SOCIAL NETWORK CHARACTERISTICS, PERCEIVED DRINKING NORMS AND HAZARDOUS ALCOHOL USE

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ABSTRACT

Efforts by researchers, policy makers and other stakeholders to bring about significant reductions in alcohol use among the youth appears not to be yielding desired results, as the problem of hazardous drinking among the youth has persisted. One possible problem is that studies and policies on alcohol have not adequately situated the problem within relevant social contexts. This cross-sectional study examined the influence of social network characteristics, perceived drinking norms and demographic variables on hazardous drinking among 1,315 adult males newly recruited into a youth empowerment scheme in a state in Southwest Nigeria. Data were collected using structured questionnaire. Results showed that about 18% of the respondents reported scores falling within the hazardous drinking zones while 13% were abstainers. Hierarchical multiple regression analyses were performed to explore the extent to which each of the network characteristics and other factors predicted hazardous drinking. Age (β = -.19; p<.05) and educational status (β = -.16; p<.05) of participants significantly predicted hazardous drinking by accounting for about 15% of the explained variance in hazardous drinking. Social network characteristics accounted for about 33% of the explained variance in hazardous drinking. The importance of these and other findings of the study, and the need to factor in normative and social influences in alcohol-reduction intervention programmes were highlighted.

INTRODUCTION

The consumption of alcohol by young people is not a new phenomenon. Concerns regarding drinking by youth can be traced back to Medes and Persians who tried to stop such behavior by rigorous education about the harms of alcohol (Hawker, 1978). By the late 18th century young people were being encouraged to take the pledge thereby promising: "*I do agree that I will not use intoxicating liquors as a beverage*" (Hawker, 1978). However, there is growing concerns with regard to the amount of alcohol that is consumed by young people and the manners of consumption in recent times. Abikoye and Adekoya (2010) found that about one-thirds of the respondents in their study reported hazardous drinking patterns.

Efforts by researchers, policy makers and other stakeholders to bring about significant reductions in alcohol use among the youth appears not to be yielding desired results, as the problem

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of hazardous drinking among the youth has persisted. Research evidence indicates that young people are drinking more heavily and more hazardously now compared to their peers in the 1990s that drank just 5.4 units (Bates, 2005; The Canadian Center on Substance Abuse, 2010). One possible problem is that studies and policies on alcohol have not adequately situated the problem within relevant social contexts.

An important factor that may predict hazardous drinking is perceived drinking norms (Abikoye, 2012). The general definition of social influence is that health-related behavior is influenced by a person's social context. The behavioral social context can be represented by the behaviors of an individual's peers or family members (e.g., alcohol use) with whom the person interacts regularly, or by behaviors observed in a larger social environment such as the neighbourhood in which a person lives. The normative social context is represented in an individual's perceptions about the acceptability of a behavior, such as alcohol use, derived from communications from network members, or by portrayals of behaviors in mass media such as television or movies (Brody, Flor, Hollett-Wright & Mccoy, 1998). If an individual considers a behavior (i.e., alcohol use) as normal and appropriate for him or her, then the likelihood is high that he or she would be more likely to engage in the behavior.

Research suggests that normative perceptions of proximal reference groups are more likely to influence drinking than normative perceptions of distal groups (Borsari & Carey, 2003; Korcuska & Thombs, 2003; Lewis & Neighbors, 2006). In support of this notion, Lewis and Neighbors (2004) found that perceived same-sex drinking norms were more strongly related to personal drinking when compared to opposite-sex norms. Moreover, Larimer and colleagues demonstrated that perceptions for drinking for normative referents specific to three levels (e.g., same-sex, same-race, and same-housing) were uniquely related to drinking when accounting for perceived typical student drinking behavior (Larimer, Kaysen, Lee, Lewis, Dillworth, Montoya, & Neighbors, 2009).

The degree to which an individual identifies with his or her normative referent group may play an important role in norms-behavior relationship. For example, Lewis and Neighbors (2007) found that same-sex normative drinking information was especially efficacious in reducing drinking for women who more closely identified with their gender. Further, Reed and colleagues (Reed, Lange, Ketchie & Clapp, 2007) found that the extent to which injunctive norms information was associated with alcohol use depended on the degree to which an individual identified with that specific group. The present research aimed to more specifically evaluate the influence of social network characteristics and perceived drinking norms on hazardous drinking among youths.

