

Employee Psychological Empowerment as Moderator, and it's Effect on Team Performance

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Abstract

This study aims to examine the impact of team psychological safety on team performance, mediated by learning orientation, and how psychological empowerment enhances the influence of learning orientation on employee team performance at the Health Polytechnic of the Ministry of Health of Aceh. The research method used in this study is a survey involving the distribution of questionnaires to a sample of respondents. The sampling technique employed is stratified random sampling, resulting in a sample of 231 respondents who are members of 19 work units at the Health Polytechnic of the Ministry of Health of Aceh. Structural Equation Modeling (SEM) with AMOS software version 22.00 is utilized to test the current study's hypotheses. The results demonstrate that team psychological safety and learning orientation have a positive and significant effect on team performance. Furthermore, learning orientation mediates the influence of team psychological safety on team performance. Finally, psychological empowerment was found to positively and significantly moderate the influence of learning orientation on employee team performance at the Health Polytechnic of the Ministry of Health of Aceh.

Keywords: Team Psychological Safety, Learning Orientation, Psychological Empowerment, and Team Performance.

Introduction

According to Maxwell & Maxwell (2006), many experts mention that good team performance can provide various benefits for organizations, one of which is increased productivity. Effective teams can complete tasks more quickly and efficiently, as they can divide tasks and responsibilities, as well as leverage the skills and experience of different team members. In the past, research on work teams has evolved significantly, and it is now one of the most researched topics updated. According to Mathieu et al (2017), there has been a shift in the focus of initial research on work teams from individual performance in teams to team performance. Several previous studies have discussed factors that affect team performance, such as team psychological safety, learning orientation, and psychological empowerment (May et al., 2004; Seibert et al., 2004; Frazier et al., 2017; Wang & Lei, 2018).

The performance of organizations, including universities, is also inseparable from the team performance in each of their functional structures, such as those found in the Aceh Ministry of Health Polytechnic (Poltekkes). This college has 10 work units (Directorate, Midwifery, Nursing, Library, Laboratory, etc.). Since the year of 2022, Aceh Ministry of Health Polytechnic Performance Report (LKj), there are several performance indicators that have not been maximized, such as the ratio of lecturers to students, which is 61.5%, the percentage of competency test passes, which is 85%, and the performance of effective, efficient, and accountable financial management, which is 94.77%. The lack of maximum achievement of these performance indicators illustrates the difference between the target and the realization of the program goals carried out by each unit. This condition is, of course, inseparable from how each individual in the unit works together to achieve the team performance target.

To determine the performance achievements at the Aceh Ministry of Health Polytechnic related to team performance, the researcher conducted an initial survey involving 20 (twenty) employees from various work units, as shown in Table 1.

Table 1

Respondents' Responses to the Job Performance of Employees at the Aceh Ministry of Health Polytechnic (n = 30)

No	Statements	Mean
1	I produce the number of products or services that meet the target.	3,42
2	I generate revenue or profits that meet the target.	3,3
3	I completed the project on time.	3,45
4	The products or services I produce meet high-quality standards	3,35
5	Customers are satisfied with the products or services I provide.	3,3
6	I'm always looking for new ways to improve my work.	3,25
7	I work closely with my team to achieve common goals.	2,95
8	I encourage the participation of all team members in decision-making.	3,1
9	I can adapt to change quickly and easily.	3,4
10	I'm always looking for ways to finish tasks efficiently.	3,35
Average		3,29

Table 1 describes that the team performance of employees at the Aceh Ministry of Health Polytechnic is still not good. This is reflected in the results of the initial survey, where the average score for the team performance variable was 3.29 (indicating disagreement or poor performance). This condition is inseparable from the responses of respondents who expressed disagreement with most indicators, especially on the indicator stating 'I worked with my team to achieve a common goal,' which obtained a mean score of 2.95 (indicating less agreement/less effectiveness). This fact shows that the cooperation among employees in the work team has not been effective, which will certainly impact the overall team performance at the Aceh Ministry of Health Polytechnic.

According to Dyer (1984), a team is a social entity consisting of members with high interdependence of tasks and a shared appreciation for common goals. For this reason, cooperation between team members is crucial to achieve good team performance, which ultimately affects the overall performance of the organization. It refers to several previous studies, team performance is closely related to psychological safety in the organizational or

team environment (May et al., 2004). In educational organizations, psychological safety means that people in the team feel safe to ask questions and share their ideas without fear of being criticized or intimidated (Edmondson et al., 2016).

