jobs. Meria (2018), said that organizational commitment is one of the consequences of job satisfaction. Zayas-ortiz et al. (2015), revealed that companies need a highly committed employee because they are more likely to maintain a consistent performance thereby increasing their competitiveness and productivity. This can result in higher profitability for the organization. In other words, employees who have high work commitment are one of the important assets for the company to be able to achieve organizational goals optimally, effectively, and efficiently. Therefore, paying attention to several factors that can affect organizational commitment is very important for the company.

Köse and Köse (2017), revealed that job satisfaction was seen as an important tool for organizations to increase organizational commitment. The success, survival, and competitive power of an organization depends on the commitment of its members. The results showed that in the health industry in Turkey, extrinsic job satisfaction such as salary, promotion, supervision, or working conditions was found to have a positive effect on normative commitment. Armutlulu and Noyan (2011), also revealed that in the banking industry in Turkey, employee job satisfaction was an antecedent of organizational commitment. Rojuaniah (2017), also shows that employees will show a high commitment to the organization if they are satisfied with their work by carrying out their work responsibly, faithfully, and proudly of their organization.

The role of job satisfaction to build employee commitment needs to be supported by several factors such as leadership and the organizational culture that the leader carries. According to Ying and Ahmad (2009), leaders must realize that their success in influencing employees in achieving organizational goals depends on how they applied the organizational culture. Griffith (2004), explores the relationship between job satisfaction and transformational leadership in the education industry in the United States. The results showed that transformational leadership enables better communication between workers hence foster greater mutual trust and understanding and also cooperation and active involvement of workers. In the end, it results in a higher level of job satisfaction. Yang (2012), examined public relations practitioners in Taiwan and the results showed that transformational leadership in the form of individual consideration, idealized influence, and inspirational motivation has a positive influence on job satisfaction. Priyatmo (2018), found that transformational leadership influences job satisfaction by implementing company policies and regulations well.

Avolio et al. (2016), examined employees in the public health industry in Singapore and revealed that transformational leadership has a positive and significant influence on organizational commitment. Transformational leaders will show trust in the abilities of their subordinates so that eventually impact their commitment. Hougyun (2014), also examined the relationship between transformational leadership and organizational commitment of workers in government public sector organizations in Korea and revealed a positive relationship.

Rawashdeh et al, (2015), examines the relationship between job satisfaction of the employee and organizational culture in private airline companies in Jordan. His research revealed that “clan” organizational culture has a positive and significant relationship with job satisfaction. Lund (2003), showed that clan culture and adhocracy have a positive relationship with job satisfaction in marketing professionals in the United States. Pratama (2016), proved that organizational culture was able to accommodate some of the diversity found in an organization so that it can provide comfort and satisfaction at work.

Acar (2012), research on workers in the logistics industry in Turkey. The results of his research stated that clan and adhocracy organizational culture has a positive relationship with affective and normative organizational commitment. Gokce et al. (2014), also examines the influence of organizational culture on organizational commitment in the health industry in Turkey and the results show something similar which is organizational culture has a positive
relationship with organizational commitment. Yildirim et al. (2016), found that marketing organization culture has greatly influenced the affective commitment of workers in the banking industry in Turkey. When employees take part in decisions or strategic plans in the organization, it will grow bonds because they feel involved in the organization thereby increasing organizational commitment.

However, from several previous studies (Köse and Köse, 2017; Gokce et al., 2014; Armutlulu and Noyan, 2011; Yildirim et al., 2016; Griffith, 2004; Yang, 2012; Avolio et al., 2016; Hougyun, 2014; Rawashdeh et al., 2015; Lund, 2003; Acar, 2012) shows that only a few researches have been done on companies in the mining industry especially in Indonesia. This study examined companies in the mining industry because the mining industry has a quite difficult work environment to achieve maximum work results, one of which is organizational commitment (Mclaggan et al., 2013). The environmental characteristics of the mining industry require special competence, experience, and expertise. Besides, due to the limited human resources with these required capabilities, there is often found a movement of employees from one company to another where this is very closely related to organizational commitment. Besides, until the present, there have been very few previous studies that combined organizational commitment, job satisfaction, organizational culture, and transformational leadership in one research model as used in this study so this research can be referred to as an expansion or development of the previous research variables. These gaps indicate that this research is different from previous studies.

The purpose of this study is to identify whether transformational leadership and organizational culture could be an appropriate basis for increasing organizational commitment through job satisfaction. This study is expected to be a reference for further research on the influence of organizational culture and transformational leadership on organizational commitment through job satisfaction and can provide information for consideration in implementing effective human resource management.

