

Alcohol, masculinity, honour and male barroom aggression in an Australian sample

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Abstract

Introduction and Aims. The link between alcohol and men's aggression is well established, although growing evidence also points to individual and learned social factors. The aim of the present study was to investigate the relationships between male alcohol-related aggression (MARA) among young Australian men and heavy episodic drinking, trait aggression, masculinity, concerns about social honour and expected positive consequences of MARA. **Design and Methods.** The total sample comprised 170 men aged 18–25 years who completed an online questionnaire exploring beliefs and attitudes towards MARA. **Results.** Those who reported heavy episodic drinking were more likely to be involved in an incident of MARA. In addition, those who were involved in MARA had higher levels of trait aggression, concern for social honour and expected positive consequences of aggression in bars than did those without such involvement. The relationship between socially constructed masculinity factors (a combined variable reflecting masculinity, social honour and expected positive consequences) and MARA was mediated by heavy episodic drinking. Social honour accounted for almost all of the predictive power of masculinity factors. Heavy episodic drinking and trait aggression remained significant predictors of MARA in a multivariate model. **Discussion and Conclusions.** The findings from the current study may assist in developing preventative techniques for young men which target masculinity concerns and the consequences of participating in MARA. [Miller P, Wells S. Alcohol, masculinity, honour and male barroom aggression in an Australian sample. *Drug Alcohol Rev* 2014;33:136–143]

Key words: aggression, alcohol, heavy episodic drinking, masculinity, social honour.

Alcohol is estimated to be involved in more than half of all violent crime [1,2], and approximately three-quarters of assaults and offensive behaviour occurs on the street [3]. Further, between 23% and 73% of all assaults in Australia involve alcohol [4]. While the link between alcohol and aggression is well established, the relationship is affected by individual, situational and cultural factors, as well as the effects of alcohol [4]. Public drinking establishments are high-risk locations for alcohol-related violence [5–7] especially for aggression by men towards other men [6–8]. Therefore, it is especially important to understand the contributing factors for male alcohol-related aggression (MARA)

that occurs in licensed premises. Research points to a number of important correlates, including heavy episodic drinking (HED), trait aggression, masculinity, concerns about social honour and expected positive consequences of MARA [9,10]. This study explores these factors in a sample of young Australian men.

Alcohol use is strongly associated with aggression [11–14], and controlled experimental research has shown that alcohol has a causal contributing role in aggression [15]. The link between alcohol and aggression has been explained by the pharmacological effects of alcohol, including a focus on salient environmental cues, reduced anxiety, increased risk taking, impaired

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Received 6 June 2013; accepted for publication 11 December 2013.

cognitive functioning as well as increased concerns about personal power [16]. HED, in particular, has been found to be an important correlate of aggression [10].

Trait aggression also plays a role in the link between alcohol and aggression, with those with moderate levels of trait aggression more susceptible to the potentiating effects of alcohol on aggression than are those with low levels of trait aggression [17]. Others have focused on specific elements of ‘trait anger’, especially suppressed anger, and its relationship with alcohol consumption. For instance, Norstrom and Pape reported that increases in HED were associated with increases in violent behaviour at the individual level [18], but that this effect of drinking is confined to individuals who tend to withhold their angry feelings (‘suppress anger’). Still, others have suggested that while the notion of suppressed anger has intuitive appeal, it may not apply to alcohol-related aggression among young adults, especially young men, because they do not seem to feel ‘inhibition conflict’ about aggression when drinking [19,20]. In other words, aggression may occur when young men drink because they believe that such behaviour is normal, acceptable and expected, and not because alcohol triggers aggression among young men with aggressive personalities or suppressed anger [19]. This study seeks to control for this to determine what other factors, over and above one’s general tendency to behave aggressively, contribute to barroom aggression.

Masculinity norms also appear to play a role in aggression [21,22]. Masculinity refers to the cultural representation of what it means to be a man in society [23]. Masculine ideologies vary by race, social class, sexual orientation and cultural context [24], although, a dominant form of masculinity prevails in Western societies (i.e. hegemonic masculinity) which reflects rigid norms about maleness, such as exerting power and dominance over women and family, being aggressive and engaging in risky behaviours, showing they are strong and tough, not showing emotion, and seeking out success and achievement [24]. In societies where this hegemonic ideal is valued, men engage in aggressive and violent behaviour to assert and defend their masculinity [25]. Although there is likely a direct link between masculinity and MARA, this relationship may also be mediated by drinking behaviour [26–29]. Certainly, de Visser and Smith [30] found that while some men believed that alcohol consumption is a marker of masculinity and behaved accordingly, others emphasised the importance of other behaviours to demonstrate masculine identity. Further to this, Anderson [32] discovered that university men were becoming more accepting of traditionally non-masculine behaviours including a greater acceptance of gay men into

peer groups, greater intimacy and emotionality between men, and a reduction of sexism.