In addition, another factor that can affect team performance is learning orientation. Previous research has shown that team performance has a close relationship with learning orientation (Edmondson, 2004; Jha, 2018). Learning-oriented team members will use self-regulation strategies (e.g., solution-oriented self-instruction, self-examination) that help develop their skills and knowledge, thus leading to superior performance (VandeWalle & Cummings, 1997).

De Jong et al (2016), in their study, found that team psychological safety has a positive relationship with team performance, and this effect is mediated by effectiveness and learning orientation. Team psychological safety improves team learning behavior by creating an environment where team members feel supported and valued. This encourages team members to take risks and try new things that can help them develop their skills and knowledge. Effectiveness and learning orientation play a role as mediators in the relationship between team psychological safety and team performance.

Moreover, the role of employee empowerment in team performance has been researched by (Yang & Choi, 2009). Several other studies suggest that team empowerment practices are successful in the workplace when teams have a better knowledge and understanding of the work context. The synergistic effect of learning orientation and psychological empowerment improves team performance (Jassawalla et al., 2004; Edmondson, 2004; Preez, 2015).

Previous research has documented the relationship between team psychological safety and team performance. However, the mechanism by which team psychological safety positively affects team performance is still unclear (May et al., 2004). This study examines the pathways through which team psychological safety improves team performance by investigating learning orientation as a mediator. However, individual responses to a safe environment vary psychologically, and not everyone will necessarily produce high performance (May et al., 2004). In contrast, Bradley et al. (2012) found that everyone can achieve high performance. Therefore, investigating how learning orientations interact in these relationships is an interesting area of exploration. In addition, researchers believe that structural factors such as delegation and policy alone may not be sufficient for optimal performance unless employees feel psychologically empowered.

This study addresses this gap by examining the moderating effect of psychological empowerment (as a motivational mindset) on the relationship between learning orientation and team performance. For this reason, this study presents a unique comprehensive model to unravel the complex relationship between team psychological safety and team performance. This holistic approach highlights the interaction of various factors in this dynamic through moderated mediation analysis.

Literature Review and Hypothesis

Team Performance

Burke et al (2006) define team performance as the result of teamwork measured in terms of meeting or exceeding team goals and objectives, as well as the team's ability to adapt to change and overcome challenges. Previously, Hackman & Wageman (2005) argued that team performance results from the collective efforts of members to complete tasks or achieve the team's desired goals.

Learning Orientation

According to Harvey et al (2019), learning orientation is an attitude characterized by the desire and ability to learn from both positive and negative experiences. Furthermore, Ortega et al. (2014) emphasized that learning orientation is a process where teams acquire and use new knowledge to improve their performance

Team Psychological Safety

Edmondson (1999), defines team psychological safety as the shared belief among team members that they will not be punished or humiliated for taking risks, expressing ideas, asking questions, or making mistakes. There are two main elements: 1) the belief that team members will not be punished or humiliated, and 2) the belief that team members will be valued and supported.

Psychological Empowerment

Psychological empowerment is a state in which employees feel capable and motivated to achieve goals (Spreitzer, 1995). Furthermore, Tanriverdi et al. (2019) define psychological empowerment as the granting of authority and opportunities to employees in the decision-making process within the company. The purpose of granting this authority is to increase the efficiency of one's ability to work so that employees are more responsible for their work (Abdulrab et al., 2017).

Research Hypothesis

Team members who feel psychologically safe will not worry about their ideas or opinions being misused by other team members. In addition, error correction is possible when team members are open about the weaknesses of an idea (Cauwelier et al., 2016). Psychological safety among team members facilitates an open discussion process and can improve the learning orientation of team members (Jha, 2018). Thus, hypothesis can be proposed as follows:

H₁: It is hypothesized that team psychological safety affects learning orientation.

Learning orientation is a characteristic of an individual or organization that shows a tendency to seek and use new knowledge. Organizations can improve team performance by promoting organizational learning and creating an environment that is conducive to the learning orientation of team members (Alerasoul et al., 2022). Thus, the following hypothesis may be presented as:

H₂: It is hypothesized that learning orientation affects team performance.

