# The Influence of Safety Compliance on Safety Climate with Safety Culture as a Mediator among Grab Drivers in South Jakarta

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#### ABSTRACT

This study aims to analyze the influence of safety compliance, safety culture and safety climate among Grab drivers in South Jakarta. By gaining an in-depth understanding of these factors, it is expected that more effective safety strategies and programs can be developed to ensure the safety of both drivers and passengers, as well as to enhance security in future online transportation operations. The research employs a quantitative methodology with descriptive and inferential approaches. Data collection was conducted through questionnaires distributed to 98 Grab drivers in the South Jakarta area. The data were analyzed using SmartPLS 3.0 software with the Partial Least Square (PLS) method. The results of the study indicate a significant influence of safety compliance on safety culture, as well as on safety climate. These findings confirm that good safety compliance contributes to the formation of a strong safety culture and overall enhancement of the safety climate. Additionally, it was found that safety culture has a strong positive impact on safety climate.

# **ABSTRAK**

Penelitian ini bertujuan untuk menganalisis pengaruh kepatuhan keselamatan, budaya keselamatan dan iklim keselamatan pada pengemudi Grab di Jakarta Selatan. Dengan memahami secara mendalam faktor-faktor tersebut, diharapkan dapat dikembangkan strategi dan program keselamatan yang lebih efektif untuk menjamin keselamatan pengemudi dan penumpang, serta meningkatkan keamanan dalam operasional transportasi online di masa depan. Penelitian ini menggunakan metodologi kuantitatif dengan pendekatan deskriptif dan inferensial. Pengumpulan data dilakukan melalui kuesioner yang disebarkan kepada 98 driver Grab di wilayah Jakarta Selatan. Data dianalisis menggunakan software SmartPLS 3.0 dengan metode Partial Least Square (PLS). Hasil penelitian menunjukkan adanya pengaruh yang signifikan antara kepatuhan keselamatan terhadap budaya keselamatan, serta iklim keselamatan. Temuan ini menegaskan bahwa kepatuhan keselamatan yang baik berkontribusi terhadap pembentukan budaya keselamatan yang kuat dan peningkatan iklim keselamatan secara keseluruhan. Selain itu, ditemukan bahwa budaya keselamatan mempunyai dampak positif yang kuat terhadap iklim keselamatan.

#### **INTRODUCTION**

South Jakarta is one of the areas with heavy traffic congestion in Jakarta. Grab drivers face various safety challenges such as dealing with chronic traffic jams, accident risks, and potential confrontations with unsafe passengers. Given this situation, it is crucial to understand the factors influencing operational safety in the context of online transportation. These factors

include compliance with safety protocols, safety training, and effective communication regarding safety between drivers and management. A thorough understanding of these factors will aid in developing more effective safety strategies and improving safety for both drivers and passengers. In recent years, the online transportation sector has experienced rapid growth in Indonesia. App-based ride services like Grab have become the primary choice for many city residents, especially in busy areas like South Jakarta. Data shows that in 2024, Indonesia had over 100 million internet users utilizing social media platforms and online services, reflecting high internet penetration that facilitates the growth of online transportation. Although providing convenience and efficiency, these services also face serious safety challenges, particularly in densely populated urban areas like South Jakarta (Kepios, 2024). Based on a survey in Figure 1 conducted by the Indonesian Consumer Community (KKI) in 2019, it was revealed that consumer safety based on the chosen mode of transportation, namely Grab and GoJek, shows that Grab has a lower safety percentage of 45%. This indicates an urgent need to improve safety and security in Grab's operations.

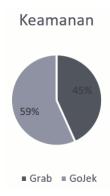


Figure 1. Safety Comparison between GoJek and Grab

(Source: https://www.indotelko.com)

According to data from the Jakarta Central Bureau of Statistics, Figure 1.2 shows the comparison of traffic accident victims based on vehicle type in South Jakarta. In 2018, motorcycles recorded the highest number of fatalities with 375 victims. This number drastically increased to 719 victims in 2021, showing an increase of 344 victims. This condition indicates the low level of driving safety among motorcycle users. Therefore, it is important for online transportation services like Grab Bike to tighten safety compliance among its drivers.



