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Drinking game participation, gender performance and normalization of intoxication among Nigerian university students



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ABSTRACT

Background: Most research on drinking games (DGs) and the associated risks focuses on Western countries. In the Nigerian context, DGs activity has not attracted scholarly attention but growing media reports indicate that Nigerian youths play DGs, and that a number of gamers have died during or immediately after game-playing. *Methods:* Drawing on gender performance scripts, we explored the performance of gender through DGs practices and the factors that motivate DGs participation. Thirty-one in-depth interviews were conducted with male and female college students (aged 19–23 years) at a university in south-eastern Nigeria.

Results: The participants discussed the popularity of the DGs that students play on this campus, identifying the spaces where each game is played and the motivations for game-playing. Collective, contextual constructions of gender identities through 'Fastest-Drinker' DG were identified, and the participants also performed gender through 'Truth-or-Dare' and 'Endurance' DGs. Men dominated 'First-to-Finish' DGs, which are played at parties and bars, and consumed beer or stout, while women, who mainly played Truth-or-Dare games, drank spirits or sweetened alcoholic beverages. Boredom and fun seeking provoked game-playing among women while adherence to masculinity norms, which engendered the public performance of masculinity and gambling activities, motivated men to play DGs. To avoid 'collective shame', men's friendship groups provided support/care for inebriated game-playing members, but the immediacy of this support/care varied according to DGs type.

Conclusion: DGs appear to normalize heavy drinking and the culture of intoxication on this campus. Measures to monitor alcohol sales outlets around campuses and interventions that target students' leisure spaces should be developed.

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1. Introduction

Heavy and extreme drinking patterns are part of the growing culture of intoxication among students (Peralta, 2007; White, Anderson, Ray, & Mun, 2016). Studies conducted in Western countries have shown that one of the drinking rituals that promotes these and other hazardous drinking practices is drinking games (DGs) (see Borsari, 2004; Zamboanga et al., 2014). In the Nigerian context, DGs activity has not attracted scholarly attention despite the growing number of media reports indicating that DGs are popular among young people in Nigeria and that in some instances, game players have died from over-consumption of alcohol (Dumo, 2016; Mba, 2015).

Nigeria has no codified national alcohol control policies (World Health Organization, 2014). As such, standard drinks are not defined and little or no regulation/monitoring of alcohol marketing exists

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(Dumbili, 2014). The marketing activities of transnational alcohol corporations, which exacerbate alcohol availability (Babor, Robaina, & Jernigan, 2015) and create conditions that encourage alcohol misuse among Nigerian students, are increasing in number (Dumbili, 2016b). These policy issues could be one of many factors contributing to the rise of alcohol consumption and related problems among Nigerian young adults (Abayomi, Babalola, Olakulehin, & Ighoroje, 2016), particularly in the south-eastern region of Nigeria (Dumbili, 2016a). Providing empirical evidence of the roles DGs may play in young people's consumption of alcohol and the related problems is also imperative because empirical studies can help us to understand how students' own rationales for drinking align with their wider social context.

As Sallee and Harris (2011, p.410) noted that "universities are rich sites for the social construction of gender", in that students often express and construct a range of masculine and feminine gender identities on campuses (Peralta, 2007), this study draws on gender performance theories, exploring Nigerian university students' gendered DG participation. Specifically, this article's objectives are to explore how Nigerian

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students perform gender through DGs practices, the factors that motivate DGs participation among them, and in particular, how these motivations reflect norms relating to gender and heterosexual relations.

1.1. Drinking games among students

According to Zamboanga et al. (2013, p.276), (i) "DGs are governed by a set of specific rules (which may be simple or complex) that specify when participants should drink and how much alcohol to consume, (ii) DGs are designed to promote increased alcohol consumption within a short period of time to facilitate intoxication, (iii) DGs are social events, and (iv) DGs involve performing some kind of physical and/or cognitive task while playing". While Borsari's (2004) review of DGs research indicated that 50%-62% of students in Western countries play DGs, a fairly recent review (Zamboanga et al., 2014) reported a higher rate of engagement in DGs, to the extent that up to 91% of drinkers are gamers. Evidence shows that over 500 types of DGs (e.g., 'Chugging', 'Beer-Pong', 'Truth-or-Dare', 'Flip Cup' (Kenney, Hummer, & LaBrie, 2010 p., 1488; Zamboanga, Leitkowski, Rodríguez, & Cascio, 2006)) exist, but the popularity level of each type varies (Zamboanga et al., 2006). LaBrie et al. (2013, p.2133) identified 100 types of DGs and categorised them into five groups: "Targeted and Skill, Communal, Chance, Extreme Consumption and Even Consumption" games.

Indeed, spaces where DGs are played are often occupied by three categories of people: "winners, losers and spectators" (Borsari, 2004 p., 37), and as part of the appealing social activities that characterise students' leisure culture, DGs engender social interaction (Newman, Crawford, & Nellis, 1991; Polizzotto, Saw, Tjhung, Chua, & Stockwell, 2007). In most instances, the heaviest drinkers initiate game-playing (Polizzotto et al., 2007). Although DGs are mainly played by males (Pedersen & LaBrie, 2008; Zamboanga, Iwamoto, Pesigan, & Tomaso, 2015), research shows that some females are gamers, although the motives for, and consequences of, game-playing differ by gender (Pedersen & LaBrie, 2006; Zamboanga et al., 2006).

Some social contexts such as bars, pubs and parties influence DGs (Pedersen & LaBrie, 2008) and game-playing is also facilitated by peer pressure and boredom (Polizzotto et al., 2007). Among other factors, Johnson and Sheets (2004) argued that conformity reasons, novelty seeking and interpersonal dominance motivate game-playing. Fun, sexual purpose (Borsari, 2004; Zamboanga et al., 2014), 'liquid courage' (Ham, Zamboanga, Olthuis, Casner, & Bui, 2010) and adherence to masculine norms (Iwamoto, Cheng, Lee, Takamatsu, & Gordon, 2011; Zamboanga et al., 2015) also motivate game-playing, especially because the ability to 'hold one's drink', is perceived to be intimately tied to the performance of masculinity (Peralta, 2007; Zamboanga et al., 2015).

