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ASSESSING VULNERABILITY TO SAFETY AND SECURITY DISRUPTIONS IN SOMALI AIRPORTS

THIS DISSERTATION IS SUBMITTED AS PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE MASTER OF AVIATION AND AIRPORT MANAGEMENT FROM ACCORD UNIVERSITY - SOMALIA.

DEPARTMENT OF AVIATION AND AIRPORT MANAGEMENT

**Supervisor;** Dr. Shantae’ Coppock

**Submitted by:** Nafiso Abdulkadir Abdi Igal

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**ABSTRACT**

Airports are complex sociotechnical systems at the heart of one of the most crucial modes of transportation in the modern world: civil aviation. The importance of air transportation in contemporary economies has grown steadily over many years and is expected to continue growing in the immediate future. As complex sociotechnical systems and critical infrastructures in the service sector, airports are particularly prone to developing vulnerability and incubating conditions for the outburst of safety and security disruptions. These have the potential to lead to major crises. According to the crisis management literature, to which the present research adhered, crises derive from the incubation, manifestation, and development of latent conditions in organizational contexts. Detection of weak signals is deemed crucial in preventing a local disturbance from escalating to a catastrophic event. Stemming from these conceptual foundations, this research explored potential determinants of organizational vulnerability to safety and security disruptions in Somalia airports as complex sociotechnical systems. Organizational vulnerability in airports was expected to be created by the combination of a series of individual and organizational factors potentially enacted by airport organizations.

Embracing a constructivist research paradigm, this investigation adopted a single case study design with an embedded approach. Data collection was conducted in Aden Adde international airport Mogadishu, Somalia and focused on airport management organizations and level of awareness. Gathered data were computed in SPSS datasheet version 28.0.1 to generate statistics measurements to present the findings. In addition to that, regression analysis was done to examine the relationship between dependent and independent variables.

The findings revealed that travelers’ awareness and feeling of comfort toward standard and elevated procedures positively influence their intention to travel. Whenever the awareness and feeling of comfort decreased, travelers intend to travel less through airports. It was also found that travelers’ awareness and feeling of comfort toward racial profiling do not influence their intention to travel. Suggested recommendations and policy implications for airport security procedures and airports administrations are discussed.

**BACKGROUND OF THE STUDY**

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. They are where the nation’s aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports (Craig Williams, 2007). In modern societies, the economic and social relevance of airports is growing, together with the number of passengers. More travelers utilize aviation as a means of transportation and modern aerodromes are becoming fundamental in ensuring movement of people and goods within and across countries. The increasing importance of contemporary airports entails a growing concern towards the factors that can hamper aeronautical operations. Therefore, the need to address the organizational vulnerability (OV) to safety and security disruptions (SSD) of airports becomes a crucial priority in modern societies.

The main objective of the present investigation is to improve the crisis prevention measures implemented in Somalia airports. In order to do so, this thesis aims to expand the existing knowledge on the concepts of OV and SSD. In particular, specific SSD are examined as the potential product of the OV existing in the observed Somalia airports. In turn, OV is deemed to be potentially generated by a number of individual and organizational factors intrinsic to the practices, attitudes, and behaviors executed in the explored aerodromes.

**PROBLEM STATEMENT**

The air transport industry has played an increasingly important role during the last quarter of the 21st century as a facilitator of overall economic activity and a critical element in certain economic sectors. Kenya has experienced a number of air accidents mostly with light aircrafts and helicopters in the recent years, and preventing accidents has remained a major challenge. Even though Kenya is experiencing challenges in terms of air accidents, the growth of air transport in terms of increased number of passengers through the airports, increase in number of operating aircrafts, increased license registrations, and air business expansion is evident.

Airports have had difficulties managing the increase in demand for flights during the past several months. This has caused airport disruption for passengers boarding both short and long haul flights. Major airports all over the world have had to delay and cancel flights. Somalia is one of the countries that has seen the biggest percentage of delayed flights recently, according to Flightaware data.

**General Objective**

The general objective of the study is to investigate the vulnerability to safety and security disruptions Somalia airports.

**Specific objectives**

Below were the specific objectives of this study:

To determine the most common and relevant safety and security disruptions to normal business operations in Somalia airports.

To investigate how do individual and organizational factors contribute generating safety and security disruptions and increase the level of organizational vulnerability in Somalia airports.

To determine how can the impact of the individual and organizational factors for organizational vulnerability be limited and safety and security disruptions prevented in airports.

**METHODOLOGY**

**Data analysis**

Data analysis is defined as a process that implies editing, coding, classification and tabulation of data. The collected data was analyzed and interpreted to make them more useful and meaningful. Both descriptive and quantitative were conducted on the data and information collected from Aden Adde International Airport travelers was presented in a form of numbers, frequencies, percentage or descriptive statistics.

The data gathered were carefully examined and checked for completeness and comprehensibility. The data were then summarized, coded, tabulated and analyzed using both descriptive statistics and inferential statistics. Descriptive statistics contain discrete numeric data. Descriptive statistics include frequency tables, percentages. Central pattern measures such as mean, mode and standard deviation were also derived. Descriptive analysis was employed to explain businesses performance of SMEs.

**RECOMMENDATION**

With the accelerated increase in passengers’ numbers and continuous terrorist threats all over the world, the administrations of airports enhanced the level of security and tightened scrutiny procedures. Those changes have negative impacts on the travel and tourism industries in general and, in particular, on passengers. Although passengers accept airport security procedures to ensure their safety from any attack, they are still the most inconvenient part of their travel. A number of studies have stated that there is a permanent reduction in air travel due to the higher level of passenger screening. The research findings were significant because they demonstrated the opposite of what previous literature found. In addition, it is the first to understand how travelers’ awareness and their feeling of comfort toward airport security procedures (standard, elevated, and racial profiling) influence their intention to travel.

According to the findings, travelers consider standard procedures to be very important and feel comfortable with them, whereas elevated and racial profiling are considered low to slightly important and uncomfortable. What makes a trip through an airport problematic is the sense of indignity and injustice. Singling out some passengers based on their ethnicity or race for further inspection under the gaze of their fellow passengers would make their travel experience humiliating. This recommends that analysis of the sense of humiliation and indignity caused by elevated and/or racial profiling procedures needs to pay more attention.

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