Frazier et al (2017), stated that team psychological safety has a stronger relationship with work results that require team creativity and innovation. Based on the results of their research, it is proven that team psychological safety is an important factor that can improve team performance and organizational performance. Referring to the finding, thus hypothesis may be declared as:

H₃: It is hypothesized that team psychological safety has an effect on team performance.

Hirak et al (2012), in their research, found that a work environment that supports the formation of psychological safety, such as having a more inclusive leader, can improve team performance by creating a safe environment for team members to take risks and make mistakes, and by supporting learning from failure. Learning from failure is one of the characteristics of learning orientation behavior that improves future performance. Based upon its premise, hypothesis may be derived as:

H₄: It is hypothesized that team psychological safety affects team performance through learning orientation.

In a team that has psychologically empowered members, responsibilities, resources, and work processes are distributed and simplified for practical results (Kirkman and Rosen, 1999). Many empirical studies have shown that empowerment is positively related to team performance (Spreitzer, 1996; Seibert et al., 2004; Srivastava et al., 2006).

Embedded team members showed a tendency toward learning orientation (Kirkman and Rosen, 1999). The finding of Ahmed & Tariq (2017), show that there is an influence of psychological empowerment as moderator in between learning orientation and its relationship on employee creativity. Therefore, it can be hypothesized as follows:

H₅: Psychological empowerment moderates the influence of learning orientation on team performance.

Theoretical Framework of Study

Based upon the above justification and preposition, this research can present the following model:

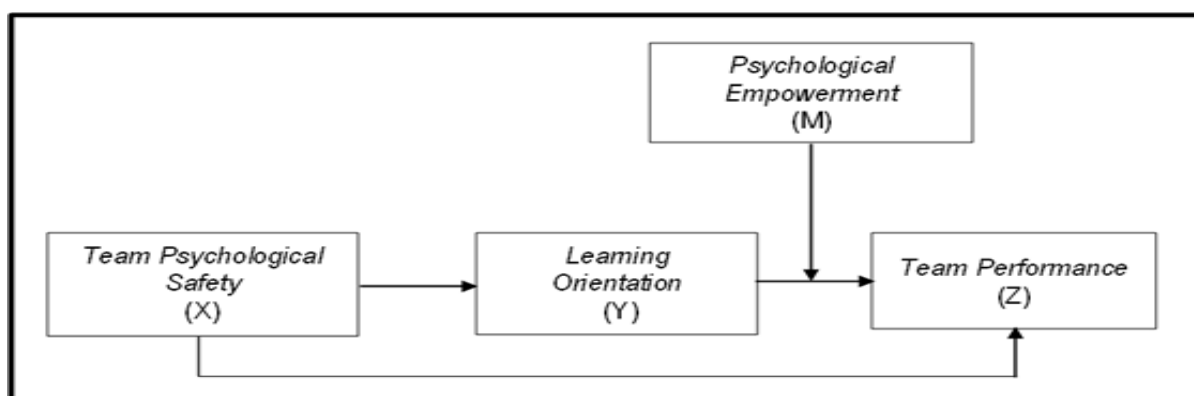


Figure 1. Research Framework

Research Methods

Research Object

The research focuses on team performance, learning orientation, team psychological safety, and psychological empowerment of employees at the Aceh Ministry of Health Polytechnic.

Population and Sample

The population in this study consists of all employees who are members of the 19 work units at the Aceh Ministry of Health Polytechnic, totaling 426 employees. The sample for this study was determined using Probability Sampling with the Stratified Random Sampling technique, where sampling was conducted by dividing the population into homogeneous groups (strata), and samples were randomly selected from each stratum. The grouping of respondents was carried out based on work units (teams) at the Aceh Ministry of Health Polytechnic. The distribution of samples was carried out by dividing the number of samples by work unit ratio.

According to Sekaran & Bougie (2017), SEM analysis requires a sample size of at least 5-10 times the number of indicator variables used. As this study have 4 variables with a total of 33 indicators; therefore, the number of samples needed is: $7 \times 33 = 231$ as minimum samples.

Data Collection Techniques

The data and information collection techniques used in this study involve using questionnaires. The questionnaire, prepared based on each indicator of the variables, was created as a Google Form. The Google Form link was then sent to respondents who are employees at the Aceh Ministry of Health Polytechnic. Furthermore, the data collected through questionnaires distributed to respondents were then analyzed using the SEM method with the assistance of the AMOS application.

