The Determinants and Consequents of Employee Performance: The Role of Intelligence Quotients (IQ), Emotional Quotients (EQ) and Organizational Culture

Alfi Hasaniyah; Zef Rizal
Faculty of Economics, Universitas Madura, Indonesia

http://dx.doi.org/10.18415/ijmmu.v5i1.3965

Abstract

This study aims to determine the effect of Intelligence Quotients (IQ) and Emotional Quotients (EQ) on Organizational Culture and Employee Performance. This study uses a quantitative approach and the type of research is explanatory research. The research sample amounted to 200 employees of Semen Indonesia Ltd, with the method used is saturated sampling. The type of data used in the form of primary data obtained from the distribution of questionnaires. Analysis of the data used is SEM. The results showed that Intelligence Quotients (IQ) have significant effect on Organizational Culture. Emotional Quotients (EQ) have significant effect on Organizational Culture. Intelligence Quotients (IQ) have significant effect on Employee Performance. Emotional Quotients (EQ) have significant effect on Employee Performance, and Organizational Culture have significant effect on Employee Performance.

Keywords: Intelligence Quotients (IQ); Emotional Quotients (EQ); Organizational Culture; Employee Performance

Introduction

Every human being has different intelligence potential. Intellectual intelligence (IQ) is the intelligence needed to carry out various mental activities such as thinking, reasoning, and solving problems (Robbins and Timothy, 2009). In Indonesian education, intellectual intelligence is more valued than other intelligences. In reality, intelligence is assessed by the value of report cards or IP, while attitudes, creativity, independence, emotion, spirituality have not received a proportional assessment (Efendi, 2005). According to Carrusso in his research, the fact that intellectual ability as measured by IQ is still important in work success, "In fact, many psychologists still believe that IQ is the single best predictor of workplace success" (Caruso, 1999). In working not only acts to carry out tasks, but also intelligence in analyzing something, intellectual intelligence plays a role when someone uses his analytical and cognitive abilities to solve problems in completing work in order to obtain maximum results. But Goleman has a different opinion, the biggest abilities that affect a person's success at work are empathy, self-discipline, and initiative. Goleman (2001) suggests that emotional intelligence accounts for 80% of a person's success factor, while the other 20% is determined by intellectual intelligence (Mangkunegara, 2005).
Emotional intelligence (EQ) is a person's ability to detect and manage emotional cues and information (Robbins and Timothy, 2009). Emotional intelligence is a key indicator for one's success (Pasiak, 2002). Goleman (2001) stated that intellectual intelligence cannot work properly without emotional intelligence. Both complement each other, and if they can interact well, emotional intelligence will increase, as well as intellectual intelligence (Efendi, 2005). Several studies on intellectual intelligence (IQ), emotional intelligence (EQ), and employee performance have been conducted before. These studies show different results. According to the results of research conducted by Husain (2013), states that intellectual intelligence is not significant with employee performance. In contrast to emotional intelligence which shows a significant relationship with employee performance and indicates that emotional intelligence is more important than other intelligences in the workplace. Research Faried (2014), states that only emotional intelligence has an effect on employee performance, while intellectual intelligence and spiritual intelligence have no effect on employee performance. In research conducted by Pratama (2016), emotional intelligence has an effect on employee performance but does not have a very large effect, and when mediated by organizational citizenship behavior the results show emotional intelligence has a greater influence on employee performance. Research by Yani dan Ayu (2016), shows that intellectual intelligence has a significant effect on employee performance, while emotional intelligence has no significant effect on employee performance. When mediated by professionalism, intellectual intelligence has a significant effect on employee performance, while emotional intelligence is not significant. Research Sholiha et al., (2017), states that emotional intelligence and spiritual intelligence affect teacher performance. However, of the two, spiritual intelligence dominates. Meanwhile, the results of research conducted by Sella (2016), show that intellectual intelligence and emotional intelligence have a positive and significant effect both simultaneously and partially. However, of the two variables tested, emotional intelligence dominates. In contrast to the results of research conducted by Maulidina et al., (2017), stating that there is no direct influence of emotional intelligence on work performance, there is an indirect influence of spiritual intelligence on work performance through organizational citizenship behavior, OCB is not able to mediate emotional intelligence on work performance, and OCB is able to mediate spiritual intelligence on work performance.

