## **ABSTRACT**

Although significant strides have been made in improving the safety of commercial air transport, fatal aircraft accidents are, and will continue to be an inevitable facet of the air transport industry. Consequently, the role that Aerodrome Rescue Fire Fighting (ARFF) personnel play in protecting the lives of passengers and crew is a vital one. It is therefore imperative that the emotional preparedness of these first responders should not be neglected.

Fire fighting is confirmed as one of the most dangerous and stressful occupations. Aerodrome rescue fighting adds an additional risk factor to this profession as no other transportation accident has the potential for intense fires; multiple deaths of hundreds of passengers; grotesque burn injuries; multiple fractures; mutilations; human suffering and environmental damage like aviation disasters. As subject experts these airport firefighters are the first responders when commercial aircraft is involved in aircraft accidents on or off airport, and it is therefore necessary to protect them prior, during and after exposure to potentially traumatic events. Supporting them will reduce the potential for loss of man hours due to incapacity, it will increase turnover, and will demonstrate appreciation for these valuable professionals.

This mini dissertation assesses the issues described above. Areas such as the legislative regulated environment in which Aerodrome Rescue Fire Fighting Services (ARFFS) exist, are explored. From a strengths perspective, within an ecological system comprising the individual (Micro-level); the family (Meso-level) and the working environment (Exo-level), the protective factors that will buffer firefighters against the mental and psychological effects of exposure to potentially traumatic events, thus enhancing their resilience, is explored and described. The same is done with the risk factors that will impact on their vulnerability.

Information was gathered using a diversity of sources namely scientific journals, studies, accident databases, personal observation and a variety of regulations. In view of the information gathered, the mini dissertation addresses the subject of the resilience of airport firefighters at King Shaka International Airport. xx

In line with the research questions, this study established that the firefighters at King Shaka International Airport have several protective factors at their disposal that would buffer them against the negative effects of traumatic exposure. These protective factors are located within themselves, their families and at their place of work and include social support, training received, mental and physical preparedness for aviation disasters and competencies and skills. It is therefore predicted that the first aviation disaster to occur at this airport or in its immediate vicinity will not compromise the airport operating licence due to insufficient firefighters remaining fit for duty, irrespective of the severity of the exposure. This study finally presents recommendations detailing actions to be taken by the employer, which could potentially result in building and enhancing the resiliency of aerodrome rescue firefighters.