

# THE EFFECT OF EMOTIONAL INTELLIGENCE ON TEAM PERFORMANCE: A CASE STUDY OF A GOVERNMENT HOSPITAL

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## ABSTRACT

**Background.** Organisational development requires human resources. Professional organisations manage systems and the organisational mechanisms of existing resources to support flexible responses of change. Hospitals are a part of the service industry and have very complex business processes, and a large potential for optimisation and efficiency improvements. The aim of this study is to explore the relationship between emotional intelligence and team performance during the inter-institutionalised collaboration work process.

**Materials and Methods.** This study was conducted in the South Sulawesi and Central Sulawesi Province's hospitals. The study lasted for six months in 2017. The sampling was done by using the cluster method and stratified random sampling, which was based on hospital type and the level of health officers. The data analysis approach used in this study was the partial least square (PLS), using WarpPLS software.

**Results.** The results show that emotional intelligence significantly and positively affected team performance with a path coefficient value of 0.138 and a p-value of 0.050.

**Conclusion.** Based on the results of the data analysis, it can be concluded that there is a significant direct influence of emotional intelligence on team performance.

*Keywords: Emotional Intelligence; Team Performance; Government Hospital*

## 1. Introduction

Hospitals are a part of the service industry and have very complex business processes, and a large potential for optimisation and efficiency improvements <sup>1</sup>. The public demands for better health services indirectly requires the hospital to continuously develop <sup>2</sup>. To improve the quality of health services for the customer, the work should be done effectively and efficiently, and it requires continuous improvement with the least amount of resistance that is possible <sup>3</sup>. In the last decade, in particular, hospitals and technical services for health care in Indonesia rapidly expanded; in 2012, the number of public hospitals was 1.608 and by 2013, the number of hospitals was 1.725 (Central Bureau of Statistics, 2015).

The rapid growth in health services may result in a lack of human resources preparation, which can threaten the quality of health services<sup>4</sup>. The level of knowledge can affect the quality of health services and the results of the hospital officers' performance<sup>5,6</sup>. To integrate the existing resources, the employees' performance must be maximised<sup>5</sup>. A series of hospital operational policies and standards require the collaboration of all hospital departments<sup>7</sup>; thus, the proposal is to create the greatest benefit for health services from limited resources between these departments<sup>8,9</sup>.

The quality of the collaboration and performance of these interdepartmental teams heavily depends on the knowledge-sharing function within the collaboration team<sup>10</sup>. Team performance also reflects the attitude of cooperation, competence and culture behind each participating institution and the team members<sup>7</sup>. Like any other professional community, team conflicts will exist in the participating institutions and even among the members of the hospital's high-status sections<sup>11</sup>. The team conflicts, such as competitions and varieties, usually have a damaging effect on the quality of interaction and achievement collaboration<sup>12</sup>. In addition, the participants' emotional intelligence is the team performance's important dominating factor during the growth process<sup>13</sup>.

## **2. Materials and Methods**

This research employs an explanatory pattern and intends to describe the position of the variables studied and the relationship between one variable and other variables<sup>14</sup>. This study was conducted in the South Sulawesi and Central Sulawesi Province's hospitals. The study conducted for six months in 2017. The sampling was done by using the cluster method and stratified random sampling<sup>15</sup>, which was based on hospital type and the level of health officers. These characteristics were considered to have represented very heterogeneous information about the characteristics of

health workers. The data analysis approach used in this study was the partial least square (PLS) <sup>16</sup>, using WarpPLS software <sup>17</sup>. The research framework is illustrated in Figure 1.

