

Zhao, N., Mehler, B., Reimer, B., D'Ambrosio, L.A., Mehler, A., & Coughlin, J.F. (2012). An investigation of the relationship between the Driving Behavior Questionnaire and objective measures of highway driving behavior. *Transportation Research Part F: Traffic Psychology and Behavior*, 15, 676-685.

The Driver Behavior Questionnaire (DBQ) is a well-documented instrument for obtaining self-report information on aberrant driving behaviors. The DBQ contains three subscales to capture different aspects of driver behavior: *errors*, *lapses* and *violations*. Previous research has demonstrated a relationship between DBQ scores and retrospective and prospective crash involvement. There is little or no published information, however, on the relationship between DBQ scores and actual driving behavior that may bear some relationship to crash risk. The present study focuses on the relationship between DBQ subscales and observed highway driving behaviors. A sample of 108 drivers in self-reported good health and with a safe recent driving history was balanced by gender across three age groups (20–29, 40–49, 60–69). Prior to driving, participants completed a 24-item U.S. version of the DBQ. The relationships between subscales of the DBQ and driving behavior were examined. The results indicated that drivers with high *violations* scores drove faster, had poorer lateral control, changed lanes more frequently, spent more time in the left lane, and had more sudden unidirectional accelerations. High *lapses* scores were related to high steering wheel reversal rates and less consistent throttle control. No main effects were observed between *errors* scores and any of the driving behavior measures. The magnitude of the relationships observed here are likely conservative because drivers involved in accidents in the past year were excluded.