The influence of social network, either positively or negatively, on a wide variety of behaviors is well documented. Most studies on alcohol epidemiology in Nigeria, however, provide little or no insight into the social contexts of alcohol consumption. Analysis of cross-cultural research reveals some near-universal 'constants', namely: proscription of solitary drinking; prescription of sociability; and social control of consumption and behavior. Research findings indicate that these unofficial rules, and the self-imposed protocols of drinking, have more influence on both levels of consumption and drinking behavior than 'external' or legal controls. The present study sought to extend previous research examining the influence of social network characteristics, perceived drinking norms and demographic variables on alcohol use. We hypothesized that the nature of social network characteristics and perceived drinking norms of participants would be strongly associated with participants' drinking.

METHOD

Participants

Participants were 1,315 male adults newly recruited into a youth empowerment employment scheme in a south-western state

of Nigeria. All participants were literate, with at least Secondary School Certificate / West African Examination Council. Mean age of participants was 27.54 (±5.35). Participants' characteristics are presented in Table 1.

Measures

The survey materials consisted of a section to tap respondents' background information such as age, education, religion, and social network characteristics. These background variables were assessed through individual items on the questionnaire.

Social network characteristics were assessed by asking participants to describe their social networks (friends) with whom they closely associate in terms of number of such associates, educational status, employment status, alcohol consumption status, and age of such associates.

Hazardous drinking was assessed using the World Health Organization's 10-item Alcohol Use Disorders Identification Test

Table 1: Socio-demographic characteristics of participants

Variable	n	%
Age (27.54 (±5.35)		
< 20	285	19.62
21 – 25	356	27.07
26 – 30	399	30.34
31+	275	20.91
Educational Level		
WASC/GCE O' Level	478	36.35
National Diploma	366	27.83
National Certificate of Education	305	23.19
Higher National Diploma	115	8.75
First Degree	53	4.03
Religious Affiliation		
Christianity	491	37.34
Islam	663	50.42
Traditional	86	6.45
Others	75	5.70

(AUDIT) (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). The AUDIT was developed as a simple instrument to screen for excessive or hazardous drinking and to assist in brief assessment. Based on individuals' composite scores on the AUDIT, their risk levels and the implications for intervention can be assessed. According to the AUDIT manual, a score of zero indicates that the individual is an abstainer; scores of 0–7 fall into zone I (alcohol education); scores of 8–15 fall into zone II (simple advice); scores of 16–19 fall into zone III (simple advice plus brief counselling and continued monitoring); while scores of 20–40 fall into zone IV (indicating that the individual should be referred to a specialist for diagnostic evaluation and treatment). The AUDIT has been used by researchers in Nigeria and has been shown to display adequate psychometric properties and cultural relevance (Abikoye & Osinowo, 2011; Akinnawo, 2010). A Cronbach's alpha coefficient of 0.76 was obtained for the AUDIT in this study.

Perceived drinking norm was assessed using the adapted (Brody et al., 1998) 12-item Perceived Norms about Substance Use scale. Each item is scored along a five-point scale ranging from "totally acceptable" to "totally unacceptable," with higher scores indicating that a respondent perceives drinking to be normal for him or her. A Cronbach's alpha coefficient of 0.81 was obtained for the scale in this study.

Procedure

Participants were personally interviewed by the researchers and four trained assistants during the orientation programme for the youth empowerment scheme of the state. The research instrument was administered to participants who were given the option of returning it immediately or to drop it later at a designated place. Informed consent was implied by the voluntary acceptance, completion and return of the research questionnaire. Of the 1500 questionnaire administered, 1315 were returned with usable data, representing an 87.7% return rate.

RESULTS

Table 2 shows participants' alcohol consumption status by AUDIT scores. Overall, 12.47% were abstainers, 46.46% were safe drinkers (falling within Zone 1 of AUDIT), 23.04% scored within Zone II of AUDIT while about 18% scored within the more hazardous drinking zones (Zones III and IV of AUDIT). In order words, about 18% of the participants scored at least 16 and above on AUDIT.

Details of respondents' social network characteristics were explored (Table 3). In terms of age of people that participants socialised with, 24.26% socialised with people aged less than 20 years, 54.07 with people aged 20 to 30 years, while 21. 67% socialised with people aged above 30 years.

In order to explore how well each of the independent variables predicted hazardous drinking among newly recruited persons, we conducted hierarchical multiple regression. In the first step, age and educational status were entered. Social network characteristics of participants were entered in the second step while perceived drinking norms were entered in the third step. Results of these are presented in Table 4.

Age ($\beta = -.19$; $p<.05$) and educational status ($\beta = -.16$; $p<.05$) of participants significantly predicted hazardous drinking in the first step. These two variables explained about 15% of the variance in hazardous drinking. In the second step, social network characteristics were added. Together, these variables accounted for about 33% of the explained variance in

hazardous drinking, meaning that the addition of social network characteristics led an incremental prediction (17%) of hazardous drinking. The addition of perceived social norms in the third step increased the joint predictive power to 44% (an increase of 12% over demographic and social network characteristics alone).

