

PREVALENCE AND SOCIO-ENVIRONMENTAL DETERMINANTS OF ALCOHOL CONSUMPTION IN SABON GARI AREA OF KANO STATE, NIGERIA

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Abstract

Alcohol consumption remains a major public health and social concern due to its association with behavioural, psychological, and socioeconomic consequences. Although previous studies have examined alcohol use in various parts of Nigeria, limited empirical attention has been devoted to understanding the interaction between alcohol availability, socio-environmental conditions, and self-reported psychological experiences within the Sabon Gari area of Kano. This study, therefore, investigated the prevalence and socio-environmental determinants of alcohol consumption in Sabon Gari, Kano State. A cross-sectional survey design was adopted using structured questionnaires and in-depth interviews to obtain quantitative and qualitative data from 300 respondents and selected key informants. Multistage cluster sampling and purposive sampling techniques were employed. Quantitative data were analysed using descriptive statistics (frequencies and percentages) and inferential statistics (Chi-square test), while qualitative responses were analysed thematically. Findings revealed a high prevalence of alcohol consumption among respondents (79%). Inferential analysis revealed statistically significant relationships between alcohol consumption and availability ($\chi^2 = 11.40$, $p = 0.001$), price ($\chi^2 = 42.93$, $p < 0.001$), proximity ($\chi^2 = 39.86$, $p < 0.001$), and peer influence ($\chi^2 = 41.01$, $p < 0.001$). Respondents also reported experiences such as depression, insomnia, memory loss, and reduced cognitive functioning following alcohol use; however, these outcomes were based on subjective self-reports rather than clinical diagnoses. The study concludes that socio-environmental dynamics and accessibility factors strongly shape alcohol consumption within the area. Therefore, community sensitisation programmes and targeted public health interventions are recommended.

Keywords: Alcohol consumption, Socio-environmental determinants, Peer influence, Psychological experiences, Prevalence.

INTRODUCTION

Alcohol consumption continues to constitute a major public health, social, and behavioural concern across many societies of the world. Beyond its recreational and social functions, excessive alcohol consumption has been associated with diverse health complications, social instability, reduced productivity, family disorganisation, risky behaviours, and psychological distress (Mungai & Midigo, 2019). In many developing countries, including Nigeria, changing socioeconomic realities, urbanisation, migration, and evolving cultural interactions have contributed significantly to increasing patterns of alcohol consumption, particularly within urban and semi-urban centres (Aremu et al., 2021; Walls et al., 2020).

Existing literature indicates that alcohol consumption is often influenced by a combination of structural, environmental, economic, and social factors. Studies have identified alcohol availability, affordability, peer influence, social acceptance, and weak regulatory enforcement as important predictors of drinking behaviour (Dumbili, 2013; Morojele et al., 2021). Similarly, excessive alcohol intake has been linked to several adverse outcomes, including impaired judgement, risky social behaviour, poor mental well-being, and reduced cognitive functioning (Sudhinaraset, 2016). However, the nature and intensity of these influences often vary across social and geographical contexts.

Within Sub-Saharan Africa, alcohol consumption has increasingly attracted scholarly and policy attention due to the expansion of alcohol markets and relatively weak alcohol control policies in many countries (Babor et al., 2015). In Nigeria, alcohol consumption presents a particularly complex sociocultural dynamic because of the coexistence of varying religious beliefs, ethnic identities, and social norms. This complexity is especially observable in Northern Nigeria, where socio-religious restrictions on alcohol coexist alongside spaces of commercial and social interaction that facilitate alcohol accessibility and consumption.

The Sabon Gari area of Kano State is one such socially and culturally heterogeneous environment. The area is characterised by intense commercial activity, population diversity, nightlife, and high interaction among people from different ethnic and religious backgrounds (Usman, 2026; Sulaiman et al., 2020). These features have contributed to the widespread accessibility and social circulation of alcoholic beverages despite broader regional restrictions associated with Islamic legal and moral frameworks (Sani & Ibrahim, 2025).