1.2. Gender performance perspective

Gender scholars (e.g., Butler, 2007; West & Zimmerman, 1987) argue that gender is enacted through a specific kind of repetitive doing. Following Sallee and Harris (2011), we drew largely on West and Zimmerman's (1987, p.126) version of gender performance theory, which argues that gender is a "routine, methodical, and recurring accomplishment". West and Zimmerman (1987, p.140) note that "a person's gender is not simply an aspect of what one is, but, more fundamentally, it is something that one does, and does recurrently, in interaction with others". Indeed, gender identity construction is contextual, (i.e., individuals enact different masculinities and femininities in different contexts or situations (Sallee & Harris, 2011, p.413)). Therefore, gendered behaviour should be understood in the light of the context in which it is enacted. Furthermore, because gendered behaviour is not constructed in isolation, but socially in collaboration with others (West & Zimmerman, 1987), it is often enacted based on the expectations of others (Sallee & Harris, 2011).

Every society has roles and expectations that members are expected to fulfil (Sallee & Harris, 2011), and these are internalised through the process of gender socialisation (Connell & Messerschmidt, 2005). Despite the fact that individuals construct gender identities and behaviours, the accomplishment of gender is often carried out in the presence of onlookers (Peralta, 2007), "who are presumed to be oriented to its production" (West & Zimmerman, 1987, p.126). This is why individuals who perform gender are *accountable* to 'others' (Sallee & Harris, 2011; West & Zimmerman, 1987), who determine whether or not their performance meets the internalised criteria for 'appropriate/ inappropriate' gendered behaviour. Due to this evaluation of gendered behaviour based on the conception of appropriate/inappropriate behaviours, conformity to, and deviation from, gender roles and expectations have consequences.

As gender is performative, different resources are employed to accomplish gender behaviour, and one of these is alcohol. In most societies, men and women are socialised to conform to gendered drinking norms, and this positions alcohol as an important resource for gender performance and social identity construction (Montemurro & McClure, 2005; Peralta, 2007). In Nigeria, alcohol use has been gendered. Traditionally, adult males dominated drinking spaces while, for adult females (and young people), drinking was taboo (Heap, 1998). Notwithstanding this constraint, recent research shows that the consumption norm is evolving, in that alcohol has become a resource for young people's gender performance and social identity (de)construction (Dumbili, 2015b). Against this backdrop, this article explores the role of DGs in alcohol consumption and gender performance on this campus.

2. Methods

Exploring the social factors and contexts that facilitate drinking among students, who lived on and around University campuses is important as these locations have been found to be primary social spaces for heavy drinking in Nigeria (Dumbili, 2013). Following ethics approval by the Nigerian University and Brunel University London Ethics Boards, the data were collected between September and December 2013 from a university located in a city of Anambra State, in south-eastern Nigeria. The participants were recruited on campus using word-of-mouth and snowballing approaches. On campus, EWD approached students and introduced the project to them. After establishing rapport, the students were then asked if they drank alcohol. Those who self-identified as current alcohol users (defined as having consumed alcohol at least once in the last 30 days) were then asked if they would consider participating in the study and sharing their experiences of alcohol use. Those who indicated interest were provided with an information sheet that detailed the aims of the study, the role of participants and the potential benefits and harms of participation, the methods for securing data and maintaining confidentiality, and the voluntary nature of participation. While 26 (20 males and six females) were recruited via this approach, snowballing methods facilitated the recruitment of an additional three females and two males.

These techniques became necessary for the successful recruitment of female participants. Alcohol use among young people is a sensitive issue in Nigeria which elicits socio-cultural disapproval, and young female drinkers are particularly stigmatised (Dumbili, 2015b; Umunna, 1967). Young people, especially females, are not easily accessible for such sensitive studies, and reaching them via any means that may expose their identity will hinder their participation. It is notable that the participants were not incentivised. All the names used in the results section are pseudonyms.

2.1. Interviews and data analysis

Thirty-one in-depth interviews lasting 33–90 min were conducted with 22 male and nine female undergraduate students (aged 19–23 years), who are of legal drinking age (i.e. 18 years and above). The interviews were recorded with a digital device with the permission of the

participants. All but one of the participants was from the *Igbo*¹ ethnic group. This is essentially due to admission policies in Nigeria, where universities have 'catchment areas' and admission quotas. Therefore, gaining admission outside one's 'catchment area' or ethnic group is often difficult.

The interviews were transcribed verbatim, and a thematic analysis was undertaken (by EWD) to identify patterns of meaning in the data set (Braun & Clarke, 2006). As Silverman (2011) suggested, the analysis was initiated immediately after the first interview was conducted. Notes taken during the interview were read and reread, and the audio file was crosschecked for accuracy. This provided an opportunity to identify some new areas to explore further in the subsequent interviews. It also helped to develop and record some tentative coding schemes (Braun & Clarke, 2006; Syed & Nelson, 2015), that were later refined and used for the identification of nuanced patterns of meanings in the data (Campbell, Quincy, Osserman, & Pedersen, 2013).

Following this, the first interview was transcribed. As the audiotape was being transcribed, the initial extracts were manually categorised into broad themes and subthemes. This process was repeated for the next six interviews. In order to ensure analytical rigor from the onset, the analyst's initial thoughts and ideas about coding were assessed (Syed & Nelson, 2015) by CW and another senior academic, who read and commented on the interviews and the preliminary coding and analysis. These processes turned out to be very useful because they assisted in obtaining an early grasp of the data (Morse, 2012) and some of these subthemes, grouped manually, became the parent nodes, while others were condensed (Saldaña, 2012) into different child nodes when the transcripts were imported into NVivo 10 (qualitative data analysis software manufactured by the QSR International Limited, Australia) for further analysis.

When all 31 interviews had been transcribed, the transcripts were read several times and crosschecked and reconciled with the audio recordings before importing them into the NVivo 10. Following this, a number of queries were conducted, the first of which was a word frequency query to gain insight into the words most frequently used by the participants and how this could help in understanding the patterns within the whole data set. It also helped with further coding the data (Seale & Rivas, 2012) because by clicking and opening each referenced source the analyst was able to highlight, and drag and drop the extract to the appropriate nodes.