Variable Operations

In this study, the measurement of team performance variables (dependent variables) used 2 dimensions totaling 10 indicators based on Burke et al. (2006), learning orientation variables (mediation variables) used 2 dimensions totaling 6 indicators based on Harvey et al. (2019). Furthermore, the independent variable is team psychological safety, which consists of 2 dimensions with 5 indicators based on Edmondson (1999), and psychological empowerment (moderation variable), which includes 4 dimensions with a total of 12 indicators based on Spreitzer (1995).

Results and Discussion

Characteristics of Respondents

The researcher used respondent characteristics to gather information about demographic data (age, gender, highest education level, length of employment, and type of employment) with a total of 231 respondents.

Tabel 2

Characteristics of Respondents

Characteristics of Respondents	Sum (n)	Percentage (%)
Gender		
Man	66	28,6
woman	165	71,4
Age		
21-30 Years	17	7,4
31-40 Years	61	26,4
41-50 Years	109	47,2
51-60 Years	34	14,7
61-70 Years	10	4,3
Last Education		
Junior High School/Equivalent	1	0,4
High School/Equivalent	10	4,3
DIII/Academy	20	8,7
S1	94	40,7
S2	104	45
S3	2	0,9
Length of Work		
1-5 Years	21	9,1
6-10 Years	23	10
11-15 Years	60	26
16-20 Years	71	30,7
21-25 Years	56	24,2
Types of Employees		
Civil servants	188	81,4
Non Civil Servants	43	18,6

Based on the results in Table 1, it shows that respondents with a female gender comprise the largest percentage, namely 71.4 percent or 165 respondents, while respondents with a male gender make up only 28.6 percent or 66 respondents. Meanwhile, respondents in the age range of 41-50 years dominate with the largest percentage, which is 47.2 percent or 109 respondents. Based on the last education category, the highest percentage is for respondents with a Master's degree (S2), comprising 45 percent or 104 respondents. Furthermore, the highest length of employment among respondents falls within the range of 16-20 years, accounting for 30.7 percent or 71 respondents. Finally, civil servants dominate the type of employees at the Aceh Ministry of Health Polytechnic, comprising 81.4 percent or 188 respondents. The remaining 18.6 percent, or 43 respondents, are non-civil servant employees.

Measurement Model Analysis*a. CFA (Confirmatory Factor Analysis) Test*

All constructs (Team Psychological Safety, Learning Orientation, Team Performance, and Psychological Empowerment) will be combined in the measurement model stage. Based

on the previous step, the exogenous variable, namely Team Psychological Safety, consists of 2 dimensions and is divided into 5 indicators. Furthermore, for the endogenous variables, namely Learning Orientation, which consists of 2 dimensions and is divided into 6 indicators, and Team Performance, which consists of 2 dimensions and is divided into 10 indicators and moderation variables, namely Psychological Empowerment which consists of 4 dimensions and is divided into 12 indicators analyzed by the CFA test with the results of the analysis as shown in Figure 2.

