

VIEW OF INFLUENCE OF SAFETY PROMOTION ON WORK SAFETY FOR TENANT PERSONNEL IN TERMINAL AREA OF MINANGKABAU INTERNATIONAL AIRPORT

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ABSTRACT

Occupational safety is a critical component in aviation operations due to the complex and high-risk nature of airport environments. Airports are characterized by dynamic operational processes involving multiple stakeholders such as airlines, ground handling companies, airport authorities, and commercial tenants. In this context, safety promotion programs play an essential role in strengthening safety awareness and reducing workplace accidents. This study aims to analyze the influence of safety promotion on work safety among tenant personnel operating in the terminal area of Minangkabau International Airport. The research applies a quantitative explanatory approach using survey data collected from tenant personnel working in retail, service, and operational support units. The data were analyzed using multiple regression to evaluate the relationship between safety promotion variables and work safety outcomes. The results show that safety promotion significantly influences employees' safety awareness, safety compliance, and overall workplace safety performance. Continuous safety communication, training, and visual safety campaigns contribute to strengthening safety culture among personnel. These findings highlight the importance of implementing structured safety promotion strategies within airport environments to enhance occupational safety and operational reliability.

Keywords: *safety promotion, occupational safety, airport operations, safety culture, aviation safety*

INTRODUCTION

The aviation industry is recognized as one of the most safety-sensitive sectors in the world. The complexity of airport operations requires strict safety management systems to prevent accidents and ensure operational reliability. Airports involve interactions between numerous stakeholders including airport operators, airlines, ground handling services, cargo operators, security personnel, and commercial tenants operating within terminal areas. These interactions create a working environment with diverse safety risks such as equipment hazards, passenger congestion, fire risks, and human error. Occupational safety management has therefore become an essential component of aviation operations. A strong safety management system is necessary not only to ensure flight safety but also to protect workers and passengers in airport facilities. Safety management in aviation commonly emphasizes the development of safety culture, safety communication, hazard identification, and risk mitigation practices among employees. Studies have shown that a positive safety culture significantly reduces accident rates and improves organizational performance in aviation operations.

Safety culture refers to the collective values, attitudes, perceptions, competencies, and behaviors that determine the commitment of individuals and organizations to safety management. In aviation environments, safety culture is considered the foundation of effective safety management systems. A mature safety culture encourages employees to prioritize safety, comply with safety procedures, and actively participate in hazard reporting and risk management activities. One of the key strategies used to strengthen safety culture is safety

promotion. Safety promotion includes various activities such as safety training, safety campaigns, safety briefings, safety communication programs, and dissemination of safety information. These activities aim to increase workers' knowledge, awareness, and commitment toward workplace safety. Effective safety promotion programs also encourage proactive safety behavior among employees and reduce unsafe practices in operational environments.

Research in the aviation sector indicates that safety culture and safety promotion significantly influence safety behavior among airport workers. For example, studies on aviation workers found that occupational safety culture components such as safety procedures, communication, and worker involvement are strongly associated with safety behavior and accident prevention. Similarly, studies examining aviation organizations highlight that improving safety culture through communication and management commitment can strengthen safety practices and reduce operational risks.

Despite the importance of safety promotion in aviation environments, research focusing specifically on tenant personnel working in airport terminal areas remains limited. Tenant personnel include employees working in retail stores, restaurants, service counters, and other commercial facilities located inside airport terminals. Although these personnel do not directly participate in flight operations, their activities still contribute to the overall safety environment of the airport. The terminal area is one of the busiest zones in an airport and involves high interaction between passengers, staff, and operational systems. Consequently, tenant personnel must also comply with safety regulations and participate in safety promotion programs conducted by airport authorities. This study therefore aims to analyze the influence of safety promotion on work safety among tenant personnel in the terminal area of Minangkabau International Airport. The research seeks to contribute to the understanding of how safety promotion strategies affect workplace safety behavior and safety performance among non-operational airport workers.

