Short Communication

The association of alcohol and family problems in a remote indigenous Australian community☆

Adrian B. Kelly*, Marusia Kowalyszyn

School of Applied Psychology, Griffith University, PMB 50, Gold Coast Mail Centre, 4217 Gold Coast, Queensland, Australia

Abstract

While a large proportion of Aboriginal Australians do not consume alcohol, those who do frequently show severe alcohol problems. In European-derived samples, heavy alcohol use is associated with relationship distress, conflict, and violence. Because Aboriginal groups commonly have very different family structures, values, and obligations to European-derived families, the association of family and alcohol problems in Aboriginal Australians may be different from European-derived families. This self-report study is the first known published empirical study of family and alcohol problems among Aboriginal Australians. It involved 99 people from a remote community in the far North of Australia. The aims were to explore the association of family conflict, family cohesion, family independence, alcohol problems, and alcohol-related expectancies. Compared to those without alcohol problems, people with alcohol problems reported more family conflict and women with alcohol problems reported high family independence. Expectancies of negative affect change mediated the association of alcohol problems and family conflict. Family cohesion was unrelated to alcohol or family problems. Implications for detection of and interventions for alcohol and family problems are discussed.

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* Corresponding author.
E-mail address: a.kelly@mailbox.gu.edu.au (A.B. Kelly).
1. Introduction

In Aboriginal Australian communities, rates of abstinence and problem drinking are higher than in nonindigenous samples (Hunter, 1992; Perkins et al., 1994). Some evidence indicates an association of indigenous alcohol and family problems. A high proportion of assaults against women is committed by intoxicated male partners (Barber, Punt, & Alberts, 1988). Little else is known about the association of family and alcohol problems in indigenous groups.

In European-derived families, family conflict and cohesion are associated with the initiation and resolution of alcohol problems in White samples (Humphreys, Moos, & Cohen, 1996; Kelly, Halford, & Young, 2000; Lammers, Schippers, & van der Staak, 1995), and alcohol expectancies may mediate alcohol and family problems (Kelly, Halford, & Young, 2001). In indigenous groups, the nature and strength of the association of family problems, alcohol expectancies, and heavy drinking may be different, given cultural differences in family life, structure, obligations, and drinking contexts (Brady, 1992; Human Rights and Equal Opportunity Commission, 1997).

**Hypothesis 1:** Problem drinkers would report higher family conflict and independence and lower family cohesion than nonproblem drinkers.

**Hypothesis 2:** Expectancies of affective change would mediate the association of problem drinking and family conflict.

2. Method

2.1. Sample

The research was conducted with 99 Aboriginal people (49 males, 50 females) living in a remote community in Northern Australia. On average, participants were 33 years of age (S.D. = 11), had 8 years of education, earned $209 a week, and lived with 7 (S.D. = 4) other residents.

2.2. Procedure

The study was conducted during the dry season (winter). The second investigator consulted with the community council before data collection. People were approached on the main street and, subject to informed consent, assessments were conducted on the spot. Because reading skills were often poor, questionnaires were administered verbally and participants pointed to response options presented on A4-size cards. The interview process and content was documented in a manual, the interviewer received extensive training on the interview process, and the interview procedure had psychometric validity (Kowalyszyn & Kelly, 2001).
2.3. Measures

Measures included the Khavari Alcohol Test (KAT; Khavari and Farber, 1978), the Alcohol Use Disorders Identification Test (AUDIT; Babor, De La Fuente, Saunders, & Grant, 1989), the affect change subscale of the Drinking Expectancy Questionnaire (DEQ; Young & Oei, 1995), and a modified version of the Family Environment Scale (Moos, 1974), called the Aboriginal Family Environment Scale (AFES; Kowalyszyn & Kelly, 2001). Data on the internal reliability and convergent validity of these measures with this sample are reported in Kowalyszyn and Kelly (2001).

2.4. Statistical design

A 2×2 between-groups MANOVA design was used, with severity of alcohol problems (low/high) and gender as the between-groups measures. Problem drinking was defined using a cutoff of eight on the AUDIT. The dependent measures were affect change (DEQ), family conflict, cohesion, and independence (AFES).

