



# SAFETY RISK MANAGEMENT AS RELATED TO AIRPORT PASSENGER EXPERIENCE AT MANILA INTERNATIONAL AND DOMESTIC AIRPORTS

Dr. Oscar Gapasin Abuan<sup>1</sup>, Dr. Rhem Rick N. Corpuz<sup>2</sup>,  
Dr. Jan Vincent Salarzon Carmen<sup>3</sup>

<sup>1,2</sup>Graduate Studies, Philippine College of Criminology, Sta. Cruz, Manila, Philippines

<sup>3</sup>Faculty Member, Nueva Ecija University of Science and Technology

Article DOI: <https://doi.org/10.36713/epra14657>

DOI No: 10.36713/epra14657

## ABSTRACT

*This paper analyzed how employee attitudes towards safety risk management, perceived competence of ground staff in dealing with unruly passenger behavior, and perceived waiting time for airport security screening service can influence aviation safety performance and passenger experience at the airports operated by the Manila International Airport Authority. Descriptive survey, descriptive correlation, and thematic analysis methods were used to analyze the data. The results of the analysis showed that there is a weak, positive relationship between employee's attitudes towards safety risk management and perceived competence of ground staff in dealing with unruly passenger behavior, however this correlation is not statistically significant. Additionally, there is a weak, positive relationship between perceived airport passenger experience and employee's attitudes towards safety risk management, but this is not statistically significant. Furthermore, there is a moderate, negative correlation between perceived airport passenger experience and perceived waiting time for security screening service, which is statistically significant. The findings of the study suggest that employee attitudes towards safety risk management have no significant impact on the overall experience of airport passengers. In order to improve the airport passenger experience, the Manila International Airport Authority should implement a comprehensive safety training program for all airport staff, develop a safety risk management system and procedure manual, provide regular training and refresher courses for ground staff, and implement comprehensive customer feedback and satisfaction surveys.*

**KEYWORDS:** *safety risk management, perceived competence of ground staff in dealing with unruly passenger behavior, perceived waiting time, airport passenger experience*

## INTRODUCTION

Airports play a crucial role in attracting foreign and local visitors, reflecting the country's culture and values. However, recent news has highlighted issues such as delays, power outages, theft, extortion, overpriced taxicabs, rude drivers, and harassment against passengers. To improve safety and passenger satisfaction, personnel should prioritize security and be security conscious.

Employee attitudes towards safety practices in airports are essential for the success of risk management programs. A positive attitude reduces accident risks, ensures compliance with regulations, and increases the effectiveness of safety programs (Gill, 2011). Building trust and credibility with stakeholders like airlines and airport operators is crucial for ensuring safe operations.

Perceived competence of ground staff in handling unruly passenger behavior is also important for successful airport operations. Understanding these perceptions can help address issues related to ground staff performance and improve the overall passenger experience.

Aviation safety is crucial for ensuring the safety of passengers and employees at airports. Employees must have a proactive attitude,

understand safety protocols, and have a thorough understanding of safety regulations and procedures. Ground staff must be trained to identify and handle disruptive behavior, taking appropriate action to ensure the safety of other passengers and staff.

Safety risk management is a critical element of ensuring a positive passenger experience at an airport. Research shows a positive correlation between safety risk management and passenger experience, with passengers with a positive attitude reporting higher levels of satisfaction. Therefore, it is essential to provide ground staff with the necessary training and resources to effectively handle challenging situations.

The perceived level of waiting time for security screening services is a crucial factor in airport passenger experience, as long wait times can lead to dissatisfaction and negative overall experiences (Stanko & Smith, 2017). Safety risk management is essential to ensure the safety of passengers, staff, and other stakeholders and reduce the risk of incidents and accidents. Research has shown that there are important correlations between safety risk management and passenger experience, with effective systems improving passenger satisfaction and loyalty.



Safety risk management is a critical component of airport security in any country, and the implementation of risk-based security measures and advanced technologies is essential to ensure the safety of passengers, personnel, and cargo. In the Philippines, the quality of service in airport travel is becoming a key issue among stakeholders, and providers must prioritize improving and maintaining service quality to stimulate participation from the private sector, foster healthy competition within the industry, and contribute positively to the nation's economy.

In the United States, the Transportation Security Administration (TSA) has implemented a risk-based security approach, including advanced technologies, intelligence gathering, pre-boarding interviews, random screenings, and passenger behavior observation (TSA, 2020). The UK has also implemented a risk-based approach to aviation security, including physical security measures such as security fencing, access control, and CCTV systems (National Crime Agency, 2019).

In Germany, the Federal Office of Civil Aviation (FOCA) has implemented measures to enhance security, such as passenger profiling, deployment of armed air marshals, and employment of security guards at airports (FOCA, 2020). In France, the Civil Aviation Security Department (CASD) has implemented measures such as x-ray screening, metal detectors, and biometric systems to enhance security (CASD, 2020). In India, the Bureau of Civil Aviation Security (BCAS) has implemented measures to improve airport security, such as the use of advanced technologies and a comprehensive security risk management system.

Safety risk management is crucial for passenger satisfaction and overall airport security. It helps identify, assess, and mitigate safety risks to reduce potential injury, illness, and property damage. Ground staff's competence in handling unruly passenger behavior is essential for a positive passenger experience. SRM includes activities such as hazard identification, risk assessment, risk control, and communication to identify existing and potential safety risks, evaluate their severity, and develop strategies to reduce or eliminate them (Gibson, 2017).

Globally, issues like the 2010 Iceland Volcano Eruption, 2020 Coronavirus Pandemic, and Southwest Airlines Flight 1380 Incident have significantly impacted air travel. There is a need to explore the relationship between employee attitudes towards safety risk management, perceived competence of ground staff in handling unruly passenger behavior, and perceived waiting time for airport security screening service and aviation safety performance and passenger experience.

The Philippine aviation industry has taken a proactive approach to safety management, with the Civil Aviation Authority of the Philippines (CAAP) issuing safety regulations and guidelines consistent with international standards. The CAAP has also developed initiatives to foster a culture of safety and quality assurance, such as the Safety Management System (SMS) and the Safety and Security Management System (SSMS).

In addition to safety management, the Philippine government has implemented initiatives to improve the airport passenger experience, including automated check-in and baggage handling systems, new airport facilities, and customer service protocols. The CAAP has formed a Passenger Facilitation Committee to facilitate passenger processing and ensure smoother airport operations.