LITERATURE REVIEW

Transformational Leadership

Bass (1999), revealed that transformational leadership refers to leaders who can move their followers beyond their interests directly through individual consideration, intellectual stimulation, inspirational motivation, and idealized influence. This increases the level of employee maturity, ideals, willingness to excel, self-actualization, and the welfare of others, organizations, and society. Burns (1978) in Emery and Barker (2007), stated that transformational leadership is a style of leadership that motivates followers in interesting ways to enhance moral goals and values.

Furthermore, transformational leadership can be measured using the dimension from Bass and Riggio (2005) in Niam (2016), which consists of four dimensions including idealized influence, leader’s behavior that provides vision and mission, creates pride, and earns the respect and trust of subordinates; inspirational motivation, leader’s behavior which capable in communicating high expectations, interestingly conveying shared visions by using symbols to focus subordinate efforts and express organizational goals simply; intellectual stimulation, leader’s behavior that can increase the intelligence of subordinates to increase their creativity and innovation, increase rationality, and careful problem solving; individualized consideration, leader’s behavior that gives personal attention, treats each subordinate individually as an individual with different aspirations, abilities, and needs, as well as training and giving advice.

Organizational Culture

Schein (2004), stated that organizational culture can be interpreted as a common basic assumption pattern that is studied by the group to solve The internal integration and external adaptation problem, so it is deemed necessary to teach newcomers the right way to feel related to problems, think, and understand in the group. According to Wheelen and Hunger (2008) in Rawashdeh et al. (2015), organizational culture is considered as a set of shared values, assumptions, and behaviors adopted by employ-
ees and can be reflected in all aspects of the company such as how decisions are made, working hours, attitudes toward employee relations to how they dress.

In this study, organizational culture will be measured using dimensions from Denison (1990) in Niam (2016), which consists of four dimensions including involvement, the organizational culture encourages employees to get involved and create a sense of ownership and responsibility; consistency, organizational culture must be consistent, well-coordinated and more integrated; adaptability, the organization holds beliefs and norms that support the receiving capacity of the company, translate and interpret signs from the environment into changes in internal behavior; mission, a successful company has a clear direction and goals in defining corporate goals and a vision of how the company in the future.

**Job Satisfaction**

Robbins and Judge (2013), said that someone with a high level of job satisfaction has positive feelings about their work which is shown in the form of loyalty. Ostroff (1992) in Silverthorne (2004), has defined that job satisfaction is a general attitude of employees towards work and is directly related to their individual needs including colleagues, a supportive work environment, fair rewards, and also challenging work.

Furthermore, job satisfaction can be measured using dimensions from Luthans (2006) in Alianto and Anindita (2017), which consists of five dimensions including Salary, the number of wages received and at this level can be seen as one that can be compared with other organizations; Promotion, employees feel positive when promoted. Promotion allows organizations to make the most of employees’ abilities and expertise; Coworkers, the degree to which colleagues are technically skilled and socially supportive. Therefore, having a pleasant colleague can increase job satisfaction; Supervision, supervision has an important role in an organization because it deals directly with employees and influences employees in doing their work, because supervision who wants to work with subordinates, is open, and has fair supervision is preferred by employees. Employees tend to prefer jobs that provide feedback, freedom, skills, and opportunities to use abilities because these characteristics make work more challenging.

**Organizational Commitment**

According to Mathis and Jackson (2008), Organizational commitment talks about how far employees can accept and believe in organizational goals and have a desire to stay together and not leave the organization. Meyer and Allen (1997) in Mosadeghrad et al. (2008), defined organizational commitment as a psychological state that shows the characteristics of the relationship between employees and the organization and has influence in the decision to continue membership in the organization.

Then, organizational commitment can be measured using the dimension from Allen et al. (1993) in Sukmasari (2016), which consists of three dimensions. The first is a normative commitment, emerging from the values in employees. The second is an ongoing commitment, which occurs when employees remain in an organization because the employee is not looking for another job or because they need other benefits and salaries. The last is the affective commitment, which occurs when employees want to be part of the organization because of emotional ties. Commitment to the organization has been owned by employees because of the awareness that remaining a member of the organization is something that must be done.

**HYPOTHESES DEVELOPMENT**

**Relationship of Transformational Leadership and Job Satisfaction**

Abelha et al. (2018), revealed that transformational leaders function as inspiration for their followers by engaging in effective communication that commitment, encourages trust, and eventually increases job satisfaction. The stronger the transformational leadership style a leader has, the more employee job satisfaction increase. ElKordy (2013), said that leaders need to realize that the shared values and norms that shape organizational culture are important drivers of job satisfaction. Several stud-
ies show a positive relationship between transformational leadership and job satisfaction. Several previous studies have predicted that transformational leadership can affect job satisfaction. This prediction refers to the results of previous studies by Judge and Piccolo (2004); Griffith (2004); Abelha et al. (2018); and Yang (2012). Based on the results of previous studies above, the authors propose the first hypothesis as follows:

$H_1$: Effective transformational leadership will increase the job satisfaction of mining industry employees.