Although previous studies have examined alcohol consumption patterns in different Nigerian communities (Aremu et al., 2021; Akosu et al., 2020; Onodugo et al., 2019; Goar et al., 2018), limited empirical attention has been devoted to understanding how alcohol availability, peer networks, environmental conditions, and social interactions collectively shape alcohol consumption behaviour within the Sabon Gari context of Kano State. Furthermore, there is inadequate evidence regarding the self-reported psychological experiences associated with alcohol consumption in the area. This gap limits the development of context-specific interventions and policy responses.

Against this background, this study investigates the prevalence and socio-environmental determinants of alcohol consumption in the Sabon Gari area of Kano State. Specifically, the study examines the major sources and accessibility of alcoholic beverages, patterns of alcohol consumption, environmental and social factors influencing alcohol use, and respondents' self-reported psychological experiences associated with alcohol consumption. The findings are expected to contribute to sociological understanding of alcohol use in heterogeneous urban

settings and provide useful insights for policymakers, public health practitioners, and community stakeholders.

THEORETICAL BACKGROUND

Availability – Proneness Theory

This study is anchored in the Availability –Proneness Theory propounded by Reginald G. Smart in 1980. The theory explains substance use behaviour as a product of the interaction between the availability of a substance and individuals' social or psychological predispositions toward its consumption. The theory argues that where access to a substance is high, and individuals are socially or psychologically vulnerable, the likelihood of consumption and abuse increases.

Within the context of this study, “availability” refers to the ease with which alcoholic beverages can be obtained within the Sabon Gari area of Kano State. This includes the physical accessibility of alcohol outlets, affordability of alcoholic beverages, proximity to places of sale, and the widespread circulation of both imported and locally produced alcohol. The concept is operationalised through variables such as accessibility, proximity, affordability, and weak regulatory enforcement.

“Proneness,” on the other hand, refers to the tendency of individuals to engage in alcohol consumption due to social and psychological influences. In this study, proneness is reflected through peer influence, social interaction, group pressure, environmental exposure, and coping tendencies associated with stressful socioeconomic conditions.

The relevance of the theory to this study lies in its ability to explain why alcohol consumption remains prevalent within Sabon Gari despite existing socio-religious restrictions. The widespread availability of alcohol within the area, combined with social interaction networks and peer influence, creates conditions that encourage alcohol consumption among residents and visitors.

The theory, therefore, provides a useful framework for understanding how socio-environmental conditions and accessibility factors interact to sustain alcohol consumption patterns in the study area.

METHODOLOGY

Study Area

Sabon Gari is a major migrant, commercial, and high-density urban district with significant social, environmental, and economic importance. Located within Fagge Local Government Area, Sabon Gari comprises the political wards of Sabon Gari East and Sabon Gari West. The eastern section extends from France Road to Normans land, while the western section stretches from Court Road to Normans land. Collectively, Sabon Gari East and West consist of approximately 30 streets. Fagge Local Government Area has an estimated population of 200,095 according to the Federal Republic of Nigeria Official Census Gazette (2009). It is a highly diverse enclave, architecturally and socially distinct from traditional Hausa quarters, and a key commercial hub (Sulaiman et al., 2020). The area faces serious environmental pressures (waste, air pollution, hazardous chemicals), security threats (terror attacks, fire risk), and complex interethnic and interfaith dynamics. At the same time, it plays a central role in trade, pharmaceuticals, finance, and communication infrastructure for Kano and much

of northern Nigeria. Despite vulnerability, organised interfaith youth programs in Sabon Gari (Fagge LGA) aim to strengthen peaceful coexistence between Muslim and Christian youths (Uman, 2026).

Study Design

The study adopted a cross-sectional survey design to investigate the prevalence and socio-environmental determinants of alcohol consumption in the Sabon Gari area of Kano State, Nigeria. The design was considered appropriate because it enabled the collection of quantitative and qualitative data from respondents within the study area at a specific point in time.

Study Population

The target population for the study consisted primarily of adult residents and visitors within the Sabon Gari area of Kano State. The study focused on both consumers and non-consumers of alcohol in order to obtain diverse perspectives regarding alcohol availability and consumption patterns within the area. In addition, selected key informants, including alcohol sellers, community leaders, religious leaders, officials of the Hisbah Board, and officers of the Nigerian Police Force, were purposively included to provide supplementary qualitative insights relevant to the study objectives.