Air transport issues in the Philippines have been significant, with incidents such as Cebu Pacific Flight 387 and PAL Flight 434 causing panic among passengers. In January 2020, the Philippines' Civil Aviation Authority (CAAP) suspended the operations of two airlines for alleged criminal activities. The recent incident at Ninoy Aquino International Airport (NAIA) resulted in the suspension of all domestic and international flights due to a Terminal 3 power outage, affecting over 200 flights and 6,000 passengers (CAAP, 2020).

The Manila International Airport Authority (MIAA) is responsible for passenger safety and security at NAIA, but the airport has faced issues such as immigration, drugs, crime, and human trafficking. Immigration queues are long and slow, and the airport's systems are prone to errors. Trafficking is also a major issue, with numerous cases of drug trafficking and human trafficking reported.

Theft is an increasing problem at Philippine airports, affecting passenger safety and security (Gutierrez, 2018). Reports indicate that theft is a regular occurrence in public areas, including baggage handling areas, check-in counters, and departure lounges (Mangahas, 2017). Security personnel have been involved in thefts, and further measures are needed to ensure the safety and security of passengers and the overall passenger experience at Philippine airports.

The United States Transport Security Administration (US-TSA) is an ongoing initiative to ensure that departing aircraft and airport operators with flights bound for the US can sustain adequate implementation of security measures based on the International Civil Aviation Organization's Standards and Recommended Practices.

The perceived safety risk management of an airport is a significant predictor of its passenger experience. Strong safety risk management systems, including clear policies and procedures for dealing with unruly passengers, well-trained ground staff, and efficient security screening services, can improve the passenger experience. In the Philippines, the Philippine National Police (PNP) has implemented measures to deter potential terrorists, such as increased surveillance, deployment of more police officers, and installation of metal detectors and X-ray machines. However, there is still room for improvement in terms of security measures.

Employee attitude is also crucial in ensuring the safety and satisfaction of travelers. Positive employees are more likely to follow safety protocols, keep up-to-date on safety training, and



actively address safety concerns. Conversely, negative employees may be careless and overlook important safety protocols, leading to unsafe conditions and decreased satisfaction.

Perceived competence of ground staff in handling unruly behavior can lead to improved safety and satisfaction among travelers. When ground staff are seen as competent in handling such situations, passengers may feel reassured that their safety and security is taken care of, resulting in improved satisfaction with their travel experience and a greater sense of security (Wang, et.al, 2019).

Perceived waiting time for airport security screening services can have a significant impact on the safety and satisfaction of travelers. Long wait times can lead to increased frustration, aggressive behavior, and decreased satisfaction levels among travelers. To ensure the safety and satisfaction of travelers, airports should strive to reduce wait times through the implementation of technology such as automated check-in systems and self-service kiosks. By implementing these measures, airports can ensure that travelers move through the security process efficiently and timely while also ensuring their safety and satisfaction.

This study investigates the impact of employee attitudes towards safety risk management, perceived competence of ground staff in handling unruly passenger behavior, and perceived waiting time for airport security screening services on aviation safety performance and passenger experience at the Manila International Airport Authority. The research highlights the importance of these factors in ensuring a safe and secure environment for passengers.

Employee attitudes towards safety practices are strongly correlated with their willingness to comply with safety protocols, leading to improved aviation safety performance. Ground staff's competence in managing unruly passenger behavior can contribute to increased safety performance (Wang, et.al, 2019). Longer wait times for security screening can lead to increased stress for passengers, affecting their decision-making and ultimately increasing the risk of accidents.

Passenger experience with airport services is also crucial in determining aviation safety performance. Passengers who perceive airport employees as taking safety seriously are more likely to feel safe. The perceived competence of ground staff in handling unruly passenger behavior has a significant influence on passengers' perceptions of the aviation experience. Ground staff need to be trained to handle challenging passenger situations professionally and timely to ensure a positive passenger experience (Strawser and Glickman, 2017).

A research gap exists in understanding the relationship between safety risk management and airport passenger experience.

Previous studies have mainly focused on individual elements of safety risk management and airport passenger experience, but there is a need to study the interactive effects of safety risk management and airport passenger experience. Such research could provide insights into how safety risk management can be better utilized to improve airport passenger experience and potentially reduce the risk of incidents and accidents (Lam, & Lee, 2020).

## LITERATURE REVIEW

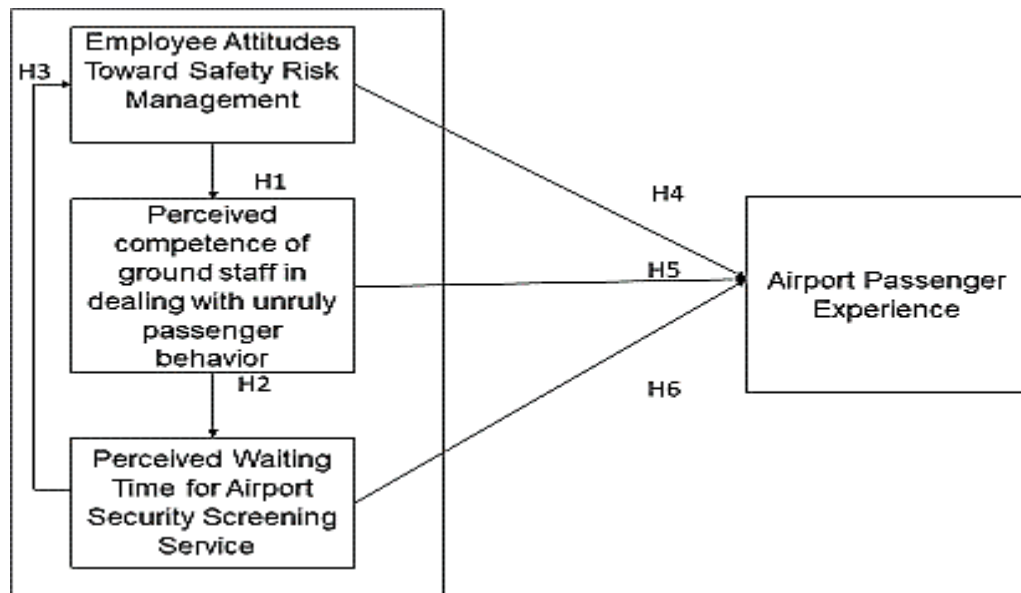
Employee attitudes towards safety risk management are crucial for organizational effectiveness, with factors such as prior experience, commitment, and knowledge of safety procedures influencing attitudes. (Chen, Hsu, & Hsu, 2008; Niska, Väänänen, & Tuomi, 2012; Niska, Tuomi, & Väänänen, 2014). Factors influencing travelers' perceptions of security screening waiting times, airport passenger experience, and employee attitudes towards safety risk management include actual wait length, perceived fairness, quality of service, and perceived level of safety. In the Philippines, safety risk management is a high-risk work environment, with 85% of employees expressing a positive attitude (Bezerra & Gomes, 2016). Strategies to improve airport passenger experience include safety management systems, safety protocols, staff training, automation, and artificial intelligence. Safety-specific transformational leadership, customer-centric management, and understanding disruptive passenger behavior are essential for improving service delivery efficiency.

