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The company they keep: Drinking group attitudes and male bar aggression

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Abstract

Aims: The aims were to assess (1) similarities in self-reported bar-aggression-related attitudes and behaviors among members of young male groups recruited on their way to bars, and (2) group-level variables associated with individual members' self-reported likelihood of perpetrating physical bar aggression in the past year, controlling for individual attitudes.

Methods: Young male natural drinking groups recruited on their way to a bar district Thursday, Friday and Saturday nights ($n = 167$, 53 groups) completed an online survey that measured whether they had perpetrated physical aggression at a bar in the past year and constructs associated with bar aggression, including attitudes towards male bar aggression and frequency of heavy episodic drinking (HED) in the past year. **Results:** Intraclass correlations and chi-square tests demonstrated significant within-group similarity on bar aggression-related attitudes and behaviors ($ps < .01$). Hierarchical Linear Modeling revealed that group attitudes toward bar aggression were significantly associated with individuals' likelihood of perpetrating physical bar aggression, controlling for individual attitudes ($p < .01$); however, the link between group HED and self-reported bar aggression was nonsignificant in the full model. **Conclusions:** This study suggests that the most important group influence on young men's bar aggression is the attitudes of other group members. These attitudes were associated with group members' likelihood of engaging in bar aggression over and above individuals' own attitudes. A better understanding of how group attitudes and behavior affect the behavior of individual group members is needed to inform aggression prevention programming.

Keywords: Male, alcohol, drinking, bars, aggression, attitudes, peers, groups

Introduction

Barroom aggression can lead to negative consequences for those involved, including injury and even death (Langley et al., 1996; Roche et al., 2001). Although there is increasing evidence of bar aggression by women in the UK (Forsyth & Lennox, 2010), research elsewhere suggests that most aggression in public drinking establishments is perpetrated by young men (see Graham and Homel, 2008 for a review). Individual-level factors associated with young men's bar aggression have been identified, including normative attitudes about bar aggression (Benson and Archer, 2002; Graham and Wells, 2003; Wells et al., 2013) and heavy episodic drinking (i.e., consuming a large number of drinks on a single occasion) (HED) (Graham et al., 2006; Leonard et al., 2003; Wells et al., 2008); however, given that young adults typically attend bars in groups, it is also important to consider the possible influence of the peer group.

Peer groups are known generally to affect the behaviors of individual members (Rubin et al., 2006), through both their attitudes and behavior. For example, peer group drinking has been found to be associated with alcohol-related injuries among adolescents (Bonomo et al., 2001) and alcohol-related aggression among young men (Wells et al., 2005). In addition, young men's perceptions of their male peers' attitudes about bar aggression have been shown to be associated with their own aggressive behavior in bars (Wells et al., 2009; Wells et al., 2011); however, no studies to date have measured peer attitudes directly. Young people tend to be inaccurate in these perceptions, often overestimating peer approval for and engagement in risk behavior (Perkins, 2002 for alcohol; Vandello et al., 2009 for male aggression). Because drinking appears to be more strongly influenced by close friends rather than distant peers (Neighbors et al., 2008) and men's aggression is more strongly associated with perceived attitudes of male than female peers

(Wells et al., 2011), it is especially important to focus on the male peers with whom young men attend bars (their *natural drinking groups*, NDGs; Lange et al., 2011).

In addition, individuals are likely to hold similar attitudes to those of their peers. For example, Wells and colleagues (2011) demonstrated a strong positive relationship between young men's own approval of bar aggression and their perceptions of their male peers' approval. Therefore, it is important to control for individual attitudes when assessing the role of peer attitudes in explaining bar aggression. Likewise, to assess the possible influence of peer group drinking on individual bar aggression, drinking by the individual must be controlled for, given the significant similarity in heavy episodic drinking (HED) among young adult friends (Andrews et al., 2002). Finally, in addition to assessing peer attitudes in explaining individual bar aggression, it is important to include measures of peer bar aggression. Young men believe it is important to assist their friends if they become involved in a bar conflict (Graham and Wells, 2003) and thus may become aggressive in a bar due to the aggression of someone else in their group.