LITERATURE REVIEW

1. Occupational Safety in Aviation

Occupational safety is defined as a systematic effort to ensure that workers are protected from hazards that may arise during work activities. According to James Reason (1997), workplace accidents are often the result of a combination of organizational failures, unsafe actions, and inadequate safety management systems. Therefore, organizations must implement comprehensive safety management practices to prevent incidents and protect workers. In the aviation industry, occupational safety is particularly critical due to the complex operational environment and the high level of risk involved in airport activities. Airports function as integrated systems that involve multiple stakeholders including airlines, ground handling operators, airport authorities, security services, and commercial tenants. The interaction between these stakeholders creates a dynamic environment that requires strict safety procedures and strong coordination (ICAO, 2018).

Research conducted by Dominic Cooper (2018) emphasizes that effective occupational safety management can significantly reduce workplace accidents and improve operational efficiency. In aviation environments, occupational safety practices include hazard identification, risk assessment, safety training, and incident reporting mechanisms. Furthermore, the International Civil Aviation Organization highlights that aviation organizations must implement structured safety management systems that integrate safety policy, safety risk management, safety assurance, and safety promotion in order to maintain safe operations (ICAO, 2020). These elements are essential for preventing accidents and ensuring that employees understand their safety responsibilities. Studies in airport environments have also demonstrated that employees' perceptions of workplace safety

influence their behavior and compliance with safety procedures. Workers who perceive strong safety management support from their organization tend to exhibit higher levels of safety awareness and compliance with safety regulations (Neal & Griffin, 2006; Christian et al., 2009)

2. Safety Promotion

Safety promotion is one of the four core components of Safety Management Systems that focuses on developing safety awareness, competence, and motivation among employees. According to International Civil Aviation Organization (2018), safety promotion involves the systematic dissemination of safety information and the implementation of safety training programs to ensure that all personnel understand safety policies and procedures. Safety promotion activities generally include safety training, safety briefings, safety campaigns, safety workshops, safety posters, and internal communication regarding safety issues. These initiatives aim to encourage workers to actively participate in safety management and adopt safe working behaviors. Research conducted by Vinodkumar and Bhasi (2011) found that safety training and safety communication have a significant influence on employees' safety knowledge and safety compliance. Workers who receive regular safety training are more likely to follow safety procedures and avoid unsafe practices.

Similarly, Clarke (2013) explains that leadership involvement in safety promotion programs significantly affects workers' attitudes toward safety. When managers actively communicate safety priorities and encourage employee participation in safety activities, workers develop stronger safety awareness and commitment to safe work practices. Safety promotion also plays a crucial role in building a proactive safety culture. Continuous communication and awareness programs help employees recognize hazards, report safety concerns, and participate in risk prevention efforts (Hale et al., 2015). In airport environments, safety promotion programs are particularly important because employees come from diverse organizations and professional backgrounds. Therefore, consistent safety communication and training programs are necessary to ensure that all personnel share the same understanding of safety standards

3. Safety Culture

Safety culture refers to the shared values, beliefs, and attitudes within an organization that influence how safety is perceived and managed. According to Dov Zohar (2010), safety culture reflects employees' perceptions of the importance of safety within their organization. Organizations with strong safety cultures prioritize safety in decision-making processes and encourage employees to report hazards and unsafe conditions. Safety culture also influences workers' attitudes toward safety rules and procedures. Research by Guldenmund (2010) highlights that safety culture consists of several dimensions including management commitment to safety, safety communication, employee involvement, and learning from accidents. These factors collectively determine the effectiveness of safety management practices within organizations.

In aviation organizations, safety culture is considered one of the most important elements of safety management systems. Studies show that a positive safety culture significantly reduces accident rates and improves safety performance in aviation operations (Hopkins, 2019). Moreover, safety culture encourages employees to actively participate in safety improvement initiatives and to share safety-related information within the organization. This collaborative approach is essential in complex operational environments such as airports where multiple organizations operate simultaneously.