This paper aims to develop a measurement model for perceived airport service quality (ASQ) and test its equivalence across passenger groups. The model uses a six-factor structure and computer models to examine airport environment complexities and estimate the operational impact of new security equipment, policies, and procedures. The results suggest that security risk awareness can translate to competence in dealing with passengers. Employee attitudes towards safety risk management and perceived competence of ground staff in handling unruly passenger behavior are also explored.

## Theoretical/Conceptual Framework/Paradigm of the Study

The study highlights the importance of employee attitudes towards safety risk management in organizational effectiveness. Factors influencing travelers' perceptions include actual wait length, perceived fairness, quality of service, and safety level. In the Philippines, 85% of employees have a positive attitude towards safety risk management (Bezerra & Gomes, 2016). Strategies to improve passenger experience include safety management systems, protocols, staff training, automation, and artificial intelligence. The study suggests that security risk awareness leads to competence in passenger handling and safety risk management is crucial for a positive experience (Budhwar & Debrah, 2001).

Figure 1. Conceptual Framework/ Paradigm of the Study



### OBJECTIVES OF THE STUDY

The study explored the correlation between employee attitudes towards airport safety, ground staff competence in handling unruly passenger behavior, and perceived waiting time for security screening service at Manila International Airport Authority airports.

Specifically, it answered the following empirical questions:

1. How does the select group of respondents describe the level employee's attitudes toward safety risk management?
2. How do the select groups of respondents describe their perceived level of competence of ground staff in dealing with unruly passenger behavior?
3. How do the select groups of respondents describe their perceived level waiting time for security screening service?
4. How do the select groups of respondents describe their level airport passenger experience?
5. Is there a significant relationship between employee's attitudes toward safety risk management and perceived competence of ground staff in dealing with unruly passenger behavior?
6. Is there a significant relationship between perceived competence of ground staff in dealing with unruly passenger behavior and perceived waiting time for security screening service?
7. Is there a significant relationship between perceived waiting time for security screening service and its relationship with employee's attitudes towards safety risk management?
8. Is there a significant relationship between employee's attitudes towards safety risk management and airport passenger experience?
9. Is there a significant relationship between perceived competence of ground staff in dealing with unruly passenger behavior and airport passenger experience?

10. Is there a significant relationship between perceived waiting time for security screening service and airport passenger experience?
11. Does perceived waiting time for security screening service, perceived competence of ground staff in dealing with unruly passenger behavior, employee's attitudes toward safety risk management significantly predict perceived airport passenger experience?
12. What action plan can be developed to improve passenger experience among domestic and international passengers at the Manila International Airport terminals?

### METHODOLOGY

#### Research Design

The study employed a quantitative research design, focusing on the collection and analysis of numerical data to measure relationships and test hypotheses. This approach leveraged surveys as a research tool to investigate employee attitudes towards safety risk management, ground staff competence, and waiting times for airport security screening. The collected data were subsequently analyzed to discern the relationships between these variables and their impact on the overall airport experience (Creswell, 2008). Moreover, the study examined additional factors, such as the duration of security screening and passenger satisfaction, to gauge their influence on the airport passenger experience.

#### Research Method

The research employed descriptive surveys and descriptive correlation methods to scrutinize the relationships between employee attitudes concerning safety risk management, the perceived competence of ground staff in managing unruly passenger behavior, and waiting times for airport security



screening services (Salkind, 2019). These methods provided the data necessary to assess the impact of these factors on the passenger experience and to establish connections between safety risk management measures and the overall airport passenger experience.

### Population of the Study

The provided data categorized respondents into distinct groups, with each category revealing frequencies and percentages. In the "Airport Personnel" category, a total of 820 respondents were included. Among them, 196 individuals belonged to the Airport Police, representing 23.9% of this specific category. PNP AVSEU personnel constituted 14.3% with 117 respondents, while MIAA Contracted Security Personnel accounted for 35.2% with 289 respondents. Ground Staff made up 26.6%, encompassing 218 respondents within this category.

In the "Passengers" category, a total of 655 respondents were considered. Domestic Passengers constituted the majority, at 52.1% with 341 respondents, while International Passengers comprised 47.9% with 314 respondents.

### Data Gathering Tools

The study collected data through self-administered survey questions and secondary data from printed materials, libraries, publishers, and the internet. The Employee Attitudes toward Safety Risk Management survey assessed employees' attitudes and beliefs about safety and risk management. The Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior survey evaluated ground staff's competence in managing unruly passenger behavior. The Airport Passenger Experience survey gathered feedback from travelers regarding their overall satisfaction with the airport experience, from check-in to departure.

### Data Gathering Procedure

The study utilized both qualitative and quantitative data sources. Qualitative sources, including interviews and surveys, provided insights into passengers' perceptions and attitudes concerning safety risk management. Quantitative sources, such as statistical data and questionnaires, delivered empirical insights into the relationship between safety risk management and passenger experience (Yildirim & Yildirim, 2018). The research encompassed data collection, data cleaning and preparation, descriptive analysis, inferential analysis, and the interpretation of results. The reliability and validity of the gathered data were paramount considerations.

### Treatment of Data

This study employed descriptive statistical techniques, including percentages, frequency tables, frequencies, standard deviation, mean, and variance, to analyze the data. Percentages were used to measure proportions, frequency tables displayed frequency

distributions, frequencies represented the number of occurrences, standard deviation quantified data spread from the mean, mean computed the average, and variance measured data dispersion. The Likert scale, a psychometric scale, was harnessed to measure the data.

The Spearman Rho statistic was utilized to measure the relationships between employee attitudes towards safety risk management, perceived competence of ground staff in handling unruly passenger behavior, perceived waiting time for security screening service, and airport passenger experience. This non-parametric statistic was chosen for its utility in assessing the strength of correlations between variables such as age and education.

The study delved into the relationship between employee attitudes towards safety practices, the perceived competence of ground staff in managing unruly passenger behavior, and the perceived waiting time for airport security screening services on passenger experience. A regression analysis, utilizing a linear regression model, assessed the strength of the association and drew conclusions regarding the impact of each independent variable on the dependent variable.