The barroom provides an environment in which masculinity and power displays are paramount and where young men compete for potential sexual partners and the approval of peers [20,31,32], facilitating hyper-masculine behaviours which, in turn, promote male violence. Both qualitative [31–34] and quantitative research [9,35] have shown direct links between concerns with social identity and displays of masculinity and aggression in bars. Thus, in addition to examining men’s concerns about conforming to masculine norms generally, it is important to also assess men’s concerns with masculinity and male honour as these play out in the setting of the bar.

Another important variable likely related to men’s aggression in bars is their expectation of positive consequences for alcohol-related aggression. Despite the risk of negative physical consequences, such as injury, punishment or social disapproval, men’s aggression in bars is rewarded in many ways, through increased feelings of power, status, and attention and approval from spectators and peers [10,20,31]. In fact, evidence suggests that young men place far more emphasis on these positive consequences than they do on any potential harm [31]. Therefore, it might be argued that the repeated observed reinforcement of MARA in today’s drinking culture leads to positive outcome expectancies for aggression, which in turn increases the likelihood of aggressive behaviour [36].

The aim of the present study was to investigate the relationship of MARA with HED, trait aggression, masculinity, concerns about social honour and expected positive consequences of MARA. Given that the research in this area has been dominated by studies done in the northern hemisphere, the present research, focusing on young Australian men, provides a unique perspective on these linkages. Based on previous evidence and theory, the following hypotheses were tested:

1. HED, trait aggression, masculinity, social honour and expected positive consequences of aggression will be positively associated with MARA.
2. The relationship between masculinity and MARA will be partially mediated by HED.
3. In a multivariate model, HED, trait aggression, masculinity, social honour and expected positive consequences will remain significant explanatory variables for MARA.

Materials and methods

Participants

Students at Deakin University in Melbourne and Geelong, and members of the Geelong and Melbourne

community, were recruited to participate in an online survey using advertisements placed on the social networking site Facebook, the Deakin University intranet, discussion forums (e.g. Whirlpool) and common interest Facebook groups (e.g. Deakin University Student Association, Geelong Nightlife). The study was specifically advertised as a means to exploring the relationship between alcohol and aggression in young Australian men. Participants were required to be male and 18 years or older; however, no other eligibility criteria applied. Posters and recruitment cards were also distributed at each of the Deakin University campuses and various bars around Geelong and Melbourne. As an incentive to participate, respondents were offered the chance to enter a draw to win two cinema vouchers upon completion of the questionnaire. E-mails gathered to enter the prize draw were kept separate from the data. Approval was obtained for this study from the Deakin University Human Research Ethics Committee. Data were collected August to September in 2010.

A total of 170 men aged 18–25 years [$M = 21.40$, (standard deviation) $SD = 1.94$] anonymously completed the questionnaire, and 91.2 % of respondents were born in Australia. University and technical and further education students made up 56.3% of the sample, an over-representation compared with Australian norms.

Measures

The online questionnaire comprised seven sections: Demographics, MARA, HED, trait aggression, conformity to masculine norms inventory (CMNI), male honour/protection of masculine identity in the setting of the bar and expected positive consequences of MARA.

MARA. Respondents reported the number of times in the previous 12 months they had experienced an incident in the barroom, defined as a bar, club or pub, in which they had grabbed, pushed, shoved, hit or kicked someone, or did something else to someone that was physically aggressive. Because of its skewed distribution, MARA was dichotomously coded to no MARA versus those who had been a perpetrator of physical MARA on at least one occasion. This measure has been used in previous research on male barroom aggression [10,37].

HED. Respondents were asked how many times they had consumed 5–7, 8–11, and 12 or more alcoholic drinks on a single occasion in the past month and past year. Participants were informed that an alcoholic drink referred to a standard drink of alcohol, and they were provided of examples of common standard drinks.