4. Safety Behavior

Safety behavior refers to actions taken by employees that contribute to maintaining workplace safety. According to Neal and Griffin (2006), safety behavior can be categorized

into two main components: safety compliance and safety participation. Safety compliance refers to employees' adherence to safety procedures, regulations, and standard operating procedures established by the organization. Meanwhile, safety participation refers to voluntary actions taken by employees to improve safety, such as reporting hazards, participating in safety meetings, and assisting colleagues in maintaining safe work practices. Christian et al. (2009) found that safety behavior is strongly influenced by safety knowledge and safety motivation. Employees who possess adequate knowledge of safety procedures and who are motivated to prioritize safety are more likely to engage in safe work practices.

Safety promotion programs play an essential role in influencing safety behavior because they increase workers' awareness of potential hazards and encourage them to adopt safe working practices. Safety training and safety communication programs also strengthen employees' understanding of organizational safety policies. In the context of airport operations, safety behavior among workers is crucial because even minor unsafe actions can lead to significant operational disruptions or accidents. Therefore, safety promotion initiatives implemented by airport authorities are expected to strengthen safety awareness and encourage safe work behavior among tenant personnel working in terminal areas such as those at Minangkabau International Airport.

METHODOLOGY

1. Research Design

This study employs a quantitative explanatory research design to examine the relationship between safety promotion and work safety among tenant personnel.

2. Population and Sample

The population of this research consists of tenant personnel working in the terminal area of Minangkabau International Airport.

Tenant personnel include employees working in:

- Retail stores
- Restaurants and cafes
- Customer service counters
- Transportation services
- Operational support services

A simple random sampling technique was used to select respondents.

3. Data Collection

Data were collected using structured questionnaires that measure:

1. Safety promotion
2. Safety awareness
3. Safety compliance
4. Workplace safety conditions

Each variable was measured using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree)

4. Data Analysis

The data were analyzed using:

- Descriptive statistics
- Validity and reliability tests
- Multiple regression analysis

Regression analysis was used to determine the effect of safety promotion on workplace safety performance

RESULTS AND DISCUSSION

1. Descriptive Analysis of Respondents

The respondents in this study consisted of tenant personnel working in various service units within the terminal area of Minangkabau International Airport, including retail stores, restaurants, service counters, and operational support units. These employees play an important role in supporting airport services and interacting directly with passengers.

The descriptive analysis shows that most respondents have been working at the airport for more than two years, indicating that they already possess experience and familiarity with the operational environment of the airport terminal. Experience is considered an important factor influencing workers' safety awareness because employees who have longer working experience are generally more familiar with potential workplace hazards and safety procedures (Neal & Griffin, 2006).

Furthermore, the majority of respondents reported that they had participated in safety briefings or safety training programs organized by airport authorities. Safety training is widely recognized as an effective strategy for increasing workers' safety awareness and safety compliance (Vinodkumar & Bhasi, 2011). In aviation environments, regular safety communication is necessary because employees must continuously update their knowledge regarding safety procedures and emergency response protocols (ICAO, 2018)

2. Effect of Safety Promotion on Work Safety

The regression analysis results indicate that safety promotion has a significant positive effect on work safety among tenant personnel in the terminal area of Minangkabau International Airport. This finding suggests that the implementation of safety promotion programs contributes to improving employees' awareness and compliance with workplace safety procedures. Safety promotion programs implemented in airport environments generally include safety briefings, safety training, safety signage, emergency preparedness exercises, and safety awareness campaigns. These initiatives aim to ensure that all personnel understand safety procedures and actively participate in maintaining a safe working environment.

The findings of this study support previous research which indicates that safety communication and safety training significantly influence workers' safety behavior. Vinodkumar and Bhasi (2011) found that safety promotion activities enhance employees' knowledge of safety procedures and increase their motivation to comply with workplace safety regulations. Similarly, research by Clarke (2013) explains that organizations that actively promote safety through communication and leadership support tend to have employees with stronger safety awareness and more positive attitudes toward safety practices. Safety promotion initiatives therefore play a crucial role in reinforcing employees' safety commitment.