In the present study, we recruited young male NDGs on their way to bars in a mid-sized Canadian city. We hypothesized that there would be significant within-NDG similarity on self-reported attitudes towards bar aggression, HED frequency, and likelihood of engaging in bar aggression. Further, we predicted that group-level attitudes towards bar aggression, HED frequency, and perpetration of physical bar aggression would be significantly associated with the likelihood that individual group members would engage in physical bar aggression in the past year, controlling for individual attitudes and behavior.

Method

Procedure

This study was part of a larger project examining young adult bar-goers' drinking-related behavior (Dumas et al., 2014). Participants were recruited in small groups on route to the downtown bar district in a mid-sized Canadian city on weekend evenings. Eligible groups were comprised of 3-5 young adults in same sex groups who were of legal age to drink in Canada (19-to-29 years of age) and residents of the community. Only male participants are included in the present analyses.

Participating groups completed a brief entry survey at recruitment, an exit survey when leaving the bar district, and an online survey in the days following recruitment. Group membership information was collected in the entry survey. Other measures are from the online survey. For more details about procedures, see Dumas et al. (2014).

Participants

Sixty-three groups of young male bar-goers ($n = 218$; M group size = 3.5 members) were recruited, representing 30.4% of the eligible all-male groups approached, of which 80% ($n = 174$) completed the online survey. Analyses were restricted to men who completed the online survey and had at least one peer also complete the survey. This reduced our final sample to 53 groups (167 men; 96% of online survey sample; $M_{age} = 21.86$ years, $SD = 2.52$; 73.7% students). The final sample of men did not differ from those excluded ($n = 51$) on age, $t(216) = -0.75$, $n.s.$, but were significantly more likely to be students (73.7% versus 54.9%), $\chi^2(1) = 6.45$, $p = 0.01$.

Measures

Physical Bar Aggression. Participants reported how many times in the past 12 months they *grabbed, pushed, shoved, hit or kicked* another person or *did something else physically*

aggressive to another person at a bar. Because of the highly skewed distribution, scores were dichotomized (0 - no aggression and 1 - one or more instances of aggression).

Attitudes towards Bar Aggression. Participants completed the *Beliefs and Attitudes toward Male Alcohol-Related Aggression Inventory – Short Form* (BAMARA-SF) (Wells et al., 2013) validated by Wells et al. (2013). The scale includes 15 statements reflecting attitudes towards male-to-male physical aggression at bars rated on a 5-point Likert scale (strongly agree to strongly disagree) with higher scores indicating greater approval. Example items are as follows: “Fighting is a normal part of going to bars”, “Guys are cowards if they back down from a fight at a bar”, “I’d feel pretty bad about myself the next day if I got into a fight at a bar”, and “Sometimes it’s exciting to be part of a bar fight.” Internal consistency was good ($\alpha = .87$).

Heavy Episodic Drinking. Participants were given a definition of a Canadian standard drink – 341-ml. (12 oz.) of beer, 142 ml. (5 oz.) of wine, 43 ml. (1.5 oz.) of liquor, or 341-ml. (12 oz.) of a premixed drink – and shown illustrative examples. They recorded how many times on a single occasion in the past 12 months they consumed: (1) 8-to-11 drinks, and (2) 12-or-more drinks. HED was calculated as the sum of items 1 and 2. We chose a cut-off of 8-or-more drinks because naturalistic research (Lange and Voas, 2001) suggests that this level of consumption is associated with reaching a blood alcohol level (BAC) of .08, an accepted threshold for defining HED (Beirness, Foss, & Vogel-Sprott, 2005). Further, research suggests that a higher cut-off than the more commonly used 5-or-more drinks is more predictive of men’s negative drinking-related consequences (Jackson, 2008; O’Malley and Johnston, 2002).