**Relationship of Organizational Culture and Job Satisfaction**

According to Rawashdeh et al. (2015), an organization needs to adopt a culture that supports the state of the organization so that it can produce the desired level of job satisfaction. Therefore, leaders in an organization who want to create greater levels of job satisfaction must give efforts that emphasize teamwork and provide support to employees to continue to innovate so that employee satisfaction can be maintained (Lund, 2003). Several previous studies above prove that the right organizational culture influences the level of job satisfaction. The stronger a culture the organization has, the greater the influence on the behavior of employees within the organization. If the employees feel comfortable with the culture in their work environment, the employees will have high job satisfaction (Qazi et al., 2017). Silverthorne (2004) and Lok and Crawford (2004) show that innovative and supportive culture has a positive and strong influence on job satisfaction compared to bureaucratic culture. Based on the results of previous studies above, the authors propose a second hypothesis by authors as follows:

$H_2$: Strong organizational culture will increase job satisfaction of mining industry employees.

**Relationship of Transformational Leadership and Organizational Commitment**

Transformational leadership is said to influence organizational commitment and acts as an important predictor in increasing organizational commitment (Arnold et al., 2001). McAliggen et al. (2013), said that leaders who adopt a transformational leadership style will pay attention to and respect their subordinates, making employees feel that they are important assets for the organization and will ultimately increase their commitment to the organization. They will also feel that their efforts are recognized and this makes them willing to stay with the organization. Several previous studies conducted by Emery and Barker (2007); Hougyun (2014); Avolio et al., (2016-); and Allen et al. (2017), showed that transformational leadership has a positive relationship with organizational commitment. Based on the results of previous studies above, the authors propose a third hypothesis as follows:

$H_3$: Effective transformational leadership will increase the organizational commitment of mining industry employees.

**Relationship of Organizational Culture and Organizational Commitment**

Employees who view culture in their organization as fair and respectful of their employees will have a higher level of organizational commitment. Yildirim et al. (2016), found that marketing organizational culture greatly affects affective commitment. Marketing culture creates more participatory management in organizations and provides strong coordination between organizational and employee goals. When employees take part in decisions or strategic plans in the organization, they will become more loyal to the organization. Employees also feel more responsible and they try to solve organizational problems voluntarily in a market-oriented culture. It can be said that organizational culture positively influences organizational commitment. Islam et al. (2013), also concluded that when employees in an organization are faced with a culture where they can learn continuously and be supported by their superiors, they show more commitment to their organization. Acar (2012) and Gokce et al. (2014), found that organizational culture has a positive relationship with organizational commitment. This is consistent with research conducted by Sikorska-Simmons (2006), which says that organizational culture is a strong predictor of organizational com-
commitment. Based on the results of previous studies above, the authors propose a fourth hypothesis as follows:

H₄: Strong organizational culture will increase the organizational commitment of mining industry employees.

**Relationship of Job Satisfaction and Organizational Commitment**

The more job satisfaction increases, the organizational commitment of employees will also increase. Employees whose job satisfaction levels are met will feel more like a part of the company and will be more committed to fighting for the interests of the company (Altinoz et al., 2012). Köse and Köse (2017), revealed that job satisfaction is seen as an important tool for organizations to increase organizational commitment. Employees who work in organizations that care about their wants and needs will have higher job satisfaction. A high level of job satisfaction will increase the level of organizational commitment so that it will be easier to keep employees loyal to the organization. Mosadeghrad et al. (2008), also said employees who were very satisfied with their work tended to have higher organizational commitment than dissatisfied employees. Employee job satisfaction has a positive and significant correlation to employee organizational commitment (Nikpour, 2018; Armutlulu and Noyan, 2011; Anari, 2012). Based on the results of previous studies above, the authors propose the fifth hypothesis as follows:

H₅: High job satisfaction will increase the organizational commitment of mining industry employees.

**METHOD**

The population used in this study is permanent employees in the mining industry in Indonesia. In accordance with the analysis tool that will be used in this study which is the structural equation model (SEM), the determination of the minimum representative sample size for this study is at least 5 times used in the questionnaires (Hair et al., 2014). The number of questionnaire items in this study is 64 items, so the number of samples taken in this study (64x5) 320 respondents. Respondents used in this study are workers with permanent employee status in the mining industry in Indonesia. The duration of the questionnaire distribution is approximately 1 month.

