Assessing DUI risk: Examination of the Behaviors & Attitudes Drinking & Driving Scale (BADDS)

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Abstract

Despite research findings indicating attitudinal differences among drivers with and without a history of driving under the influence (DUI) offenses, there are no well-established instruments specifically designed to clinically assess drinking and driving attitudes and behaviors among adults. The purpose of this current series of three studies was to investigate the psychometric properties of the Behaviors & Attitudes Drinking & Driving Scale (BADDS). The BADDS was developed in previous studies by the authors and assesses respondents' rationalizations for drinking and driving, likelihood of future drinking and driving, drinking and driving behaviors, and riding with a drinking driver behavior in the previous month. Study 1 ($N=179$) and Study 2 ($N=338$) assessed college participants, while Study 3 gathered data from adult DUI offenders ($N=160$) and non-DUI offenders ($N=166$). Results indicate good to excellent test–retest reliability and internal consistency estimates for BADDS scale scores. Support for the construct validity as well as concurrent and predictive criterion validity of BADDS scores was also demonstrated. Potential applications for the measure, as well as need for future research are described.
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With the National Highway Traffic Safety Administration (NHTSA) reporting approximately 221 million vehicles on the road in the United States (NHTSA, n.d.), drinking and driving continues to be one of the greatest preventable health risks nationwide. In fact, vehicular accidents are a leading cause of death

in the United States, with only cancer and heart disease responsible for more years of life lost (NHTSA, 2006). In 2004, accidents involving alcohol accounted for 39% of all traffic fatalities, resulting in 16,694 deaths, with most of these fatalities (86%) involving a legally intoxicated driver with a BAC meeting or exceeding .08 g/dL (NHTSA, 2004). Compounding these issues is the fact that despite the pervasiveness of drinking and driving, only one driving under the influence (DUI) arrest is made for every 300 to 1000 drunk driving episodes (Yalisove, 2004).

Research on drinking-related cognitions as they relate to Drinking and Driving Behaviors has become a topic of increasing interest. Schell, Chan, and Morral (2006), for example, found that positive alcohol expectancies (e.g., "I feel relaxed when drinking") were related to drinking and driving among DUI recidivists, such that those with stronger expectations for the positive consequences of drinking engaged in drinking and driving more frequently. In examining motivations specifically for drinking and driving behavior, Kulick and Rosenberg (1999) found that while the majority of their college student sample regularly drove after drinking, participants rationalized this behavior in a variety of ways. The most commonly reported rationales for driving under the influence of alcohol were the desire to go to a particular destination (e.g., home), perceiving oneself as only slightly intoxicated, perceiving that friends and others are too intoxicated to drive, and perceiving oneself as having had less to drink than friends and others.

McCarthy, Pedersen, and Leuty (2005) found that drinking and driving attitudes were predicted by participants' history of drinking and driving consequences (e.g., car accident). In short, those who had experienced consequences from drinking and driving held more lenient attitudes toward driving after having one, three, five, or more drinks. Perceived risk has also been shown to relate to drinking and driving behavior. In one study, for example, adolescents' perceptions of the dangers of drinking and driving, as well as perceived likelihood of getting into an accident while driving after drinking, was negatively correlated with drinking and driving (Gibbons, Lane, Gerrard, Pomery, & Lautrup, 2002).

Mannering, Bottiger, and Black (1987) argue that attitudes toward drinking and driving, while affecting drinking and driving decisions, are not well understood. Despite research findings indicating differences among non-DUI drivers and DUI drivers, most research in this area either relies on one or two attitudinal items (Stacy, Bentler, & Flay, 1994) with little evidence regarding reliability and validity of the questions, or uses a general driving behaviors questionnaire that includes a drinking and driving item (e.g., Driving Behaviour Questionnaire; Ozkan, Lajunen, & Summala, 2006). Additionally, there are no well-established instruments specifically designed to assess drinking and driving attitudes and behaviors among adults. Specifically assessing drinking and driving attitudes and behaviors may provide an effective means for identifying potential DUI offenders. Measuring and understanding attitudes toward drinking and driving is also critical because attitudes have the potential to change consequent to experience, prevention, and intervention. Given the pervasive problem posed by drinking and driving as well as the seemingly intractable nature of drinking and driving as exemplified by its high recidivism rate (Greenberg, Morral, & Jain, 2005; McCarthy et al., 2005; Wiliszowski, Murphy, Jones, & Lacey, 1996) more extensive tools for investigating attitudes and behaviors toward drinking and driving are crucial in order to more fully understand driving after drinking as well as designing effective universal, selective, and indicated prevention efforts. Comprehensive, reliable, and valid measures of DUI attitudes and behaviors would also equip researchers and practitioners with a means of assessing the effectiveness of such interventions.

McCarthy, Pederson, Thompson, and Leuty (2006) recently developed the Positive Expectancies for Drinking and Driving for Youth (PEDD-Y) in order to meet this described need. This measure includes