Figure 2. Comparison of Traffic Accident Victims by Vehicle Type in South Jakarta

(Source: https://jakarta.bps.go.id/)

Safety compliance, which is the extent to which Grab drivers adhere to the company's established safety rules and procedures, is a crucial aspect in ensuring daily operational safety. This compliance level not only affects individual driver safety but also impacts the overall safety of the online transportation system in South Jakarta. However, the factors influencing the level of safety compliance among drivers still need further investigation. Safety compliance, which refers to the extent to which Grab drivers adhere to safety rules and procedures, is the main focus of this study. Previous research by Ricci et al. (2022) has shown that safety compliance has a positive relationship with safety climate, with an adjusted R Square from the multivariate regression analysis of 38.3%. This means that approximately 38.3% of the variation in safety climate can be explained by variations in safety compliance after accounting for the number of independent variables in the regression model. In other words, a significant portion of the variation in safety climate can be attributed to safety compliance, indicating a significant relationship between the two. In the study, safety compliance was measured as the level of adherence to safety rules and procedures set by the company among Grab drivers. The evidence supporting the relationship between safety compliance and safety climate is based on survey data from drivers and other organizational members, showing that the higher the level of driver compliance, the more positive the collective perception and attitude towards safety within the organization, reflected in the safety climate.

Additionally, previous research has also highlighted the importance of safety culture in shaping the safety climate. Petitta et al. (2017) found that safety climate has a reciprocal relationship with safety culture, with an adjusted R Square of 0.383. This means that approximately 38.3% of the variation in safety climate can be explained by variations in safety culture after accounting for other variables in the regression model. This implies that safety culture plays a crucial role in shaping collective perceptions and attitudes towards safety (safety climate) within the organization. Safety culture encompasses norms, values, and attitudes related to safety, which can influence adherence to safety rules and procedures. As a mediating variable, safety culture can act as a mediator in the influence of safety compliance on safety climate among online motorcycle drivers. Essentially, safety culture reflects shared values, attitudes, and behaviors regarding safety within an organization. Safety compliance, involving adherence to safety protocols and regulations, directly influences safety culture. As a mediator, a strong safety culture not only increases individual compliance with safety standards but also reinforces the general perception or safety climate among drivers, thereby promoting a safer working environment.

Previous research has demonstrated significant relationships between driver compliance with safety rules, collective safety perceptions, and safety culture within organizations. By understanding the dynamics of these relationships, this study aims to contribute to the development of more effective safety strategies and programs, which can enhance operational safety for drivers and passengers and strengthen security within the online transportation industry in the future, particularly in areas with high online transportation usage like South Jakarta. Therefore, this study aims to explore the relationships between safety compliance, safety culture, and safety climate among Grab drivers in South Jakarta. Through a deeper understanding of these factors, it is hoped that more effective safety strategies and programs can be developed to ensure driver and passenger safety and enhance security in online transportation operations in the future.

#### RESEARCH METHOD

Safety Compliance

According to Clarke and Wark (2006) as cited in Kuswara (2017), Safety compliance is defined as employees' efforts to adhere to safety procedures and rules to prevent workplace accidents. Grab is responsible for ensuring that every operation complies with applicable procedures. Safety compliance encompasses adherence to safety procedures, safe driving compliance, and compliance with traffic safety rules on the road.

## Dimensions of Safety Compliance

Safety compliance consists of two dimensions: safety communication and safety training:

- a. Safety communication dimension represents management commitment and workplace safety programs communicated to employees. Management facilitates planning, implementation, and monitoring of workplace safety programs within the company, followed by open communication between employees and management.
- b. Management commitment to safety training involves providing job-specific safety training and managing safety training for employees.

## Safety Climate

According to Zohar (1980) as initially introduced in Zulfirman and Djunaidi (2021), Safety climate is defined as employees' perceptions of safety policies, procedures, practices, and overall safety priorities and concerns in the workplace. Safety climate is crucial as it reflects Grab drivers' perceptions of the company's commitment to workplace safety. Given the complexity of the online transportation sector and responsibilities in managing traffic risks, safety climate at Grab is fundamental in creating a safe work environment and ensuring drivers' well-being.

## Dimensions of Safety Climate

The dimensions of safety climate based on Zulfirman and Djunaidi (2021) following Kines et al. (2011), known as The Nordic Occupational Safety Climate Questionnaire (NOSACQ-50), include:

- a. Management Safety Priority and Ability: Perceptions of workers regarding the extent to which management prioritizes safety in the workplace.
- b. Management Safety Empowerment: Assessment of how employees perceive management efforts to enhance workers' safety competencies.
- c. Management Safety Justice: Evaluation of employees' perceptions of management actions concerning safety, including responses to workplace accidents.
- d. Worker's Safety Commitment: Evaluation of employees' attitudes and commitment towards workplace safety.
- e. Worker Safety Priority and Risk Non-Acceptance: Assessment of employees' perceptions of prioritizing safety aspects before performing their tasks.
- f. Peer Safety Communication, Learning, and Trust Safety Ability: Evaluation of employees' perceptions of peer cooperation in safety communication and learning.
- g. Worker's Trust in Efficacy of Safety System: Assessment of employees' perceptions of the effectiveness of the safety management system implemented by their organization.