The design of this research is quantitative and deductive. This research is causality research that will prove the causal relationship between independent variables, namely transformational leadership, organizational culture, mediating variables, job satisfaction and dependent variables, organizational commitment. To find out the significant level and the relationship between variables, the structural equation model (SEM) analysis method is used. With this method, the influence and relationship between exogenous variables (dependent variables) and en-
dogenous variables (independent variables) are related to the problem under study.

Measurement

In this study, the measurement of the transformational leadership variable was adopted from Bass and Riggio (2005) in Niam (2016), with 16 items, the measurement of organizational culture variable was adopted from Denison (1990) in Niam (2016), with 23 items and the measurement of job satisfaction variable was adopted from Luthans (2006) in Alianto and Anindita (2017), with 10 items. Furthermore, the measurement of the organizational commitment variables was adopted from Allen et al. (1993) in Sukmasari (2016), with 15 items. In this study, the data was obtained using a questionnaire. Whilst the measurement scale is using the Likert scale method. Likert scale method uses five alternatives answers, namely: a score of 5 means strongly agree, a score of 4 means agree, a score of 3 means between agreeing and disagree, a score of 2 means disagree and a score of 1 means strongly disagree (Ferdinand, 2006 in Niam, 2016). All of these measurements form the basis of the research questionnaire.

This study uses confirmatory factor analysis to test validity by looking at the value of the Kaiser-Meyer-Olkin measure of sampling (KMO) and measures of sampling adequacy (MSA). The small KMO value shows that factor analysis cannot be used because the correlation between pairs of variables cannot be explained by other variables. If the KMO value is below 0.5 then factor analysis cannot be used or accepted. Whereas the acceptable KMO value is at a minimum value of 0.5 to 1.0 (Malhotra & Birks, 2006). The reliability test performs by looking at the Cronbach alpha value > 0.6 which means reliable. (Sekaran and Bougie, 2010 in Niam, 2016).

RESULTS

Profile of Respondents

The profile of respondents in this study was based on four main categories, namely gender; age; latest education; and monthly income. The questionnaire was distributed to 320 respondents. The respondents’ gender consists of men and women. Based on gender, respondents were dominated by men which are 191 people or 60% while 129 women or 40%. Based on age, it was found that respondents’ age between 19-29 years were 130 people or 41%, age 30-39 years were 81 people or 25%, age 40-49 years were 78 people or 24% and age 50-55 years were 31 people or 10%. Based on latest education, the majority of respondents had an undergraduate education as many as 178 people or by 56%, followed by respondents who had postgraduate education as many as 66 people or by 20%, high school education as many as 53 people or by 17% and diploma education by 23 people or by 7%. Then based on income per month, it was found that respondents with an income of ≤ Rp. 7,000,000, as many as 96 people or 30% and income > Rp. 7,000,000, as many as 224 people or 70%.

Respondent Demographic Differences

An analysis of respondents’ demographic differences (gender, age, last education, and income) was carried out to determine whether there were significant differences in each variable, namely organizational commitment, job satisfaction, organizational culture, and transformational leadership. If the value of sig homogeneity > 0.05 and ANOVA < 0.05 means there is a homogeneity difference, sig homogeneity > 0.05 and ANOVA > 0.05 means there is no homogeneity difference. Meanwhile, sig homogeneity ≤ 0.05 means ANOVA is not tested or the results are not tested (not homogeneous)

Most of the ANOVA test results, respondents showed that there is no difference so that the answers of respondents are homogenous and ANOVA test can be done, namely on respondents’ answers based on the gender on organizational commitment, job satisfaction, organizational culture, and transformational leadership, then respondents’ answers based on age on job satisfaction variable, based on the latest education on organizational culture and job satisfaction variables. And also, the respondents’ answers are based on income on organizational commitment, job satisfaction, organizational culture, and transformational leadership.
Furthermore, some ANOVA test results showed respondents’ answers were not homogeneous and the ANOVA test could not be done, which is, respondents’ answers based on age on organizational commitment, organizational culture, and transformational leadership. And then, respondents’ answers based on the latest education on transformational leadership and organizational commitment because sig homogeneity $\leq 0.05$ means ANOVA is not tested or the results are not tested.

