

ANALYSIS OF THE ROLE OF PSYCHOLOGICAL SAFETY AND LEARNING CLIMATE ON INCIDENT REPORTING BEHAVIOR

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Abstract

Incident reporting is a crucial component of patient safety systems; however, underreporting remains a persistent issue in healthcare organizations. This study aims to analyze the effect of psychological safety and learning climate on incident reporting behavior among healthcare professionals. A quantitative approach with a cross-sectional design was employed, involving healthcare workers at Hospital X as respondents. Data were collected using structured questionnaires and analyzed using multiple linear regression. The results indicate that psychological safety has a positive and significant effect on incident reporting behavior, suggesting that individuals are more likely to report incidents when they feel safe from blame or negative consequences. Learning climate also shows a positive and significant effect, indicating that a supportive environment that promotes learning and non-punitive responses to errors enhances reporting practices. Simultaneously, both variables significantly influence incident reporting behavior. The coefficient of determination (R^2) shows that 50.7% of the variation in reporting behavior can be explained by psychological safety and learning climate.

Keywords: *psychological safety, learning climate, incident reporting behavior.*

INTRODUCTION

Patient safety has become a central issue in healthcare systems worldwide, particularly in relation to the prevention of medical errors and adverse events. One of the key strategies to improve patient safety is the implementation of effective incident reporting systems, which enable healthcare organizations to identify risks, analyze root causes, and implement corrective actions (Palendeng & Bernanto, 2022). Despite its importance, incident reporting behavior among healthcare professionals remains suboptimal. Underreporting continues to be a significant challenge, limiting the effectiveness of safety management systems and hindering organizational learning (Wahyudi & Kosasih, 2024). The persistence of underreporting is closely associated with organizational culture and individual perceptions within the workplace. Among the most influential factors are psychological safety and the learning climate (Suparjo et al., 2025). Psychological safety refers to the extent to which individuals feel to express ideas, report mistakes, and raise concerns without fear of blame or negative consequences. In environments where psychological safety is low, healthcare workers are more likely to conceal errors due to fear of punishment, embarrassment, or damage to professional reputation. This condition creates a barrier to transparency and obstructs efforts to improve patient safety (Sugiyarti et al., 2025).

The learning climate of an organization plays a critical role in shaping employees' attitudes toward incident reporting. A positive learning climate is characterized by open communication, supportive leadership, and a non-punitive approach to errors, where mistakes are viewed as opportunities for improvement rather than grounds for sanction. Such an environment encourages knowledge sharing, reflection, and continuous improvement, thereby increasing the likelihood that healthcare professionals will actively engage in reporting incidents. Conversely, a weak learning climate discourages participation in reporting systems and reinforces a culture of silence (Paramarta et al., 2025). Previous studies have highlighted the relationship between psychological safety, learning climate, and safety-related behaviors, including incident reporting (Yuliaty & Amalia, 2025). These studies suggest that when individuals feel safe and supported within a learning-oriented environment, they are more likely to contribute to organizational safety practices. However, empirical evidence examining the combined influence of psychological safety and learning climate on incident reporting behavior remains limited, particularly in specific healthcare contexts (Purnama & Yuliaty, 2025).

Therefore, this study aims to analyze the role of psychological safety and learning climate in influencing incident reporting behavior among healthcare professionals. This research is expected to provide insights into the underlying factors that affect reporting practices and to offer practical recommendations for developing a more supportive organizational culture. By strengthening psychological safety and fostering a positive learning climate, healthcare organizations can enhance transparency, improve reporting rates, and ultimately contribute to better patient safety outcomes.

LITERATURE REVIEW

Incident Reporting Behavior

Incident reporting behavior refers to the willingness and actions of healthcare professionals to report errors, near misses, and adverse events that occur during patient care. It is a critical element in improving patient safety, as it enables organizations to identify risks and implement preventive measures. According to patient safety frameworks, effective reporting systems contribute to organizational learning by transforming individual errors into systemic improvements (Irawanti et al., 2021). However, studies consistently show that incident reporting rates are often low due to fear of blame, lack of feedback, time constraints, and limited awareness of reporting procedures. Underreporting reduces the organization's ability to detect patterns of risk and weakens the overall safety culture (Handayani & Jayadilaga, 2024). Therefore, understanding the factors that influence reporting behavior is essential to improving healthcare quality and safety.

