ALCOHOL USE AND COGNITIONS PREDICT FUTURE SOCIAL PROBLEMS IN ADOLESCENTS

T. R. Johnson¹, M.D. Krank¹, A.M. Wall², D. Lai³, C. Wekerle⁴
¹Okanagan University College and University of British Columbia Okanagan
²York University, ³University of Calgary, ⁴University of Western Ontario

Abstract

Adolescence is a time of change, transitions, and experimentation with risk. The Project on Adolescent Trajectories and Health (PATH), a three year longitudinal study, investigates the social and cognitive antecedents of adolescent risk and the impacts of risk on health, social, and educational outcomes. Past research has demonstrated the ability of alcohol cognition measures to predict future drinking levels. This study investigates whether alcohol cognitions predict various problems behaviors. This poster describes the levels of alcohol use and problem behaviors adolescents reported in Year 2 of PATH. The study then assesses to what degree are these behaviors predicted by the alcohol-related cognitive measures and alcohol use in Year 1. The results demonstrate that cognitive measures and alcohol use prospectively predict the level of alcohol use and problem behaviors in adolescents 12 months later.

Methods

• 1303 students from grades 7 to 9 were surveyed in the first wave of PATH. 1142 (87%) of those students, grade 8 to 10, were surveyed in the second wave of PATH 12 months later.

• All participants received the same questionnaires as groups.

• The assessment tool was a paper and pencil questionnaire that included survey items, word and phrase associations, and a picture drawing task. The questionnaire was divided into the following sections: alcohol, drugs, activities, sex, dating items included both closed and open-ended responses. The questionnaire was counterbalanced for position within the survey.

• Implicit measures of cognition included alcohol outcome expectancies, behavioral associates, and homographs. The order of implicit memory tasks was counterbalanced for position within the survey.

• Assessed problem behaviors included truancy, vandalism, theft, weapon carrying, and school suspensions.

• The present poster reports only the data on alcohol measures and problem behaviors.

Results

Measures of Alcohol Cognitions and Problem Behaviors

• Behavioral Associates (Stacey, 1999c):
  Write the first behavior or action that comes to mind to complete the sentence
  a. What I want to eat really good, I....
  b. What I want to do really good, I....
  c. What I want to drink really good, I....

• Homographs (Stacey, 1999):
  Write the first word that you think of next to each word.
  a. Hot
  b. Cold
  c. Ice

• Outcome Expectancy Liking (based on Leigh & Stacey, 1993):
  What do you think would happen if you drank alcohol?
  a. Less than one or four things that would happen. Fill in the circle to say if you would like the face on, (Face = 1), Less than 4 = (Face = 0).

• Problem Behaviors (National Longitudinal Youth Health Study):
  Think about the things that you have done or that have happened to you since September.
  a. Drive home
  b. Suspended out of school

The probability score indicates if the behavior was engaged in (1) or not (0).

Table 1: Year 1 Alcohol Use Measures Predict Problem Behaviors in Year 2

Recency of Alcohol use in Year 2 and Problem Behaviors

Factor analysis of the problem behaviors in the second year of PATH revealed three factors (see appendix for details). The first factor, General Problems, includes a variety of behaviors from skipping school to involvement with the police. Weapon Carrying, the second variable, includes carrying weapons in and out of school. Finally, the third factor, School Problems, includes a variety of behaviors concerning school suspension and running away.

The following tables indicate the percentage of students engaging in various problem behaviors as a function of the last time an adolescent drank alcohol.

Year 1 Alcohol Cognition Measures Predict Behavior Problems in Year 2

- The table shows the results of separate analyses representing the three cognitive measures from Year 1 as the predictor variables in Year 2.
- The general problems factor is predicted by all three cognitive measures. In addition, the predictive value of the homographs and the outcome expectancy liking measures hold true for adolescents who had not used alcohol in the first year.
- The results showed that the current frequency of alcohol use is strongly related to these problem behaviors. In addition, the level of alcohol use and the measures of alcohol association in the first wave predicted which students became problem drinkers.
- The results showed that adolescents at greater risk for developing problem drinking were those who reported higher levels of drinking, particularly with positive outcomes (behavioral associates) and implicit associations with ambiguous values related to the use of the various alcohol-related homographs (e.g., school).
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Summary of Findings

• Current frequency of alcohol use is strongly related to the problem behaviors investigated.

• Alcohol cognitions predict problem behaviors twelve months later. This prediction is only partially mediated by alcohol behaviors.

• Both the level of alcohol use and the measures of alcohol associations in the first wave of PATH predicted who would engage in the problem behaviors investigated.

• Cognitive measures (homographs and expectancies) predict problem behaviors even for students in the first wave who were non-drinkers.

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