Table 1  Respondent Test Results Based on Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Homogeneity</th>
<th>ANOVA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>0.563</td>
<td>0.280</td>
<td>No difference</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>0.569</td>
<td>0.351</td>
<td>No difference</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.715</td>
<td>0.233</td>
<td>No difference</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.144</td>
<td>0.474</td>
<td>No difference</td>
</tr>
</tbody>
</table>

Source: SPSS test result

Table 2  Respondent Test Results Based on Age

<table>
<thead>
<tr>
<th>Variable</th>
<th>Homogeneity</th>
<th>ANOVA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>0.036</td>
<td>0.026</td>
<td>Not tested*</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>0.069</td>
<td>0.134</td>
<td>Not tested*</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.058</td>
<td>0.082</td>
<td>No difference</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.000</td>
<td>0.152</td>
<td>Not tested*</td>
</tr>
</tbody>
</table>

Source: SPSS test result *) homogeneity $< 0.05$

Table 3  Respondent Test Results Based on Education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Homogeneity</th>
<th>ANOVA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>0.017</td>
<td>0.203</td>
<td>Not tested*</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>0.062</td>
<td>0.414</td>
<td>No difference</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.101</td>
<td>0.156</td>
<td>No difference</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.002</td>
<td>0.187</td>
<td>Not tested*</td>
</tr>
</tbody>
</table>

Source: SPSS test result *) homogeneity $< 0.05$

Table 4  Respondent Test Results Based on Monthly Income

<table>
<thead>
<tr>
<th>Variable</th>
<th>Homogeneity</th>
<th>ANOVA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>0.534</td>
<td>0.362</td>
<td>No difference</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>0.929</td>
<td>0.962</td>
<td>No difference</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.420</td>
<td>0.774</td>
<td>No difference</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.521</td>
<td>0.717</td>
<td>No difference</td>
</tr>
</tbody>
</table>

Source: SPSS test result
Validity Test and Reliability Construct

The result of reliability construct, all indicators on transformational leadership variables (ideal influence, inspirational motivation, intellectual stimulation, and individual attention), organizational culture (involvement, consistency, adaptability, and mission), job satisfaction and organizational commitment (affective commitment, continuous commitment, and normative commitment) can be accepted because the factor loading value has a good match (> 0.50), and the t-value is greater than t-table (1.96) at the 5% significance level. Furthermore, the construct reliability test meets the reliability requirements with CR values above 0.60 and VE values above 0.50 (Hair et al., 2014). All CR values meet the reliable requirements of values above 0.60, transformational leadership (0.96), organizational culture (0.94), job satisfaction (0.98) and organizational commitment (0.99). At all VE values meet the reliable requirements of values above 0.50, for transformational leadership (0.85), organizational culture (0.81), job satisfaction (0.80) and organizational commitment (0.96).

Table 5 Results of Validity Test and Reliability Construct

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Variable</th>
<th>Loading Factor</th>
<th>t-Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTD1 (ideal influence)</td>
<td>Transformational Leadership</td>
<td>0.95</td>
<td>22.96</td>
<td>Supported</td>
</tr>
<tr>
<td>KTD2 (Inspirational Motivation)</td>
<td></td>
<td>0.92</td>
<td>21.71</td>
<td>Supported</td>
</tr>
<tr>
<td>KTD3 (Intellectual Stimulation)</td>
<td></td>
<td>0.92</td>
<td>21.67</td>
<td>Supported</td>
</tr>
<tr>
<td>KTD4 (Individual Attention)</td>
<td></td>
<td>0.90</td>
<td>20.65</td>
<td>Supported</td>
</tr>
<tr>
<td>BOD1 (Involvement)</td>
<td>Organizational Culture</td>
<td>0.90</td>
<td>20.28</td>
<td>Supported</td>
</tr>
<tr>
<td>BOD2 (Consistency)</td>
<td></td>
<td>0.81</td>
<td>17.63</td>
<td>Supported</td>
</tr>
<tr>
<td>BOD3 (Adaptability)</td>
<td></td>
<td>1.00</td>
<td>24.86</td>
<td>Supported</td>
</tr>
<tr>
<td>BOD4 (Mission)</td>
<td></td>
<td>0.88</td>
<td>20.03</td>
<td>Supported</td>
</tr>
<tr>
<td>KK1</td>
<td>Job Satisfaction</td>
<td>0.89</td>
<td>0.00</td>
<td>Supported</td>
</tr>
<tr>
<td>KK2</td>
<td></td>
<td>0.86</td>
<td>32.66</td>
<td>Supported</td>
</tr>
<tr>
<td>KK3</td>
<td></td>
<td>0.88</td>
<td>27.20</td>
<td>Supported</td>
</tr>
<tr>
<td>KK4</td>
<td></td>
<td>0.90</td>
<td>27.98</td>
<td>Supported</td>
</tr>
<tr>
<td>KK5</td>
<td></td>
<td>0.89</td>
<td>24.08</td>
<td>Supported</td>
</tr>
<tr>
<td>KK6</td>
<td></td>
<td>0.89</td>
<td>24.42</td>
<td>Supported</td>
</tr>
<tr>
<td>KK7</td>
<td></td>
<td>0.91</td>
<td>25.57</td>
<td>Supported</td>
</tr>
<tr>
<td>KK8</td>
<td></td>
<td>0.89</td>
<td>24.20</td>
<td>Supported</td>
</tr>
<tr>
<td>KK9</td>
<td></td>
<td>0.91</td>
<td>25.16</td>
<td>Supported</td>
</tr>
<tr>
<td>KK10</td>
<td></td>
<td>0.92</td>
<td>26.09</td>
<td>Supported</td>
</tr>
<tr>
<td>KOD1 (Affective Commitment)</td>
<td>Organizational Commitment</td>
<td>0.98</td>
<td>0.00</td>
<td>Supported</td>
</tr>
<tr>
<td>KOD2 (Continuous Commitment)</td>
<td></td>
<td>0.98</td>
<td>48.29</td>
<td>Supported</td>
</tr>
<tr>
<td>KOD3 (Normative Commitment)</td>
<td></td>
<td>0.98</td>
<td>60.34</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: SEM Lisrel test results