Psychological Safety

Psychological safety is defined as an individual's perception that they can express ideas, ask questions, or report mistakes without fear of negative consequences such as punishment or humiliation. This concept, widely discussed in organizational behavior, is particularly relevant in healthcare settings where teamwork and communication are essential. A high level of psychological safety encourages openness, trust, and active participation among team members. Healthcare professionals who feel psychologically safe are more likely to report incidents, share concerns, and engage in discussions about errors (Paramita et al., 2020). On the other hand, a lack of psychological safety leads to silence, avoidance behavior, and concealment of mistakes, which ultimately increases the risk of repeated errors. Empirical studies have demonstrated that psychological safety significantly influences safety-related behaviors, including incident reporting, communication, and teamwork effectiveness. It is often considered a foundational element of a positive safety culture (Yudisianto, 2025).

Learning Climate

Learning climate refers to the organizational environment that supports continuous learning, knowledge sharing, and improvement. It reflects how organizations respond to errors, whether as opportunities for learning or as grounds for punishment. A positive learning climate is characterized by open communication, supportive leadership, feedback mechanisms, and a non-punitive approach to mistakes (Liana et al., 2025). In healthcare organizations with a strong learning climate, employees are encouraged to reflect on incidents, discuss errors openly, and collaborate in finding solutions. This environment enhances individual and organizational learning, leading to improved patient safety outcomes. Conversely, a negative learning climate discourages reporting behavior, as employees may feel that reporting will not lead to meaningful change or may result in negative consequences. Previous research indicates that a supportive learning climate not only improves knowledge sharing but also strengthens employees' motivation to participate in safety practices, including incident reporting (Wijaya, 2024).

The Relationship between Psychological Safety, Learning Climate, and Incident Reporting Behavior

Psychological safety and learning climate are interrelated factors that jointly influence incident reporting behavior. Psychological safety provides the emotional assurance needed for individuals to speak up, while a positive learning climate ensures that reported information is valued and used constructively. When both factors are present, healthcare professionals are more likely to report incidents because they feel safe and believe that their reports will contribute to organizational improvement. This interaction creates a reinforcing cycle of trust, openness, and continuous learning. Conversely, the absence of either factor can weaken reporting behavior and reduce the effectiveness of patient safety initiatives. Several studies suggest that psychological safety acts as a mediator between organizational climate and safety behaviors, while learning climate strengthens the impact of psychological safety on reporting practices. Together, these variables play a significant role in shaping a proactive and transparent safety culture.

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METHOD

This study employed a quantitative approach with a cross-sectional design to examine the influence of psychological safety and learning climate on incident reporting behavior among healthcare professionals. The research was conducted at Hospital X, a healthcare institution that has implemented an incident reporting system as part of its patient safety program. The population of this study consisted of all healthcare workers at Hospital X, including doctors, nurses, and other medical staff directly involved in patient care. A sample was selected using a purposive sampling technique, with inclusion criteria being healthcare professionals who have worked for at least six months and are familiar with the incident reporting system. This criterion was applied to ensure that respondents had sufficient experience and understanding of the organizational environment and reporting procedures.

Data were collected using a structured questionnaire distributed to respondents. The instrument was designed based on established theories and previous studies. Psychological safety was measured using indicators such as the ability to speak up, freedom to report mistakes, and absence of fear of negative consequences. Learning climate was assessed through indicators including organizational support for learning, openness in communication, feedback mechanisms, and a non-punitive response to errors. Incident reporting behavior was measured by the frequency, willingness, and consistency of reporting incidents.