Sample Size

A sample size of 300 respondents was selected for the quantitative aspect of the study. The sample size was considered adequate for the exploratory and descriptive nature of the study and for obtaining sufficient representation across the selected political wards (Sabon Gari East and Sabon Gari West) within the study area. In addition, ten key informants, including alcohol sellers, community leaders, religious leaders, Hisbah officials, and police officers, were selected for in-depth interviews.

Sampling Techniques

The study adopted a mixed-methods design comprising quantitative and qualitative approaches and was conducted over four months in Sabon Gari. For the quantitative component, a multistage cluster sampling technique was employed due to the heterogeneous and spatially dispersed nature of the study population. In the first stage, cluster sampling was used to select the two political wards that constitute the study area (Sabon Gari East and Sabon Gari West). In the second stage, simple random sampling was used to select two areas from each ward, resulting in four study areas (A–D). Subsequently, systematic sampling (1:3 interval) was used to select streets with alcohol hotspots (e.g., bars and liquor shops). A total of 156 alcohol consumers were selected through accidental (convenience) sampling based on availability. Residents (both consumers and non-consumers of alcohol) were selected systematically from every third street, resulting in eight sampled streets (two per area). Thereafter, simple random sampling was used to select 18 respondents per street, giving a total of 144 resident respondents. The multistage cluster sampling approach enhanced accessibility and efficiency in sampling a geographically dispersed population while ensuring adequate coverage of the study area.

For the qualitative component, purposive sampling was employed to select key informants with relevant knowledge of alcohol-related issues. Two participants each were drawn from alcohol sellers, religious leaders, community leaders, officials of the Hisbah Board, and

officers of the Nigeria Police Force, based on their expertise and relevance to the study objectives.

Data Collection Instruments and Method

Data for this study were obtained through structured questionnaires and in-depth interviews. The adoption of mixed methods was considered appropriate because it enabled the researcher to obtain both quantitative and qualitative information regarding alcohol consumption patterns, accessibility, socio-environmental influences, and respondents' self-reported psychological experiences within the study area.

The questionnaire served as the principal instrument for collecting quantitative data from residents and visitors within the Sabon Gari area of Kano State. The instrument consisted of both closed-ended and open-ended questions carefully structured into relevant sections. The first section collected information on respondents' socio-demographic characteristics, including age, gender, marital status, educational attainment, occupation, and religious affiliation. The second section focused on issues relating to alcohol accessibility, prevalence, patterns of alcohol consumption, and sources of alcoholic beverages within the area. The third section examined socio-environmental determinants of alcohol consumption, including peer influence, availability, affordability, proximity to alcohol outlets, and regulatory enforcement. The final section explored respondents' self-reported psychological experiences associated with alcohol consumption.

The questionnaire items were carefully designed to ensure clarity, simplicity, and relevance to the study's objectives. In addition, the inclusion of open-ended questions enabled respondents to provide supplementary explanations regarding alcohol consumption practices and environmental influences within the study area.

In-depth interviews were also conducted with selected key informants, including alcohol sellers, community leaders, religious leaders, officials of the Hisbah Board, and officers of the Nigerian Police Force. These categories of respondents were purposively selected for their experience, knowledge, and involvement in issues related to alcohol consumption, social behaviour, and regulatory enforcement in the Sabon Gari area.

The interviews provided detailed qualitative insights that complemented the quantitative findings. Interview sessions focused on participants' perceptions regarding the prevalence of alcohol consumption, accessibility of alcoholic beverages, environmental influences, social acceptance of drinking behaviour, enforcement challenges, and perceived consequences of alcohol use within the study area. Responses obtained during the interviews were recorded with participants' consent, transcribed, and organised into emerging themes relevant to the study's objectives.

Method of Data Analysis

Quantitative data generated through the questionnaire were coded and analysed using the Statistical Package for the Social Sciences (SPSS) version 26.0 for Windows. Descriptive statistics (frequencies and percentages) and inferential statistics (Chi-square test of association) were employed. The Chi-square test was used to examine relationships between selected socio-environmental factors and alcohol consumption among respondents. Statistical significance was determined at $p < 0.05$. Qualitative data obtained through in-depth interviews were analysed thematically. Responses from participants were transcribed, grouped into

thematic categories, and interpreted in relation to the study's objectives. The thematic analysis enabled the researcher to provide explanatory insights that enriched and supported the quantitative findings.