Structural Test Analysis

Structural test analysis can be seen from the R² value. The value of R² for each equation serves to show how far the independent variable can explain the dependent variable. The result of the first analysis shows that simultaneously, KT (transfor-
mational leadership) and BO (organizational culture) affect KK (job satisfaction) with an $R^2$ of 0.91. This means that 91% of the variants of KK (job satisfaction) can be explained by the variable KT (transformational leadership) and BO (organizational culture), while the remaining 9% can be explained by other variables that are not used in this study. The result of the second analysis shows that simultaneously, KK (job satisfaction), KT (transformational leadership), and BO (organizational culture) affect KO (organizational commitment) with an $R^2$ of 0.94. This means that 94% of the variant of KO (organizational commitment) can be explained by the KK (job satisfaction), KT (transformational leadership), and BO (organizational culture) variables, while the remaining 6% can be explained by other variables that not used in this study.

### Table 6 Calculation of Construct Reliability and Variance Extracted

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard Loading</th>
<th>Error</th>
<th>Construct Reliability</th>
<th>Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\sum$ Std. Loading</td>
<td>$\sum$ (Std. Loading)$^2$</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KTD1 (Ideal Influence)</td>
<td>0.95</td>
<td>0.09</td>
<td>3.69</td>
<td>13.62</td>
</tr>
<tr>
<td>KTD2 (Inspirational Motivation)</td>
<td>0.92</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KTD3 (Intellectual Stimulation)</td>
<td>0.92</td>
<td>0.15</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>KTD4 (Individual Attention)</td>
<td>0.90</td>
<td>0.19</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Organizational Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD1 (Involvement)</td>
<td>0.90</td>
<td>0.20</td>
<td>3.59</td>
<td>12.89</td>
</tr>
<tr>
<td>BOD2 (Consistency)</td>
<td>0.81</td>
<td>0.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD3 (Adaptability)</td>
<td>1.00</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>BOD4 (Mission)</td>
<td>0.88</td>
<td>0.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KK1</td>
<td>0.89</td>
<td>0.21</td>
<td>8.94</td>
<td>79.92</td>
</tr>
<tr>
<td>KK2</td>
<td>0.86</td>
<td>0.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KK3</td>
<td>0.88</td>
<td>0.23</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>KK4</td>
<td>0.90</td>
<td>0.20</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>KK5</td>
<td>0.89</td>
<td>0.21</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>KK6</td>
<td>0.89</td>
<td>0.20</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>KK7</td>
<td>0.91</td>
<td>0.17</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>KK8</td>
<td>0.89</td>
<td>0.21</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>KK9</td>
<td>0.91</td>
<td>0.18</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>KK10</td>
<td>0.92</td>
<td>0.16</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KOD1 (Affective Commitment)</td>
<td>0.98</td>
<td>0.04</td>
<td>2.94</td>
<td>8.64</td>
</tr>
<tr>
<td>KOD2 (Continuous Commitment)</td>
<td>0.98</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KOD3 (Normative Commitment)</td>
<td>0.98</td>
<td>0.04</td>
<td>0.96</td>
<td></td>
</tr>
</tbody>
</table>

Source: SEM Lisrel test results
Goodness of Fit

The results of conformity analysis show a good fit model including ECVI, AIC, CAIC, and Fit Index and Goodness of Fit. There are marginal results on Chi-Square, RMSEA, and Critical N. Therefore, it can be concluded that the fittest for all models meets the requirements (good fit). Furthermore, this research produces the T-Value path diagram as follows:

![Path Diagram T-Value](image)

**Figure 2  Path Diagram T-Value**

Note:
Transformational leadership (KT), organizational culture (BO), job satisfaction (KK), and organizational commitment (KO).