### 3. Results

#### 3.1. Validity and Reliability Testing

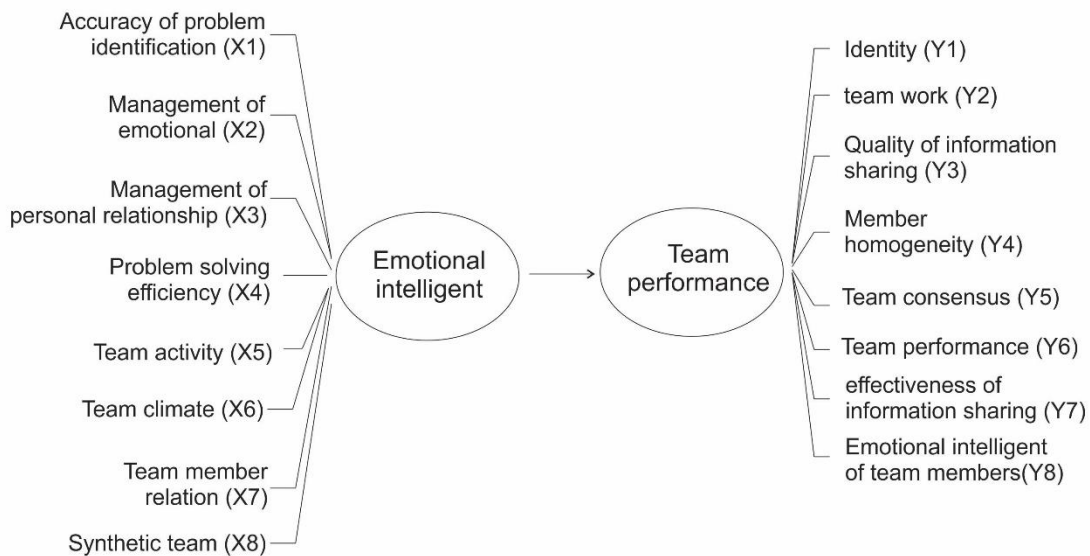
This research employed questionnaires to obtain the data. Some parts of the questionnaire involved perceptions, with a Likert scale. Therefore, a test was required to determine whether the questionnaire was valid and reliable. The instrument validity test used the Pearson correlation analysis tool. If the Pearson correlation value (r) is greater than 0.30, this indicates that the item is valid and eligible for inclusion at a later stage. On the other hand, if the Pearson correlation value (r) is less than 0.30, this indicates that the item is invalid. Meanwhile, the instrument reliability was tested with the Cronbach's alpha analysis tool. If the value of Cronbach's alpha coefficient is above 0.60, this indicates a reliable instrument; otherwise, if the value of Cronbach's alpha coefficient is below 0.60, it indicates the instrument is not reliable. Table 1 below presents the validity and reliability test.

Tabel 1. Validity and Realibility of Indicators

Variables	Indicators	Validity	Reliability		
Emotional Intelligence (X1)	X11	0.421	Valid	0.702	Reliable
	X12	0.423	Valid		
	X13	0.472	Valid		
	X14	0.446	Valid		
	X15	0.422	Valid		
	X16	0.373	Valid		
	X17	0.509	Valid		
	X18	0.375	Valid		
Team Performance (Y3)	Y31	0.626	Valid	0.774	Reliable
	Y32	0.702	Valid		
	Y33	0.664	Valid		
	Y34	0.612	Valid		
	Y35	0.620	Valid		

Y36	0.597	Valid
Y37	0.479	Valid
Y38	0.612	Valid

Based on Table 1, all indicators for each variable have a correlation value greater than 0.30; therefore, the research instrument is declared valid. Meanwhile, the Cronbach's alpha value for all variables is greater than 0.60; thus, it can be said that the research instrument is also reliable.



### 3.2. Goodness of Fit Test

The goodness of fit test used predictive-relevance (Q2) values. The calculation result showed a predictive-relevance value of 0.787 or 78.7%; therefore it can be said that the model has relevant predictive value. The predictive relevance value of 78.7% indicates that the diversity of data that can be explained by the model is 78.7%. In short, the information contained in the data can be explained by 78.7% through the model. Meanwhile, the remaining 21.3% is explained by other variables (which are not in the model) and error. Hair Ringle (2011) states that the value of  $Q^2 > 75\%$  indicates a very good model and can be interpreted for further hypothesis testing<sup>18</sup>.

### 3.3. Partial Least Square Analysis Result

Inner model testing (structural model) essentially tested the hypothesis of the research. Hypothesis testing was done by a t-test (TStatistic) on each partial direct effect path <sup>19</sup>. The results of the complete analysis are contained in the results of the WarpPLS analysis and is shown in Table 1. The following table presents the results of hypothesis testing.

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**Table 2.** Inner model result in WarpPLS: Direct Effect

Relationship	Path Coefficient	p-value	Information
Emotional Intelligence (X1) → Team Performance (Y3)	0.138	0.050	Signifikan

In direct effect testing on emotional intelligence as it relates to team performance, the path coefficient value of 0.138, with a p-value of 0.050 was obtained. Since the p-value was equal to 0.05, there was a significant direct effect on emotional intelligence regarding team performance (Table 2). Given a path coefficient marked positive, this indicates that the relationship was positive, meaning that the higher the emotional intelligence, the higher the team performance will be.