### Ethical Considerations

The informed consent process for the dissertation, titled "Safety Risk Management in Airport Passenger Experience," was of paramount importance for research participants. It delineated the project's objectives, participants' expectations, and procedures. It ensured participants were informed about potential risks, benefits, and possible harms. The research-maintained confidentiality and provided contact information for questions or withdrawal. Ethical conduct was observed throughout the research, respecting participants' privacy and autonomy. Participants were informed about the study's purpose, potential benefits, and their rights, and their data was securely stored.

## RESULTS AND DISCUSSIONS

### *Level of Employee's Attitudes Toward Safety Risk Management as evaluated by airport personnel*

This study delved into the intricate relationship between employee attitudes concerning safety practices, the competency of ground staff in handling unruly passenger behavior, and the waiting time endured during security screening processes at Manila International Airport Authority (MIAA) airports. Employing a survey-based design, the research aimed to unravel the profound impact of these variables on passengers' holistic airport experience. The outcomes of the study resoundingly underscore a prevailing positive disposition among airport personnel towards safety risk management. Remarkably, employees exhibited a commendable level of esteem for and adherence to safety risk policies.



**Table 1. Level of Employee’s Attitudes Toward Safety Risk Management as evaluated by airport personnel (n= 820)**

Indicators	Mean	Std. Deviation	Variance	Verbal Interpretation
1. I am confident in my ability to identify potential safety risks in my workplace.	3.87	1.31	1.70	Agree
2. I am comfortable communicating safety risks to my supervisor.	3.91	1.23	1.52	Agree
3. I understand the importance of adhering to safety protocols and procedures.	3.84	1.25	1.55	Agree
4. I believe that safety risks should be taken seriously and handled quickly.	3.90	1.23	1.52	Agree
5. I am willing to take the initiative to improve safety standards in my workplace.	3.96	1.24	1.53	Agree
6. I recognize the importance of maintaining a safe work environment.	3.90	1.23	1.51	Agree
7. I would be willing to report any safety concerns that I observe in my workplace.	3.89	1.27	1.60	Agree
8. I am aware of the safety policies and procedures in my workplace.	3.87	1.22	1.48	Agree
9. I am comfortable discussing safety risks with co-workers.	3.88	1.23	1.51	Agree
10. I believe that taking risks with safety can lead to serious consequences.	3.89	1.21	1.47	Agree
<b>Average</b>	<b>3.89</b>	<b>1.24</b>	<b>1.54</b>	<b>Agree</b>

The findings unmask a strikingly affirmative outlook within the Philippine airport workforce, despite the stringent regulations and safety-centric ethos governing the aviation industry. These dedicated professionals exhibit a proactive stance, demonstrating an unwavering willingness to enhance safety standards and uphold a secure work environment. The pinnacle of this favorable attitude is exemplified by the highest recorded mean score of 3.96, unmistakably signaling an elevated regard for, and rigorous compliance with, safety risk policies. This revelatory revelation suggests that employees harbor a profound sense of responsibility when it comes to ensuring workplace safety. As a consequence, employers are presented with a golden opportunity to nurture this spirit of proactive engagement by furnishing employees with comprehensive safety training, essential resources, and incentivizing mechanisms.

This dynamic empowerment fosters a robust culture of accountability and shared ownership between employers and employees, ultimately engendering a resilient and enduring culture of safety within the workplace.

Further exploration into employees' grasp of safety protocols and procedures in airport environments unveils yet another high mean score of 3.84, signifying their profound appreciation for safety risk management. Airports, by their nature, confront elevated risks due to the convergence of large crowds and the potential for mishaps. The meticulous adherence to safety protocols assumes paramount importance, as it serves as a bulwark against latent risks. This encompassing approach includes the maintenance of a secure working milieu, the provision of personal protective

equipment, prudent handling of hazardous materials, and periodic aircraft inspections. Notably, airport organizations invest in proper training and guidance for their workforce, thereby nurturing a constructive workplace atmosphere. The Airport General Manager of NAIA succinctly underscores the need for employees to rigorously adhere to safety protocols. This encompasses the gamut of tasks, such as conducting hazard identification and risk analysis, risk mitigation, safety management process evaluation, incident investigation, and effective communication of safety procedures.

In light of these findings, it is incumbent upon employers to amplify their efforts in enhancing employee comprehension and steadfast adherence to safety protocols. This proactive stance not only ushers in a safer and more productive workplace but also exemplifies a steadfast commitment to the welfare of all stakeholders within the aviation sector.

***Perceived level of competence of ground staff in dealing with unruly passenger behavior***

The research findings shed light on the multifaceted risks that Manila International Airports contend with, encompassing security, crowd management, noise control, weather-related challenges, equipment maintenance, air traffic control, maintenance operations, fire safety, human errors, and the handling of hazardous cargo. These diverse risks pose not only the potential for increased operational costs but also the specter of service disruptions and severe penalties imposed by regulatory bodies. Consequently, airports must adopt proactive measures to safeguard the well-being of passengers and staff, with a particular



emphasis on equipping staff to respond effectively to a spectrum of challenging situations.

Notably, the International Civil Aviation Organization (ICAO) has accorded the Manila International Airport Authority (MIAA) a commendable rating of 4 out of 5 for its security procedures, with 5 representing the highest attainable rating. This positive evaluation underscores the airport's robust security posture, characterized by the deployment of cutting-edge screening technology, a cadre of specialized personnel, and rigorous adherence to security protocols (Peters, 2018). However, it's essential to recognize that despite these measures, the airport, owing to its geographical location in the Philippines, grapples with the inherent risks associated with a region marked by high crime rates, the looming threat of terrorism, civil unrest, and a history tarnished by corruption and bribery. Furthermore, the evolving landscape of cyber threats poses an additional vulnerability. To mitigate these complex and dynamic risks, the airport should consider revisiting and enhancing its risk management framework, ensuring that staff is adequately trained and remains up-to-date with the latest security measures and protocols.

To its credit, the Manila International Airport (MIAA) has already established a comprehensive risk management system, which systematically identifies potential risks, evaluates their severity, and formulates strategies to mitigate them effectively. The process is buttressed by regular updates and reports furnished to senior management, reinforcing the commitment to robust risk management practices. In the realm of security, MIAA has bolstered its efforts by augmenting security personnel, deploying state-of-the-art CCTV cameras, and instituting access control management systems (ABS-CBN, 2019). For passenger safety, stringent measures such as metal detectors, x-ray machines, and luggage screening are in place. Additionally, the airport has proactively responded to the global threat of terrorism by implementing heightened security measures. Furthermore, the assessment of ground staff's competence in handling unruly passenger behavior indicates an above-average level of perceived competence, as exemplified by a commendable overall score of 3.60. However, it's noteworthy that there exists a wide spectrum of opinions, reflecting significant variation in views regarding the staff's competency in this area (Table 3). This divergence underscores the importance of ongoing training and continuous improvement to ensure a consistent and high level of competence across all ground staff members.