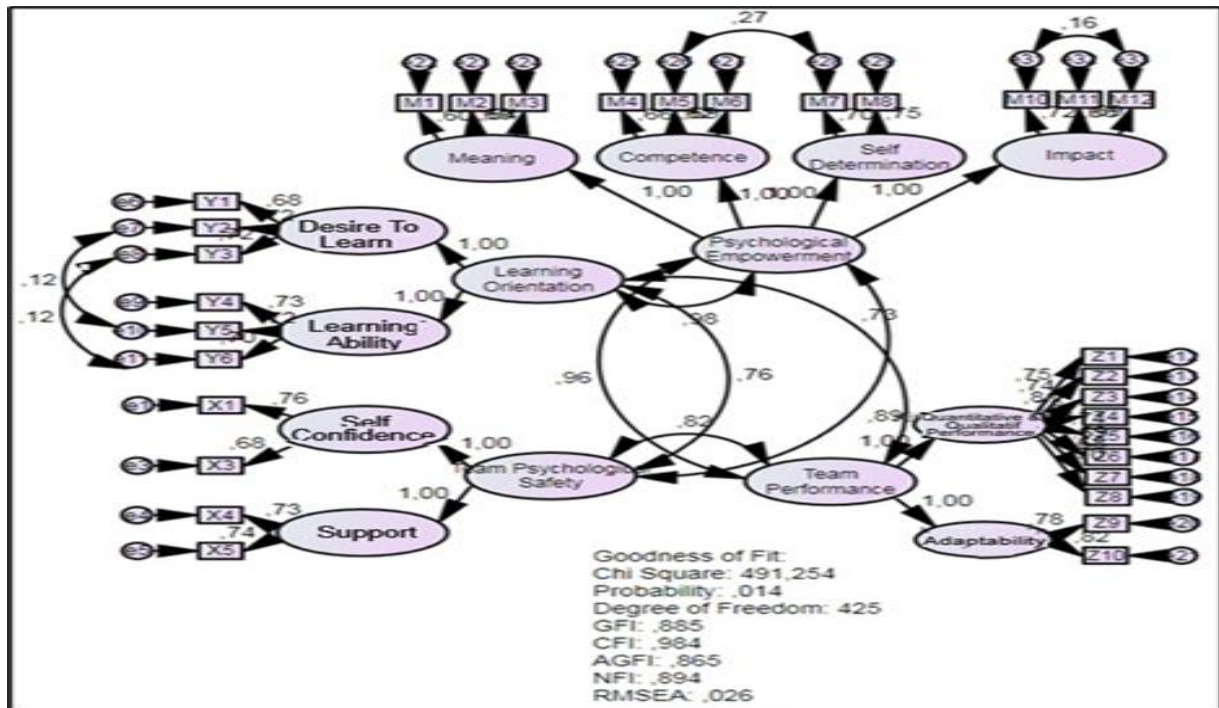


Figure 2 describe that the Chi-square value = 491.254 < 474.065 (df=425) with a probability value of 0.014 < 0.05 (marginal fit), GFI of 0.885, AGFI of 0.865, and NFI of 0.894 (marginal fit), CFI of 0.984 > 0.90 (good fit), and RMSEA value of 0.026 < 0.08 (good fit). Because the values of all criteria have met the recommended values (Fit), the entire Measurement Model 2 test is a Fit Model.

Tabel 3
Reliability Test

Variabel	Cronbach's Alpha	Conclusion
Team Psychological Safety	0,742	Reliable
Learning Orientation	0,744	Reliable
Psychological Empowerment	0,798	Reliable
Team Performance	0,862	Reliable

Table 3 ilustratres that the Cronbach's Alpha value of each variable, namely Team Psychological Safety, Learning Orientation, Psychological Empowerment, and Team Performance, is greater than 0.7. Therefore, all constructs in this study are stated to have good reliability.

Structural Model Analysis

The results of data processing for the SEM full model analysis are shown in Figure 3. Based on the measurement of the full structure in Figure 3, the results of the goodness-of-fit (GoF) test are summarized in Table 4.

Table 4
Test of Good of Fit Full Model

Fit Model	Value	Cut Of Value	Conclusion
Chi Square (df=163)	195,568	193,791	Marginal Fit
Probability	0,042	≥ 0,05	Marginal Fit
GFI	0,925	≥ 0,90	Fit
AGFI	0,904	≥ 0,90	Fit
NFI	0,926	≥ 0,90	Fit
RMSEA	0,029	≤ 0,08	Fit

Table 4 above illustrates that overall, the Full Model is an acceptable fit model. This conclusion is based on the fact that overall goodness-of-fit (GoF) can be assessed based on a minimum of 4-5 criteria (Hair et al., 2006).