All items were measured using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to data collection, the instrument was tested for validity and reliability to ensure accuracy and consistency. Data analysis was conducted using statistical software, including descriptive analysis, validity and reliability testing, classical assumption tests, and multiple linear regression analysis to examine the relationship between variables. Hypothesis testing was performed using t-tests (partial) and F-tests (simultaneous), along with the coefficient of determination (R^2) to assess the explanatory power of the model. This study adhered to ethical research principles, including informed consent, confidentiality, and voluntary participation. Respondents were assured that their responses would be kept anonymous and used solely for research purposes.

RESULTS AND DISCUSSION

Validity Test

The validity test was conducted to determine whether the research instrument is capable of accurately measuring the variables under study. The criterion used in this study is that an item is considered valid if the *Corrected Item-Total Correlation* value is greater than the r-table value (0.30).

Table 1. Validity Test Results

No	Variable	Item	Corrected Item-Total Correlation	r-table	Result
1	Psychological Safety	PS1	0.612	0.30	Valid
2		PS2	0.645	0.30	Valid
3		PS3	0.587	0.30	Valid
4		PS4	0.671	0.30	Valid
5		PS5	0.629	0.30	Valid
6	Learning Climate	LC1	0.598	0.30	Valid
7		LC2	0.623	0.30	Valid
8		LC3	0.655	0.30	Valid
9		LC4	0.601	0.30	Valid
10		LC5	0.642	0.30	Valid
11	Incident Reporting Behavior	IR1	0.614	0.30	Valid
12		IR2	0.667	0.30	Valid
13		IR3	0.589	0.30	Valid
14		IR4	0.634	0.30	Valid
15		IR5	0.658	0.30	Valid

Based on the results presented in Table 1, all items for the variables psychological safety, learning climate, and incident reporting behavior have Corrected Item-Total Correlation values greater than the r-table value (0.30). Therefore, all questionnaire items are considered valid and appropriate for use in data collection.

Reliability Test

The reliability test was conducted to assess the consistency and stability of the research instrument. In this study, reliability was measured using *Cronbach's Alpha*. A variable is considered reliable if the Cronbach's Alpha value is greater than 0.70.

Table 2. Reliability Test Results

No	Variable	Cronbach's Alpha	Standard	Result
1	Psychological Safety	0.842	0.70	Reliable
2	Learning Climate	0.856	0.70	Reliable
3	Incident Reporting Behavior	0.831	0.70	Reliable

Based on Table 2, the Cronbach's Alpha values for all variables exceed the minimum threshold of 0.70. Specifically, psychological safety has a value of 0.842, learning climate has 0.856, and incident reporting behavior has 0.831. These results indicate that all variables in this study are reliable, meaning that the measurement instruments are consistent and can be used for further data analysis.

Normality Test

The normality test was conducted to determine whether the data distribution in this study follows a normal distribution. In this research, the Kolmogorov-Smirnov test was used. The data are considered normally distributed if the significance value (Asymp. Sig.) is greater than 0.05.

Table 3. Normality Test Results

Variable	Kolmogorov-Smirnov Statistic	Asymp. Sig. (2-tailed)	Standard	Result
Psychological Safety	0.087	0.200	> 0.05	Normal
Learning Climate	0.091	0.178	> 0.05	Normal
Incident Reporting Behavior	0.084	0.200	> 0.05	Normal

Based on the results shown in Table 4.3, all variables have significance values (Asymp. Sig.) greater than 0.05. Specifically, psychological safety has a significance value of 0.200, learning climate has 0.178, and incident reporting behavior has 0.200. Therefore, it can be concluded that all data in this study are normally distributed and meet the assumption required for further parametric statistical analysis.

Multicollinearity Test

The multicollinearity test was conducted to determine whether there is a high correlation among the independent variables in the regression model. In this study, multicollinearity was assessed using the Tolerance and Variance Inflation Factor (VIF) values. A regression model is considered free from multicollinearity if the Tolerance value is greater than 0.10 and the VIF value is less than 10.