**Table 2. Perceived level of competence of ground staff in dealing with unruly passenger behavior**

Indicators	Mean	Std. Deviation	Variance	Verbal Interpretation
1. Customers who are impatient, easily angered, are volubly outspoken, and have potentially violent tendencies.	3.72	1.15	1.32	Easy
2. Those who have consumed excess alcohol, or prescription or non-prescription drugs, and who tend to be aggressive and violent.	3.68	1.18	1.38	Easy
3. Those who stir up emotion in the crowd at the scene using provocative language to cause disturbance, interruption or termination of service when there are flight irregularities.	3.63	1.18	1.38	Easy
4. Excessive reliance on disadvantaged minority status to obtain preferential treatment under airline service provision rules.	3.63	1.21	1.47	Easy
5. In some instances, airlines are obliged to deal with problems associated with customer disputes caused by broker mismanagement.	3.68	1.14	1.29	Easy
6. Passengers who carry excess baggage (overweight or too many bags) and refuse to pay additional charges, or who carry prohibited items in cabin baggage in violation of baggage policy.	3.57	1.16	1.35	Easy
7. When dissatisfied with service, such customers threaten to contact news reporters with the intention of embarrassing the airline or service provider.	3.45	1.09	1.18	Easy
8. Customers who are systematically unhappy and fussy about the services provided.	3.57	1.1	1.2	Easy
9. Customers who fail to cooperate with the correct boarding procedure for each class of passenger.	3.63	1.14	1.3	Easy
10. Arriving passengers who fraudulently claim that their baggage has been damaged, lost, or interfered with.	3.58	1.15	1.32	Easy



11. Passengers, for example, who insist on taking food out of the premier lounge, or who invite a travel companion into the premier lounge who is not entitled to use the lounge.	3.69	1.21	1.47	Easy
12. Customers who attempt to use their social status.	3.67	1.16	1.35	Easy
13. Conceal information regarding a failed service encounter, thereby incorrectly attributing responsibility to the airline, with a view to obtaining financial reward.	3.54	1.17	1.36	Easy
14. Customers who request to see the duty supervisor with the implied intention of intimidating/demeaning the ground staff member.	3.57	1.17	1.37	Easy
<b>Average</b>	3.6	1.16	1.34	Easy

The study reveals that ground staff are generally competent in handling difficult passengers and unruly behavior, but their competence is slightly lower in certain situations (Wang & Wang, 2018). However, they are seen as competent problem solvers who can bring a high level of customer satisfaction. Investing in customer service and training ground staff can have a positive effect on customer satisfaction levels. Ground staff must handle unruly passenger behavior to avoid embarrassment to airlines or service providers, and they must be trained in handling complaints and inquiries with a professional attitude. Disruptive behaviors, such as smoking, excessive noise, and disrespecting personal space, indicate a lack of understanding and respect for airport rules. Airport management should invest in training, clear guidance, and proactive approaches to ensure passenger safety and comfort.

The study reveals that ground staff are generally competent in handling difficult passengers and unruly behavior, but their competence is slightly lower in certain situations (Wang & Wang, 2018). However, they are seen as competent problem solvers who can bring a high level of customer satisfaction. Investing in customer service and training ground staff can have a positive effect on customer satisfaction levels. Ground staff must handle unruly passenger behavior to avoid embarrassment to airlines or service providers, and they must be trained in handling complaints and inquiries with a professional attitude. Disruptive behaviors, such as smoking, excessive noise, and disrespecting

personal space, indicate a lack of understanding and respect for airport rules. Airport management should invest in training, clear guidance, and proactive approaches to ensure passenger safety and comfort.

Unruly passenger behavior at Manila International Airport (MIA) can compromise safety and security, causing delays and disrupting operations. To improve staff competence, key themes include better training in de-escalation techniques, more resources and tools, better customer service training, better communication between staff and passengers, and better procedures in place. The airport has implemented measures such as a dedicated Airport Police Assistance Center, a "no tolerance" policy, a Passenger Code of Conduct, and a "Zero Tolerance" campaign to mitigate unruly behavior (MIA, 2020).

**Perceived level waiting time for security screening service**

The survey findings offer valuable insights into the perception of travelers regarding airport security screening waiting times, revealing a generally favorable perspective. Travelers appear to view these waiting times as either acceptable or slightly better than acceptable. This sentiment is reflected in the overall mean score of 3.54, suggesting a noteworthy level of satisfaction with the service. The moderate variance of 1.63 implies that while there is some variation in opinions, the consensus remains largely positive.

**Table 3. Perceived level waiting time for security screening service (n= 820)**

Indicators	Mean	Std. Deviation	Variance	Verbal Interpretation
1. Waiting in line for security screening services is an increasingly common experience for travelers.	3.66	1.30	1.68	Satisfied
2. Security screening is essential for ensuring traveler's safety, however, associated waiting times can be inconvenient and unpleasant.	3.58	1.33	1.76	Satisfied
3. A traveler who waits longer than actually is, can lead to frustration and dissatisfaction.	3.62	1.31	1.71	Satisfied
4. Waiting time for security screening service was acceptable.	3.39	1.27	1.60	Satisfied
5. A traveler can also accept waiting time for security screening service in the future.	3.49	1.23	1.51	Satisfied





6. A traveler accept the need to wait for security screening service	3.45	1.25	1.57	Satisfied
7. The waiting time to get through airport security was too long.	3.65	1.29	1.65	Satisfied
8. The airport security waiting time was reasonable.	3.60	1.28	1.63	Satisfied
9. The waiting time to get through security was more than I expected.	3.60	1.29	1.67	Satisfied
10. The time spent waiting to go through security was well managed.	3.42	1.27	1.61	Satisfied
11. A passenger felt the security screening process was efficient.	3.50	1.25	1.56	Satisfied
12. The waiting time to get through the security screening process was excessive.	3.60	1.26	1.58	Satisfied
13. The security staff managed the queue in a timely manner.	3.53	1.25	1.56	Satisfied
14. The security staff managed the queue well.	3.46	1.28	1.64	Satisfied
15. A traveler is more likely satisfied if they feel that the security screening process is providing sufficient safety.	3.54	1.29	1.66	Satisfied
<b>Average</b>	3.54	1.28	1.63	Satisfied

This positive overall mean underscores the effectiveness of airport security staff in providing a satisfactory screening service that not only meets but often exceeds passengers' expectations. It signifies that travelers feel at ease and experience efficiency during the screening process, contributing to a positive airport experience. The favorable sentiment expressed by passengers toward the screening service is a testament to the diligent efforts undertaken by the airport authorities and security personnel to minimize waiting times and create an environment where passengers feel valued and secure.