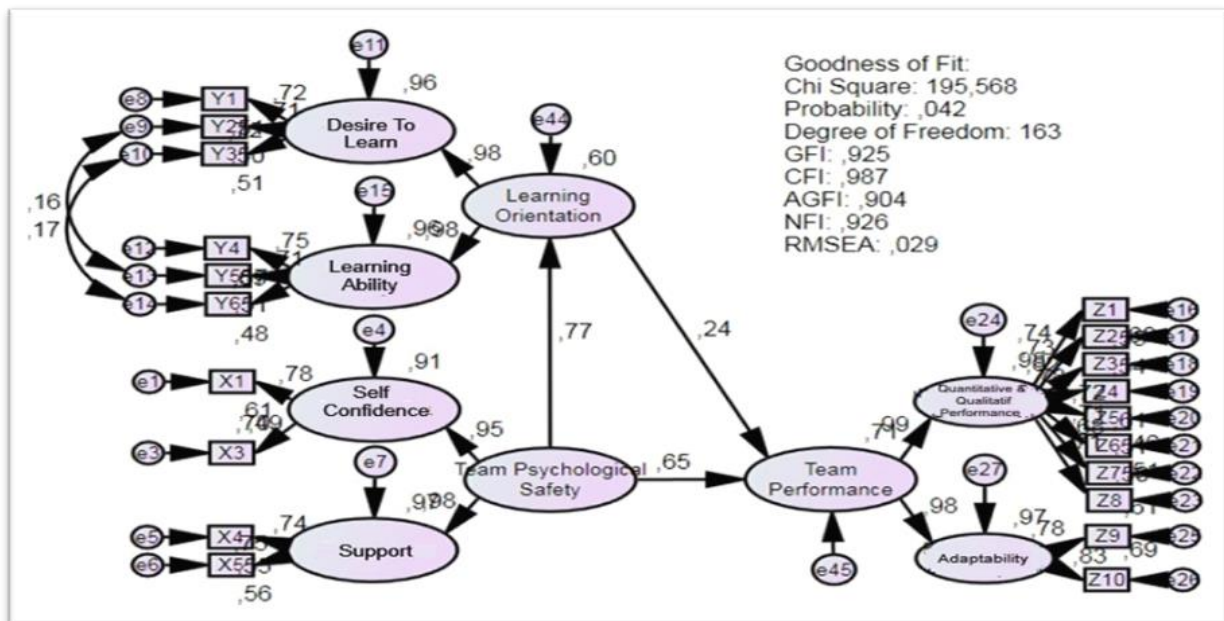


Figure 3. Structural Full Model **hypothesis Testing**

Direct Impact Test

The results of the direct influence test can be seen in Table 5

Table 5
Direct Effect Test

Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P	β
LearningOrientation	<--- TeamPsychologicalSafety	,736	,089	8,307	***	,771
TeamPerformance	<--- TeamPsychologicalSafety	,642	,119	5,385	***	,649
TeamPerformance	<--- LearningOrientation	,246	,109	2,265	,024	,237

Table 5 presents that the significance value (P) of the influence of the team psychological safety variable on learning orientation is *** (***) means less than 0.000), which is less than 0.05, and the C.R. value is $8.307 > \pm 1.96$. These two values prove that the influence of team psychological safety on learning orientation is significant. Besarnya pengaruh team psychological safety terhadap learning orientation adalah $(\beta) = 0,771$ atau 77,1%. Thus, hypothesis 1 is accepted, which means that team psychological safety has a positive and significant effect on the learning orientation of the Aceh Ministry of Health Polytechnic employees. The results of this study confirm the findings of Cauwelier et al (2016), Jha (2018), and Harvey et al. (2019), which concluded that Team Psychological Safety has a positive and significant effect on the learning orientation of the work team.

Furthermore, Table 5 also shows that the P value of the influence of the learning orientation variable on team performance is 0.024, which is less than 0.05, and the C.R. value is $2.265 > \pm 1.96$. These two values indicate that the influence of learning orientation on team performance is significant. The magnitude of the influence of learning orientation on team performance was $(\beta) = 0.237$ or 23.7%. Thus, it can be concluded that hypothesis 2 is accepted, which means that in this study, learning orientation has a positive and significant effect on team performance among employees of the Aceh Ministry of Health Polytechnic. The results of this study are consistent with the findings of van der Vegt & Bunderson (2005), Zellmer-Bruhn & Gibson (2006), and Edmondson & Lei (2014), The exchange of ideas, information, and knowledge among learning-oriented employees will result in effective team performance.

Additionally, Table 4 shows that the significance value (P) of the influence of the team psychological safety variable on team performance is *** (***) indicating a highly significant effect). The significance value (P) of the influence of the team psychological safety variable on team performance (***) indicating less than 0.000) is less than 0.05, and the C.R. value is $5.385 > \pm 1.96$. These two values indicate that the influence of team psychological safety on team performance is significant. The magnitude of the influence of team psychological safety on team performance was $(\beta) = 0.649$ or 64.9%, which shows that the team psychological safety variable has a positive and significant effect on team performance. From the results of this analysis, it can be concluded that hypothesis 3 is accepted, which means that in this study, team psychological safety has a positive and significant effect on team performance among employees of the Aceh Ministry of Health Polytechnic. This finding reinforces the results of previous research by May et al. (2004), Salas et al. (2005), and Ayenew et al. (2015), This research concludes that a work team with strong team psychological safety (confidence and support) performs well, thereby improving team performance.

