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THE SEARCH FOR A ROBUST MEASURE OF ROAD SAFETY ADVERTISING EFFECTIVENESS

A thesis presented in partial fulfilment of the requirements for the degree of

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Palmerston North

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ABSTRACT

Loss of life resulting from road accidents incurs an immeasurable social and financial cost on society every year. Fortunately, the number of road injuries and fatalities has been reducing in most industrialised countries for the past three decades due to the ongoing improvement of the engineering of roadways, the safety of vehicles and the changing attitudes and behaviour of drivers. Governments are constantly developing innovative tactics to further reduce the number of road accidents.

One such initiative has been the adoption of marketing theory and specifically, advertising, by transport agencies in Australia and New Zealand into their road safety strategies. The Governments of both countries have proclaimed the campaigns to have been a success. However, the two road safety advertising campaigns have been studied by a number of researchers with conflicting results and conclusions about their efficacy. The studies have varied in form, estimation, outcomes, and data, making the comparison of their claims often very difficult. Policymakers and the public rely on the research of road safety experts when deciding on the best actions to undertake. However, the experts have each in turn argued that their approach was the most appropriate and that other researchers had done something wrong to reach their conclusions.

The objective of this research was to identify a robust measure of road safety advertising effectiveness to take the confusion out of the ongoing debate.

Using a single set of data and a range of advertising forms and road safety outcomes, previous evaluations of the New Zealand campaign were replicated and extended to discover which approach provided the best explanation of the value of road safety advertising. A further refinement was then made that addressed a potential problem with the original methods. Therefore, the research exhausted all the appropriate single and multiple equation approaches to the econometric evaluation of the effectiveness on road safety advertising using non-experimental data.

The research shows that using one data source and a range of road safety outcomes, a robust and consistent measure of advertising effectiveness could not be identified among the approaches investigated. Furthermore, there is no objective way of knowing which of the models tested best reflects the actual situation. Therefore, it is claimed that a viable solution to this dilemma is to implement an experimental approach to identify the true effect of road safety advertising on driver behaviour.
ACKNOWLEDGEMENTS

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I would also like to thank the following people for providing the necessary data so this research could be undertaken, the LTSA (now Land Transport New Zealand), and Dr Michael White of Transport South Australia.

On a more personal level I would like to sincerely thank Donna Royal for giving me the confidence and support to even consider tackling a PhD. To my son Jack and daughter Zoë, who are both still completely befuddled about just what a PhD is and why anyone would ever want to spend so much time doing one, many, many thanks for your patience, love and support.

Last, but most importantly, I would like to express my heartfelt gratitude and thanks to Sandi Butts for her tireless support through the good and bad times. Without her I would never have completed this thesis.
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