

## Application of the Transtheoretical Model of behaviour change to predict speeding behaviours

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### Abstract

This study proposes the application of the Transtheoretical Model of behaviour change (Prochaska & DiClemente, 1992) to speeding behaviours. The Readiness to Change Questionnaire (Rollnick, Heather, Gold, & Hall, 1992) was adapted to address motivation to reduce speeding behaviours. A total of 105 participants completed the Readiness to Reduce Speeding and Usual Speed (RRS) questionnaire. They were also queried about their usual driving speed. Results showed that the RRS possessed a clear component structure (three stages of change) and an acceptable internal consistency and test-retest reliability. Participants with a higher level of readiness to change (action stage) reported driving slower than participants at a lower level of readiness (precontemplation or contemplation stage). The RRS appears useful to evaluate stage of change in speeding behaviours and to target driver improvement course to drivers' stage of change.

### Introduction

The Transtheoretical Model of behaviour change (Prochaska & DiClemente, 1992) has been applied to many health behaviours, but rarely to risky driving other than drunk driving. To our knowledge, no instrument for the identification of stage of change concerning speeding behaviours has been developed or validated.

The Readiness to Change Questionnaire (RCQ) (Rollnick, Heather, Gold, & Hall, 1992), which measures stage of change regarding drinking behaviour, was adapted for that purpose. The RCQ focuses on three critical stages proposed by the Transtheoretical Model: precontemplation (poor problem recognition), contemplation (some problem recognition, but ambivalence about the need to change), and action (concrete changes in behaviour are being undertaken).

The goal of this study was to adapt the RCQ to address speeding behaviours by: 1) the development and validation of the Readiness to Reduce Speeding and Usual Speed (RRS) questionnaire; and 2) the examination of the relationship between stage of change as measured by the RRS and self-reported usual speed.

### Method

#### *Participants*

Participants were 105 male drivers 19 to 39 years old ( $M = 28.28$ ;  $SD = 4.71$ ) who held a regular driving license for at least two years ( $M = 11.26$ ;  $SD = 4.78$ ) and who drove an average of 23,890 kilometres ( $SD = 17,451$ ) in the year before the study. They were either working (69.9%), studying (18.5%), looking for a job (8.7%) or 'other' (2.9%).

#### *Adaptation of the RCQ to the RRS*

The primary strategy of our adaptation of the RCQ (Rollnick et al., 1992) was adherence to the original questionnaire:

- 12 items (4 items for each stage of change: precontemplation, contemplation and action).
- 5-point Likert-type responses range from 'strongly disagree' to 'strongly agree'.
- Scores from -2 to +2; for each stage, possible scores from -8 to +8.
- Stage of change determined by stage with highest score; in case of a tie, the higher level of readiness to change is chosen.