Indirect Influence Test

The results of the indirect influence hypothesis test are listed in Table 6 as follows:

Table 6

Indirect Influence Test

Standardized Indirect Effects (Group number 1 - Default model)

	Team Psychological Safety	Learning Orientation	Team Performance
Learning Orientation	,000	,000	,000
Team Performance	,183	,000	,000

Based on Table 6, it shows that there is an indirect influence of the team psychological safety variable on team performance through learning orientation of 0.183 or 18.3%. Furthermore, the significance of this influence is not directly shown in Figure 4.

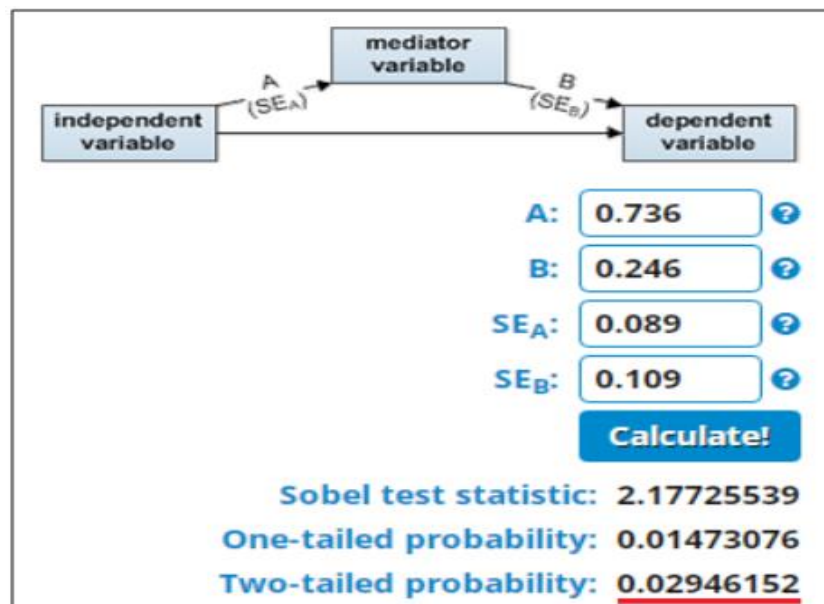


Figure 4. Sobel Test Calculator Results

Based on Figure 4, the significance value of the two-tailed probability (p) variable of Team Psychological Safety on Team Performance through Learning Orientation is 0.029, which is less than 0.05. These results indicate that the indirect influence is significant. Based on the results in Table 5 and Figure 4, it shows that the team psychological safety variable has a positive and significant effect on team performance through learning orientation by 18.3%. Thus, hypothesis 5 is accepted. This means that team psychological safety has a positive and significant effect on team performance through the learning orientation of the Aceh Ministry of Health Polytechnic employees. The results of this study are in line with research conducted by De Jong et al. (2016) and Kim & Connerton (2020), which confirmed that learning orientation can positively and significantly mediate the influence of team psychological safety on team performance. Furthermore, to determine the type of mediation of the learning orientation variable, it can be seen in Table 7.

Table 7
Significance of Direct Influence and Indirect Influence

Variable	Direct Effect	Indirect Effect
Team Psychological Safety → Team Performance	Significant	
Learning Orientation → Team Performance	Significant	
Team Psychological Safety → Learning Orientation → Team Performance		Significant

Table 7 dramatically present that the direct influence of team psychological safety on team performance and learning orientation is significant, and the indirect influence of team psychological safety on team performance through learning orientation is also significant. Thus, it can be concluded that the learning orientation variable in this study exhibits partial mediation.

Moderation Effect Test

Test on the Effect of Psychological Empowerment Moderation on the Effect of Learning Orientation on Team Performance

The results of testing the psychological empowerment moderation model on the effect of learning orientation on team performance are presented in Figure 5.