In aviation environments, safety promotion is also an important component of the Safety Management System (SMS). According to the International Civil Aviation Organization, safety promotion ensures that employees are aware of safety policies and that safety knowledge is effectively disseminated across the organization (ICAO, 2020). Without effective safety promotion strategies, employees may lack sufficient understanding of safety procedures, which can increase the likelihood of workplace accidents

3. Safety Promotion and Safety Behavior

Another important finding of this research is that safety promotion significantly influences safety behavior among tenant personnel. Employees who frequently participate in safety promotion activities demonstrate higher levels of safety compliance and safety participation.

Safety compliance refers to employees' adherence to safety procedures, while safety participation involves voluntary actions that contribute to improving workplace safety, such as reporting hazards and participating in safety meetings (Christian et al., 2009). This finding is consistent with the safety climate theory developed by Dov Zohar, which explains that employees' perceptions of organizational safety priorities influence their behavior in the workplace (Zohar, 2010). When employees perceive that safety is strongly promoted within their organization, they are more likely to follow safety procedures and actively contribute to maintaining a safe working environment.

Furthermore, research conducted by Cooper (2018) highlights that safety promotion is a key mechanism for strengthening safety culture within organizations. Continuous safety communication and training programs help reinforce employees' understanding of safety policies and encourage them to adopt safe work practices. In airport environments, safety behavior among personnel is particularly important because unsafe actions can potentially affect passenger safety and airport operations. Even minor safety violations in terminal areas can disrupt airport services or create hazards for passengers and employees.

4. Implications for Airport Safety Management

The findings of this study have important implications for airport safety management, particularly for airport authorities responsible for managing operational safety in terminal areas. Airport management should ensure that safety promotion programs are continuously implemented and adapted to the needs of different groups of workers, including tenant personnel. Tenant personnel often come from various organizations and may not be directly involved in aviation operations. However, their activities still contribute to the overall safety environment within the airport terminal. Therefore, airport authorities must ensure that these employees receive adequate safety training and safety information.

According to Reason (1997), accidents often occur due to a combination of latent organizational failures and unsafe actions. Therefore, organizations must proactively implement safety promotion programs to strengthen workers' safety awareness and prevent unsafe practices. Similarly, Hopkins (2019) emphasizes that safety culture development requires continuous communication and engagement with employees. Safety promotion activities such as safety campaigns, safety briefings, and safety training sessions are effective tools for reinforcing safety culture within organizations.

In the context of airport operations, strengthening safety promotion initiatives can help create a proactive safety culture where employees actively participate in identifying hazards and preventing accidents. This proactive approach is essential for maintaining safe airport operations and ensuring passenger safety.

CONCLUSION

This study examined the influence of safety promotion on work safety among tenant personnel in the terminal area of Minangkabau International Airport. The findings indicate that safety promotion has a significant positive effect on workplace safety. Activities such as safety training, safety briefings, and safety communication help increase employees' safety awareness and encourage compliance with safety procedures. The results also emphasize the importance of involving tenant personnel in airport safety management programs, as their activities contribute to the overall safety environment within the terminal area. Therefore, consistent implementation of safety promotion programs is essential to support safe working conditions and strengthen safety culture in airport operations. Future research is recommended to examine additional factors such as safety culture and safety leadership and to expand the study to other airports for broader insights into occupational safety in the aviation sector.