RESULTS

Sources and Availability of Alcoholic Beverages

The study found that alcoholic beverages consumed in the Sabon Gari area are sourced from both imported and locally produced sources. The majority of respondents (86.7%) indicated that both local production and importation are the major sources of alcohol supply in the study area (Table 1). Only 0.3% of respondents recognised local production alone, and a smaller percentage (12.0%) ascribed availability only to imports. According to respondents, alcoholic beverages are obtained from both locally made drinks, such as burukutu and ogogoro and from neighbouring states, such as Kaduna. Qualitative data support this conclusion.

Table 1

Sources of Alcoholic Beverages in the Sabon Gari Area of Kano

Source of Alcoholic Beverages	Frequency	Percentage (%)
Importation	36	12.0
Local Production	1	0.3
Both (Importation & Local)	260	86.7
No Idea	3	1.0
Total	300	100.0

An in-depth interview with one of the community leaders supported this when he mentioned that:

There is no doubt that Sabon Gari is an area where availability is the key factor to alcohol consumption. This is an area where all kinds of alcoholic beverages are found, and these include expensive and less expensive kinds for all classes of consumers. Furthermore, it is an area with a lot of hotels and night clubs where prostitutes are found and their services are always needed coupled with other drugs usage as parts of the social activities.

Both contemporary (industrial) and locally manufactured alcoholic beverages are available, according to the vast majority of respondents (91.7%) (Table 2). This suggests that Sabon Gari customers have access to a wide variety of alcoholic items, which could lead to higher consumption levels. Locally produced alcohol is preferred by nearly half of the respondents (47.3%) (Table 3), especially when costlier options are out of reach. Nonetheless, 31.7% said

they had no preference for local alcohol. This suggests that while not the only factor influencing buying behaviours, economic factors do play a role.

Table 2

Existence of Modern and Locally Produced Alcoholic Beverages

Response	Frequency	Percentage (%)
Agree	275	91.7
Disagree	1	0.3
No Idea	24	8.0
Total	300	100.0

Table 3

Preference for Locally Produced Alcohol

Response	Frequency	Percentage (%)
Yes	142	47.3
No	95	31.7
No Response	63	21.0
Total	300	100.0

Prevalence and Patterns of Alcohol Consumption

Table 4 shows a high prevalence of alcohol drinking in the study area, with 79.0% of respondents reporting active use. Only 16.0% said they were not consumers, and 5.0% had given up alcohol. This indicates that alcohol use is common and deeply ingrained in the community under consideration. The majority of respondents (66.7%) stated that they obtained alcohol through friends or peers, underscoring the significance of social networks in alcohol consumption patterns. It means that drinking is often a group activity shaped by social connections rather than just an individual spending decision (Table 5).

Table 4**Alcohol Consumption Status of Respondents**

Consumption Status	Frequency	Percentage (%)
Yes	237	79.0
No	48	16.0
Quit	15	5.0
Total	300	100.0

Table 5**Other Means of Accessing Alcohol**

Means of Access	Frequency	Percentage (%)
Through Friends/Peers	200	66.7
On Credit	10	3.3
Others	4	1.3
No Response	86	28.7
Total	300	100.0

This was supported by an in-depth interview with one of the alcohol sellers, who mentioned that:

Income does not count for many of the alcohol consumers because the majority of the consumers always get drunk at the expense of their friends and family, who buy for them. This is a fact, as we, the sellers, always supply when told to do so by these friends (Alcohol Seller, Male, 48 years).