According to Wibowo (2010), organizational culture also has a role in employee performance. Organizational culture will affect the competence of human resources in various activities, such as in recruitment and selection practices, reward systems for employees, decision-making systems, organizational philosophy, vision, mission, values, habits and procedures, commitments, and the organizational process itself. The people who have good qualities in a good environment or organization will perform well. This statement is in line with the opinion Handayani (2012), that organizational culture greatly influences the behavior of organizational members because the value system and organizational culture can be used as a reference for human behavior in organizations that are oriented towards achieving the goals or performance results set, so that if the organizational culture is good, it is not surprising that members organizations are good people and quality anyway. There are several studies on organizational culture that have been conducted previously. Adinata (2015), conducted a study with results showing that transformational leadership, motivation, organizational culture have a significant effect on employee performance. The most dominant influence is organizational culture while the lowest influence is transformational leadership. Research conducted by Lina (2014), shows that leadership and organizational culture have an effect on employee performance, but only by 11.6% while the rest is explained by other variables. Some of these studies have had different results. So it is necessary to do further research on intellectual intelligence, emotional intelligence, organizational culture, and employee performance with different case studies.

**Research Purposes**

1. Analyze the influence of Intelligence Quotients (IQ) (X1) on Organizational Culture (Z).
2. Analyze the influence of Emotional Quotients (EQ) (X2) on Organizational Culture (Z).
3. Analyze the influence of Intelligence Quotients (IQ) (X1) on Employee Performance (Y).
4. Analyze the effect of Emotional Quotients (EQ) (X2) on Employee Performance (Y).
5. Analyze the influence of Organizational Culture (Z) on Employee Performance (Y).

Theoretical Review and Hypotheses

Intelligence Quotients (IQ), Emotional Quotients (EQ) and Organizational Culture

Tika (2006), divide the five elements that make up culture, namely the business environment, values, role models or heroes, rituals, and cultural networks. Included in the organizational values here are the individual values of organizational members, in this case including intellectual intelligence and emotional intelligence. Because intelligence is a value that is shared by all members but with different levels of frequency. The progress of an organization is very dependent on how the members in the organization. Good infrastructure, systems, and finances will have no meaning if organizational members have low competence and commitment. The competence that a person has is closely related to the high and low IQ they have, the higher a person's IQ, the faster an employee receives the knowledge given. Meanwhile, to increase commitment, more effort is needed. However, increased commitment is closely related to a person's EQ. The higher a person's EQ, the better the ability of an employee to motivate himself to always be positively committed to the organization, and to manage emotions well so as to minimize negative attitudes that can have an impact on other members and the organization. Based on this explanation, the first and second hypothesis is:

H1: Intelligence Quotients (IQ) have significant effect on Organizational Culture
H2: Emotional Quotients (EQ) have significant effect on Organizational Culture

Intelligence Quotients (IQ) and Employee Performance

The world of work is closely related to the intellectual intelligence possessed by a person to complete tasks. Someone who has a high IQ is expected to perform better than those who have a lower IQ. This is because someone who has a high IQ has the ability to absorb knowledge quickly to perform various tasks in a job (Robbins and Timothy (2009). A person's abilities will affect how well an employee can perform his duties. According to Supriyanto et al., (2010), this performance appraisal can be measured through timeliness in completing tasks, achieving targets, and working without errors. In completing tasks, employees are required to always be on time, in this case employees who have a high IQ are likely to learn quickly so that they can complete tasks on time. Even with the remaining time, employees can work beyond the set targets. In addition, the fast learning process of employees can also minimize errors at work. Based on this explanation, the third hypothesis is:

H3: Intelligence Quotients (IQ) have significant effect on Employee Performance

Emotional Quotients (EQ) and Employee Performance

Emotional intelligence is the ability to recognize oneself and others, the ability to motivate oneself and manage emotions well, and to relate to others. A person with well-developed emotional intelligence is most likely to succeed in life because he is able to develop thinking habits that encourage productivity. This ability will affect how well an employee completes his tasks. According to Supriyanto et al., (2010), this performance appraisal can be measured through timeliness in completing tasks, achieving targets, and working without errors. In completing tasks, employees are required to always be on time, in this case employees who have a high EQ will be able to manage themselves and their time so that the tasks given can be completed on time. Even someone who has a high EQ can complete a task by leaving the time he has, so that it can be used to work beyond the set target. In addition, with good self-management and time, employees can also minimize mistakes at work. Based on this explanation, the fourth hypothesis is:
**H4: Emotional Quotients (EQ) have significant effect on Employee Performance**

**Organizational Culture and Employee Performance**

According to Druicker Organizational Culture is the subject of solving external and internal problems whose implementation is carried out consistently by a group which then bequeaths it to new members as the right way to understand, think, and feel about related problems as above. This culture is held and implemented by all members of the organization, so that in the implementation of every activity and every problem solving can be carried out without distinction. Pratiwi (2012), explains that one of the factors that influence employee performance is the organizational environment. Organizational work environment factors are very supportive for individuals in achieving performance. The organizational environmental factors in question include clear job descriptions, adequate authority, challenging work targets, effective communication patterns, harmonious working relationships, respectful and dynamic work climate, career opportunities and relatively adequate work facilities including organizational culture.

Likewise with Rosiyana (2012), which states that situational factors in a job can affect a person's performance. Situational factors, consisting of two factors, namely social and organizational factors, including organizational policies, types of training and supervision, wage system and social environment. As well as physical and occupational factors, including work methods, design and condition of work tools, arrangement of work space and work environment (such as lighting, noise and ventilation). From these factors it can be seen that organizational culture has a relationship and can support employee performance. Based on this explanation, the fifth hypothesis is:

**H5: Organizational Culture have significant effect on Employee Performance**

**Research Methods**

**Research Framework**

![Research Framework Diagram](image)

**Measures**

The variables in this study were measured by a Likert scale with a range from 1 to 5 where 1 was equal to "Strongly Disagree" and 5 equal to "Strongly Agree". The variables studied consisted of exogenous variables and endogenous variables. The exogenous variables include Intelligence Quotients (IQ) which was adopted from Moustofa and Miller (2003). Emotional Quotients (EQ) was adopted from Goleman (2001), and Organizational Culture which was adopted from Robbins (1996), while the endogenous variables are Employee Performance was measured from Bernardin and Russel (1993). This study uses SEM for variables between linear relationships between variables, hypothesis testing and causal relationships using AMOS software.
Result

Data analysis used AMOS software with the Structural Equation Model (SEM) method. There are two stages in the Structural Equation Model (SEM). The first stage is the Measurement Model and the second stage is the Structural Model (Kaplan, 2020).

Measurement Model

Goodness Fit Indices

Based on Table 1, the following results are obtained, namely $\chi^2 / df$-ratio is 2.50, which is at interval 2-3, which means that the model has met the criteria so that the model can be accepted. As for the assessment of GFI, NFI, NNFI, and CFI, namely the value obtained is greater than or close to 0.9, this means that the calculations related to GFI, NFI, NNFI, and CFI have met the model requirement criteria so that it can be concluded that the model is acceptable. Anything regarding the calculation of RMSEA obtained a value of 0.03, so it can be concluded that this value is still acceptable. So the overall measurement has met the standardization of the assessment on the measurement model fit indices.

Table 1 The Measurement Model Fit Result

<table>
<thead>
<tr>
<th>Index</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square ($\chi^2$)</td>
<td>485,873</td>
</tr>
<tr>
<td>Chi-square DF</td>
<td>194</td>
</tr>
<tr>
<td>Chi-square ($\chi^2$/df)</td>
<td>2.50</td>
</tr>
<tr>
<td>Goodness of Fit (GFI)</td>
<td>0.92</td>
</tr>
<tr>
<td>Adjusted Goodness of Fit (AGFI)</td>
<td>0.91</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.02</td>
</tr>
<tr>
<td>Root Mean Square of Residual (RMR)</td>
<td>0.03</td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td>0.93</td>
</tr>
<tr>
<td>Non-normed Fit Index (NNFI)</td>
<td>0.94</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Source: Research Data (Processed, 2022)