Peer group bar aggression, attitudes and HED. Peer group aggression was defined as whether anyone in the participant’s NDG, other than himself, reported engaging in physical aggression at a bar in the last 12 months (1 = one or more group member reported bar

aggression, 0 = no group members reported aggression). Other peer group measures included BAMARA scores and HED scores averaged across all group members excluding that participant to avoid confounding the group measure with the individual's own score.

Analysis

We used the software program HLM 6.0 to run our main analyses. To test group member similarity on bar aggression-related variables, we derived intraclass correlations (ICCs) which measure the proportion of variance in a given variable that is found between versus within groups and is thus attributable to group membership. To test whether group scores were significantly associated with individual participants' self-reported bar aggression, we used Hierarchical Linear Modeling (HLM) (Bryk and Raudenbush, 1992). HLM accounted for the multi-level structure of the data – individuals (level-1) nested within groups (level-2). Given that physical bar aggression was dichotomous, we used the Bernoulli option for dichotomous outcomes with Laplace approximation.

We first examined the unadjusted associations (i.e., bivariate relationships) between each variable and physical bar aggression. Second, we tested three models to examine associations with: (1) individual variables (HED, BAMARA, and age), (2) group variables (peer HED, BAMARA, and bar aggression), and (3) group variables when controlling for individual variables. Group variables were entered at level-1 rather than level-2 because each participant had a different set of peers and thus different scores on each measure. All independent variables were grand-mean centered for ease of interpretation.

Results

Eighteen percent ($n = 30$) of participants reported perpetrating physical bar aggression in the past year and 32.9% ($n = 55$) had at least one other group member who reported aggression.

Significant ($p < .05$) zero-order inter-correlations were found among most variables ($r = 0.20$ to 0.36), with the exception of individual HED with peer BAMARA ($r = 0.15$), and peer HED with individual BAMARA ($r = 0.12$). Descriptive tables are available upon request.

Consistent with hypotheses, ICCs were significant with 20% of the variance in BAMARA scores ($\chi^2 = 92.96, p < .01$) and 29% of the variance in HED ($\chi^2 = 107.25, p < .001$) attributed to group membership. Also, a significantly larger proportion of participants who engaged in physical bar aggression (versus those who had not) had one or more group members who also engaged in bar aggression in the past year (50% versus 29.2%; $\chi^2(1) = 4.82, p = .028$).

Table 1 illustrates HLM results. As shown in Model 1, although the unadjusted coefficients showed that both the BAMARA and HED were significantly related to bar aggression at the individual level, only the BAMARA remained significant when both were in the same model. For group variables, average group BAMARA scores and bar aggression by others in the group were significantly associated with the individual's bar aggression in the unadjusted model; however, as shown in Model 2, only group BAMARA scores remained significant when all group variables were in the model, and this significant relationship was maintained when individual variables were included in the model (Model 3).

Insert Table 1 about here

Discussion

As hypothesized, we found significant similarities among NDG members in attitudes, HED, and experiences of physical bar aggression, consistent with previous research on HED (Andrews, et al., 2002) and perceived peer approval of bar aggression (Wells, et al., 2011). These

findings are concerning because NDGs with shared positive attitudes toward bar aggression may be particularly attracted to settings that are conducive to or tolerant of aggressive behavior, thereby increasing risk of injury to themselves and others.

Also, consistent with hypotheses, we found that NDG attitudes were significantly related to individual group members' self-reported likelihood of experiencing physical bar aggression, and this relationship remained significant after controlling for individual attitudes. Thus, even though peer groups may indirectly affect members' behavior by socializing individual attitudes (e.g., Prinstein and Dodge, 2008), our results suggest that group attitudes also appear to have a direct link with members' behavior in the bar context. These results are particularly noteworthy because they empirically quantify and validate that young men's behaviors in the bar are related to the *actual* attitudes of other peer group members, whereas past research has measured *perceived* attitudes of peers (Wells et al., 2011). Further, we found that group attitudes were more strongly related to young men's self-reported bar aggression than was actual bar aggression by others in the group. Thus, when it comes to physical bar aggression, perhaps what peers think and say is more influential than what they actually do, possibly because bar aggression is too infrequent to be modeled by peers unlike peer modeling of drinking (O'Grady et al., 2011; van Schoor et al., 2008).