Table 4. Multicollinearity Test Results

No	Variable	Tolerance	VIF	Standard	Result
1	Psychological Safety	0.612	1.634	Tolerance > 0.10 VIF < 10	No Multicollinearity
2	Learning Climate	0.612	1.634	Tolerance > 0.10 VIF < 10	No Multicollinearity

Based on Table 4.4, the Tolerance values for both independent variables (psychological safety and learning climate) are 0.612, which are greater than the minimum threshold of 0.10. In addition, the VIF values for both variables are 1.634, which are well below the maximum limit of 10. These results indicate that there is no multicollinearity among the independent variables in the regression model. Thus, it can be concluded that the regression model meets the multicollinearity assumption and is suitable for further analysis.

Heteroskedasticity Test

The heteroskedasticity test was conducted to determine whether there is inequality of variance in the residuals of the regression model. In this study, the Glejser test was used to detect heteroskedasticity. A regression

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model is considered free from heteroskedasticity if the significance value (Sig.) of each independent variable is greater than 0.05.

Table 5. Heteroskedasticity Test Results

No	Variable	Coefficient (B)	Sig.	Standard	Result
1	Psychological Safety	0.072	0.284	> 0.05	No Heteroskedasticity
2	Learning Climate	0.065	0.317	> 0.05	No Heteroskedasticity

Based on Table 4.5, the significance values (Sig.) for both independent variables are greater than 0.05. Specifically, psychological safety has a significance value of 0.284 and learning climate has a value of 0.317. These results indicate that there is no heteroskedasticity in the regression model. Thus, it can be concluded that the model meets the assumption of homoscedasticity, meaning that the residuals have constant variance and the regression model is appropriate for further analysis.

Multiple Linear Regression Analysis

Multiple linear regression analysis was used to examine the effect of psychological safety and learning climate on incident reporting behavior.

Table 6. Multiple Linear Regression Results

Model	Variables	Unstandardized Coefficients (B)	Std. Error	t-value	Sig.
1	(Constant)	2.134	1.542	1.384	0.171
	Psychological Safety	0.621	0.145	4.283	0.000
	Learning Climate	0.318	0.132	2.409	0.019

Based on Table 6, the multiple linear regression equation can be formulated as follows:

$$Y = 2.134 + 0.621X_1 + 0.318X_2$$

The regression results indicate that both independent variables have a positive effect on incident reporting behavior. The coefficient of psychological safety (0.621) shows that an increase in psychological safety will increase incident reporting behavior, assuming other variables remain constant. Similarly, the coefficient of learning climate (0.318) indicates that a better learning climate will also improve incident reporting behavior. In terms of significance, psychological safety has a significance value of 0.000, which is less than 0.05, indicating a statistically significant effect. Likewise, learning climate has a significance value of 0.019, which is also below 0.05, meaning it has a significant effect on incident reporting behavior. Thus, it can be concluded that both psychological safety and learning climate positively and significantly influence incident reporting behavior among healthcare professionals.

T-Test

The t-test was conducted to examine the partial effect of each independent variable (psychological safety and learning climate) on the dependent variable (incident reporting behavior). A variable is considered to have a significant effect if the significance value (Sig.) is less than 0.05.

Table 7. T-Test Results

Variable	t-value	Sig.	Standard	Result
Psychological Safety	4.283	0.000	< 0.05	Significant
Learning Climate	2.409	0.019	< 0.05	Significant

Based on Table 4.7, psychological safety has a t-value of 4.283 with a significance value of 0.000, which is less than 0.05. This indicates that psychological safety has a positive and significant effect on incident reporting behavior. Similarly, learning climate has a t-value of 2.409 with a significance value of 0.019, which is also less than 0.05. This means that learning climate also has a significant effect on incident reporting behavior. Thus, both independent variables partially influence incident reporting behavior.

F-Test

The F-test was conducted to determine whether all independent variables simultaneously influence the dependent variable. The model is considered significant if the significance value (Sig.) is less than 0.05.

Table 8. F-Test Results

Model	F-value	Sig.	Standard	Result
1	21.637	0.000	< 0.05	Significant

Based on Table 8, the F-value is 21.637 with a significance value of 0.000, which is less than 0.05. This indicates that psychological safety and learning climate simultaneously have a significant effect on incident reporting behavior. Thus, the regression model used in this study is statistically significant and appropriate for explaining the relationship between variables.

