



ABSTRACT

The study was conducted to identify the passenger's perception on the "Smart Ticketing System" (STS) in Sri Lanka Railway as a service quality improvement the primary objective of the research was to identify the passenger's perception on "Smart Ticketing System" in Sri Lanka Railways as quality improvement.

For the researcher to achieve the objectives, the study encompasses a primary data collection, in the form of printed questionnaires and Google forms, while secondary data of the study incorporates statistics from the Ministry of Transport and Civil Aviation, as well as former publications.

A questionnaire developed based on factor identified in the literature review, distributed to passengers through online and drop off method. A sample size of 250 passengers transit/transfer via Colombo fort railway station and Maradana railway station were selected with Simple Random Sampling technique. The data concerning the analysis was collected only with 160 valid passenger responses (obtained 64% response rate) transit/transfer via the selected two main stations.

The reliability of the data collected was analyzed using Cronbach's alpha. The KMO test statistic for sample adequacy. Moreover, factor analysis was created based on the Principal Component Analysis by extracting 8 factors from the 29 variables, the total amount of variance accounted, redistributed over the eight extracted factors, renamed using Component Score Coefficient Matrix, Kruskal-Wallis Test for hypothesis testing used to identify the impact of demographic factors.

Accordingly identified that factors such as Reliability of faring, System efficiency, Travel card option with prepayments, Integrated tickets were affected with the demographic factors of gender, age, occupation, and income as factors affecting the passenger's perception on STS in Sri Lanka Railways as quality improvement.

Hence, this study is significant enough to discover the overall perception of this fare collection mechanism.

Key words: *Passenger Perception, Public Transport System, Service Quality, Smart Ticketing System*