At the end of this process, each transcript was reread, and data that had not been coded through the first process were coded. When the coding was completed, the nodes were read thoroughly to identify incompatible quotes. Through these means, such quotes were condensed or expanded into the existing nodes (Braun & Clarke, 2006), or new nodes were created (Syed & Nelson, 2015) before running matrix coding queries. At the end of the matrix queries, the nodes were exported to a word document and read several times. Here, some comparisons with the few tentative themes that had been generated manually were made before recording the patterns of meaning from the key themes that had been identified. It is notable that, during these iterative processes, codes were inductively and deductively generated, and the analyst drew from the lens of gender theories (Syed & Nelson, 2015) while searching through the data set to identify examples of gender performance in drinking game practices. Here, some elements of contextual, collective gender creation, the reproduction of hegemonic masculinity and emphasized femininity and gender accomplishment themes/subthemes that are presented in the 'results' section were identified.

¹ The Igbo ethnic group is one of the three predominant ethnic groups in Nigeria. They live in the south-east where the data were collected.

3. Results

3.1. Overview

The participants were asked to share their knowledge about their drinking patterns and that of their friends', as well as the spaces where they drink, their brand preference and the factors that engender alcohol consumption among them and other members of their friendship groups. All of the male participants revealed that they engage in social drinking, especially in public leisure sites such as bars and 12 of them highlighted that they normally consume between four and nine bottles of beer/stout on a drinking occasion. All of them also discussed their friends' diverse drinking patterns. A key factor in their accounts is the way in which they compared their drinking with that of their male friends. Some of them perceived their friends' drinking as being heavier than their own, while others bragged about their ability to outdrink their peers. The data also highlighted that consuming large quantities of alcohol - more than one's peers - without showing signs of intoxication, means that one "drinks well", and also confers a superior masculine status.

The female participants' accounts also highlighted diverse drinking patterns among them and their friends and showed that while six of them engage in social drinking, the others drink in their hostels (a factor that can be attributed to the gendering of spaces in Nigeria (Dumbili, 2015b)). None of them drank beer, but four used the consumption of at least two bottles of wine and up to five bottles of ready-to-drink alcoholic beverages (on a drinking occasion) to 'perform superior femininity'. All of the female participants compared the quantities of alcohol they drank with their peers (as the men did), and four of them also perceived their female friends, who drink more than they do, as possessing 'superior femininity'.

3.2. Collectively enacting gender through "First-to-finish" DGs

Having repeatedly compared the quantities (with reference to the number of bottles each person consumes) and the frequencies of their drinking with their friends', they were probed to shed light on the factors that they think are responsible for the differences, and they indicated that DGs participation and the use of heavy drinking to construct gender identities accounted for the differences. Both male and female participants demonstrated that DGs (in their words, *drinking competitions*) are popular among students on this campus. While nearly all of the male participants had participated in DGs, three females had also played DGs, and others had witnessed game-playing on many occasions. For example, Larry noted that, **"everywhere you go you'll see it; there is always competition while drinking among boys"**. The accounts of the female participants supported his view:

... Each time they do a function like a picnic or a 'night show' [night party], they always do it, and it's like a normal game ... (Pretty, Female).

I have seen drinking competitions countless times among friends on this campus; they always do it (Chimanda, Female).

The use of phrases such as 'a normal game', 'everyone is involved in it', among others, not only permeated the data, but both male and female participants also demonstrated sophisticated levels of awareness of the diverse types of DGs that students play. For example, some of them revealed that they had played what they called the "Fastest Drinker" or "First-to-Finish" DG and others noted that they had witnessed it:

It happened that we were just drinking [in a bar], then a guy was like, you people want 'to spend all my money on drinks'? Okay,

we'll bring drinks, so that we can find out who will be the first person to finish five bottles of Smirnoff Ice ... My friend beat me though ... (Chioma, Female).

It's just like a game where they say the person that finishes his or her bottle first is the winner ... They bring out alcohol and people that want to participate will come out ... (Pretty, Female).

Although the First-to-Finish DG has some features of LaBrie et al.'s (2013) Extreme Consumption games, it also differs in many ways. Unlike LaBrie et al.'s (2013) Extreme Consumption games, which may or may not be guided by rules, the First-to-Finish game is guided by defined rules that are explained to players before each game starts. For example, (i) gamers must drink directly from the bottle (the use of glasses is not allowed), (ii) the consumption is tied to time, and (iii) gamers must drink the stipulated number of bottles without throwing up or letting the drink drop out of their mouth. For instance, if a gamer finishes the stipulated number of bottles of beverages but mistakenly allows some to drop onto the floor while gulping down the drinks, s/he loses to their closest rival, who may not have finished the stipulated number of bottles before the time elapsed but avoided a similar error. The interviewed highlighted that the "Fastest Drinker" DG is mostly played at students' parties:

At parties they do that It's just like you have the 'fastest-eater'; maybe ... three people will come out; the number can be more, but at least three people. You give them alcohol ... so whoever gulps his down first, as in finishes his bottles first, wins the competition (Chikere, Male).

Other participants buttressed the fact that the 'First-to-Finish' DG is integral to students' parties and also shared their perceptions of some of the functions it performs for students. For example:

If you've ever stayed around to witness any hostel parties, you'll see lots of drinking competitions [laughs]. 'It is fun; we see it as fun'. When you go to a party, you'll see bottles of [beer] lined up ... [The competition] is either the 'first-to-finish-four or first-to finish-five' [bottles] ... It is usually part of the programme of most parties ... (Fred, Male).

Game-playing represents positive reinforcements that provide fun for partygoers, but it also performs other roles for gamers. The data revealed the role public performance of drinking practices plays for men who occupy masculinist leisure spaces, in that it creates opportunities for them to publicly construct or reproduce their perceived superior masculinity. As gender is powerfully performative (Campbell, 2000), especially in leisure spaces, party settings provide resources for gender enactment and accomplishment (West & Fenstermaker, 1995) by serving as ready-made 'theatres' where gamers enact what we may call *party masculinity* and display their 'badges of honour' (Peralta, 2007) as skilful *drinking machos*. Indeed, such public performance and reproduction of masculinity appear to enable them to accumulate social capital and win the admiration of both their male and female peers:

At parties, they have drinking competitions ... So you'll see guys who will come out and show themselves, to impress the ladies and stuff like that (Boniface, Male).