Based on Figure 2 Path Diagram T-Value, the hypothesis in this study is presented in the hypothesis testing table as follows:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>t-Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>9.75</td>
<td>Hypothesis is supported</td>
</tr>
<tr>
<td>H₂</td>
<td>2.73</td>
<td>Hypothesis is supported</td>
</tr>
<tr>
<td>H₃</td>
<td>6.89</td>
<td>Hypothesis is supported</td>
</tr>
<tr>
<td>H₄</td>
<td>2.69</td>
<td>Hypothesis is supported</td>
</tr>
<tr>
<td>H₅</td>
<td>4.84</td>
<td>Hypothesis is supported</td>
</tr>
</tbody>
</table>

**Table 7  Research Model Hypothesis Testing**

**Job Satisfaction Mediation Analysis**

Mediation variable analysis can be done through two approaches, namely, the coefficient difference and multiplication. The first approach is carried out by examining through analysis with and without mediating variables, while the second method is done using procedures (Hair et al., 2014). The first analysis is that transformational leadership has a direct effect on job satisfaction, with a value of $t = 9.75 (>1.96)$. Transformational leadership has a direct effect on organizational commitment, with a value of $t = 6.89 (>1.96)$. Job satisfaction directly affects...
organizational commitment, with a value of $t = 4.84$ ($>1.96$). It can be concluded that job satisfaction mediates the relationship between transformational leadership and organizational commitment in mining industry employees. Transformational leadership directly affects organizational commitment and also indirectly affects organizational commitment through job satisfaction. This is commonly called a partial mediation analysis because it can affect directly and indirectly.

The second analysis concluded that organizational culture has a direct effect on job satisfaction, with a value of $t = 2.73$ ($>1.96$). Organizational culture has a direct effect on organizational commitment, with a value of $t = 2.69$ ($>1.96$) and job satisfaction has a direct effect on organizational commitment, with a value of $t = 4.84$ ($>1.96$). It can be concluded that job satisfaction mediates the relationship between organizational culture and organizational commitment in mining industry employees. Organizational culture has a direct effect on organizational commitment and also organizational culture has an indirect effect on organizational commitment through job satisfaction. The result shows a partial mediation analysis because it can affect directly and indirectly.

**DISCUSSION**

In this study, the results show that there is a relationship between transformational leadership and job satisfaction among mining industry employees. This shows that strong transformational leadership will increase job satisfaction in mining industry employees. Leadership is an important factor in determining job satisfaction. Transformational leadership is a leader who can provide support, inspire his employees, foster employee motivation, and confidence to make employees feel satisfied at work. The role of a transformational leader is needed in the mining industry where the level of difficulty faced by employees in working is very high because it requires special competence and experience. Transformational leaders can change the perspectives of employees by providing clear direction and support and can provide fair treatment. In the end, a transformational leader can maximize the competencies that already exist in each individual so that employees can have positive feelings about their work or in other words have job satisfaction. The results of this study support the research of Judge and Piccolo (2004), Griffith (2004), Abellha et al. (2018), and Yang (2012), who concluded that transformational leadership influences job satisfaction.

The results also show that there is a relationship between organizational culture and job satisfaction among mining industry employees. This shows that a strong organizational culture will increase job satisfaction among mining industry employees. Companies in the mining industry generally emphasize teamwork to coordinate well in achieving company goals. The company also always provides an opportunity to continue to think innovatively so that ultimately foster satisfaction with the work they have. There are several results of previous studies that state that organizational culture influences employee job satisfaction, i.e Rawashdeh et al. (2015); Lund (2003); Qazi et al. (2017); Silverthorne (2004); Lok and Crawford (2004).

Then the results also show that there is a relationship between transformational leadership and organizational commitment. Strong transformational leadership will increase organizational commitment in mining industry employees. Leaders who can provide support to employees can make employees feel optimistic in achieving organizational goals. From this support, employees realize that they have sufficient competence to work better. Besides, from the attitude of leaders who always provide this support can be established good relations between superiors and subordinates. This can cause a feeling of comfort and pleasure in being in an organization to create an emotional bond or positive affective commitment that is one part of the organizational commitment itself. This is consistent with the results of research by Arnold et al. (2001); McLaggan et al. (2013); Emery and Barker (2007); Hougyun (2014); Avolio et al., (2016-); Allen et al. (2017), who concluded that transformational leadership influences organizational commitment.