These variables were found to be positively skewed. Therefore, they were combined to produce a single dichotomous variable reflecting the consumption of five or more drinks on a single occasion, at least weekly (i.e. four or more times in the past month) versus non-HED (i.e. less than four times in the past month).

Trait aggression. Aggressive disposition was measured using the physical aggression subscale of the aggression questionnaire [38]. Nine statements such as ‘I have become so mad that I have broken things’ were responded to on a 5-point Likert-type scale (*extremely uncharacteristic of me to extremely characteristic of me*). The physical aggression subscale has good construct validity and internal consistency reliability ($\alpha = 0.85$) [38] and has been shown to be strongly linked to heavy drinking and aggressive behaviour [39].

CMNI. Seven subscales from the CMNI-46 [40] were used to assess the extent to which respondents conformed to masculinity norms. Respondents were asked to respond to 37 statements on a 4-point Likert-type scale (*strongly disagree to strongly agree*), indicating the extent to which statements such as ‘I never share my feelings’ provided an appropriate description of their personality. The mean of these items gave an overall CMNI score. A higher score on this scale reflected a higher level of conformity to masculine norms. The CMNI-46 has been shown to have good construct validity and internal consistency reliability [41].

Male honour/protection of masculine identity and expected positive consequences. Two subscales of the beliefs and attitudes towards male alcohol-related aggression inventory were used [10]. Male honour/masculinity, reflecting the belief that aggression is required in certain social situations and the importance of maintaining a masculine image in the bar context (e.g. ‘Sometimes it is important to show I’m tough in front of my friends at a bar’), consists of six items and has demonstrated good reliability ($\alpha = 0.84$) and construct validity. Expected positive consequences, reflecting beliefs that aggression can result in feeling strong or proud (e.g. a guy feels like a hero when he gets into a bar fight to protect his friends), consist of five items and has demonstrated good reliability ($\alpha = 0.78$) and construct validity [10].

All results were analysed using the statistical software program SPSS 21 (IBM, Armonk, New York, USA).

Results

Preliminary analyses

Reliability analyses were performed on the items measuring conformity to masculine norms, positive alcohol

Table 1. Inter-correlations and descriptive statistics for predictor variables

Measure	1	2	3	4	5	6
MARA	1	0.35**	0.45**	0.27**	0.42**	0.34**
HED (5+ drinks)		1	0.12	0.23**	0.18*	0.15
Trait aggression			1	0.56**	0.67**	0.65**
Masculinity				1	0.66**	0.66**
Social honour					1	0.75**
Expected positive consequences of MARA						1
<i>n</i>	170	154	170	170	170	170
Mean	0.22	4.96	1.61	2.37	1.91	1.76
Standard deviation	0.42	5.79	0.85	0.31	0.69	0.79
Scale reliabilities			.89	0.87	0.77	0.87
Scale Range			1–4	1–4	1–5	1–5

Masculinity refers to conformity to masculine norms inventory mean score. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$. HED, heavy episodic drinking; MARA, male alcohol-related aggression.

Table 2. Relationship between MARA and HED, trait aggression, masculinity, social honour and expected consequences

	MARA <i>n</i> (%) or mean (SD)	No MARA <i>n</i> (%) or mean (SD)	Statistical test
HED	21 (14%)	40 (26%)	$\chi^2 (1, n = 154) = 8.95^{***}$
Non-HED	13 (8%)	80 (52%)	Cramer's $V = 0.24$
Trait aggression	2.32 (0.79)	1.41 (0.76)	t -value = -6.47^{***} Cohen's $d = 1.17$
Masculinity	2.53 (0.32)	2.33 (0.29)	t -value = -3.69^{***} Cohen's $d = 0.65$
Social honour	2.44 (0.55)	1.75 (0.66)	t -value = -6.61^{***} Cohen's $d = 1.15$
Expected positive consequences	2.27 (0.69)	1.61 (0.77)	t -value = -4.75^{***} Cohen's $d = 0.90$

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. HED, heavy episodic drinking; MARA, male alcohol-related aggression.

expectancies, social honour, positive MARA expectancies and trait aggression. Cronbach's alphas suggested good internal consistency for all measures ($\alpha > 0.75$). Descriptive statistics including means, SDs, correlations and reliabilities for the key variables are shown in Table 1. Only 154 responses were available for the HED variable, and thus, all analyses using this variable comprised only 154 participants.