Hypothesis Testing

Table 2 Structural Model Path Coefficient

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Standardized path coefficient</th>
<th>$t$ value</th>
<th>Square Multiple Correlation ($r^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture</td>
<td>Intelligence Quotients</td>
<td>0.57</td>
<td>15.31*</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Emotional Quotients</td>
<td>0.49</td>
<td>13.73*</td>
<td></td>
</tr>
<tr>
<td>Employee Performance</td>
<td>Intelligence Quotients</td>
<td>0.93</td>
<td>23.29*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotional Quotients</td>
<td>0.87</td>
<td>22.64*</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td>Organizational Culture</td>
<td>0.98</td>
<td>24.17*</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data (Processed, 2022) *p<0.001.

Table 2 presents information related to the results of hypothesis testing, the results of the path coefficient related to the influence of Intelligence Quotients (IQ) -> Organizational Culture is 0.57; Emotional Quotients (EQ) -> Organizational Culture is 0.49; Intelligence Quotients (IQ) -> Employee Performance is 0.93; Emotional Quotients (EQ) -> Employee Performance is 0.87; Organizational Culture -> Employee Performance is 0.98.
The Determinants and Consequents of Employee Performance: The Role of Intelligence Quotients (IQ), Emotional Quotients (EQ) and Organizational Culture

Performance is 0.93; Emotional Quotients (EQ) -> Employee Performance is 0.87; and Organizational Culture -> Employee Performance is 0.98. Furthermore, "Employee Performance" as the dependent variable, the value of r² is 0.97; and "Organizational Culture" with the value of r², namely 0.88. According to (Kline, 2016) the category of influence size r² is small 0.02, medium 0.13, large 0.26. So it can be concluded that Organizational Culture -> Employee Performance have a very high level of contribution. The results of the path analysis can be seen in Table 2.

**Intelligence Quotients (IQ) Has Significant and Positive Effect on Organizational Culture (H1 Accepted)**

Based on Table 2 the finding analysis namely Intelligence Quotients (IQ) has Significant and positive effect Organizational Culture (with the coefficient = 0.57, t = 15.31, p <0.001). A significant value with a positive sign means that the higher the Intelligence Quotient (IQ) of the employee, the higher the employee's performance will be. This research is in line with research by Tika (2006), dividing five elements that make up culture, namely the business environment, values, role models or heroes, rituals, and cultural networks. Included in the organizational values here are the individual values of organizational members, in this case including Intelligence Quotients (IQ). Because intelligence is a value that is owned according to members but with different levels of frequency.

**Emotional Quotients (EQ) Has Significant and Positive Effect on Organizational Culture (H2 Accepted)**

Based on Table 2, the data analysis show that Emotional Quotients (EQ) has Significant and positive effect on Organizational Culture (with the coefficient = 0.49, t = 13.73, p <0.001). Organizational culture is a social phenomenon that is structured according to the interactions between individuals and organizations and cannot exist without individuals and characteristics such as subjectivity, irrationality, and emotionality that can be used to explain them (Tolmats and Reino, 2006). Thus, the importance of emotional intelligence is put forward to enable organizations to shape organizational culture and activities at all levels in the organization (Langhorn, 2004). Although studies on the topic of emotional intelligence in work-related settings are insufficient, it is agreed that emotional intelligence has a very important importance in work settings (Matthews, Zeidner, & Roberts, 2004). One such study was conducted by Tolmats and Reino to find the relationship between emotional intelligence and the type of organizational culture taken from The Competing Values Framework conceptualized by Quinn and Rohrbaugh (1983) in two business sectors in Estonia (Tolmats and Reino, 2006). The results showed that participants with higher levels of emotional intelligence gave higher estimates for organizational culture than participants with lower emotional intelligence. According to research results, emotional intelligence is usually positively related to the type of organizational culture Human Relations, Open System and Rational Goals, thus forming the hypothesis that by increasing emotional intelligence employees can develop organizational culture. (Tolmats and Reino, 2006). In the Human Relations type of organizational culture, leadership and morale are focused on the Open Systems type of organizational culture to promote innovation, growth, dynamics, imagination, and willingness to change and the Goal type of organizational culture concentrates on productivity, efficiency, and performance (Parker & Bradley, 2000; Dastmalchian, Lee & Ng, 2000). Another study conducted by Danaeefard, Salehi, Hasiri and Noruzi (2012) which examined the relationship between emotional intelligence, organizational culture and organizational learning in service delivery had a direct impact on organizational culture. This study shows a direct relationship between emotional intelligence factors and organizational culture where the relationship between self-stimulation and organizational culture shows the strongest value. Thus, emotions can pave the way for the development of organizational culture in organizations (Danaeefard, Salehi, Hasiri, & Noruzi, 2012).
**Intelligence Quotients (IQ) Has Significant and Positive Effect on Employee Performance (H3 Accepted)**

