

ACCURACY OF SELF-REPORTS OF ALCOHOL OFFENDERS  
IN A RURAL MIDWESTERN COUNTY<sup>1</sup>

JAMES R. NEVITT AND JOEL LUNDAK

*Peru State College*

*Summary.*—Self-reports of drinking are of doubtful accuracy as heavy drinkers tend to underreport consistently amounts drunk as well as other alcohol-related data. A sample of 60 people cited for DWI in a rural midwestern county in southeast Nebraska during routine alcohol-dependency evaluations indicated that 10% underreported their Breath Alcohol Content at the time of arrest and 38% their previous number of DWI citations. Subjects were grouped by age (over and under 30) and by accuracy (accurate and inaccurate reporters). A 2 × 2 analysis of variance of later DWI arrests was significant as younger subjects showed greater risk. Those who underreported number of past DWI citations were significantly lower on their self-reported BAC at the time of arrest than accurate reporters. Age and underreporting alcohol-related data are as important for practitioners to attend to as scores on the Michigan Alcoholism Screening Test or SCID measuring alcoholic tendencies.

Currently there is uncertainty regarding the relative usefulness of some types of client data received during drug and alcohol evaluations and screenings in predicting early success in treatment or later potential of relapse (12). Indeed, there are controversies regarding the method of recording and self-reporting quantities and frequencies of alcohol consumed by the general population (15) and in military appraisals (2). Evidence suggests such data might be adversely affected by bias from underreporting (6). Indeed, self-report of drinking is of doubtful accuracy as heavy drinkers tend consistently to underreport amounts drunk as well as other alcohol-related data (5, 14).

Chang and Lapham (4) found DWI clients are reluctant to comply with court mandates and frequently underreport their own past criminal behaviors. Given such inaccuracies in self-reporting, psychometric tests often are not reliable indexes of alcohol use for these clients. This study assessed the accuracy of self-reporting by alcohol offenders in a rural midwestern county during a court-mandated evaluation of alcohol dependency and measured its relationship to later DWI citations and scores on commonly used self-report assessments such as the Michigan Alcohol Assessment Test and the Structured Clinical Interview for the DSM-IV (1).

Because younger people, particularly college-aged individuals, are at risk for alcohol-related problems such as “binge” drinking (7, 13) and episodes

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<sup>1</sup>Address enquiries to James R. Nevitt, Ph.D., P.O. Box 317, Peru, NE 68421 or e-mail (jnevitt@oakmail.peru.edu).

of violence (8), age was also of interest. Clients were hypothesized to underreport prior DWIs and other similar data at intake (4). Also underreporting was predicted likely to be associated with future DWIs. It is also hypothesized that scores on the Michigan Alcoholism Screening Test and Structured Clinical Interview for the DSM-IV would not correlate strongly with future DWI arrest, given some subjects' tendencies to underreport aspects of their drinking. A secondary objective was to investigate the relationship of age to later DWI citations and accuracy of self-report data during a mandated evaluation of alcohol dependency.

#### METHOD

##### *Subjects*

A sample of 60 was randomly selected from 125 people arrested on DWI offenses and referred by the county to a professional evaluator between May 2000 and December 2003. The subjects were 53 men and 7 women living in or near the same midwestern county in southeastern Nebraska. All alcohol-dependency evaluations were done by the same professional, who was naive as to the objectives of the study.

The sample was representative of the general drinking population of the county, 99% white subjects, the mean age was 34.1 yr. ( $SD=11.8$ ), the mean posthigh school education was 0.9 yr. ( $SD=1.2$ ), with 30% of all subjects married, 27% divorced, and 43% single.

##### *Procedure*

The Michigan Alcoholism Screening Test measures multiple dimensions of drinking behavior including amount consumed and social and legal consequences related to the pattern of consumption. The 25 questions have forced choice Yes or No responses (11). Examples of questions include "Have you ever been in a hospital because of your drinking?" and "Do friends or relatives think you are a normal drinker?"

Self-reported information during a standard alcohol-dependency evaluation was compared with county records obtained with cooperation from the Otoe County Nebraska police and sheriff's department. Of particular interest were discrepancies between self-reported and actual breath-alcohol content (BAC) at the time of arrest, self-reported and actual past DWI offenses, age, Michigan Alcoholism Screening Test scores, Structured Clinical Interview for the DSM-IV scores, and any records of subjects receiving additional DWI arrests after the evaluation.

For statistical analysis, subjects were grouped by age (over and under 30 years) and by accuracy of self-reported data (accurate and inaccurate reporters). A 2 (age)  $\times$  2 (accuracy) design (3) was used to assess number of DWIs, Michigan Alcoholism Screening Test scores, Structured Clinical In-

terview for the DSM-IV scores, self-reported discrepancies in breath-alcohol content with actual county records, and additional DWI citations since the time of evaluation.

#### RESULTS AND DISCUSSION

In the present study 10% of subjects underreported their BAC at the time of arrest, and 38% underreported their previous number of DWIs in the state of Nebraska. The Pearson correlation between scores on the Michigan Alcoholism Screening Test and Structured Clinical Interview for the DSM-IV was significant ( $r_{59} = .45, p < .001$ ), and scores on the Michigan Alcoholism Screening Test were positively correlated with subjects' self-reported past number of DWI convictions ( $r_{59} = .34, p < .01$ ), although neither the former ( $r_{59} = .11$ ) nor the latter ( $r_{59} = -.20$ ) were significantly correlated with later DWI convictions. Michigan Alcoholism Screening Test ( $r_{59} = -.18$ ) and Structured Clinical Interview for the DSM-IV scores ( $r_{59} = -.01$ ) also did not correlate significantly with ages of subjects. However, a  $2 \times 2$  analysis of variance for later DWI convictions was significant as younger subjects had more later arrests ( $F_{1,56} = 8.37, p < .005$ ). Also, subjects underreporting number of past DWIs reported significantly lower self-reported BAC at the time of arrest than accurate reporters ( $F_{1,56} = 4.17, p < .05$ ).

During routine evaluations for alcohol dependency self-report inventories such as the Michigan Alcoholism Screening Test have been widely used and accepted as useful in making diagnostic decisions (11). Method used (15) or context of questions (10) may influence self-reported answers. As hypothesized, the Michigan Alcoholism Screening Test and Structured Clinical Interview for the DSM-IV scores were not related to later DWIs, but age was related. Underreported data such as previous DWIs may be related to underreporting of other similar data (BAC at time of arrest). These findings are consistent with other research in which previous citations for DWI were considered as strong a predictor of relapse in long-term abstinent alcoholics as an elevated psychopathic deviancy score on the MMPI-2 (9). It is suggested that practitioners should pay as much attention to a client's history of adverse legal consequences and willingness to disclose these honestly as they do to a client's history of characterological problems or scores on self-report inventories.

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