#### Safety Culture

According to Cooper (2002) as cited in Kuswara (2017), Safety culture is defined as part of Corporate Culture that encompasses individuals, work, and organizations capable of creating and influencing safety. In the context of Grab, safety culture is part of Corporate Culture that includes individuals, work, and organizations capable of creating and influencing safety. Safety culture is not only reflected in individual actions towards safety procedures but also in how these values are applied to every aspect of Grab's operations and tasks. This may involve

implementing safety protocols at every service stage, using Personal Protective Equipment (PPE), and actively participating in safety training programs. Neal and Griffin (2006) found that a strong safety culture enhances motivation and safety behaviors, ultimately reducing accidents.

## Dimensions of Safety Culture

The dimensions of safety culture in this study are based on research conducted by Kuswara, W. (2017) titled "Analysis of the Influence of Transformational Leadership on Safety Compliance with Safety Culture as an Intervening Variable at PT. Pertamina (Persero)-MOR V". The researchers modified and adapted the dimensions as follows:

- a. Safety Driving
- b. Work Permit
- c. Workplace Hazard Prevention
- d. Prohibited entry into closed areas without permission (Prohibited loitering or entering specific areas)
- e. Use appropriate Personal Protective Equipment (PPE) such as helmets, jackets, shoes
- f. Inspection and Maintenance

## Research Framework

Data analysis in this study is conducted descriptively and inferentially, aiming to process, present, understand, and analyze research findings. All data from the questionnaire will be processed and interpreted, then presented in tables to facilitate readers in understanding the data presented. The software used for data analysis is SmartPLS 3.0 using the Partial Least Squares (PLS) method. Partial Least Squares (PLS) was first developed by Herman Wold (1982). Sampling in this study used the Cochran formula as follows:

$$n = \frac{z^2 pq}{e^2}$$

Where:

n = Required sample size

Z = Value on the normal curve for a 5% deviation, with a value of 1.96

p = True probability 50% = 0.5

q = False probability 50% = 0.5

e = Sampling error rate of 10%

Therefore, we can determine the required sample size to be:

$$n = \frac{(1,96)^2 \cdot 0,5.0,5}{0,1^2}$$

$$n = \frac{3,8416 \cdot 0,25}{0.01}$$

$$n = \frac{0,9604}{0,01}$$

$$n = 96,04$$

Based on the Cochran formula above, the calculated sample size is 96,04 (rounded up to 98) for online motorcycle taxi drivers in South Jakarta

Measurement Model Testing (Outer Model)

## a. Validity Testing

## 1. Convergent Validity

Convergent validity measures the extent to which a latent variable (construct) is reflected by its indicators. Convergent validity is assessed based on the strength of the relationship between item scores or composite scores and the constructed score calculated by Partial Least Squares (PLS). Convergent validity is considered high if the correlation is greater than 0.60 with the construct being measured. Additionally, convergent validity can be verified by checking the Average Variance Extracted (AVE). AVE values exceeding 0.5 indicate good convergent validity criteria for the indicators.

## 2. Discriminant Validity

A method to assess the validity of a concept is by evaluating cross-loading factors. This is useful to determine whether the concept has adequate discrimination, where the loading value on the intended concept should be higher than the loading value with other concepts.

## b. Reliability Testing

Besides conducting construct validity testing, reliability evaluation of constructs is also performed using composite reliability and Cronbach's alpha methods for each group of indicators measuring the construct. A construct is considered reliable if it has composite reliability and Cronbach's alpha values exceeding 0.70. These values indicate the internal consistency level of the measured construct, with higher values indicating greater reliability.

#### Structural Model Testing (Inner Model)

Testing in the structural model examines dependent variables and path coefficient values for independent variables, referencing R-Square, and assessing significance based on t-statistic values for each path.

#### a. R Square

R Square is a determination measure in the endogenous model, indicating the extent of influence of independent variables on dependent variables. R Square values range from 0 to 1, where values closer to one indicate better performance. There are three categories of R Square values: strong, moderate, and weak. An R Square value of 0.67 is considered strong, 0.33 moderate, and 0.19 weak. Additionally, the coefficient of determination (R-square adjusted) is useful for measuring the extent of influence from independent latent variables on dependent latent variables and whether the impact is substantial.