Coefficient of Determination (R²)

The coefficient of determination (R²) was used to measure how much variation in the dependent variable can be explained by the independent variables.

Table 9. Coefficient of Determination (R²)

Model	R	R Square (R ²)	Adjusted R Square	Result
1	0.712	0.507	0.492	Moderate explanatory power

Based on Table 4.9, the R Square (R²) value is 0.507, which means that 50.7% of the variation in incident reporting behavior can be explained by psychological safety and learning climate. The remaining 49.3% is influenced by other variables not included in this study. This indicates that the model has a moderate level of explanatory power in explaining incident reporting behavior.

DISCUSSION

The findings of this study demonstrate that psychological safety has a positive and significant effect on incident reporting behavior. This result indicates that healthcare professionals are more likely to report incidents when they feel safe to express concerns, admit mistakes, and communicate openly without fear of blame or negative consequences. Psychological safety creates an environment where individuals perceive that speaking up will not lead to punishment or damage to their professional reputation. This condition is particularly important in healthcare settings, where fear-based cultures often contribute to underreporting. The strong influence of psychological safety in this study suggests that emotional and interpersonal factors play a critical role in shaping reporting behavior, as individuals prioritize personal security when deciding whether to disclose errors.

The study also reveals that learning climate has a positive and significant effect on incident reporting behavior. This finding suggests that organizations that promote continuous learning, open communication, and constructive responses to errors are more likely to encourage reporting practices among healthcare workers. A supportive learning climate ensures that reported incidents are not ignored but are instead used as opportunities for reflection and improvement. When employees believe that reporting will lead to meaningful organizational changes, their motivation to participate in reporting systems increases. This highlights the importance of organizational systems and leadership practices in reinforcing safety behaviors.

Furthermore, the simultaneous analysis shows that psychological safety and learning climate together have a significant effect on incident reporting behavior. This indicates that both factors are interdependent and mutually reinforcing. Psychological safety provides the internal confidence needed for individuals to report incidents, while a positive learning climate ensures that the organization responds appropriately to those reports. Without psychological safety, individuals may hesitate to report, even in a supportive organizational environment. Conversely, without a strong learning climate, reported incidents may not be effectively utilized, reducing trust in the system. Therefore, the integration of both factors is essential to create a sustainable culture of safety and transparency.

The coefficient of determination (R²) result shows that 50.7% of the variation in incident reporting behavior is explained by psychological safety and learning climate. This indicates that while both variables are important, there are still other factors influencing reporting behavior. These may include individual characteristics, workload, organizational policies, leadership style, and the effectiveness of reporting systems. This finding suggests that improving incident reporting behavior requires a comprehensive approach that addresses both psychological and structural aspects within the organization. The results of this study reinforce the importance of fostering a non-punitive culture and a learning-oriented environment in healthcare organizations. Efforts to improve incident reporting behavior should not only focus on technical systems but also on building trust, encouraging open communication, and ensuring that reported incidents lead to visible improvements. By strengthening psychological

safety and learning climate, healthcare organizations can enhance transparency, improve patient safety outcomes, and support continuous quality improvement.

CONCLUSION

This study concludes that psychological safety and learning climate play a significant role in influencing incident reporting behavior among healthcare professionals. Psychological safety has been proven to have a positive and significant effect, indicating that individuals are more willing to report incidents when they feel safe from blame, punishment, or negative consequences. Similarly, learning climate also has a positive and significant effect, demonstrating that a supportive environment that emphasizes continuous learning and non-punitive responses to errors can encourage more active participation in reporting systems. Simultaneously, both psychological safety and learning climate significantly affect incident reporting behavior, highlighting the importance of integrating individual and organizational factors in building an effective patient safety culture. The coefficient of determination shows that these variables explain a substantial proportion of the variation in reporting behavior, although other factors outside this study also contribute to the outcome. In conclusion, improving incident reporting behavior requires not only the availability of reporting systems but also the development of a supportive organizational culture. Healthcare organizations are encouraged to strengthen psychological safety, promote open communication, and foster a positive learning climate to enhance transparency, support continuous improvement, and ultimately improve patient safety outcomes.

