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THE RELATIONSHIP BETWEEN  
THINKING AND DRIVING STYLES  
AND THEIR CONTRIBUTION TO  
YOUNG DRIVER ROAD SAFETY

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THIS THESIS IS SUBMITTED IN FULFILLMENT OF THE  
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## ABSTRACT

This thesis explores the relationship between thinking and driving styles and their contribution to young driver road safety. In doing so, it aspires to strengthen the focus on road *safety* instead of road *unsafety*. Although the majority of literature on traffic safety concentrates on crashes, crash risk, and aberrant driving behaviour, this research concentrates on people and safe driving styles. In other words, this study is undertaken from a positive point of view, and it presents and uses the first positive definition of road safety.

Young drivers are overrepresented in traffic fatalities, and they have been at the centre of many crash focused studies. However, although the number of young driver deaths has been reduced in the past decade (Chen, Ivers, Martiniuk, Boufous, Senserrick, Woodward, Stevenson and Norton 2010a), young drivers still represent 25% of the road related deaths, but make up only 15% of the licensed drivers (Department of Infrastructure Transport Regional Development and Local Government 2009). It seems that past research, the majority of which is negatively focused on crashes and aberrant driving behaviour, has not yet led to a satisfactory improvement of young driver road safety. This study, therefore, focuses on young drivers' safety from a positive perspective.

Mixed methodology is used to find an answer to the main research question *Can knowledge of thinking and driving styles contribute to young driver road safety?*, using self-report questionnaires and group interviews with young drivers. The thesis examines the relationship between young drivers' thinking and driving styles, emphasising patient and careful driving. The traffic safety literature and the parallel literature on thinking styles is used to get a better understanding of the construct of driving style, and what driving style means to young drivers themselves. It argues that thinking and driving styles can both be regarded as intellectual styles and a model for the development of driving styles is proposed. The findings from this research have implications for driver training content as well as for driver training execution.



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Working on a PhD thesis is a perilous undertaking because it confronts the candidate with several of their hidden fears, anxieties, and worries, and unveils the enormous amount of things one does not know. At the same time it unleashes lots of creativity, stimulates the brain, breeds stamina, and opens up whole new worlds of knowledge. This makes the road to completion a rocky one, with high highs and low lows. I did not go this road alone and I would like to take this space to acknowledge the people who travelled with me; the ones who were there for shorter periods, and especially the ones who went with me all the way.

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## ABBREVIATIONS AND GLOSSARY

**ACT:** Australian Capital Territory.

**L-plater:** a driver holding a learner permit.

**L-plates:** Australia has a graduated licensing system for drivers. Drivers on a learner's permit have to be accompanied by a fully-licensed driver and display L-plates at the rear and front of their car.

**MDSI:** Multi-dimensional Driving Style Inventory (Taubman - Ben-Ari, Mikulincer and Gillath 2004).

**MSG:** theory of mental self-government (Sternberg 1997).

**Negative view on road safety:** a focus on crashes, crash risk, and aberrant driving behaviour (e.g. angry driving, risky driving)(Lehtimäki 2001).

**Negative definition of road safety:** safety defined as a lack of something (e.g. crashes) (Lehtimäki 2001).

**Positive definition of road safety:** safety defined as some harmonious circumstances that so far have not been explicated further (Lehtimäki 2001).

**Positive view on road safety:** a focus on people, and normal safe driving behaviour or driving styles (e.g. patient driving, careful driving) (Kleisen 2009).

**P-plater:** a driver holding a provisional licence (intermediate).

**P-plates:** Australia has a graduated licensing system for drivers. Drivers on a provisional licence must display P-plates on the rear and front of their car.

**TSI-R:** Thinking Style Inventory-Revised (Sternberg, Wagner and Zhang 2003).

**Young drivers:** male and female drivers between 18-25 years of age.