ABSTRACT

Modern day escalators have been essential to the ease of human traffic flow in public spaces such as our underground Mass Rapid Transit (MRT) system and shopping centres. However, studies and foreign statistics have revealed that riding escalators involved certain risk, as accidents are likely to have occurred by falls, entrapments or other causes.

In the United States alone, there are thousands of cases of emergency room injuries per year due to escalators. The paper attempts to determine escalator-related accident statistics in Singapore, through the local MRT system and two of the major shopping centres. It examines the safety adequacy of escalators for the use of the general public through the analysis of the main causes of such accidents and the types of injury sustained for different age groups. The case studies show that more escalator-related accidents are due to the human errors rather than mechanical faults, or an inadequacy of safety provision by escalators. It also shows that senior citizens of age more than sixty years are the most prone to such accidents.

A survey was also conducted to determine the safety perception and awareness by the general public. It revealed the fact that many people, especially the younger ones, are inattentive to safety considerations, while many others are unaware of improper behaviors on escalators. The paper finally concluded with suggestions and recommendations to improve the standards and regulations for the operation of the escalators.