Our analysis revealed how gender is collectively created through First-to-Finish DGs in party contexts. Despite the fact that some parties are organised by female students, only the men played DGs at parties while the women watched and applauded them. This is related to the fact that traditionally in Nigeria, public leisure spaces were masculinist sites that normatively women did not occupy. Despite the fact that women, especially young women, now occupy such sites in contemporary Nigeria (Dumbili, 2016b), discrimination against them is still evident (Dumbili, 2015a). As alcohol is a resource for gender performance, we found that beer (which is categorised as men's alcohol in Nigeria (Dumbili, 2015b)) is the only beverage that is used in gameplaying at parties. The women noted that playing such games at a party or consuming beer was viewed as deviating from 'appropriate' feminine behaviour due to the culture. Because gender norms that specify how we behave in social spaces (Butler, 2009) also make us accountable for our actions (West & Zimmerman, 1987), a woman who consumes 'beer' in such contexts will be regarded as a 'double transgressor' (i.e., transgressing social boundaries and gender consumption norms). Due to the fact that hegemonic masculinity privileges men over women (Connell & Messerschmidt, 2005), the men on this campus appeared to use male-gendered drinking games to perform masculinity and reproduce women's subordination while women seemed to be reproducing 'Emphasized femininity' (Connell & Messerschmidt, 2005) by "doing deference" in party contexts (West & Zimmerman, 1987 n 146)

Although none of the female participants had played DGs at parties, those who had witnessed such games also revealed their perceptions of the reasons for game-playing at parties. For example:

'Most people see it as a chance to take free alcohol', so they go into games to perform ..., while some people go into them to 'show off' that they are better than others ... (Pretty, Female).

The data show that some men may be playing DGs at parties to take advantage of *patriarchal benefits* (i.e., free beers (Connell & Messerschmidt, 2005)). This is especially because the crates of beer that are used in DGs are provided free by the host(s) of each party. Therefore, by playing games to demonstrate that they are better than others (in addition to drinking free alcohol), men "obtain social rewards" (Kuntsche, Knibbe, Gmel, & Engels, 2005, p.844).

Additional evidence shows another way in which gender (masculinity) is created collaboratively through interactions between gameplayers and party attendees in 'Fastest-Drinker' DG contexts. Although not every party attendee plays DGs, gaming-playing is a collective/social activity because partygoers (spectators) play the following indispensable roles during games. First, the 'judges' (referees/umpires- male and female) are selected from them before each game starts. Because gamers are not only accountable to the judges, but also to other party attendees, gender accountability (West & Zimmerman, 1987) is maintained. Those who play according to the gender norms are rewarded (i.e., applauded and sometimes offered gifts, in addition to being seen as possessing superior masculinity) and punishments (in the form of ridicule) are meted out to losers for their 'inappropriate' gender behaviour. People in different friendship networks also serve as fans/cheerers (who applaud their representatives) during games. This is especially because winning a game confers honour on the gamer and his group while losing in a game attracts 'collective shame' on the members of the friendship group to which the loser belongs (i.e., people cast doubt on their masculinity). Members of friendship groups also play another central role by providing support/care for members who become inebriated during game-playing, and it could be argued that this is to avoid shaming the gamer and his friendship group.

3.3. Contextualising gendered extreme consumption games

As gender performance is contextual, our analysis shows that the extreme consumption games that men and women play and the spaces where they play such games vary. For example, 'Truth-or-Dare' games are played in students' off-campus hostels:

There was a time that my friends and I were just having fun; we were like ten girls. We bought drinks and we were doing a Truth-or-Dare competition ... You'll be asked to do something ... but if you cannot do it, you'll be asked to take a shot of alcohol, and it is a 'hot drink' [spirit] ... Because one of my friends could not answer the questions, she was just consuming more of the drink, and she just started throwing up [laughs] ... And she felt sick the next day because she had drunk so much alcohol (Chioma, Female).

Similar to Johnson and Sheets' (2004) description of the motives for game playing, the female participants revealed that they often play this game when they are bored because it is a source of fun for them. In this type of game, the possession of 'knowledge capital' (i.e., being able to answer questions correctly) plays a central role because it confers on a player the right to control other players and mandate a rival(s) to consume alcohol even when the latter is inebriated; (thus, normalising intoxication).

Our analysis shows that none of the male participants had played the Truth-or-Dare game. Instead, they mainly play 'Endurance' games. In the excerpt below, one of the male participants revealed his perception of how the Endurance DG is played:

Not the Fastest-Drinker, but just 'who drinks more' ... They boasted among themselves that they should know who drinks more [quantities] among them, so one night they decided to go out [to a bar] and he won. So they all contributed money, bought one bottle of expensive wine and gave it to him because he is the 'chairman of drinking' in that hostel (Jacob, Male).

The accounts of both male and female participants showed that this type of game is mainly played in bars. Due to the fact that the criterion for winning the game is based on the consumption of large quantities of alcohol (and not how fast one drinks), it could be argued that gamers play this game in bars because of the availability and accessibility of alcohol in such venues.

Similar to the account of the women, the men also revealed that they often perform compulsory tasks during games, which help to determine who the winner/loser is:

Most of the time they can go out [to the bar] and some might even buy a crate [12 bottles] of beer, and they will want to know who will take the highest number of bottles without getting drunk. They might take this little test of ... 'you should point at your nose to see who the first person to get tipsy is'. Usually, 'it is kind of difficult to directly point at your nose with your index finger when you are tipsy'; so they will keep drinking and when they suspect that someone is getting drunk, 'they'll tell him to walk in a straight line'. So they will just compete and compete ... [till someone fails the test] (Larry, Male).

The data revealed that this type of consumption ritual is also intimately tied to the performance of masculinity, in that winning the game requires consuming large quantities of alcohol without showing signs of intoxication. Additionally, spaces where Endurance games are played are gendered because only male participants reported playing such games in bars. Gaming in bars is also a social activity that involves players, umpires and spectators, but unlike the games that are played at parties, where any partygoer can be selected as an umpire, members of the same friendship group (who may have won a previous game) serve as referees in Endurance games. Interestingly, members of friendship networks also provide support for intoxicated members.

