

Assessing the Ghanaian driver's susceptibility to distraction engagement

Enoch F. Sam

*Lead presenter: efsam@uew.edu.gh

Department of Geography Education, University of Education, Winneba, Ghana

Keywords: driver distraction engagement; driver type; driving context; susceptibility to driver distraction questionnaire; Ghana

Background

Driving involves multiple subtasks (e.g., route finding and following, velocity control, etc.) performed in a constantly evolving environment. Despite this complexity, drivers often engage in non-driving activities, such as using mobile phones or adjusting in-vehicle technology, that take their attention and hands off crucial vehicle controls. Growing evidence shows that driver distraction impairs driving performance and heightens the risk of traffic crashes and critical incidents.

Aim

Understanding the reasons underlying driver distraction engagement and the susceptibility to various distractions is necessary to develop effective distraction-mitigating countermeasures. The study examined the forms, instances, and predictors of distraction engagement among Ghanaian drivers to propose workable interventions.

Method

The study sampled 257 private and professional/commercial drivers via personal contacts and social media invitations. The study utilised the *Susceptibility to Driver Distraction Questionnaire (SDDQ)* and four driving scenarios to investigate the drivers' voluntary and involuntary distraction engagement. Bivariate correlation and independent samples t-tests were performed to investigate the associations and differences among driver types and forms of distraction. Further, hierarchical multiple regression was used to model the predictors of distraction engagement.

Results

The study results reveal that self-reported distraction engagement while driving has a positive correlation with voluntary distraction and a negative correlation with involuntary distraction. The results also show significant differences in the perceived likelihood of using mobile phones among the different driver types in different driving contexts. Moreover, the hierarchical regression model shows that gender, age, past mobile-phone-related crash experience, driving context (urban road and motorway), attitude, injunctive norms, and involuntary distraction are significant predictors of self-reported distraction engagement.

Conclusions

The study results suggest that gender, age, past mobile phone-related crash experience, driving context, attitude, injunctive norms, and involuntary distractions predict distraction engagement, confirms the SDDQ's utility in predicting voluntary and involuntary distraction engagement and highlights the importance of providing driving-based context information when studying distraction engagement.