The results of the data analysis show that Intelligence Quotients (IQ) has significant and positive effect on Employee (coefficient = 0.93, t = 23.29, p < 0.001). This study is in accordance with research by Pratiwi (2012), which explains that there are two factors that influence employee performance, namely individual factors and organizational environmental factors. Likewise research by Rosyiana (2012), which states that there are two factors that influence a person's performance, namely individual factors and situational factors. Individual factors are related to the potential that exists in employees (intelligence), while organizational environmental factors or situational factors are related to organizational culture which is very supportive for individuals in achieving performance.

**Emotional Quotients (EQ) Has Significant and Positive Effect on Employee Performance (H4 Accepted).**

The results of the data analysis show that Emotional Quotients (EQ) has significant and positive effect on Employee (coefficient = 0.87, t = 22.64, p < 0.001). The standardized coefficient beta value is positive indicating that Emotional Quotients (EQ) and employee performance have a unidirectional relationship. This means that the higher the Emotional Quotients (EQ), the higher the employee's performance. The results of this study are in accordance with research by Supriyanto and Mahfudz (2010), Ability will affect how well an employee completes his tasks. This performance appraisal can be through punctuality in completing tasks, achieving targets, and working without errors. In completing tasks, employees are required to be on time, in this case employees who have high Emotional Quotients (EQ) will be able to manage themselves and their time so that the assigned tasks can be completed on time. Even someone who has high Emotional Quotients (EQ) can complete tasks by leaving the time they have, so that they can be used to work beyond the set targets. In addition, with good self-management and time, employees can also minimize mistakes at work.

**Organizational Culture Has Significant and Positive Effect on Employee Performance (H5 Accepted)**

The results of the data analysis show that Organizational Culture has significant and positive effect on Employee (coefficient = 0.98, t = 24.17, p < 0.001). A significant value with a positive sign means that the higher the organizational culture, the higher the employee's performance. This study is in accordance with research by Pratiwi (2012), explaining that one of the factors that influence employee performance is organizational environmental factors. Organizational environmental factors are very important for individuals in achieving performance. The organizational environmental factors in question include clear job descriptions, adequate authority, and challenging work targets, effective communication patterns, harmonious working relationships, respectful and dynamic work climate, career opportunities and relatively adequate work facilities as well as a complex and strong organizational culture.

**Conclusion**

The results show that Intelligence Quotients (IQ) have significant effect on Organizational Culture. Emotional Quotients (EQ) have significant effect on Organizational Culture. Intelligence Quotients (IQ) have significant effect on Employee Performance. Emotional Quotients (EQ) have significant effect on Employee Performance, and Organizational Culture have significant effect on Employee Performance.
Suggestions

This study only focuses on the perception the 200 employees of Semen Indonesia Ltd, so the results of this study cannot be generalized to other companies. Future research can expand the results by analyzing other cities and including other large companies. The purpose of this research is to dig deeper into the role of Intelligence Quotients (IQ) and Emotional Quotients (EQ) in a certain period of time and its effects on Organizational Culture and Employee Performance. However, the effects of some variables may change over time, causing the results to change too. Therefore, this study suggests that further research can develop a research model in order to obtain more comprehensive results / information.

References


Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).