Although support is provided for inebriated gamers, it often comes after mocking them and recording their actions with camera phones (unlike the kind of immediate care intoxicated gamers receive in party settings). Arguably, this is because Endurance games are played mainly among "insiders" (members of friendship groups); thus, there is no fear of 'collective shame', which can emanate from being noticed by "outsiders". Together, these accounts have not only revealed that game participation is gendered, but the interviewees have also demonstrated that they are aware of the spaces where DGs are played.

3.4. Gender accomplishments and gambling motivate DGs

As indicated earlier, fun and free drinks are some of the motivations for game-playing at parties. Regarding games that are played in non-party settings, the data revealed that social pressure (peerto-peer coercion) provoked participation. As gender behaviour is enacted based on *others*' expectations (Sallee & Harris, 2011), external forces such as social "situation and expectancies" (Kuntsche et al., 2005, p.842) may reinforce DGs participation. Our analysis shows that in this collective ritualised consumption, individuals might be bullied/cajoled into gaming-playing to enact expected (masculine) gendered behaviour. For example:

Men always 'dare' themselves ... There was a day we attended a burial ceremony at [name of a town]; they brought beers. So, they saw that one guy was feeling tipsy, and they were like, 'I doubledare you; can you finish this bottle without throwing up?' So he was like, 'I can finish it'. He went ahead to drink, but he eventually ended up vomiting up everything. They use such means to know who the most powerful person is. That is, 'to know whose head is too strong' (Chisalum, Female).

While the interviewees demonstrated that game-playing at parties is voluntary, our analysis reveals that the most Extreme consumption DGs, especially those that are played in bars, involve subtle coercion. Some of these games often emanate from what the participants called "common arguments" among people in friendship networks. As five of the female participants reported, more than half of the male participants discussed that such DGs start either because someone has boasted about his ability to "hold his drink" (more than other peers) or because someone has made provocative statements such as **"I can drink more than everyone here"**. Again, questions such as **"how many bottles do you think you can drink"** engender game-playing. Both male and female participants also revealed that such questions are often asked by men.

When the male participants were asked to explain how they responded to these statements/questions, we found that their responses or actions mainly resulted in game-playing in order to defend or protect their masculine pride:

Just like friends drinking and all of a sudden one person starts making a noise or acting childishly [due to intoxication] and another will challenge him by saying: 'you drank only two bottles, and you are acting like this'. In defence, the other will say, 'okay let's compete; I'll drink more than you'. And that's how they will keep drinking, and at the end of the day, you will see who has the 'bigger head' (Dozie, Male).

Having revealed that he had played Endurance games, Buchi was probed to unpack his motivation, and his account shows that his main motive was gender accomplishment:

I was feeling like drinking two bottles [of beer], but because my friend said to me, 'you're drinking two, but I can drink more than that'; it was then that we started the competition. And I found myself drinking five to six bottles that day (Buchi, Male).

The motives for playing games often determine the quantity of alcohol intake (Johnson & Sheets, 2004), and this can be inferred from Buchi's account. Other men also recalled how they had either played or witnessed Endurance games that were motivated by peers who were reproducing masculinity. For example:

Some time ago, I went out with four of my male friends, and I took three bottles of 'Legend' [stout] ... while they took six bottles each. Then one of them added one bottle to the six bottles

to show us that "you can't get to my level" ... So the guy that took seven bottles was now 'showing off' by saying, 'you people cannot drink more than me, I am a big boy' ... (Kelly, Male).

Showing off one's ability to outdrink one's peers without showing physical signs of intoxication was paramount to the male participants because it revealed one's superior masculinity, but being called names such as the "drinking boss", "best guy", "someone with a strong head" and the "chairman of drinking" were particularly coveted 'badges of honour' among them. Prestige associated with these 'titles', and the associated social and symbolic capital accruable to the "drinking boss" appeared to motivate game-playing. For example, when the participants were asked to unpack what gamers gain from playing DGs, they said:

It is just a matter of 'name'; it is just to make a name [for oneself], as in "he is the 'best guy' because he can withstand alcohol very well" (Larry, Male).

It's just, 'this guy can 'drink well'; he's good at drinking.' In fact, 'this guy's head is strong; he is the boss' ... Most of the time girls might really admire it and say you are the 'big boss'; you've really experienced drinking by taking so many bottles and don't really get drunk; 'it seems like he has money' ... (Peter, Male).

Two of the male gamers revealed that displays of machoism are admired by women, and this may increase the chances of initiating a romantic relationship with female admirers after game-playing. Our analysis shows that winning money or other valuables may also motivate others to play DGs:

It is betting money actually, like 'If I drink more than you, you have to pay for the drinks, and you still pay me [some amount of money]'. The loser pays for the drinks and still pays the winner (Dozie, Male).

Sometimes they will put a bet on phones; sometimes they bet money. Then the more you drink and remain 'normal' [the greater chance there is of you winning]. Maybe this person will say, "I'll drink 10 bottles, but you can only take 8 bottles" When the argument is heated, then someone will put a bet on and say ... "if you finish these 10 bottles, you can have the money. If maybe you drink 8 bottles and start vomiting you lose the game" ... (Chimanda, Female).

Because physical prizes such as money and other valuables are accruable to winners, it could be argued that they form part of the motivations for game-playing on this campus. Indeed, these accounts have revealed the types of DGs students play on and around this campus, the spaces that facilitate game-playing and the gendered motivations for playing DGs.

4. Discussion

This is the first study to provide empirical evidence of the roles that DGs play in alcohol consumption in Nigeria. The findings reveal that DGs are popular on this campus and show how the participants demonstrated sophisticated levels of awareness of different games that students play, the spaces where they play such games and how they construct gender identities during game-playing. The lived experience of the participants shows that men dominated game-playing on this campus, and this is consistent with previous research (e.g., (Polizzotto et al., 2007).

Some of the key and unique findings of this study show that diverse spaces and motives facilitate different types of DGs, the type of beverages used during games, and who among men and women can participant in each DG. Students play "First-to-Finish" (Fastest-Drinker) competitive DGs that require the skill of speedy consumption of alcohol, and students' parties provide spaces where such games are used to construct gender identities. Previous research shows that DGs are played at parties (Pedersen & LaBrie, 2008). This current study adds depth to this by illustrating that participating in DGs at parties requires being a male, and the choice of alcoholic beverage is also limited to beer. Indeed, that game-playing in parties is gendered not only reinforces West and Zimmerman's (1987) assertion that social situations provide a scaffold for gender (re)production, but also reflects more general social norms surrounding alcohol consumption in Nigeria.