HED and MARA

A two-way chi-square analysis was conducted to determine the statistical significance of the relationship between HED and MARA. A significant relationship emerged between HED and MARA, with a larger percentage of heavy episodic drinkers than non-heavy episodic drinkers reporting MARA (see Table 2).

Relationship of MARA with trait aggression, masculinity, social honour and expected positive consequences of MARA

As shown in Table 2, independent sample t -tests (two tailed) revealed significantly higher scores on trait aggression, masculinity, social honour and expected positive consequences for participants who reported involvement in MARA compared with those who reported no MARA. Effect size analysis (Cohen's d) revealed these were large effects, with trait aggression having the strongest association with MARA, followed by social honour.

Because of the high correlations between masculinity, social honour and expected positive consequences for MARA, analyses of subscales were conducted to determine the nature of the relationships. This analysis

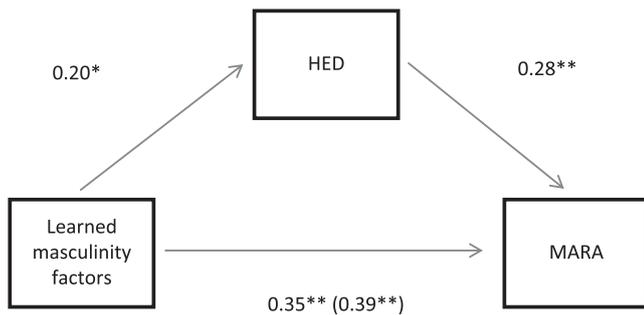


Figure 1. Mediation analysis for the relationship between learned masculinity factors and male alcohol-related aggression (MARA), reported as beta weights. Number in parentheses is direct relationship between learned factors and MARA. * $P < 0.01$, ** $P < 0.001$. HED, heavy episodic drinking.

determined that the violence subscale of the CMNI was the only subscale which correlated highly with social honour ($r = 0.65$, $P < 0.01$) and expected positive consequences ($r = .69$, $P < 0.01$). Thus, the scores from the violence subscale of the CMNI, social honour and expected positive consequences of MARA were combined and averaged to create the variable labelled 'socially constructed masculinity factors'. The combination of these factors is theoretically plausible as those who adopt masculine values would be more likely to view these consequences as positive, hence explaining the high correlation between these variables. In addition, there have been direct links discovered between concerns with social identity, displays of masculinity and aggression in bars [9,35].

A mediation analysis [42,43] was undertaken to determine whether the relationship between socially constructed masculinity factors and MARA would be mediated by HED. Results are depicted in Figure 1. As a continuous variable is required to perform a classic mediation analysis, the continuous measure of HED (i.e. number of times reported engaging in HED) was utilised.

Based on the Sobel test [44], HED was found to be a significant mediator of the relationship between socially constructed masculinity factors and MARA ($z = 2.08$, $P < 0.05$). However, the relationship between socially constructed masculinity factors and MARA remained significant after the introduction of HED, suggesting partial mediation.

To determine whether HED, trait aggression, social honour, masculinity and expected positive consequences remained significant in explaining MARA in a multivariate model, a hierarchical logistic regression analysis was conducted. Given the requirement of a minimum of 10 subjects in the smallest outcome group for each predictor variable recommended by Hosmer and Lemeshow [45], and the high correlations between

social honour, masculinity and expected positive consequences of MARA, the combined variable 'socially constructed masculinity factors' was again utilised in the current analysis. Further, as the combined variable produced a significant result in the mediation, it was clear that it was having an influence; however, this specific influence needed to be further investigated. A test of the full model versus a constant-only model was significant, $\chi^2(3, N = 154) = 56.00$, $P < 0.001$, indicating that the set of predictors reliably differentiated respondents who reported no MARA from those who reported involvement in MARA. The model classified 89% correctly. Cox and Snell's R^2 was 0.31. This model revealed that HED and trait aggression were significant predictors of MARA. Both these variables remained significant predictors of MARA after the introduction of socially constructed masculinity factors; however, socially constructed masculinity was not a significant predictor within the model, as shown in Table 3.

Discussion

This study explored the complex relationships among HED, trait aggression, masculinity, social honour and positive MARA expectancies in explaining MARA. Consistent with previous international research, these Australian results affirm that while HED remains a reliable predictor of MARA, individual and learned social factors also may be important in determining which young men are more likely to engage in MARA, and the circumstances under which these behaviours may arise.