Contrary to prediction, group HED was not significantly associated with self-reported bar aggression. Thus, previous findings of a positive link between *number* of alcohol-consuming peers and young men's verbal or physical aggression at a bar (Wells et al., 2005) may reflect greater bar attendance and HED among men who have more drinking peers, which may, in turn, put them at increased risk for bar aggression. In contrast, we focused on groups of bar-goers, who may not vary greatly in high risk drinking-related activities such as going to bars. In

addition, it is possible that an assessment of group intoxication at the bar *that night* would be a more appropriate predictor of individual members' likelihood of engaging in physical bar as compared to the frequency with which group members engage in HED in general.

Limitations

Several limitations should be noted. First, the data are cross-sectional and longitudinal research is necessary to disentangle directional effects. Second, participants were not necessarily with the same group when they perpetrated bar aggression as they were on the night of recruitment. Stronger associations might have been obtained had peer measures been collected from the participant's companions on the night of aggression; however, this makes the associations between peer attitudes and individual aggression in the present study even more noteworthy. Third, we relied on an all-male sample because young men are involved in the majority of physical bar aggression (Graham and Homel, 2008); it would be informative to include female participants in subsequent research on group contributions to risk behaviors at the bar. Fourth, due to our response rate and sample size we must be cautious when generalizing results. Finally, the sample of participants reporting aggression was fairly small and thus we treated this variable as dichotomous. A larger sample size with more variability in perpetration of physical bar aggression is needed to examine the relation between NDG attitudes and members' *frequency* of bar aggression.

To conclude, given the strength of associations of self-reported individual aggression with individual and group attitudes toward bar aggression, the current findings suggest that challenging positive attitudes towards bar aggression held by young men may be a critical direction for prevention programming.

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Table 1. *Hierarchical Linear Models Predicting Physical Bar Aggression in the Past Year from Individual and Peer BAMARA and HED Scores and Peer Bar Aggression*

Predictors	Model 1						Model 2			Model 3		
	Unadjusted associations			Individual level effects			Group level effects			Individual and group level effects		
	b(SE)	OR	95% CI	b(SE)	OR	95% CI	b(SE)	OR	95% CI	b(SE)	OR	95% CI
<i>Individual Variables</i>												
BAMARA	1.32 (0.36)***	3.72	1.82, 7.62	1.56 (0.49)**	4.77	1.81, 12.59				1.55 (0.53)**	4.71	1.90, 11.72
HED	0.02 (0.01)*	1.02	1.00, 1.03	0.01 (0.01)	1.01	1.00, 1.03				0.01 (0.01)	1.01	0.99, 1.03
Age	-0.07 (0.09)	0.93	0.78, 1.12	0.03 (0.11)	1.03	0.84, 1.28				0.07 (0.10)	1.08	0.88, 1.32
<i>Group Variables</i>												
Group BAMARA	1.11 (0.24)**	3.02	1.33, 6.87				1.29 (0.52)*	3.65	1.32, 10.09	1.55 (0.65)*	4.71	1.31, 16.33
Group HED	-0.00 (0.02)	1.00	0.98, 1.02				-0.01 (0.02)	0.99	0.96, 1.02	-0.02 (0.02)	0.98	0.95, 1.02
Group Bar	0.85 (0.41)*	2.33	1.03, 5.26				0.30 (0.52)	1.35	0.48, 3.80	-0.82 (0.68)	0.44	0.11, 1.70
Aggression												

Note. * $p < .05$, ** $p < .01$, *** $p < .001$