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THE INFLUENCE OF WEEKDAYS ON PEDESTRIANS ROAD CROSSING BEHAVIOUR

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The research project build on the findings of Ellis & Jenkins (2011) that days of the week provoke specific emotional responses, with Monday being very negative and Friday a polar opposite. The project entails observing pedestrians' tendency to wait or not wait for the "green man" on different days of the week, requiring the recording of video footage at a specific road crossing so that it was possible to observe pedestrians and bypassing traffic at the same time (as traffic flow is one of the main predictors of pedestrian unsafe crossing behaviour). 40 hours of video footage (each hour of footage taking up 2GB±) was recorded, for which extra storage storage space was needed. Therefore I applied for funding for an external hard drive (320GB, the smallest possible) and received £50 from the settlement fund.

In this study, 5941 pedestrians were unobtrusively recorded crossing at a pelican crossing in an urban setting. Chi-squared results reveal a significant difference in unsafe crossing rates [$\chi 2$ (1, N = 2558) = 4.351, p = .037] between Monday (38.9%) and Friday (34.5%), especially for female pedestrians (Monday-Friday comparison [$\chi 2$ (1, N = 1296) = 11.249, p < .001]). A logistic regression model comparison indicates that controlling for vehicle density, pedestrian density and gender, the weekday effect persisted and is the second best predictor for road crossing safety. These findings showed that pedestrians crossed unsafely more often at the beginning of the week, with a decline towards the end of the week. It is suggested that a higher frequency of "green man" signals at the beginning of the week could significantly reduce pedestrian unsafe crossing.

This has made a step towards benefiting the social good, since the UK suffers serious problems with pedestrian road fatalities. In 2011, 26 198 pedestrians were injured in road traffic accidents in the UK (DoT, 2011). The majority of these incidents were caused by pedestrians crossing the road unsafely. Governmental agencies attempt to reduce unsafe crossing with little success or high costs involved, having left a need for cheap and efficient change proposals to reduce pedestrian unsafe crossing behaviour. Based on current findings a cheap and efficient reduction is proposed by changing the frequency of the "green man" on weekdays where unsafe crossing rates peak to decrease unsafe road crossing behaviour and in turn pedestrian fatality numbers.

This research would not have been possible without the supplement fund small grant's support. I would like to give my thanks for helping me execute the project, and hopefully benefit society through it's findings.