## **4. Discussion**

### *4.1. Emotional Intelligence for Team Performance*

Referring to the research data, the emotional intelligence variable has an empirically significant effect on team performance. In the direct effect testing between emotional intelligence and team performance, the path coefficient value of 0.138, with a p-value of 0.050 was obtained. Since the p-value was equal to 0.05, there was a significant direct effect between emotional intelligence and team performance. Given a path coefficient marked positive, this indicates that the relationship was positive.

The finding indicates that the higher the emotional intelligence, the higher the team performance. This aligns with Beam (2012), who indicated that as an individual's total EQ score increases, so does the team cohesion assessment <sup>20</sup>. According to Michael (2007), the finding shows that a team's emotional intelligence predicts a stronger positive performance in heterogeneous groups than in homogeneous groups <sup>21</sup>. The result is discussed with respect to the implications of group construction and for the study of work group diversity.

Other facts also suggest creating a factor (shown by vector) that moves the employee towards the reception of the spectrum and repeats the sequence. Constantly monitoring employees'

reactions is important because there is evidence that initiatives of change fail due to a lack of attention for long-term human factors <sup>22</sup>. This research found that the team leader's emotional intelligence had an impact on the team performance through the mediation effect of the team's emotional level and the creativity of team members <sup>23</sup>. These results are also supported by Brown's findings (2002) that a transactional / transformational leadership style acts as a strong predictor of leadership effectiveness and ability <sup>24</sup>. In addition, transactional and transformational leadership styles seem to have a symbiotic relationship with emotional intelligence in the domain leadership style <sup>25</sup>.

However, another fact stated by Hansenne (2008) indicated that emotional intelligence (EI) is assessed using a modified version of the Schutte Emotional Intelligence Scale and the cohesiveness with the Group Cohesiveness Scale <sup>26</sup>. Finally, the performance of the nurse team was measured at four different levels: job satisfaction. The results showed that health care quality correlated positively with emotional regulation. Emotional regulation was also positively correlated with group cohesion. It is surprising that emotional assessment was negatively correlated with the quality of health care provided by the team. This result indicates that EI and, more specifically, the emotional regulation can provide a new, interesting way to improve team cohesion <sup>27</sup>.

This study implies that technological change will always have an impact on army personnel in particular battalion cavalry 8 / NSW. Army personnel will use land technology to the fullest if they can commensurate with the technology carried by the primary defense system. the results of this study can be applied to the air force and marine units within the scope of the Indonesian republic military organization for analyzing the potential for disruption resulting from changes in defense technology. This study recommends policymakers to maintain the continuing capacity building of Indonesian Army troops, so they are not distracted by changes in defense technology.

#### *4.2. Conclusions*

Based on the data analysis results, it can be concluded that there is a significant direct effect and a real impact of emotional intelligent on team performance. However, a continuous and comprehensive handling is still needed for all health officers in the hospital. Knowledge sharing, team conflict and structure mechanism in this research proved to strengthen the effect of EI on team performance. New processes and ideas, continuous innovation, the application of expertise, cognition, role, key ideas, interpersonal relationships, division of labour, hierarchy of authority, rights and obligation rules and interpersonal relationships can influence team performance in the workplace. Employees who apply these values when working, in accordance with the results of the research, will be able to demonstrate good team performance. Therefore, institutions should also ensure that these indicators are included in every employee development activity at the institutions.

**Significant Statement:** This study found that the emotional intelligence of team leaders had an impact on team performance. Emotional intelligence can be a mediating factor between the emotional level of team members and work team creativity. That can be beneficial for the head of the hospital and the ministry of health of the Republic of Indonesia to formulate a strategic policy related to increasing human resources in the Government Hospital. This study will help the researcher to cover the critical areas of the relationship between emotional intelligence on team performance during the inter-institutionalized collaboration work process. Thus a new theory on the effect of emotional intelligence on team performance is arrived at.

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**Conflict of Interest:** The authors whose names are listed in this article state that they have no affiliation or involvement in any organization or entity with any financial. The author declares that the article is the Authors' original work and has not received prior publication and is not under consideration for publication elsewhere. This research has not been submitted for publication nor has it been published in whole or in other parts.

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