DISCUSSION

The present study investigated hazardous drinking in a population of newly-recruited male youths in southwestern Nigeria. Results indicated that hazardous drinking was quite high among respondents, a finding that is consistent with recent empirical reports on alcohol consumption patterns among youths in Nigeria (Abikoye & Adekoya, 2010; Abikoye & Osinowo, 2011).

Age of respondents and their educational levels were found to be significantly associated with drinking. Specifically, younger respondents, compared to relatively older ones, were more involved in hazardous drinking; and higher educational level was associated with less hazardous drinking. The startling finding that younger persons reported higher levels of drinking relative to older persons shows a near-universal contemporary trend and portends great danger to stakeholders involved in regulating alcohol use. As noted by Bates et al., (2005) and Canadian Center on Substance Abuse (2010), youths are consuming more alcohol and they are doing so in increasingly more dangerous patterns now than at any other point in time. The prediction of drinking by educational status is quite plausible in the sense that the more educated an individual is, the more likely that he or she will show more restraints in social situations and habits.

Results also indicated social network characteristics significantly predicted hazardous drinking. For instance, age of people in respondents' social network was negatively associated with hazardous drinking, suggesting that the older the people in a person's social

Table 2: Participants' alcohol consumption status by AUDIT scores

AUDIT Score	n	%
Abstainers	164	12.47
1 -7	611	46.46
8 – 15	303	23.04
16 – 19	172	13.08
20 +	65	4.94

Table 3: Respondents' social network characteristics

SN	Variable	n	%
1.	**"Average age of people you socialise with"**		
	Less than 20	319	24.26
	20 – 30 years	711	54.07
	30 years and above	285	21.67
2.	**"Alcohol consumption by people you socialise with?"**		
	No	102	7.76
	Yes, Little	388	29.51
	Yes, Moderate	619	47.07
	Yes, Heavy	206	15.67
3.	**"Alcohol consumption with people you socialise with?"**		
	No	102	7.76
	Yes, Little	405	30.80
	Yes, Moderate	631	47.98
	Yes, Heavy	177	13.46
4.	**"Educational status of people you socialise with"**		
	Low	361	27.45
	Moderate	709	53.92
	High	245	18.63
5.	**"Employment status of people you socialise with"**		
	Not Employed	488	37.11
	Employed	827	62.89
6.	**"How many people do you closely socialise with"**		
	Few	390	29.66
	Many	755	57.41
	Very many	170	12.93

Table 4: Hierarchical multiple regression analysis of demographic factors, social network characteristics and perceived drinking norms on hazardous alcohol use

Variable	Step 1	Step 2	Step 3
Age	−.19*	−.17*	−.17*
Education	−.16*	−.18*	−.18*
Age of members of social network		-.21*	-.24**
Alcohol use by members of social network		.28**	.32**
Alcohol use with members of social network		.22**	.27**
Educational status of members of social network		-.26**	-.31**
Employment status of members of social network		-.21**	-.23**
Number of social network		.23**	.26**
Perceived drinking norms			.35**
R	.41	.57	.67
R^2	.16	.33	.46
Adj. R^2	.15	.32	.44
R^2 change (%)		17	12
F	12.28**	21.21**	28.54**
F Change		8.93**	7.33**

5

network the less likely that the individual would engage in hazardous drinking. Similarly, alcohol use by members of social network strongly predicted hazardous drinking. Alcohol use with members of social network strongly also predicted hazardous drinking. Furthermore, higher educational status social network was strongly associated with less hazardous drinking. Having unemployed persons as social network was associated with hazardous drinking. Finally, perceived drinking norms were associated with hazardous drinking. All these lend credence to earlier findings (Larimer et al., 2009; Lewis & Neighbours, 2007; Reed et al., 2007) attributing major roles to social network characteristics and normative influences on addictive behaviors generally and alcohol consumption specifically.

For greater effectiveness, therefore, alcohol reduction programmes should take cognisance of social factors. Drinking is a social behavior which is hardly exhibited in isolation. In fact, consistent drinking in isolation is considered a form of serious psychopathology. Any alcohol reduction intervention that neglects the social realities of the target population is, thus, bound to fail. The socially-situated experiential learning model (Lederman, Stewart, Barr, & Perry, 2001) could be adopted. The model assumes that substance use among youths is a shared reality learned through drinking-related experiences, stories shared, perceptions and many misperceptions of the behaviors and expectancies of one another. Applying the same model into the creation, implementation, and evaluation of preventive campaigns has the potential of significantly reducing alcohol consumption by the youth. We are of the view that intervention focussed on the interactional experiences that youths have in their social settings can be used to influence alcohol use among them.

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