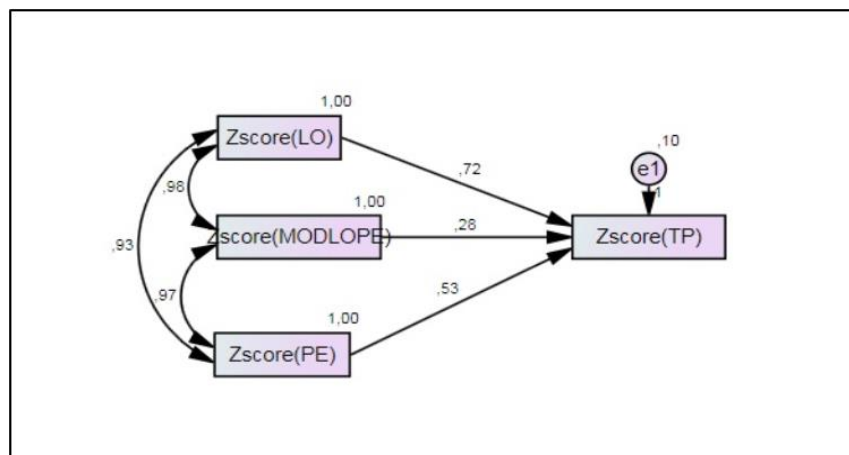


Figure 5. Testing of the Psychological Empowerment Moderation

Interaction Model on the Effect of Learning Orientation on Team Performance.

The estimated output results from the calculation based on Figure 5 are as follows

Table 8
Estimation of Psychological Empowerment Moderation on the Effect of Learning Orientation on Team Performance
Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
ZTP	<---	ZLO	,715	,125	5,702	***
ZTP	<---	ZMODLOPE	,281	,188	2,149	,035
ZTP	<---	ZPE	,529	,100	5,290	***

Table 8 pictures that the significance value (P) of the influence of the interaction moderation variable (ZMODLOPE) on team performance (ZTP) is 0.035, which is less than 0.05, and the C.R. value is $2.149 > \pm 1.96$. These two values indicate that the moderation of psychological empowerment on the influence of learning orientation on team performance is significant. The magnitude of the influence of interaction moderation on proactive behavior was 0.281 or 28.1%. Based on this explanation, it can be concluded that hypothesis 6 is accepted, which means that in this study, psychological empowerment moderation can positively and significantly strengthen the influence of learning orientation on employee team performance at the Aceh Ministry of Health Polytechnic. The results of this study are in line with a study conducted by Jha (2018), which found that employees who are learning-oriented will have better performance if they perceive the support provided by team members as important to the organization (Chughtai & Buckley, 2008).

Based upon the results of the two moderation hypothesis tests as shown in Table 8, it is known that the significance coefficient of the moderation variable (psychological empowerment) on the dependent variable (team performance) is significant, and the significance coefficient of the Mod Inter variable on the dependent variable is also significant. Therefore, it can be concluded that psychological empowerment acts as a quasi-moderator. In quasi moderation, the moderation variable functions as both a direct predictor and an amplifier of the effect of independent variables on dependent variables.

Conclusions, Implications, and Recommendation

This study proves that there is a direct influence of team psychological safety on learning orientation and team performance, as well as the mediating effect of learning orientation on the relationship between team psychological safety and team performance, and the moderating effect of psychological empowerment on the relationship between learning orientation and team performance among employees of the Aceh Ministry of Health Polytechnic. The findings of this study demonstrate that psychological empowerment moderates the influence of learning orientation on employee team performance at the Aceh Ministry of Health Polytechnic. For this reason, management must make every effort to improve learning orientation and psychological empowerment as moderators to enhance employee team performance. This involves building and maintaining a psychologically safe teamwork environment and fostering collaborative efforts among leaders and team members. Leaders are also required to understand the needs of individuals and teams, and to create an environment conducive to learning and development for employees at the Health Polytechnic of the Ministry of Health of Aceh.

Referring to the above research findings, it has confirmed to encourage understanding among academicians and practitioners. In other words, this study has provided a contribution to academic strengthening that there is an existence of psychological empowerment between relationships of learning orientation and team performance.

This research was conducted only at one educational institution within a university, namely the Aceh Ministry of Health Polytechnic. Therefore, future research is expected to broaden its scope by including a more diverse range of research subjects, such as government institutions, private organizations, and other entities. The variables used in this study include

only team psychological safety, learning orientation, and psychological empowerment. Future research can add other variables that also affect team performance.

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