As indicated earlier, in the traditional era (i.e., before 1949, when beer production was localised in Nigeria and aggressive marketing to change the existing drinking cultures by encouraging women and youths to consume alcohol was introduced (Dumbili, 2016b)), alcohol consumption was divided along gender lines. Although this consumption norm is beginning to change in contemporary Nigeria, the country remains largely a patriarchal entity (Dumbili, 2015b). Thus, beer, rum and spirits are still categorised as men's alcohol while women may drink wine and other flavoured/sweetened alcoholic beverages (Dumbili, 2015b). As these games are used to reinforce inherent hegemonic masculinity (i.e., social subordination) on this campus (because "power cannot stay in power without reproducing itself" (Butler, 2009, p.ii)), it appears that women avoid gameplaying in party spaces to maintain 'respectable femininity' and avoid being seen as transgressors.

The findings also show that students play extreme consumption games that have been found to exacerbate alcohol consumption (Zamboanga et al., 2013). Although the women played Truth-or-Dare games, the Endurance games were dominated by men. The fact that only women played the 'Truth-or-Dare' DG lends support to previous research that shows that some DGs are more popular among women (Zamboanga et al., 2006). One of the significant aspects of this finding is that the spaces where the Truth-or-Dare and Endurance games are played and the alcoholic beverages that players consume are also gendered. Unexpectedly, the women drank spirits during Truth-or-Dare games, which they played in their off-campus hostels.

As alcohol is a resource for enacting gender, spirits are 'categorised' as men's alcohol in Nigeria (Dumbili, 2015b). As such, it could be argued that this is the reason why the female participants consumed 'ready-to-drink' beverages in the games they played outside their hostels and drank spirits in games played in their private rooms. That women consumed men's alcohol while gaming not only shows the fluidity (Connell & Messerschmidt, 2005) and contextual nature of gender (West & Zimmerman, 1987), but also reveals how "gender power relations" can be redefined and negotiated through practice (Poggio, 2006, p.228). Again, because this type of game promotes the exertion of social dominance over others- (an indispensable element of hegemonic masculinity (Connell & Messerschmidt, 2005)), it could be argued that women are performing what Palmer (2015, p.491) terms "hegemonic drinking". On the other hand, public leisure sites such as bars serve as spaces for Endurance DGs, and as expected men often consume beer/stout during the games. Most importantly, we found that the type of DG also determines the quantity of alcohol the players drink and how it is consumed, suggesting that DGs are guided by fluid rules.

Regarding the motivations for game-playing, fun appears to motivate DGs that are played at parties, especially because as a social activity (Newman et al., 1991) DGs add colour to parties by providing entertainment for partygoers. Fun was also a motivating factor for game-playing among women (Johnson & Sheets, 2004). That fun seeking motivates DG participation corroborates previous studies (Borsari, 2004; Zamboanga et al., 2014), but while the women in this study mainly played games for fun, the men's motivations extended beyond fun seeking. Some of the men were found to be impulsive reward seekers who were motivated by gender accomplishment (West & Zimmerman, 1987) and social and enhancement motives (Kuntsche et al., 2005). This is because the men publicly performed their masculinity and

gained social capital by demonstrating that they can withstand the effects of alcohol.

Internationally, evidence shows that men employ the ability to outdrink others, especially in public sites, to reproduce hegemonic masculinity (Campbell, 2000; Thurnell-Read, 2011). As gendered behaviour is assessed by onlookers based on gender norms, people's "sense of self" (Zamboanga et al., 2014 p., 689) may motivate DGs, and this was found in this current study, where men played games to reproduce or defend their perceived superior masculinity.

During this public performance of masculinity, men were found to consume large quantities of alcohol, suggesting that the motives for playing games determine the alcohol intake and level of intoxication (Johnson & Sheets, 2004). Although hegemonic masculinity connotes risk-taking, drinking to show off one's ability to 'hold his drink' normalises intoxication (Thurnell-Read, 2011) and increases the frequency of gaming (Hone, Carter, & McCullough, 2013). It is, therefore, conceivable that men on this campus may be engaging in heavy drinking regularly, especially because the socio-cultural environment, which promotes and rewards heavy drinking (e.g., by applauding gamers and associating heavy drinking with gender performance/accomplishment), reinforces immediate and future alcohol misuse (Cox & Klinger, 1988). Although, as Polizzotto et al. (2007) found, peer-to-peer coercion provoked some men in this present study to play extreme consumption games, those who play such games may encounter "psychological challenges" such as "novelty-seeking" (Zamboanga, Calvert, O'Riordan, & McCollum, 2007 p., 34).

Additionally, we found that winning money or mobile phones may motivate men's participation in DGs and this raises serious concerns. Individuals often consume alcohol and gamble simultaneously, especially in 'alcohol environments' such as bars and this normalises heavy drinking and gambling activities (Deans, Thomas, Daube, & Derevensky, 2016). Because leisure gambling is more common among men (Wolfgang, 1988), the rate of masculinist gambling DGs might be high on this campus, and this is likely to increase alcohol-related problems because of the relationship between DGs, gambling and binge drinking (Bhullar, Simons, Joshi, & Amoroso, 2012). The findings also show that game-playing is a group activity where gamers represent a 'group identity'. Interestingly, friendship networks provide support for members during and after gaming, in the form of cheering them on during games and also leading intoxicated members back to their hostels to avoid shaming the group.

Some of the implications of this study are that DGs are popular on this campus and its precincts and some of these games are played in bars located in off-campus leisure spaces. Because participants play games for competitive purposes, which often increases the frequency of DGs participation (Zamboanga et al., 2014), this may also contribute to the frequency of drinking among them. Again, because off-campus locations that exacerbate students' drinking (Miller, Borsari, Fernandez, Yurasek, & Hustad, 2016) are the sites for most of these games, the chances are that students may consume large quantities of alcohol. This is not only because there are no alcohol control policies that specify standard drinks (which can be used to judge whether a drinker has exceeded specified limits (World Health Organization, 2014)), but also because alcohol outlets are not monitored (Dumbili, 2016b). Therefore, DGs may be exacerbating alcohol-related problems among Nigerian students (Abayomi et al., 2016).