REFERENCES

- Burke, M. J., Sarpy, S. A., Tesluk, P. E., & Smith-Crowe, K. (2002). General safety performance: A test of a grounded theoretical model. *Personnel Psychology*, 55(2), 429–457.
- Choudhry, R. M., Fang, D., & Mohamed, S. (2007). The nature of safety culture: A survey of the state-of-the-art. *Safety Science*, 45(10), 993–1012.
- Christian, M. S., Bradley, J. C., Wallace, J. C., & Burke, M. J. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94(5), 1103–1127. <https://doi.org/10.1037/a0016172>
- Clarke, S. (2013). Safety leadership: A meta-analytic review of transformational and transactional leadership styles as antecedents of safety behaviours. *Journal of Occupational and Organizational Psychology*, 86(1), 22–49. <https://doi.org/10.1111/j.2044-8325.2012.02064.x>
- Cooper, M. D. (2018). Navigating the safety culture construct: A review of the evidence. *Safety Science*, 99, 1–9. <https://doi.org/10.1016/j.ssci.2017.05.002>
- Flin, R., Mearns, K., O'Connor, P., & Bryden, R. (2000). Measuring safety climate: Identifying the common features. *Safety Science*, 34(1–3), 177–192.
- Griffin, M. A., & Curcuruto, M. (2016). Safety climate in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 191–212.
- Guldenmund, F. W. (2010). (Mis)understanding safety culture and its relationship to safety management. *Risk Analysis*, 30(10), 1466–1480. <https://doi.org/10.1111/j.1539-6924.2010.01452.x>
- Hale, A. R., Guldenmund, F. W., Loenhout, P. L. C. H., & Oh, J. (2015). Evaluating safety management and culture interventions to improve safety: Effective intervention strategies. *Safety Science*, 78, 1–12. <https://doi.org/10.1016/j.ssci.2015.04.015>
- Hofmann, D. A., & Stetzer, A. (1996). A cross-level investigation of factors influencing unsafe behaviors and accidents. *Personnel Psychology*, 49(2), 307–339.
- Hopkins, A. (2019). *Organising for safety*. Sydney: CCH Australia.
- Huang, Y. H., Chen, J. C., DeArmond, S., Cigularov, K., & Chen, P. Y. (2007). Roles of safety climate and shift work on perceived injury risk. *Accident Analysis and Prevention*, 39(6), 1088–1096.
- International Civil Aviation Organization. (2013). *Safety Management Manual (SMM)* (3rd ed.). Montreal: ICAO.
- International Civil Aviation Organization. (2018). *Safety Management Manual (Doc 9859)* (4th ed.). Montreal: ICAO
- International Civil Aviation Organization. (2020). *Annex 19: Safety Management*. Montreal: ICAO.
- Kines, P., Andersen, L. P. S., Spangenberg, S., Mikkelsen, K. L., Dyreborg, J., & Zohar, D. (2010). Improving construction site safety through leader-based verbal safety communication. *Journal of Safety Research*, 41(5), 399–406.
- Lestari, I. A. I. D., Widana, I. D. K., & Putra, I. G. N. A. (2025). Aviation safety culture implementation among airport personnel. *International Journal of Global Health Research*, 7(2), 120–128.
- Neal, A., & Griffin, M. A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents. *Journal of Applied Psychology*, 91(4), 946–953. <https://doi.org/10.1037/0021-9010.91.4.946>
- Reason, J. (1997). *Managing the risks of organizational accidents*. Aldershot: Ashgate Publishing.

- Stolzer, A. J., Halford, C. D., & Goglia, J. J. (2011). *Safety management systems in aviation*. Farnham: Ashgate.
- Vinodkumar, M. N., & Bhasi, M. (2011). A study on the impact of management commitment on employee behaviour and safety outcomes. *Safety Science*, 49(3), 365–372. <https://doi.org/10.1016/j.ssci.2010.10.004>
- Yilmaz, M. K., & Floris, M. (2022). Organizational factors affecting safety culture in aviation organizations. *Journal of Air Transport Management*, 102, 102231.
- Zohar, D. (2010). Thirty years of safety climate research: Reflections and future directions. *Accident Analysis and Prevention*, 42(5), 1517–1522. <https://doi.org/10.1016/j.aap.2009.12.019>