3. Results

Men reported more problem drinking than women, with mean AUDIT scores of 16.3 (S.D. = 12.0) and 5.4 (S.D. = 8.2) for men and women, respectively. On the KAT, men reported...
heavier alcohol consumption than women, with 9.1 (S.D. = 13.4) and 1.5 (S.D. = 3.0) standard drinks per day for men and women, respectively. Using a total score cutoff of eight on the AUDIT, 36 of 49 (73.5%) male drinkers and 12 of 50 (24.0%) female drinkers were classified as having alcohol problems, \( \chi^2(1) = 22.8, P < .001 \).

Those with alcohol problems reported more family conflict than those without alcohol problems, \( F(1,97) = 5.57, P < .025 \) (see Fig. 1). Those with alcohol problems reported more family independence than those without alcohol problems, \( F(1,97) = 4.81, P < .05 \), and the interaction was significant, \( F(1,97) = 7.91, P < .01 \) (see Fig. 2). Male drinkers without alcohol problems reported more family independence than females without alcohol problems, \( t(47) = 2.90, P < .01 \) (one-tailed), females with alcohol problems reported more family independence than females without alcohol problems, \( t(46) = 3.04, P < .01 \) (one-tailed), and males with and without alcohol problems did not differ. All effects for family cohesion were nonsignificant.

To test Hypothesis 2, Baron and Kenny’s (1986) procedure was used. When AUDIT scores were regressed onto family conflict, the beta coefficient was significant, \( F(1,95) = 5.58, P < .025 \). Family conflict accounted for 6% of the variance in alcohol problems. When AUDIT scores were regressed onto expectancies of affective change, the beta coefficient was significant, \( F(1,41) = 8.00, P < .01 \). The expectancy accounted for 17% of variance in AUDIT scores. With the independent variable and mediator entered together, the association of family conflict and AUDIT scores became nonsignificant at \( P = .05 \), and the correlation between expectancy and AUDIT scores remained significant, \( t(41) = 2.50, P < .05 \).

![Fig. 2](image_url)  
**Fig. 2.** Family independence as a function of alcohol problems and gender. Error bars represent 95% confidence intervals.
4. Discussion

In terms of family conflict, results were consistent with Hypotheses 1 and 2. Family aggression predicted problem drinking and affect change expectancies mediated this association. In contrast to the mainstream literature (e.g., Halford, Bouma, Kelly, & Young, 1999; Kelly et al., 2001; Kelly, Halford, & Young, in press), cohesion was unrelated to problem drinking and family aggression, and there was a ceiling effect on cohesion. Prevalence of physical aggression (based on family conflict responses) was also high, a finding previously reported in Kowalyszyn and Kelly (2001).

These findings have several implications for further research, prevention, and intervention. The AFES conflict and DEQ affect change subscale may be useful tools in the detection of those at risk of heavy drinking or alcohol problems. Given that heavy drinkers report that alcohol increases negative affect (e.g., anger, irritability), further research is needed on the extent to which alcohol ingestion accompanies acts of domestic verbal and physical aggression. Family cohesion may be a useful resource for health workers in reducing the impact of domestic violence and alcohol problems (e.g., early detection, consensus on strategies for exiting violent situations, pressuring the family member to change). However, high cohesion may decrease the likelihood of disclosure of alcohol problems or violence to outsiders, and decrease the likelihood of involvement in interventions for these problems. Family-based interventions have been useful for reducing alcohol and violence problems (Halford, Price, Kelly, Bouma, & Young, 2001) and could be adapted to this population. Despite calls for increased family support and intervention services for indigenous Australians (Sanders & Duncan, 1995), there is virtually no data on the potential utility of family-based interventions for alcohol abuse in indigenous Australians (Gray, Saggers, Sputore, & Bourbon, 2000).

Because of its cross-sectional nature, the results of this study cannot be used to determine causal relationships. While the findings are probably generalizable to people within the studied community (about 25% of the adult community were sampled), findings may not generalise to other remote indigenous communities or to Aboriginal groups living in cities. A disadvantage of conducting research on small populations like this is that some between-subjects data may be statistically nonindependent. However, the convergence of self-report measures within couples and families is frequently low, even for readily observable events (Kelly & Fincham, 1999).

In conclusion, family conflict and expectancies of negative affect change were shown to interact to predict alcohol problems, alcohol problems were positively associated with perceived family independence in women, and family cohesion was high and unrelated to severity of alcohol problems.

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References