The fact that some women who played DGs consumed spirits poses serious health concerns. Spirits in Nigeria contain between 20% and 43% alcohol by volume (ABV) (Kehinde & Olusegun, 2012). Because women's bodies metabolise alcohol slower than men's, this may expose them to a higher blood alcohol concentration (Zamboanga et al., 2014). Although it may be difficult to say whether gamers suffer alcohol-related harms while gaming, some of the participants discussed high levels of consumption and intoxication. Stout and beer in Nigeria contain 7.5% and 5% ABV respectively. Also, ready-to-drink beverages contain 5.5%–6% ABV (Dumbili, 2015b), and some of the participants reported consuming five or more bottles during DGs.

This study has some limitations. We did not elicit data from many female students, and the study's sample is generally small. Although this is a qualitative study, caution should be applied while drawing a conclusion from our findings. Quantitative studies should, therefore, be conducted among Nigerian student populations to examine the roles that DGs play in students' drinking. Furthermore, the study relied on data elicited through self-reporting and did not observe how DGs are played in the spaces described above. Future studies might benefit from ethnographic techniques that involve directly observing these games. We reported only three types of DGs; future studies might examine whether or not students play other types of games (e.g., Chance games, Targeted and Skill, etc. see LaBrie et al. (2013)). The consequences of DGs participation among students and out-of-school young adults should also be examined in Nigeria.

The findings suggest that effective harm reduction strategies should be developed in Nigeria instead of relying on the existing self-regulation (Dumbili, 2014). Health interventions that focus on the types of DGs that students play and the factors that motivate each game should be developed because different motives encourage each type of game, resulting in different levels of alcohol consumption. It is hoped that these findings will aid discussions around the development of measures that will reduce the risks associated with DGs.

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References

- Abayomi, O., Babalola, O., Olakulehin, O., & Ighoroje, M. (2016). Drink driving and risky behavior among university students in southwestern Nigeria-Implications for policy development. *Traffic Injury Prevention*, 17, 330–335.
- Babor, T. F., Robaina, K., & Jernigan, D. (2015). The influence of industry actions on the availability of alcoholic beverages in the African region. Addiction, 110, 561–571.
- Bhullar, N., Simons, L., Joshi, K., & Amoroso, K. (2012). The relationship among drinking games, binge drinking and gambling activities in college students. *Journal of Alcohol* and Drug Education, 56, 58–84.
- Borsari, B. (2004). Drinking games in the college environment: A review. Journal of Alcohol and Drug Education, 48, 29–51.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3, 77–101.
- Butler, J. (2009). Performativity, precarity and sexual politics. AIBR-Revista De Antropologia Iberoamericana, 4, i-xiii (http://media.virbcdn.com/files/3c/98dd516e9b6a090b-Butler_PerformativityPrecarity.pdf).
- Butler, J. (2007). Gender trouble: Feminism and the subversion of identity. New York: Routledge.
- Campbell, H. (2000). The glass phallus: Pub(lic) masculinity and drinking in rural New Zealand. Rural Sociology, 65, 562–581.
- Campbell, J. L, Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews problems of unitization and intercoder reliability and agreement. Sociological Methods & Research, 42, 294–320.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. Gender and Society, 19, 829–859.
- Cox, W. M., & Klinger, E. (1988). A motivational model of alcohol use. *Journal of Abnormal Psychology*, 97, 168–180.
- Deans, E. G., Thomas, S. L., Daube, M., & Derevensky, J. (2016). "I can sit on the beach and punt through my mobile phone": The influence of physical and online environments on the gambling risk behaviours of young men. Social Science & Medicine, 166, 110–119.
- Dumbili, E. W. (2013). Patterns and determinants of alcohol use among Nigerian university students: An overview of recent developments. *African Journal of Drug and Alcohol Studies*, 12, 29–51.

- Dumbili, E. W. (2014). Can brewer-sponsored "drink responsibly" warning message be effective without alcohol policies in Nigeria? *Drugs: Education, Prevention and Policy*, 21, 434–439.
- Dumbili, E. W. (2015a). Media, alcohol consumption and young people in an eastern Nigerian university: A qualitative study. Doctoral Thesis: Brunel University London. http:// dspace.brunel.ac.uk/handle/2438/13015
- Dumbili, E. W. (2015b). 'What a man can do, a woman can do better': Gendered alcohol consumption and (de)construction of social identity among young Nigerians. BMC Public Health, 15, 167. http://dx.doi.org/10.1186/s12889-015-1499-6.
- Dumbili, E. W. (2016a). Gendered sexual uses of alcohol and associated risks: A qualitative study of Nigerian university students. *BMC Public Health*, 16, 1. http://dx.doi. org/10.1186/s12889-016-3163-1.
- Dumbili, E. W. (2016b). Intoxicating entertainment? The influence of "Star Music Trek" on the drinking practices of Nigerian students. *Contemporary Drug Problems*, 43, 62–78.
- Dumo, E. (2016). Betting to death: Tragic story of barber who drank to his grave over N10,000. Punch newspaper Retrieved from http://www.punchng.com/tragic-storyof-barber-who-drank-to-his-grave-over-n10000/
- Ham, L. S., Zamboanga, B. L., Olthuis, J. V., Casner, H. G., & Bui, N. (2010). No fear, just relax and play: Social anxiety, alcohol expectancies, and drinking games among college students. *Journal of American College Health*, 58, 473–479.
 Heap, S. (1998). "We think prohibition is a farce": Drinking in the alcohol-prohibited zone
- Heap, S. (1998). "We think prohibition is a farce": Drinking in the alcohol-prohibited zone of colonial northern Nigeria. *The International Journal of African Historical Studies*, 31, 23–51.
- Hone, L. S., Carter, E. C., & McCullough, M. E. (2013). Drinking games as a venue for sexual competition. Evolutionary Psychology: An International Journal of Evolutionary Approaches to Psychology and Behavior, 11, 889–906.
- Iwamoto, D. K., Cheng, A., Lee, C. S., Takamatsu, S., & Gordon, D. (2011). "Man-ing" up and getting drunk: The role of masculine norms, alcohol intoxication and alcohol-related problems among college men. Addictive Behaviors, 36, 906–911.
- Johnson, T. J., & Sheets, V. L. (2004). Measuring college students' motives for playing drinking games. Psychology of Addictive Behaviors, 18, 91–99.
- Kehinde, O. S., & Olusegun, F. F. (2012). Taking alcohol by deception II: Paraga (alcoholic herbal mixture) use among commercial motor drivers in a south-western Nigerian city. *BMC Research Notes*, 5, 301.
- Kenney, S. R., Hummer, J. F., & LaBrie, J. W. (2010). An examination of prepartying and drinking game playing during high school and their impact on alcohol-related risk upon entrance into college. *Journal of Youth and Adolescence*, 39, 999–1011.
- Kuntsche, E., Knibbe, R., Gmel, G., & Engels, R. (2005). Why do young people drink? A review of drinking motives. *Clinical Psychology Review*, 25, 841–861.
- LaBrie, J. W., Ehret, P. J., & Hummer, J. F. (2013). Are they all the same? An exploratory, categorical analysis of drinking game types. *Addictive Behaviors*, 38, 2133–2139.
- Mba, M. (2015). Man dies in drinking competition at a funeral in Benin City. Retrieved from http://www.nigeriadailynews.news/news/114915-man-dies-in-drinkingcompetition-at-a-funeral-in-benin-city.html
- Miller, M. B., Borsari, B., Fernandez, A. C., Yurasek, A. M., & Hustad, J. T. (2016). Drinking location and pregaming as predictors of alcohol intoxication among mandated college students. *Substance Use & Misuse*, 51, 983–992.
- Montemurro, B., & McClure, B. (2005). Changing gender norms for alcohol consumption: Social drinking and lowered inhibitions at bachelorette parties. Sex Roles, 52, 279–288.
- Morse, J. M. (2012). The implications of interview type and structure in mixed-method designs. In J. F. Gubrium, J. A. Holstein, A. Marvasti, & K. D. McKinney (Eds.), *The SAGE handbook of interview research. The complexity of the craft.* Los Angeles: SAGE Pub.