## b. F Square (f2)

To evaluate whether the influence of exogenous latent variables on endogenous latent variables has a significant impact, the effect size f2 is used. Cohen (1988) recommends an expected effect size f2 value greater than 0.15, indicating that exogenous latent

variables have a moderate impact at the structural level. The f2 value can be used to assess whether the influence of specific independent latent variables on dependent latent variables has a significant impact.

## Hypothesis Testing

Based on research conducted by Kuswara, W. (2017), Hypothesis Testing is conducted by comparing the value (P Value) based on the significance level set at 0.05. If the significance level is smaller than the P value, the hypothesis is rejected. Meanwhile, statistical value testing is used to test the significance located in the structural model. The T-statistic value will be considered significant if its value is greater than 1.985.

#### **RESULTS AND DISCUSSION**

Measurement Model Testing (Outer Model)

## 1. Convergent Validity Testing

Table 1. Convergent Validity

T(	Table 1. Convergent variaty					
Item	Safety Climate (Y)	Safety Compliance (X)	Safety Culture (Z)	Remark		
SC1		0,87				
SC2		0,89				
SC3		0,93				
SC4		0,93				
SC5		0,96				
SC6		0,94				
SC7		0,95				
SC8		0,94				
SCL1	0,92					
SCL10	0,88					
SCL11	0,92					
SCL12	0,94					
SCL13	0,92					
SCL14	0,92					
SCL15	0,92					
SCL16	0,85					
SCL17	0,74					
SCL18	0,89					
SCL19	0,89					
SCL2	0,93					
SCL20	0,92					
SCL21	0,92					
SCL22	0,92			1		
SCL23	0,92			1		
SCL24	0,89			1		
SCL3	0,89			VALID		

Item	Safety Climate (Y)	Safety Compliance (X)	Safety Culture (Z)	Remark
SCL4	0,88			
SCL5	0,80			
SCL6	0,90			
SCL7	0,91			
SCL8	0,85			
SCL9	0,90			
SCU1			0,95	
SCU10			0,95	
SCU11			0,95	
SCU12			0,93	
SCU2			0,90	
SCU3			0,94	
SCU4			0,94	
SCU5			0,94	
SCU6			0,94	
SCU7			0,94	
SCU8			0,94	
SCU9			0,95	

From Table 1, an indicator is considered high if it has a correlation above 0.60 with the construct being measured. All indicators in the results have correlations above 0.6, allowing for further testing.

Table 2. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)
Safety Climate (Y)	0,801
Safety Compliance (X)	0,859
Safety Culture (Z)	0,884

Additionally, the AVE values are significantly greater than 0.5, indicating good convergent validity for these indicators.

# 2. Discriminant Validity Testing

**Table 3. Discriminant Validity** 

Item	Safety Climate (Y)	Safety Compliance (X)	Safety Culture (Z)	Remark
SC1	0,82	0,87	0,78	
SC2	0,83	0,89	0,78	
SC3	0,87	0,93	0,81	
SC4	0,87	0,93	0,85	
SC5	0,90	0,96	0,91	
SC6	0,89	0,94	0,88	
SC7	0,91	0,95	0,90	
SC8	0,93	0,94	0,92	
SCL1	0,92	0,89	0,94	

Item	Safety Climate (Y)	Safety Compliance (X)	Safety Culture (Z)	Remark
SCL10	0,88	0,81	0,82	Valid
SCL11	0,92	0,86	0,92	
SCL12	0,94	0,90	0,92	
SCL13	0,92	0,86	0,88	
SCL14	0,92	0,88	0,86	
SCL15	0,92	0,86	0,91	
SCL16	0,85	0,81	0,87	
SCL17	0,74	0,68	0,74	
SCL18	0,89	0,84	0,83	
SCL19	0,89	0,85	0,87	
SCL2	0,93	0,90	0,90	
SCL20	0,92	0,89	0,90	
SCL21	0,92	0,89	0,90	
SCL22	0,92	0,87	0,88	
SCL23	0,92	0,88	0,90	
SCL24	0,89	0,86	0,89	
SCL3	0,89	0,85	0,82	
SCL4	0,88	0,83	0,80	
SCL5	0,80	0,76	0,72	
SCL6	0,90	0,85	0,85	
SCL7	0,91	0,86	0,87	
SCL8	0,85	0,79	0,76	
SCL9	0,90	0,86	0,83	
SCU1	0,90	0,86	0,95	
SCU10	0,92	0,89	0,95	
SCU11	0,92	0,89	0,95	
SCU12	0,89	0,86	0,93	
SCU2	0,86	0,81	0,90	
SCU3	0,90	0,86	0,94	
SCU4	0,91	0,91	0,94	
SCU5	0,90	0,87	0,94	
SCU6	0,89	0,85	0,94	
SCU7	0,93	0,90	0,94	
SCU8	0,89	0,84	0,94	
SCU9	0,91	0,86	0,95	

Cross-loading factors are useful indicators in assessing whether a construct has adequate discrimination. This measurement is obtained by comparing loading values on the specific construct with loading values on other constructs. If the loading value on the specific construct exceeds the loading value on other constructs, it can be concluded that the construct has adequate discrimination. This can be observed from Table 3 where the loading on specific constructs has higher values compared to loading on other constructs.

