A new study confirms researchers’ previously limited findings that drivers with impulsive, angry personality characteristics are more likely than other drivers to engage in the kind of belligerent driving that potentially leads to accidents, conclusions that could be used in designing more effective traffic safety publicity campaigns.

Washington, D.C. — Past research has suggested that people with impulsive, angry personality traits run a higher risk of engaging in aggressive driving behavior than people without those characteristics, and a new study for the first time confirms those earlier findings. The new research—which contributes to understanding the significant problem of belligerent driving—could be used in designing traffic safety campaigns that more effectively train aggressive drivers to alter their behavior, according to the researchers.

Drivers who are readily angered by slower drivers, detours and similar traffic disruptions could be taught to become more aware of their responses and modify them to reduce accident risks, according to the authors. For example, they could be taught to be more mindful of the traffic conditions likely to trigger their anger and to focus on other less aggravating traffic factors. The new study, “Trait predictors of aggression and crash-related behaviors across drivers from the United Kingdom and the Irish Republic”—by Amanda N. Stephens of the Accident Research Centre, Monash University, Australia, and Mark J. M. Sullman of Cranfield University, United Kingdom—recently appeared in the online version of Risk Analysis, a publication of the Society for Risk Analysis.

For the new study, a total of 268 male and 281 female fully licensed drivers between the ages of 18 and 75 years voluntarily completed an online questionnaire. The questionnaire was based on well-established systems for measuring traits, such as the Driving Anger Expression Inventory and the Road Rage Questionnaire, which include questions about shouting or swearing at another driver, threatening to hurt another driver, intentionally damaging another vehicle and intentionally hurting another driver.

The authors state that their study’s aim was to test a proposed model of driver crash-related behaviors and compare how the model fit with data for drivers in the United Kingdom and Republic of Ireland. According to the model, the personality traits of boredom proneness, impulsiveness and sensation seeking, coupled with driving anger, would predict aggressive driving. Such driving would, in turn, “be a reliable contributor toward crash-related conditions,
including near-misses, slips of attention (loss of control of the vehicle and loss of concentration) and moving violations,” according to the authors. Their study confirmed the model, “with anger and impulsivity being significant predictors of aggressive expression and this in turn predicting subsequent crash-related behavior.” The findings held for both Ireland and the United Kingdom.

Although the new study to some extent replicates previous research, the results make a novel contribution to the broader field because the study used a sample of drivers from the general community, whereas previous research used American university students. Until now, the generalizability of the university results had not been assessed. Drivers in the current study were older and more diverse. In addition, the new study is the first to provide information on self-reported aggression of drivers in the Republic of Ireland and is also the first to support the proposed relationship between impulsivity and driving anger with more than correlational analysis, which provides only limited information about the relationships between variables.

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