- Newman, I. M., Crawford, J. K., & Nellis, M. J. (1991). The role and function of drinking games in a university community. *Journal of American College Health*, 39, 171–175.
- Palmer, C. (2015). Drinking like a guy? Women and sport-related drinking. *Journal of Gender Studies*, 24, 483–495.
 Pedersen, E. R., & LaBrie, J. (2006). Drinking game participation among college students:
- Gender and ethnic implications. Addictive Behaviors, 31, 2105–2115.
- Pedersen, E. R., & LaBrie, J. W. (2008). Normative misperceptions of drinking among college students: A look at the specific contexts of prepartying and drinking games. *Journal of Studies on Alcohol and Drugs*, 69, 406–411.
- Peralta, R. L. (2007). College alcohol use and the embodiment of hegemonic masculinity among European American men. Sex Roles, 56, 741–756.
- Poggio, B. (2006). Editorial: Outline of a theory of gender practices. Gender, Work & Organization, 13, 225–233.
- Polizzotto, M. N., Saw, M. M., Tjhung, I., Chua, E. H., & Stockwell, T. R. (2007). Fluid skills: Drinking games and alcohol consumption among Australian university students. Drug and Alcohol Review, 26, 469–475.
- Saldaña, J. (2012). The coding manual for qualitative researchers. London: Sage Pub.
- Sallee, M. W., & Harris, F. (2011). Gender performance in qualitative studies of masculinities. *Qualitative Research*, 11, 409–429.
- Seale, C., & Rivas, C. (2012). Using software to analyze qualitative interviews. In J. F. Gubrium, J. A. Holstein, A. Marvasti, & K. D. McKinney (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (pp. 427–440) (2nd ed.). Los Angeles: SAGE Pub.
- Silverman, D. (2011). Interpreting qualitative data (4th ed.). London: Sage Pub.
- Syed, M., & Nelson, S. C. (2015). Guidelines for establishing reliability when coding narrative data. *Emerging Adulthood*, 3, 375–387.
- Thurnell-Read, T. (2011). Off the leash and out of control: Masculinities and embodiment in eastern European stag tourism. *Sociology*, *45*, 977–991.
- Umunna, I. (1967). The drinking culture of a Nigerian community: Onitsha. Quarterly Journal of Studies on Alcohol, 28, 529–537.

West, C., & Zimmerman, D. H. (1987). Doing gender. Gender & Society, 1, 125-151.

- White, H. R., Anderson, K. G., Ray, A. E., & Mun, E. (2016). Do drinking motives distinguish extreme drinking college students from their peers? *Addictive Behaviors*, 60, 213–218.Wolfgang, A. K. (1988). Gambling as a function of gender and sensation seeking. *Journal of*
- Gambling Behavior, 4, 71–77. World Health Organization (2014). Global status report on alcohol and health. Geneva:
- World Health Organization.
 Zamboanga, B. L., Calvert, B. D., O'Riordan, S. S., & McCollum, E. C. (2007). Ping-pong, endurance, card, and other types of drinking games: Are these games of the same feather? Journal of Alcohol and Drug Education, 51, 26–39.
- Zamboanga, B. L., Iwamoto, D. K., Pesigan, I. J. A., & Tomaso, C. C. (2015). A "Player's" game? Masculinity and drinking games participation among white and Asian-American male college freshmen. *Psychology of Men & Masculinity*, 16, 468–473.
- Zamboanga, B. L., Leitkowski, L. K., Rodríguez, L., & Cascio, K. A. (2006). Drinking games in female college students: More than just a game? *Addictive Behaviors*, 31, 1485–1489.
- Zamboanga, B. L., Olthuis, J. V., Kenney, S. R., Correia, C. J., Van Tyne, K., Ham, L. S., & Borsari, B. (2014). Not just fun and games: A review of college drinking games research from 2004 to 2013. Psychology of Addictive Behaviors, 28, 682–695.
- Zamboanga, B. L., Pearce, M. W., Kenney, S. R., Ham, L. S., Woods, O. E., & Borsari, B. (2013). Are "extreme consumption games" drinking games? Sometimes it's a matter of perspective. *The American Journal of Drug and Alcohol Abuse*, 39, 275–279.