# 3. Reliability Testing

**Table 4. Reliability Testing** 

Variable	Cronbach's Alpha	Composite Reliability	Remark
Safety Climate (Y)	0,98	0,99	
Safety Compliance (X)	0,97	0,97	Reliable
Safety Culture (Z	0,98	0,98	

Based on Table 4, all constructs have composite reliability and Cronbach's alpha values above 0.70, indicating good reliability.

Structural Model Testing (Inner Model)

# 1. R Square

Table 5. R Square

Variable	R Square	Adjusted R Square
Safety Climate (Y)	0,9478	0,9467
Safety Culture (Z)	0,8493	0,8477

From Table 5, the adjusted R square of 0.8477 indicates that approximately 84% of the variation in the mediation variable (Safety Culture) can be explained by the independent variable (Safety Compliance), while the remaining variation is explained by other factors not included in the model. Additionally, an adjusted R square of 0.9452 shows that approximately 94% of the variation in the dependent variable (Safety Climate) can be explained by the independent variable (Safety Compliance) and the mediating variable (Safety Culture).

# 2. *F Square (f2)*

Table 6. F Square

Variable	Safety Climate (Y)	Safety Culture (Z)
Safety Compliance (X)	0,5180	5,6342
Safety Culture (Z)	0,9362	

From Table 6, all constructs have f2 values above 0.15, indicating they have a moderate impact at the structural level

#### 3. Model Fit

Table 7. Model Fit

	Saturated Model	Estimated Model
SRMR	0,04	0,04
d_ULS	1,72	1,72
d_G	11,18	11,18
Chi-Square	3527,74	3527,74
NFI	0,66	0,66

The model evaluation results show that both the saturated model and the estimated model have the same values for each evaluation metric. This indicates that the estimated model accurately reproduces the saturated model and has a very good fit with the observed data. The low SRMR value (0.04) indicates a good fit of the model with the data, while the identical d\_ULS and d\_G values indicate no difference between the saturated and estimated models in terms of model fit. Furthermore, the identical Chi-Square values indicate no significant difference

between the saturated and estimated models, and the relatively low NFI (0.66) suggests some issues in model fit with the data. Although the estimated model adequately reproduces the saturated model, there is still potential to improve the model's fit with the observed data.

# Hypothesis Testing

# 1. Direct Effects Testing

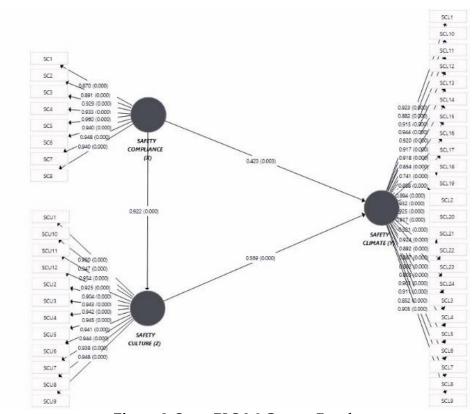


Figure 3. SmartPLS 3.0 Output Results

## **Table 8. Direct Effects**

Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Safety Compliance $(X) \rightarrow$ Safety Climate $(Y)$	0,4235	0,4227	0,1400	3,0255	0,0032
Safety Compliance $(X) \rightarrow$ Safety Culture $(Z)$	0,9215	0,9178	0,0258	35,6505	0,0000
Safety Culture $(Z) \rightarrow$ Safety Climate $(Y)$	0,5562	0,5694	0,1405	4,0533	0,0001

## Regression Equation:

- a. Safety Climate = 0.4235 Safety Compliance
- b. Safety Climate = 0.9215 Safety Compliance + 0.5562 Safety Culture