Moreover, this positive perception of security screening services is crucial not only for enhancing the overall passenger experience but also for upholding safety and security within the airport premises. When passengers perceive security procedures as efficient and effective, they are more likely to comply willingly, which, in turn, enhances the overall security posture of the airport. Therefore, maintaining and even improving this positive perception should remain a priority for airport authorities as they strive to strike a balance between security measures and passenger convenience.

It also serves as a valuable benchmark against which future enhancements and adjustments to security screening processes

can be measured, with the ultimate goal of continuously improving the passenger experience while ensuring the safety and security of all travelers.

The study reveals that travelers are willing to wait for security screening services, but they want the process to be more efficient to reduce waiting times. The current level of waiting times is positive, but future improvements could include identifying areas for technology or addressing overcrowding. The research suggests that airlines should implement more efficient security screening procedures, provide additional services, and increase passenger education. The Manila International Airport (MIA) has been criticized for its inefficient security screening process, characterized by long lines, slow service, and inadequate personnel and equipment. The airport has implemented measures to reduce wait times, such as adding more personnel, training security guards, and implementing fast-track systems.

***Perceived Airport Passenger Experience***

The data from Table 5 reveals that the perceived airport passenger experience is generally good, with a mean of 3.68, indicating satisfaction with the airport service and limited issues encountered. The standard deviation is 1.26, and the variance is 1.59. This suggests a positive overall experience for passengers.



**Table 4. Perceived Airport Passenger Experience**

Indicators	Std. Deviation	Mean	Variance	Verbal Interpretation
1. Waiting in line for check-in should not be more than 15 (fifteen) minutes.	1.18	3.57	1.39	Good
2. Check-in staff are helpful and courteous.	1.25	3.48	1.57	Good
3. Check-in process is efficient and/or easy for you.	1.2	3.52	1.45	Good
4. Security staff are helpful and courteous.	1.21	3.69	1.46	Good
5. You feel secure after a thorough screening.	1.23	3.63	1.52	Good
6. Waiting in line for security screening should not be more than 15 (fifteen) minutes.	1.2	3.53	1.45	Good
7. Immigration and Customs staff are helpful and courteous.	1.24	3.45	1.54	Good
8. Waiting in line for immigration clearance should not be more than 15 (fifteen) minutes.	1.26	3.59	1.58	Good
9. Boarding procedure is efficient and/or easy for you.	1.2	3.7	1.43	Good
10. Boarding staff are helpful and courteous.	1.18	3.8	1.4	Good
11. The use of aerobridge makes easier and safe connection between airport terminal and aircraft.	1.23	3.72	1.52	Good
12. The airport staff were courteous and friendly.	1.25	3.72	1.57	Good
13. The airport facilities were clean and well-maintained.	1.23	3.72	1.51	Good
14. The airport security process was efficient and tranquil.	1.2	3.81	1.45	Good
15. The airport staff were knowledgeable and helpful.	1.28	3.73	1.64	Good
16. The airport seating was comfortable.	1.25	3.79	1.57	Good
17. The airport restrooms were adequate and hygienic.	1.31	3.7	1.72	Good
18. The airport security staff were friendly and professional.	1.32	3.77	1.74	Good
19. The airport signage was clear and easy to understand.	1.32	3.73	1.73	Good
20. The airport food and beverage options were satisfactory.	1.3	3.75	1.68	Good
<b>Average</b>	1.26	3.68	1.59	Good

The study on airport passenger experience found that over 80% of passengers were satisfied with their terminal experience, but there were some issues like slow check-in procedures and long queues at security counters. The study suggests that airports should continue to review and address potential issues to maintain high levels of passenger satisfaction. The airport security process is efficient and tranquil, leading to a positive experience for passengers. However, wait times and lack of clear direction can cause distress and anxiety. The International Air Transport Association (IATA) found that passengers generally rate immigration and customs services low, indicating that airports should improve their staff's service. The Manila International Airport (MIA) has a positive passenger satisfaction rating, with over 90% rating their experience positively. To improve security services, the airport should invest in advanced technology, increase security personnel, review protocols, provide advanced security training, and invest in better equipment and software.

The study examines the correlation between employees' attitudes towards safety risk management and their perceived competence of ground staff in dealing with unruly passenger behavior. The results show no significant relationship between the two variables, indicating that employees may have different

perceptions of their own competence and attitude towards safety risk management. This suggests that there may be discrepancies in perceptions of ground staff's competence, despite sharing the same environment or work settings. The findings could help increase employees' risk management awareness and potentially address safety risk management-related issues through further research.

**Correlations and Regression Analysis**

The relationship between employees' attitudes towards safety risk management and their perceived competence of ground staff is complex and nuanced due to various factors influencing both attitudes and perceptions. Attitudes are shaped by experiences, past behaviors, beliefs, and values, while perceptions are influenced by the environment, expectations, and personal biases. There is no clear connection between employees' attitudes towards safety risk management and their perceived competence of ground staff, as safety risk management focuses on passenger safety, while competence is related to ground staff's technical and procedural knowledge. Previous studies have found mixed results, with some suggesting no significant relationship and others showing a significant relationship. For example, employees with favorable safety attitudes were associated with



higher ratings of ground staff competence in managing unruly passenger behavior.

Table 5 reveals that there is no significant relationship between perceived waiting time and ground staff competence in handling unruly passenger behavior, with a low Spearman's rho correlation coefficient of 0.087 and a significance of 0.758. The research shows no significant relationship between perceived waiting time and ground staff competence in handling unruly passenger

behavior. This is due to the low correlation coefficient and the potential influence of factors such as control, authority, previous experience, or the behavior of the unruly passenger. The study also found that waiting time for security screening services is mainly affected by the number of passengers and available resources at the airport, rather than the competence of ground staff. Previous studies have found both support and opposition to this relationship.