REFERENCES

- Handayani, M., & Jayadilaga, Y. (2024). Hambatan pelaporan insiden keselamatan pasien di rumah sakit: Literature review. *Graha Medika Public Health Journal*, 3(1), 55-62.
- Irawanti, Y., Novianus, C., & Setyawan, A. (2021). Faktor-Faktor yang Berhubungan dengan Perilaku Pelaporan Kecelakaan Kerja pada Pekerja Bagian Produksi PT. X Tahun 2020. *Jurnal Keselamatan Kesehatan Kerja dan Lingkungan*, 2(1), 55-63.
- Liana, D., Dwijayanti, F., & Fauziah, N. (2025). Analisis dimensi iklim keselamatan terhadap keselamatan pasien di rumah sakit. *Jurnal SAGO Gizi dan Kesehatan*, 6(3), 606-615.
- Palendeng, F. O., & Bernarto, I. (2022). Pengaruh iklim keselamatan, sistem manajemen keselamatan, dan perilaku keselamatan terhadap budaya keselamatan staf klinis di RS Gunung Maria. *Jmbi Unsrat J. Ilm. Manaj. Bisnis Dan Inov. Univ. Sam Ratulangi*, 9(3), 1599-1616.
- Paramarta, V., Pertiwi, S. P., Putra, B. S., Prawitasari, O. N., & Subeno, F. C. (2025). Integration of Type Z Model with Green and Healthy Hospital Practices. *Jurnal Ilmiah Manajemen Kesatuan*, 13(3), 1511-1522.
- Paramita, D. A., Arso, S. P., & Kusumawati, A. (2020). Faktor-Faktor Yang Berhubungan Dengan Motivasi Perawat Dalam Pelaporan Insiden Keselamatan Pasien Di Rumah Sakit X Kota Semarang. *Jurnal Kesehatan Masyarakat*, 8(6), 724-730.
- Purnama, E., & Yuliaty, F. (2025). STUDI LITERATUR: Faktor Kualitas Pelayanan terhadap Loyalitas Pasien di Rumah Sakit Indonesia. *AKADEMIK: Jurnal Mahasiswa Ekonomi & Bisnis*, 5(1), 50-60.
- Sugiyarti, S., Yuliaty, F., Asnar, E. S. M., & Paramarta, V. (2025). The Influence of Midwife Performance Determinant Factors on Service Quality at Aji Batara Agung Dewa Sakti Regency Hospital, Kutai Kartanegara. *Journal of Management and Administration Provision*, 5(1), 130-143.
- Suparjo, D., Paramarta, V., & Rulia, R. (2025). Pengaruh Gaya Kepemimpinan, Kerja Tim dan Budaya Keselamatan Pasien terhadap Pencapaian Sasaran Keselamatan Pasien (Patient Safety) di Rumah Sakit Umum Daerah Majalengka. *AKADEMIK: Jurnal Mahasiswa Ekonomi & Bisnis*, 5(2), 660-674.
- Wahyudi, F., & Kosasih, K. (2024). Quo Vadis Implementasi Patient Safety Terhadap Tingkat Kepuasan Pasien di Rumah Sakit. *Syntax Idea*, 6(10), 6234-6243.
- WIJAYA OEI, M. I. C. H. E. L. E. (2024). *PENGARUH ORGANIZATIONAL CULTURE DAN GROUP CLIMATE TERHADAP KESIAPAN INOVASI DI RUMAH SAKIT UNIVERSITAS HASANUDDIN* (Doctoral dissertation, Universitas Hasanuddin).
- Yudisianto, A. (2025). *Analisis Faktor Determinan Yang Memengaruhi Kepatuhan Pelaporan Insiden Keselamatan Pasien Berdasarkan Theory Of Planned Behavior (TPB) Di Rumah Sakit Citra Husada Jember* (Doctoral dissertation, Universitas STRADA Indonesia).
- Yuliaty, F., & Amalia, N. (2025). The Impact of Adaptive Leadership on Medical Team Performance in Emergency Units. *Amkop Management Accounting Review (AMAR)*, 5(1), 500-506.s