Environmental and Economic Influences on Alcohol Consumption

As shown in Table 6, nearly half of the respondents (46.7%) reported that their area of residence affects alcohol consumption, indicating that peer presence, availability, and proximity are important environmental factors shaping behaviour. The majority (56.0%) stated that price had no discernible impact on their choice of alcohol (Table 7), suggesting that availability and social factors may be more relevant drivers than cost in this context. To determine whether socio-environmental factors were significantly associated with alcohol consumption among respondents, Chi-square tests of association were conducted (Table 8). The results revealed statistically significant relationships between alcohol consumption and availability of alcohol ($\chi^2 = 11.40$, $p = 0.001$), price ($\chi^2 = 42.93$, $p < 0.001$), proximity ($\chi^2 = 39.86$, $p < 0.001$), peer influence ($\chi^2 = 41.01$, $p < 0.001$), and other identified factors ($\chi^2 = 98.57$, $p < 0.001$). However, weak regulation was not statistically significantly associated with alcohol consumption ($\chi^2 = 1.12$, $p = 0.290$). This shows that a variety of social and environmental factors influence alcohol intake in Sabon Gari.

Table 6

Influence of Place of Residence on Alcohol Consumption

Response	Frequency	Percentage (%)
Yes	140	46.7
No	100	33.3
No Response	60	20.0
Total	300	100.0

Table 7

Influence of Price on Choice of Alcohol

Response	Frequency	Percentage (%)
Yes	71	23.7
No	168	56.0
No Response	61	20.3
Total	300	100.0

Table 8**Factors Contributing to the Prevalence of Alcohol Consumption**

Factor(s)	Consumes Alcohol	Do Not Consume Alcohol	Total	χ^2	p-value	Decision
Availability				11.40	0.001*	Significant
Yes	237	60	297			
No	0	3	3			
Total	237	63	300			
Price				42.93	<0.001*	Significant
Yes	230	22	252			
No	7	41	48			
Total	237	63	300			
Proximity				39.86	<0.001*	Significant
Yes	204	31	235			
No	33	32	65			
Total	237	63	300			
Peer Influence				41.01	<0.001*	Significant
Yes	200	39	239			
No	27	34	61			
Total	237	63	300			
Weak Regulation				1.12	0.290	Not Significant
Yes	185	53	238			
No	52	10	62			
Total	237	63	300			
Others				98.57	<0.001*	Significant
Yes	20	41	61			
No	217	22	239			
Total	237	63	300			

Psychological Implications of Alcohol Consumption

Depression is the most prevalent psychological impact linked to alcohol use, with 39.0% of respondents reporting having experienced it (Table 9). Lower levels of other effects included amnesia (9.0%), sleeplessness (7.3%), and diminished cognitive functioning (8.3%). Even though most respondents did not report such impacts, these results imply that alcohol intake has significant consequences on mental health.

Table 9**Self-Reported Psychological Effects of Alcohol Consumption**

Psychological Effect	Yes (%)	No (%)
Depression	39.0	61.0
Amnesia (Memory Loss)	9.0	91.0
Insomnia	7.3	92.7
Reduced Understanding/Communication	8.3	91.7
Others	3.3	96.7

DISCUSSION OF FINDINGS

The findings of this study provide important insights into the prevalence and socio-environmental determinants of alcohol consumption in the Sabon Gari area of Kano State, and demonstrate that structural, environmental, and social factors interact to shape alcohol consumption behaviour. The finding that the majority of respondents (86.7%) identified both local production and importation as major sources of alcohol supply indicates the existence of a diversified alcohol distribution system within the study area. This suggests that the continuous circulation of both imported beverages and locally produced alcoholic drinks, such as burukutu and ogogoro, contributes substantially to widespread access and consumption. The availability of multiple alcohol sources creates opportunities for consumers from varying socioeconomic backgrounds to obtain alcohol with relative ease. Similar observations have been reported in previous studies, which found that accessibility and density of alcohol supply systems significantly influence drinking patterns and consumption behaviour, particularly within urban and socially heterogeneous settings (Dimova et al., 2023; Odeigah et al., 2023; Babor et al., 2015). Studies conducted in sub-Saharan Africa further suggest that liberal market conditions and increased alcohol distribution networks have expanded alcohol availability within communities, thereby facilitating consumption (Morojele et al., 2021; Obot, 2000). The finding also supports the assumptions of Availability–Proneness Theory, which posits that increased accessibility to alcohol increases the likelihood of use among individuals who are socially or psychologically predisposed toward consumption.