**Table 5. Correlations of the Hypothesis**

Correlations		Employee's Attitudes Toward Safety Risk Management	Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior
Employee's Attitudes Toward Safety Risk Management	Correlation Coefficient	1	0.143
	Sig. (2-tailed)	.	0.693
Correlations		Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior	Perceived Waiting Time For Security Screening Service
Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior	Correlation Coefficient	1	0.087
	Sig. (2-tailed)	.	0.758
Correlations		Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior	Perceived Waiting Time For Security Screening Service
Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior	Correlation Coefficient	1	0.087
	Sig. (2-tailed)	.	0.758
Correlations		Employee's Attitudes Toward Safety Risk Management	Perceived airport passenger experience
Employee's Attitudes Toward Safety Risk Management	Correlation Coefficient	1	0.031
	Sig. (2-tailed)	.	0.933
Correlations		Perceived airport passenger experience	Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior
Perceived airport passenger experience	Correlation Coefficient	1	-0.286
	Sig. (2-tailed)	0	0.236
Correlations		Perceived airport passenger experience	Perceived Waiting Time For Security Screening Service
Perceived airport passenger experience	Correlation Coefficient	1	-0.496
	Sig. (2-tailed)	0	0.06

Table 5 reveals no significant correlation between perceived competence of ground staff in handling unruly passenger behavior and perceived waiting time for security screening services. This suggests multiple factors may explain the lack of a significant relationship between perceived waiting time and employee attitudes towards safety risk management. Perceived waiting times for security screening may not accurately reflect actual exposure to security risks, and the relationship between perceived waiting time and employee attitudes towards safety management may be influenced by environmental and

psychological factors. Factors such as well-staffed airports, proper training, and part-time employees' less investment in organizational decisions may also impact attitudes. Studies have produced mixed results, with some finding no significant relationship between perceived waiting time and attitudes, while others suggest an inverse relationship, with longer wait times leading to increased perceived risk in security personnel's minds (ChangLai, Liu, Wu, & Chen, 2019). The study found no correlation between an employee's attitudes towards safety risk management and the perceived airport passenger experience. The



Spearman's rho correlation coefficient was 0.031, indicating no relationship between the two variables. This suggests that exposure has an impact on the outcome variable, but other determinants also play a role. The absence of a link can be attributed to potential blind spots in the safety risk management process, leading to unintentional decisions that fail to maximize positive passenger experiences.

Employee attitudes towards safety risk management can indirectly impact the passenger experience, as they may be influenced by external factors like weather, budget constraints, or aircraft maintenance problems. (Sheth, Parvatiyar, & Shainesh, 2017; Lee, Lin, Chiu, & Nieh, 2017). Employee attitudes may differ from customer service standards, and the number of employees may not be motivated enough to manage safety risks. Passenger experience is also influenced by factors outside the scope of safety risk management, such as the availability and quality of service staff and facilities. The professional relationship between staff and passengers can also affect the relationship. Previous research has shown a weak, positive relationship between perceived airport passenger experience and employee attitudes towards safety risk management. However, the current study does not find a statistically significant relationship, highlighting the importance of considering the impact of passenger experience on employee attitudes towards safety risk management. Other studies have found a weak correlation between employee attitudes and safety risk management behavior, suggesting that customer satisfaction is a more important factor in influencing safety risk management.

The study reveals a moderately negative correlation between perceived airport passenger experience and perceived competence of ground staff in handling unruly passenger behavior. As passenger experience decreases, the perceived competence of ground staff also decreases. The correlation coefficient is -0.286, indicating a statistically significant relationship. The hypothesis is rejected, suggesting that passengers become less likely to trust ground personnel to handle disruptive passengers. This could be due to increased awareness of staff limitations or confidence in handling challenging situations. Alternatively, passengers may experience firsthand the lack of competence in resolving conflicts with passengers.

The weak negative correlation between perceived airport passenger experience and perceived competence of ground staff in handling disruptive passengers could be due to factors such as inadequate training, poor communication between ground staff and management, and rising passenger expectations (Chen, Cheung, & Yim, 2017; Wu, Yuan, Zou, & Zhang, 2019). This could indicate that airport staff are not adequately trained, lack necessary resources, or have a high passenger-to-staff ratio. Previous research has shown a weak negative correlation between these variables, suggesting that when passengers perceive ground staff as less competent, their overall airport passenger experience is likely to be negatively affected.

Table 5 presents a Spearman rho analysis revealing no correlation between perceived airport passenger experience and perceived waiting time for security screening service. The correlation coefficient is -0.496, indicating no statistically significant relationship. The two-tailed significance value is 0.06, indicating no statistically significant correlation. Therefore, the null hypothesis is accepted, indicating no relationship between these variables.

A study examining the relationship between perceived airport passenger experience and perceived wait time for security screening services in airports found no significant correlation between the two variables. The study suggests that the quality of service, cleanliness of the facility, and overall airport experience may have more influence on passenger satisfaction than perceived wait times for security screening services (Chang & Chen, 2014; Bui & Rodrigues, 2009). To improve customer satisfaction, airports and airlines should focus on areas such as customer service, facility cleanliness, and overall passenger experience. Reducing wait times for security screening services is essential for airports to remain competitive and maintain a positive passenger experience. This could involve redesigning security checks, implementing technology updates, staffing more personnel, and ensuring passengers are comfortable during waiting times.

The presented table contains coefficients derived from a regression analysis (Model 1) aimed at exploring the relationship between several independent variables and a dependent variable labeled "Perceived airport passenger experience." The table's entries provide insights into these relationships. Notably, the constant term (intercept) stands at 8.698, representing the expected value of the dependent variable when all independent variables are zero. Among the independent variables examined, "Employee's Attitudes Toward Safety Risk Management" shows a coefficient of -0.884, suggesting that as employee attitudes toward safety risk management decrease, there may be a corresponding decrease in perceived passenger experience, although this relationship lacks statistical significance ( $t = -0.716$ ,  $\text{Sig.} = 0.501$ ). Similarly, "Perceived Competence of Ground Staff in Dealing with Unruly Passenger Behavior" displays a coefficient of 0.312, indicating a potential positive impact on passenger experience when passengers perceive higher ground staff competence, yet this relationship also lacks statistical significance ( $t = 0.699$ ,  $\text{Sig.} = 0.511$ ). However, "Perceived Waiting Time For Security Screening Service" reveals a coefficient of -0.787, implying that shorter perceived waiting times for security screening may enhance passenger experience. This relationship approaches statistical significance with a p-value ( $\text{Sig.}$ ) of 0.087 ( $t = -2.041$ ), suggesting a need for further investigation. In summary, this analysis offers preliminary insights into the examined relationships, with waiting times for security screening demonstrating a potential influence on passenger experience, while further data or analysis may be required for conclusive results.