# Interpretation:

- a. Safety Compliance has a significant positive direct effect on Safety Climate. This means that an increase of 1 point in Safety Compliance will increase Safety Climate by 0.4235, assuming other variables remain constant. This result is supported by a t-statistic of 3.0255, which exceeds the t-table value (1.98), and a p-value of 0.0032, which is less than the significance level (0.05).
- b. Safety Compliance has a significant positive direct effect on Safety Culture. This means that an increase of 1 point in Safety Compliance will increase Safety Culture by 0.9215, assuming other variables remain constant. This result is supported by a t-statistic of 35.6505, which is much higher than the t-table value (1.98), and a p-value of 0.0000, which is much less than the significance level (0.05).
- c. Safety Culture has a significant positive direct effect on Safety Climate. This means that an increase of 1 point in Safety Culture will increase Safety Climate by 0.5562, assuming other variables remain constant. This result is supported by a t-statistic of 4.0533, which exceeds the t-table value (1.98), and a p-value of 0.0001, which is less than the significance level (0.05).

## 2. Indirect Effects Testing

**Table 9. Indirect Effects** 

Variable	Original	Sample	Standard	T	P
	Sample	Mean	Deviation	Statistics	Values
Safety Compliance $(X) \rightarrow$ Safety Culture $(Z) \rightarrow$ Safety Climate $(Y)$	0,5247	0,5209	0,1233	4,2564	0,0000

Interpretation: Safety Compliance has a significant positive indirect effect on Safety Climate through Safety Culture. This means that an increase of 1 point in Safety Compliance will indirectly increase Safety Climate by 0.5247 through Safety Culture, assuming other variables remain constant. This result is supported by a t-statistic of 4.2564, which exceeds the t-table value (1.98), and a p-value of 0.0000, which is much less than the significance level (0.05).

## 3. Total Effect

Table 10. Total Effect

Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Safety Compliance $(X) \rightarrow$ Safety Climate $(Y)$	0,948	0,945	0,024	39,576	0,000
Safety Compliance $(X) \rightarrow$ Safety Culture $(Z)$	0,922	0,922	0,025	37,094	0,000
Safety Culture (Z) $\rightarrow$ Safety Climate (Y)	0,569	0,588	0,146	3,891	0,000

Interpretation: Safety Compliance has a significant positive indirect effect on Safety Climate through Safety Culture. This means that an increase of 1 point in Safety Compliance will indirectly increase Safety Climate by  $0.569 \times 0.922 = 0.5247$ , assuming other variables remain constant. This result is supported by a t-statistic of 3.891, which exceeds the t-table value (1.98), and a p-value of 0.000, which is less than the significance level (0.05.

Discussion

The first hypothesis of this study found that Safety Compliance has a significant positive influence on Safety Climate. The analysis indicates that each increase of one point in Safety Compliance results in a 0.4235 increase in Safety Climate, supported by a t-statistic of 3.0255 — exceeding the t-table (1.96) — and a p-value of 0.0032, smaller than alpha (0.05). Increasing Safety Compliance values demonstrate organizational commitment to better safety practices, indirectly motivating employees to adopt and support safety behaviors, thereby creating a safer work environment and enhancing overall safety awareness. This conclusion aligns with findings from Avanzi et al. (2018), which suggest that improvements in Safety Compliance contribute to the formation of a stronger Safety Climate.

The second hypothesis of this study found that Safety Compliance influences Safety Culture. Safety Compliance has a significant positive direct impact on Safety Culture. In other words, an increase of one point in Safety Compliance will increase Safety Culture by 0.9215, assuming other variables remain constant. This finding is reinforced by a t-statistic of 35.6505, far exceeding the t-Table (1.96), and a p-value of 0.000, much smaller than alpha (0.05), indicating that hypothesis H2 is supported. The significant positive impact of Safety Compliance on Safety Culture indicates that enhancing compliance with safety standards and procedures can directly strengthen the safety values and norms embedded in the organizational culture. This factor is critical as a strong Safety Culture reflects how safety values become integral to daily behaviors in the workplace, thereby enhancing overall safety. This finding is consistent with research by Kuswara, W. (2017), indicating a positive correlation between Safety Compliance and Safety Culture, with strong Safety Compliance reinforcing Safety Culture.

The third hypothesis of this study found that Safety Culture has a strong positive impact on Safety Climate. This means that each increase of one point in Safety Culture will result in a 0.5562 increase in Safety Climate, assuming other variables remain constant. This is supported by a t-statistic of 4.0533, which exceeds the t Table (1.96), and a p-value of 0.0001, smaller than alpha (0.05). Therefore, hypothesis H3 is accepted. This finding emphasizes the importance of building a positive safety culture where safety values and norms are internalized in employees' daily behaviors, ultimately shaping a safety climate that supports workplace safety and well-being. This hypothesis is consistent with the findings of Restuputri (2021), which also affirm that Safety Culture has a positive influence on Safety Climate. Thus, developing a positive Safety Culture is crucial for creating a Safety Climate that supports workplace safety and well-being.