The results state that there is a relationship between organizational culture and organizational
The Role of Transformational Leadership and Organizational Culture towards Organizational ... commitment shows that a strong organizational culture will increase organizational commitment in mining industry employees. A strong organizational culture in the mining industry companies results in high agreement because of the shared values shared by members of the organization. This will foster a sense of belonging in employees. They are proud to be part of the organization and choose not to leave the organization thereby creating employee commitment to the organization. The results of this study are in line with the results of Yildirim et al. (2016); Islam et al. (2013); Acar (2012); Gokce et al. (2014); Sikorska-Simmons (2006), which concluded that organizational culture influences organizational commitment.

Furthermore, the results show that there is a relationship between job satisfaction and organizational commitment. This shows that high job satisfaction can increase organizational commitment in mining industry employees. Many opportunities to learn new things at work. Employees need to understand the flow of the production process in the mining industry as a whole and in-depth. Employees feel the work they do has a great responsibility because they are actively involved in maintaining the entire series of work processes to run well. However, this large responsibility continues to be balanced by providing comparable compensation so that employee job satisfaction is maintained and regularly forms their commitment to the company. The results of this study reinforce the results of research Altinoz et al. (2012); Köse and Köse (2017); Mosadeghrad et al. (2008); Nikpour (2018); Armutlulu and Noyan (2011); Anari (2012) who found that job satisfaction influences organizational commitment.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions
This study concludes the first result which shows that there is a relationship between transformational leadership and job satisfaction among mining industry employees, secondly, there is a relationship between organizational culture and job satisfaction among mining industry employees, thirdly there is a relationship between transformational leadership and organizational commitment in mining industry employees, fourth, there is a relationship between organizational culture and organizational commitment in mining industry employees, fifth, there is a relationship between job satisfaction and organizational commitment in mining industry employees.

Recommendations

Future research can be developed by adding other variables that can influence transformational leadership and organizational culture in mining industry employees so they can continue to have job satisfaction and maintain their commitment to the organization such as job satisfaction variables because job motivation variables can affect satisfaction work. Further research can expand the scope of the research not only in Jakarta but throughout Indonesia.

Research Limitations

This study only discusses the variables of transformational leadership, organizational culture, job satisfaction, and organizational commitment. Then, the area used in this study is only limited to Jakarta, Indonesia. Furthermore, there is a possibility that the respondent is not serious about filling out the questionnaire or only filling it out based on the ideal conditions expected, not the actual conditions that are happening.

Implications for Management

This study aims to determine the role of transformational leadership and organizational culture on organizational commitment through job satisfaction among mining industry employees. The characteristics of the mining industry environment are a challenge for employees because they have a level of difficulty high enough to achieve maximum work results. Employees in the mining industry need direction and support from the leadership in creating a conducive organizational culture that fosters job satisfaction and also creates employee commitment to the mining industry. Therefore, managerial implications that can be proposed to increase the influence of transformational leadership on organizational
commitment through job satisfaction is to look at the dimensions of transformational leadership used in this study. The first dimension is the ideal influence, which is the behavior of leaders who provide vision and mission, bring pride, and gain respect and trust from subordinates. Thus, employees will feel satisfied and understand that their existence has meaning for the organization which is a form of affective commitment.

The second dimension is inspirational motivation which is the behavior of leaders who can communicate high expectations, interestingly convey shared visions by using symbols to focus subordinate efforts, and express organizational goals simply. In this case, the leader is expected to provide clear guidance and direction through effective communication to his followers so that employees get ease in completing their work and can carry out their duties properly. When employees can carry out their duties properly, they will enjoy their work and have no objection to staying with the organization for a long time. Employees will feel disadvantaged to leave the organization when they feel comfortable in their work. The third dimension is intellectual stimulation which talks about the behavior of leaders who can increase the intelligence of subordinates to increase their creativity and innovation, increase rationality, and careful in problem-solving. A leader needs to improve the competence of their followers, especially in the mining industry whereas a lot of special knowledge is needed in the work. By increasing employee competency, they will also feel well-equipped and increase their value individually. Employees will feel they have a debt of gratitude for organizations that have invested so much in educating them consistently that they will feel the organization is worthy of their loyalty.

Then, the last dimension is individual consideration which is the behavior of leaders who give personal attention, treat each subordinate individually as an individual with different needs, abilities, and aspirations, as well as train and give advice. With a leader who can recognize the needs of each of his followers individually, employees are expected to realize that the organization cares about their well-being and creates a sense of satisfaction so that employees will think again if they want to leave the organization because of all benefits they have received from the organization.

REFERENCES
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Veny Senjaya, Rina Anindita