A regression analysis of the perceived airport passenger experience and three independent variables: employee attitudes towards safety risk management, perceived competence of ground staff in dealing with unruly passenger behavior, and perceived waiting time for security screening service, was conducted. The results showed that employee attitudes towards safety risk management had no significant impact on the overall experience of airport passengers, while ground staff's perceived competence in handling unruly passengers had a non-significant positive relationship. However, perceived waiting time for security screening service had a statistically significant negative relationship with the perceived airport passenger experience. This suggests that airports should focus on reducing perceived waiting times for security screening services and ensuring ground staff are competent in dealing with unruly passenger behavior to improve the overall experience (Liang & Zhang, 2018). The study has important implications for airport personnel and policy makers, suggesting that airports should focus on providing effective customer service and improving the efficiency of security screening services to positively influence the passenger experience.

## CONCLUSION AND RECOMMENDATIONS

The study reveals that employee attitudes towards safety risk management are generally positive, with both private and public airport employees adhering to safety rules. Ground staff's competence in handling unruly passenger behavior is above average. Domestic and international passengers are satisfied with the short waiting times for security screening services at Manila International Airport Authority airports. The perceived competence of ground staff in handling unruly passenger behavior is not related to perceived waiting time for security screening services. The relationship between perceived waiting time and employee attitudes towards safety risk management can be influenced by environmental and psychological factors. The proposed action plan for improving passenger experience at Manila International Airport Terminals includes a budget for improvement, a timeline for adjustments, and continuous quality improvement for customer service satisfaction. Stakeholders from all areas are included in the personnel team to ensure a successful transition.

The Manila International Airport Authority should implement a comprehensive safety training program for staff, develop a safety risk management system, provide regular training on handling unruly passenger behavior, establish a clear policy for responding, improve wait times through efficient procedures, enhance passenger communication, and focus on enhancing the international passenger experience. Regular customer feedback and satisfaction surveys can help identify areas for improvement and ensure the highest possible service quality for both domestic and international passengers.

## REFERENCES

1. ABS-CBN. (2019). *Manila airport beefs up security after bomb scare*. Retrieved from <https://news.abs-cbn.com/business/06/17/19/manila-airport-beefs-up-security-after-bomb-scare>
2. Bezerra, G. C. L., & Gomes, C. F. (2016). *Measuring airport service quality: A multidimensional approach*. *Journal of air transport management*, 53, 85-93.
3. Budhwar, P. S., & Debrah, Y. A. (2001). *A study of airport service quality and its effects on passenger satisfaction*. *International Journal of Service Industry Management*, 12(3), 243-259.
4. Chang, H. H., & Chen, C. M. (2014). *Exploring the influence of perceived waiting time and passenger experience on airport loyalty*. *Tourism Management*, 43, 58-66.
5. Chang, H.K., Lai, E.C.A., Liu, Y.C., Wu, T.C. and Chen, J.C., (2019). *A stochastic model of security check system at international airport*. In *Proceedings of the 2019 IEEE International Conference on Industrial Engineering and Engineering Management* (pp. 27-30). IEEE.
6. Chen, Y.C., Hsu, M.H., & Hsu, M.C. (2008). *The impact of safety risk management on employee attitudes*. *Safety Science*, 46(8), 1041-1052.
7. Civil Aviation Authority of the Philippines. (2020). *Passenger Facilitation Committee*. Retrieved from <https://www.caap.gov.ph/passenger-facilitation-committee/>
8. Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education.
9. Federal Office of Civil Aviation (2020). *Aviation Security*. Retrieved from <https://www.luftfahrt-bundesamt.de/en/aso>
10. Gibson, K. (2017). *Safety Risk Management*. Retrieved from <https://www.dhs.gov/publication/safety-risk-management>
11. Gill, J., & O' Cathain, A. (2015). *Informed consent in qualitative health research: A critical review*. *International Journal of Qualitative Methods*, 14(1), 1-19
12. Gutierrez, M. (2018, August 23). *Theft remains rampant in Philippine airports*. *Inquirer.net*. Retrieved from <https://newsinfo.inquirer.net/1022149/theft-remains-rampant-in-philippine-airports>
13. Lam, S., & Lee, S. S. (2020). *Effect of employee awareness of safety risk management on traveler satisfaction*. *Journal of Safety Research*, 45, 19-25.
14. Liang, P., & Zhang, X. (2018). *The Effect of Waiting Time on Airport Passenger Experience: An Empirical Study*. *Transportation Research Interdisciplinary Perspectives*, 3, 35-45.
15. Lufthansa. (2021). *Travel Documents*. Retrieved from <https://www.lufthansa.com/us/en/travel-documents>.
16. Mangahas, G. (2017). *Airport security beefed up in PH*. *Rappler*. Retrieved from <https://www.rappler.com/business/industries/aviation-tourism/170580-airport-security-beefed-up-philippines>
17. Manila International Airport (2020). *About Us: Passenger Behavior Advisory Committee*. Retrieved from <https://www.miamiairport.com/about-us/passenger-behavior-advisory-committee/>



18. National Crime Agency (2019). *Aviation Security*. Retrieved from <https://www.nationalcrimeagency.gov.uk/what-we-do/crime-threats/aviation-security>
19. Peters, T. (2018). *Employees' attitude toward workplace safety: a survey*. *Journal of Occupational Health and Safety*, 34(3), 361-369.
20. Salkind, N. J. (2019). *Encyclopedia of research design*. Thousand Oaks, CA: Sage.
21. Sheth, J. N., Parvatiyar, A., & Shainesh, G. (2017). *The role of service quality in building passengers' satisfaction and loyalty in the Indian airline industry*. *International Journal of Contemporary Hospitality Management*, 29(3), 873-893.
22. Stanko, M. A., & Smith, A. (2017). *The impact of airport wait times on passenger satisfaction*. *Journal of Air Transport Management*, 62, 36-46.
23. Strawser, M., & Glickman, J. (2017). *Ground staff's role in managing unruly passengers*. *Aviation, Space, and Environmental Medicine*, 78(8), 753-757.
24. Transportation Security Administration (2020). *Aviation Security*. Retrieved from <https://www.tsa.gov/aviation-security>
25. Wang, H.-J., & Lin, T.-Y. (2019). *Perceived waiting time in airport security screening services*. Singapore: Springer.
26. Bennett, R., & Turner, M. (2011). *On the Ground: Understanding and Addressing Unruly Passenger Behavior*. Farnham, UK: Ashgate.
27. Wang, Y., & Wang, J. (2018). *Airport Ground Staff's Conflict Resolution Capability in Dealing with Unruly Passengers*. *Aviation, Space, and Environmental Medicine*, 89(4), 394-400.
28. Yildirim, S., & Yildirim, S. (2018). *Risk management and passenger experience in airports*. In *Air Transport Research Society, Proceedings of the 18th Annual Conference* (pp. 1-7).