

Reliability and Validity Summary

of the BADDs

The Behaviors & Attitudes Drinking & Driving Scale (BADDs) is comprised of three scales that measure attitudes and two that measure behaviors related to drinking and driving. The instrument was designed to screen individuals and groups for impaired driving risk, and as a program evaluation tool to measure change following intervention.

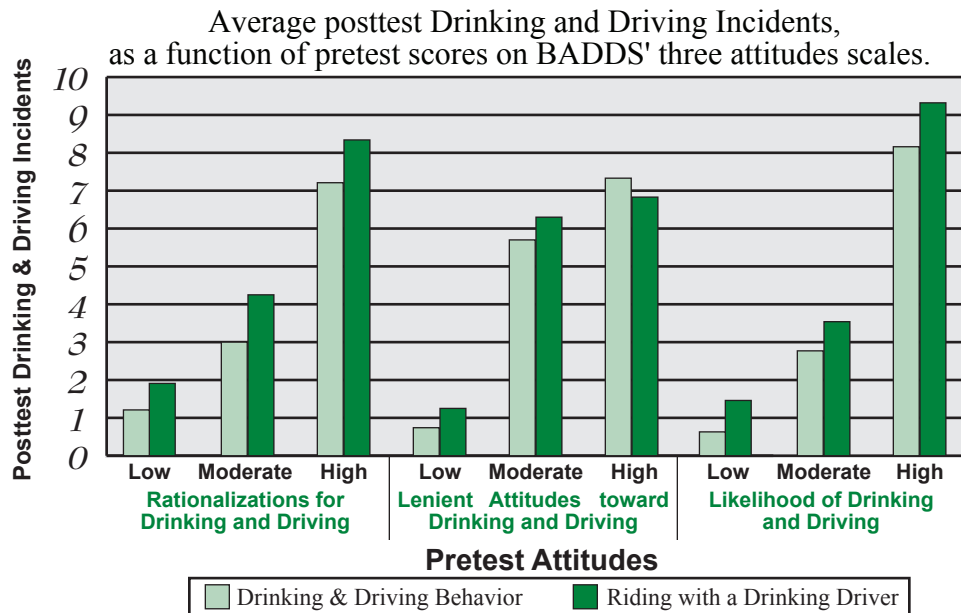
The psychometric properties of the BADDs have been examined in several studies (Collins, 2007; Jewell & Hupp, 2005, 2006, 2007; Jewell, Hupp, & Luttrell, 2004; Jewell, Hupp, & Segrist, 2008; Lazowski, Jewell, & Hupp, 2007). The following summarizes the reliability and validity of the BADDs.

Reliability

- *Internal Consistency* - Cronbach's alpha coefficients estimating how consistently the items within a scale measure the same construct can range from 0 to 1.00. Alpha coefficients for the BADDs scales ranged from .71 to .95, demonstrating good internal consistency.
- *Test-Retest Stability* - When individuals took the BADDs at two different times 4 weeks apart the correlations between their scores at time 1 and time 2 showed good stability. Test-retest correlations on the BADDs scales ranged from .74 to .88.

Validity

- Research on the BADDs shows a high degree of discrimination among the scores obtained by five different types of respondent samples – DUI offenders, adults in substance abuse treatment, adults without a DUI history, college students, and high school students. These findings indicate that scores on the BADDs can effectively discriminate between people who engage in the target behavior (drinking and driving) and those who do not.
- DUI offenders score 2 to 3 times higher on all five BADDs scales when compared to adults with no DUI history, demonstrating further evidence of discriminant validity.
- BADDs pretest attitudes scores predict future drinking and driving behaviors at 4-week follow-up. As shown in the figure below, on average, at 4-week follow-up, the number of impaired driving incidents for those who scored "high" on the BADDs attitudes scales at pretest is 7 times greater than the number of incidents for those who scored "low."



- BADDs scale scores show significant positive correlations with the scores on the substance use scales of the Substance Abuse Subtle Screening Inventory–3 (SASSI-3). These findings are an index of the instrument's construct validity by demonstrating that people's drinking and driving attitudes and behaviors as measured by the BADDs are consistent with measures of their alcohol and drug misuse on a different instrument, the SASSI-3.
- Scores in the high range on the BADDs scales, particularly the Driving Behaviors and Riding Behaviors with a Drinking Driver scales are most likely to be associated with test positive results on the SASSI-3, suggesting a need for further evaluation for a substance use disorder.
- The BADDs is highly sensitive to attitudinal change, even when relatively weak interventions (e.g., a 10-minute video on drinking and driving) are applied, and it is also able to measure the effects of more complex and time-consuming interventions (Collins, 2007; Jewell & Hupp, 2005; Jewell et al., 2004).

Additional information on the psychometric properties of the BADDs can be found in the User's Guide and Manual for the instrument (Jewell, Hupp, Lazowski, & Miller, 2007).

References

- Collins, A. (2007). *The impact of shock videos and informational videos on adolescent drunk driving attitudes and behaviors*. Unpublished master's thesis, Southern Illinois University Edwardsville, Edwardsville, Illinois.
- Hupp, S.D.A., & Jewell, J.D. (2008). Evaluating programs for impaired driving: More effective tools are arriving to measure change in the DWI population. *Addiction Professional*, 6(2), 29-31.
- Jewell, J., & Hupp, S. (2005) Examining the effects of fatal vision goggles on changing attitudes and behaviors related to drinking and driving. *The Journal of Primary Prevention*, 26, 553-565.
- Jewell, J.D. & Hupp, S.D.A. (2006). [Examination of the reliability and validity of the BADDs]. Unpublished raw data.
- Jewell, J.D. & Hupp, S.D.A. (2007). [Examination of the psychometric properties of the Lenient Attitudes toward Drinking and Driving scale of the BADDs]. Unpublished raw data.
- Jewell, J.D., Hupp, S.D.A., Lazowski, L.E., & Miller, G.A. (2007). *The BADDs User's Guide & Manual*. Springville, IN: SASSI Institute.
- Jewell, J.D., Hupp, S.D.A., & Luttrell, G. (2004). The effectiveness of Fatal Vision goggles: Disentangling experiential versus onlooker effects. *Journal of Alcohol and Drug Education*, 48, 63-84.
- Jewell, J. D., Hupp, S. D. A., & Segrist, D.J. (2008). Assessing DUI risk: Examination of the Behaviors & Attitudes Drinking & Driving Scale (BADDs). *Addictive Behaviors*, 33, 853-865.
- Lazowski, L.E., Jewell, J.D. & Hupp, S.D.A. (2007). [Examination of the psychometric properties of the Behaviors & Attitudes Drinking & Driving Scale (BADDs) with adults in treatment for substance use disorders]. Unpublished raw data.



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