Analysis of Fatalities in Road Accidents considering Peliyagoda Police Area in Gampaha District as a Case Study
M. P. V. Dissanayaka, & D.D.S. Kulatunga, Department of Mathematics, University of Kelaniya

Road accidents have become a leading cause of death and injury as well as property damage worldwide. In Sri Lanka, a steady increase of road accidents has been reported resulting in a rising trend of fatalities too. In 2006, there were 2069 fatalities, while 2263 fatalities were reported in 2010. There are a number of factors that increase the risk of road accidents, including vehicle design, speed of operation, road design, road environment, driver’s skill and driver’s behaviour. The objective of this study is to find the factors that mostly contribute to fatal road accidents caused by motor vehicle drivers, using Logistic Regression Analysis.

This study investigates the factors affecting fatalities in road accidents in the Peliyagoda Police Area in Gampaha district, using Logistic Regression Analysis. Accident data [519 accidents] recorded at the Peliyagoda Police Station in 2009 were considered. A total number of 506 road accidents where the motor vehicles were at fault were included in the analysis.

Based on the data obtained from the police records, several predictor variables were employed in three independent Logistic Regression models in this study. A multinomial logistic model was used in one of them to deal with the multiple nature of dependent variables such as fatal, grievous, non grievous compared to damage only accidents. A binary logistic regression model was also developed to evaluate the odds of fatal accidents compared to non fatal accidents. The odds of an accident being fatal due to the collisions with pedestrians were high in both models with a positive effect. Since there were only 17 fatal accidents (3.4%), both these models were unsuccessful with huge coefficients.

Re-categorizing fatal, grievous and non grievous accidents as human damage accidents, and damage only accidents as non human damage accidents, a binary logistic regression model was constructed. Head on crashes, approaching crashes, rear end crashes, crashes in conjunction with turning movements, crashes with pedestrians and passengers were positively related to human damage accidents rather than single crashes. Similarly, in the first two models, crashes with pedestrians and passengers had high impact on increasing the odds of human damage accidents. The odds of an accident being human damage were increased by a factor of 6.888 by having no traffic control rather than having police traffic control. The odds of an accident being human damage by a driver/rider with a valid or probationary driving license were about 25% and 13% respectively, lower than for accidents caused by the drivers/riders without valid license.

The odds of an accident being human damage rather than being non-human damage are increased by a factor of 6.742 for motor cycles and bicycles rather than heavy vehicles. For every one-unit increase in the age of the vehicle, we can expect a 1.074 increase in the odds of human damage accidents, holding all other independent variables constant. In the Peliyagoda Police area, analyzing human damage accidents is more effective than analysing fatal accidents. However, a further study is recommended for an area where fatal accidents are more significant.
Challenges in Teaching and Learning English as a Second Language in Distance Education: Special Reference to the Open University of Sri Lanka
S.D. Dissanayake, Department of Language Studies, Open University of Sri Lanka

Sri Lanka has made considerable progress in the field of distance education over the past three decades. Opportunities for Sri Lankan students to access both national and international educational organizations through technology are increasing. This will make a remarkable contribution to efforts directed at promoting equality of opportunity for all citizens across the chronic urban-rural divide. The emergent distance learning projects of both the public and private sectors will naturally give a boost to the study of English Language through information technology, which in fact is the key to such an education.

As far as English language education in the distance mode is concerned, as the pioneer of open and distance learning in the country, the Open University of Sri Lanka conducts a wide range of General English programs. These programs have become some of the most popular programs of the university.

The objective of this study is to evaluate the introduction of Teaching English as a Second Language (TESL) in distance education, and to discuss the major challenges and issues faced by the students and the teachers in the distance education mode. On the other hand, the study attempts to find the answer for the basic question of “Can English as a second language be taught at a distance?” The second objective of the study was to find methods to solve the problems that are encountered by both the teachers and the learners as they are engaging in the mode of distance education.

The analysis was based on the sample of students of the Basic English Programme and a sample of teachers in the English Language Programme at the Kandy Regional Centre of The Open University of Sri Lanka. The perceptions of the students towards the relevance of the programme, the teaching and learning environment, the assessment methods and the course content were assessed. Data were collected by questionnaire and an interview schedule.

The findings of the research reveal that there is a considerable amount of issues and challenges in teaching and learning English at a distance. In the context of improvement in writing and speaking skills of the students, it was obvious that the students did not exhibit a competency level up to the standard that the Department of Language Studies was expecting by offering the programme. Further, the low attendance of the students, their lack of interest in learning language, poor teaching methods of the teacher and their inability to cope with the new mode of education have been identified as the causes.