The first hypothesis that HED, trait aggression, masculinity, social honour and expected positive consequences of aggression will be positively associated with MARA was supported as all variables were positively correlated with MARA.

As expected, a greater proportion of heavy episodic drinkers reported MARA compared with non-heavy episodic drinkers. This finding is consistent with meta-analytic studies which find a medium effect size for the relationship between alcohol and aggression [29,46]. Providing support for hypothesis two, the relationship between socially constructed masculinity factors and MARA was partially mediated by HED. Therefore, perceptions of masculinity influenced a person's likelihood of engaging in MARA and the likelihood that they would engage in HED, but HED also added to the likelihood that they would engage in MARA.

Consistent with findings by Wells *et al.* [10], those who participated in MARA held significantly stronger positive expectancies regarding the consequences of MARA than those who did not participate in MARA. As noted in previous research [31,47], MARA is often rewarded with increased feelings of power, status,

Table 3. Hierarchical logistic regression model assessing roles of HED, trait aggression and socially constructed factors in explaining MARA

Predictor	B	Wald χ^2	OR	95% CI
Step one				
HED	0.73	10.88	2.07***	1.34–3.19
Trait aggression	1.77	25.35	5.87***	2.95–11.69
Step two				
HED	0.71	10.27	2.03***	1.32–3.13
Trait Aggression	1.53	13.83	4.66***	2.07–10.49
Socially constructed masculinity factors	0.62	1.06	1.86	0.57–6.11

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$. CI, confidence interval; HED, heavy episodic drinking; MARA, male alcohol-related aggression; OR, odds ratio.

pride, attention and approval from spectators. Following these forms of reinforcement, young men may learn that MARA is not only normative and acceptable behaviour within the barroom context but also offers considerable benefits to combatants which may outweigh possible negative consequences such as minor injuries. These expectancies may form part of the cognitive model that promotes and reinforces learned behaviour, such as MARA.

Finally, those who reported MARA had higher levels of trait aggression than those who did not. This is consistent with past research [17,18] which found that persons high on dispositional aggressiveness exhibited more alcohol-related aggression than did those who were low on this trait [48]. Partially confirming hypothesis three, HED and trait aggression were found to be significantly associated with MARA in a multivariate model. Although social honour, masculinity and expected positive consequences of MARA were associated with MARA in the bivariate analyses, when included with HED and trait aggression, they did not produce significant effects in the multivariate model. This finding, which is in need of further study in larger samples, suggests that although masculinity plays a role in MARA occurring in bars, trait aggression and HED are more important predictors.

Limitations

Because of the small sample size, there was a lack of power to enable the testing of interaction effects as well as the testing of all explanatory variables in the multivariate model [49]. The low sample size may reflect the difficulty in recruiting young men for research [50]. Further, the sample was one of convenience, meaning the results can be considered only tentative. However, this is a limitation common to many studies in the area, and the current study represents the first attempt at investigating this relationship in an Australian sample. The present study provides a good foundation for

future studies, ideally with more representative samples. Finally, as the study was directed at university students who would be expected to have low involvement in MARA [51], subtle findings were expected. However, the current study located many significant relationships, and it may be that these relationships would be far stronger in more diverse groups of the population.

Summary

The present findings showed that it is the heavy episodic drinkers who are most likely to report aggression in bars [35]. However, men who reported experiencing aggressive acts in bars also generally had greater social honour concerns, held positive MARA expectancies and were higher on trait aggression than those who reported no MARA. These findings imply that the effects of alcohol play a role in aggression that occurs in the bar, along with underlying personality factors and the many other factors at play in the barroom, such as peer pressure and masculinity concerns. Therefore, prevention initiatives may be improved by focusing on [52] de-normalising MARA, as well as encouraging pro-social behaviours and an alternative form of masculinity [30], which may be based on Anderson's [53] concept of 'inclusive masculinity'. A focus on greater policing or increased prices on alcohol may help to reduce aggression [54,55]. In addition, further research is needed to assess relations among masculinity, drinking behaviour and sober violence as well as violence that occurs in other contexts, such as partner violence which occurs primarily in the home.

Acknowledgements

P. M. is supported by project grants from the National Drug Law Enforcement Research Fund, an Initiative of the Australian National Drug Strategy. The authors would like to thank Dr Mahalik for the use of the CMNI.

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