The fourth hypothesis of this study found that Safety Compliance influences Safety Climate through Safety Culture. Safety Compliance indirectly has a significant positive impact on Safety Climate through Safety Culture. This means that a one-point increase in Safety Compliance indirectly increases Safety Climate by 0.5247 through Safety Culture, assuming other variables remain constant. This finding is supported by a t-statistic of 4.2564, exceeding the t-Table (1.96), and a p-value of 0.0000, much smaller than alpha (0.05), indicating that the fourth hypothesis is accepted. Improvements in compliance with safety standards not only directly affect safety climate but also strengthen Safety Culture. This indicates that when organizations enhance compliance with safety protocols, they reinforce safety values and behaviors ingrained in the organizational culture, ultimately leading to increased overall safety perceptions among employees. Thus, it can be concluded that by improving Safety Compliance, Safety Culture is also strengthened, which in turn enhances Safety Climate.

#### **CONCLUSION**

This study aimed to investigate the influence of Safety Compliance on Safety Climate with Safety Culture as a mediator. It employed a quantitative approach by distributing an online questionnaire to assess the impact of Safety Compliance on Safety Climate through Safety Culture among Grab drivers in South Jakarta. The results showed that Safety Compliance has a

significant positive influence on both Safety Climate and Safety Culture. Furthermore, Safety Culture was found to mediate the positive relationship between Safety Compliance and Safety Climate. Model analysis indicates that approximately 94.67% of the variation in Safety Climate and 84.77% in Safety Culture can be explained by this model, demonstrating strong predictive power and validity of the variable relationships under study. Based on these findings, it is recommended that ride-sharing companies like Grab intensify training programs focusing on enhancing Safety Compliance and building a strong Safety Culture among drivers. It is also important to periodically evaluate and adjust safety policies to ensure they remain relevant and effective in addressing changes in operational conditions and new challenges. Additionally, developing efficient feedback mechanisms between drivers and management can aid in quickly identifying and addressing safety issues, thereby proactively enhancing Safety Climate in the workplace.

#### **REFERENCE**

- Afrizal, D., Erlianti, D., Hijeriah, E. M., Hafrida, L., Erinaldi, E., & Sofyan, S. (2024). Public Services: A Satisfaction Survey of Dumai City Hospital Services. Golden Ratio of Data in Summary, 4(2), 174-179.
- Ajmal, M., Isha, A. S. N., Nordin, S. M., & Al-Mekhlafi, A. B. A. (2022). Safety-management practices and the occurrence of occupational accidents: Assessing the mediating role of safety compliance. Sustainability, 14(8), 4569.
- Arzahan, I. S. N., Ismail, Z., & Yasin, S. M. (2022). Safety culture, safety climate, and safety performance in healthcare facilities: a systematic review. Safety science, 147, 105624.
- Audina, M., Yunus, R., Parinding, K. A., & Nasruddin, M. A. (2024). The Role of Micro, Small, and Medium Enterprises in Improving Community Welfare. Golden Ratio of Data in Summary, 4(1), 81-89.
- Avanzi, L., Savadori, L., & Fraccaroli, F. (2018). Unraveling the organizational mechanism at the root of safety compliance in an Italian manufacturing firm. International Journal of Occupational Safety and Ergonomics.
- Bayutama, G. W., & Partiwi, S. G. (2018). Effect of safety climate relationship, and organizational culture on compliance regulation safety rules. IPTEK Journal of Proceedings Series, (3), 55-60
- Chandeny, A. (2023). Gambaran Iklim Keselamatan (Safety Climate) Dengan Nosacq 50 Pada PT. Pertamina (Persero) Fuel Terminal Jambi Tahun 2023 (Doctoral dissertation, Universitas Jambi).
- Curcuruto, M., Griffin, M. A., Kandola, R., & Morgan, J. I. (2018). Multilevel safety climate in the UK rail industry: A cross validation of the Zohar and Luria MSC scale. Safety science, 110, 183-194.
- Ghozali, I., & Latan, H. (2012). Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan rogram SmartPLS 2.0 M3. Semarang: Badan Penerbit Universitas Diponegoro.
- Griffin, M. A., & Curcuruto, M. (2016). Safety climate in organizations. Annual review of organizational psychology and organizational behavior, 3, 191-212.
- Kalteh, H. O., Salesi, M., & Mokarami, H. (2022). The mediator role of safety motivation and knowledge between safety culture and safety performance: The results of a sociotechnical and macroergonomics approach. Work, 72(2), 707-717.
- Kepios. (2024). Digital 2024: Indonesia. DataReportal. https://datareportal.com/reports/digital-2024-indonesia

