

Traffic Sign Evaluation and Redesign of Typeface in Saudi Arabia

Abstract

Traffic signs in Saudi Arabia are very important element in highways; they serve as guidance to drivers. For that reason, any issues caused by traffic signs may lead to confuse the driver, thus, increase the rate of accidents. This project focuses on one of the traffic signs parameters, which is typeface; the reasons behind focusing on typeface are rareness of researches related to typeface and effectiveness of typeface on traffic safety. The basic idea of this project is to compare between the current typeface used in Saudi Arabia traffic signs and several other typefaces using a specific program that is designed especially for this project. This program is designed to simulate the traffic sign with a single word wrote by one of the typeface candidates. The goal of the program is to find the reaction time (RT) spent by the participant to identify a single word. The participant will try to identify 560 words with different typefaces. After finishing the experiment, the data will be processed and analyzed using MANOVA statistical analysis method in order to find the optimal typeface between the candidates. Results show that there is a better typeface than the one currently used. As a result, it is recommended that ministry of transportation (MOT) to consider changing the current typeface. This will potentially help to improve traffic safety and reduce the current alarming rate of automobile accidents.