- Kuswara, W. (2017). Analisa Pengaruh Gaya Kepemimpinan Transformasional Pada Safety Compliance Dengan Safety Culture Sebagai Variable Intervening Di PT. Pertamina (persero)-MOR V (Doctoral dissertation, Universitas Airlangga).
- Luo, T. (2020). Safety climate: Current status of the research and future prospects. Journal of safety science and resilience, 1(2), 106-119.
- Mai, N. X., Hoang, L. N., & Nguyen-Phuoc, D. Q. (2023). Factors influencing safety compliance behavior among food delivery riders—an application of safety climate model. Tạp chí Khoa học và Công nghệ-Đại học Đà Nẵng, 14-18.
- Mohammadfam, I., Mahdinia, M., Aliabadi, M. M., & Soltanian, A. R. (2022). Effect of safety climate on safety behavior and occupational injuries: A systematic review study. Safety science, 156, 105917.
- Neal, A., & Griffin, M. A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. Journal of Applied Psychology, 91(4), 946-953.
- Newaz, M. T., Davis, P. R., Jefferies, M., & Pillay, M. (2018). Developing a safety climate factor model in construction research and practice: A systematic review identifying future directions for research. Engineering, construction and architectural management, 25(6), 738-757.
- Newaz, M. T., Davis, P., Jefferies, M., & Pillay, M. (2019). The psychological contract: A missing link between safety climate and safety behaviour on construction sites. Safety science, 112, 9-17.
- Newaz, M. T., Davis, P., Jefferies, M., & Pillay, M. (2019). Using a psychological contract of safety to predict safety climate on construction sites. Journal of safety research, 68, 9-19.
- Parulian, E., Yusdiana, Y., & Syarif, S. H. (2024). Determining Consumer Preferences In Choosing Low Budget Accommodation Services In Medan City With Choice-Based Conjoint (CBC) Analysis. Golden Ratio of Data in Summary, 4(2), 290-294.
- Petitta, L., Probst, T. M., Barbaranelli, C., & Ghezzi, V. (2017). Disentangling the roles of safety climate and safety culture: Multi-level effects on the relationship between supervisor enforcement and safety compliance. Accident Analysis & Prevention, 99, 77-89.
- Ramadhan, Abrar Fajar, and Dinda Amanda Zuliestiana. "Analisis Pemanfaatan Youtube Sebagai Social Media Marketing Go-Jek Dalam Mempengaruhi Minat Beli Dan Loyalitas Terhadap Brand." Jurnal Mitra Manajemen 3.5 (2019): 628-637.
- Restuputri, D. P., Giraldi, M. S., Dewi, S. K., Masudin, I., & Yuliati, U. (2021). Relationship Between Safety Culture and the Safety Climate, Safety Behavior and Safety Management. Majalah Ilmiah Pengkajian Industri; Journal of Industrial Research and Innovation, 15(2), 105-114.
- Ricci, F., Panari, C., & Pelosi, A. (2022). Safety compliance in a sample of Italian mechanical companies: The role of knowledge and safety climate. European journal of investigation in health, psychology and education, 12(3), 281-294.
- Russell, D. W., Russell, C. A., & Lei, Z. (2022). Development and testing of a tool to measure the organizational safety climate aboard US Navy ships. Journal of safety research, 80, 293-301.
- Setiono, B. A., Brahmasari, I. A., & Mujanah, S. (2018). Effect of safety culture, safety leadership, and safety climate on employee commitments and employee performance PT. Pelindo III (persero) east Java province. Sebelas Maret Business Review, 3(1), 6-10.
- Shen, Y., Ju, C., Koh, T. Y., Rowlinson, S., & Bridge, A. J. (2017). The impact of transformational leadership on safety climate and individual safety behavior on construction sites. International journal of environmental research and public health, 14(1), 45.
- Sihombing, P. R., & Arsani, A. M. (2022). Aplikasi SmartPLS Untuk Statistisi Pemula.

- Singh, S., Bahl, A., & Mann, G. S. (2021). Influence of Positive Safety Climate for Worker's Occupational Safety. Journal of Emerging Technologies and Innovative Research, 8(6), 1-6.
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta, Bandung
- Zulfirman, D. E., & Djunaidi, Z. (2021). Analisis Iklim Keselamatan Kerja Di Pt. Xyz Balikpapan 2021. Prepotif: Jurnal Kesehatan Masyarakat, 5(2), 1303-1309.