Relatedly, the finding that 91.7% of respondents acknowledged the availability of both locally produced and imported alcoholic beverages further reinforces the significance of alcohol accessibility in shaping drinking behaviour. The coexistence of inexpensive local products and relatively expensive imported brands provides consumers with a wide range of alternatives and reduces economic barriers that may ordinarily discourage consumption. The finding that 47.3% of respondents preferred locally produced alcohol when unable to afford

imported beverages suggests that economic conditions influence beverage choice rather than alcohol use itself. Qualitative findings indicating that respondents frequently switch between local and imported alcohol depending on availability suggest an adaptive consumption pattern driven largely by access and convenience. Similar findings have been reported by Dumbili (2013), who observed that patterns of alcohol use in Nigeria are increasingly influenced by environmental opportunities and changing social contexts rather than by fixed beverage preferences alone.

The prevalence of alcohol consumption found in this study was considerably high, with 79.0% of respondents indicating current alcohol use. This finding suggests that alcohol consumption has become socially embedded within the Sabon Gari environment and may reflect the combined influence of accessibility, social interaction, and relatively weak control mechanisms. The normalisation of drinking behaviour observed in this study is consistent with sociological perspectives which argue that repeated exposure to substance use within social environments often contributes to behavioural acceptance and institutionalisation (Onodugo et al., 2019; Taylor et al., 2017). Similar studies conducted in urban communities in Nigeria have reported relatively higher prevalence of alcohol consumption (Akosu et al., 2020; Goar et al., 2018), associated with social acceptance and environmental exposure (Aremu et al., 2021; Onodugo et al., 2019). Given that socially diverse communities, such as Sabon Gari, where people of varying cultural and ethnic backgrounds coexist, exposure to drinking practices may become more frequent and socially reinforced. However, studies have shown that Muslims report lower alcohol use, and Islam is a negative predictor of likely alcohol use disorder, especially in an open space drinking study (Lasebikan et al., 2018).

The study further revealed that 66.7% of respondents obtained alcohol through friends or peers, indicating that social networks play a significant role in alcohol consumption behaviour. This finding demonstrates that drinking behaviour extends beyond individual decisions and operates within broader social contexts. Peer relationships and social interactions often create environments in which drinking behaviour becomes normalised and reinforced through group expectations and shared experiences. Similar findings have been reported in studies demonstrating that peer influence significantly predicts alcohol initiation and sustained consumption behaviour (Sudhinaraset, 2016; Taylor et al., 2017). The finding also aligns with observations by Dumbili (2013), who noted that social interaction and peer acceptance frequently encourage alcohol use within Nigerian communities. This may explain why economic limitations alone do not necessarily prevent alcohol use when access is facilitated through social networks.

Environmental conditions also emerged as important determinants of alcohol use in the study area. The finding that place of residence and environmental characteristics influence alcohol consumption suggests that the physical and social environments in which individuals reside shape behavioural outcomes. Sabon Gari is characterised by commercial activity, dense social interaction, and relatively easy access to alcohol outlets. Such conditions may create environments that encourage regular alcohol use. Previous studies have similarly demonstrated that environmental exposure, alcohol outlet density, and neighbourhood characteristics are strongly associated with drinking behaviour and alcohol-related practices (Dimova et al., 2023; Walls et al., 2020; Odeigah et al., 2023). Ecological perspectives equally argue that behaviour is often influenced by contextual environmental conditions, particularly where opportunities for access are readily available.

Although a considerable proportion of respondents identified price as a factor influencing alcohol consumption (84.0%), the study found that the majority (56.0%) did not consider price as the primary determinant of alcohol choice. This suggests that while economic considerations remain relevant, social and environmental influences may exert stronger effects on drinking behaviour within the study area. The availability of cheaper locally produced alcohol may also reduce the effect of cost barriers on overall consumption patterns. Similar findings have been reported in studies suggesting that alcohol affordability may influence beverage preference but does not necessarily reduce overall consumption where alternative lower-cost products are readily available (Babor et al., 2015; Morojele et al., 2021).

Furthermore, inferential statistical analysis using Chi-square tests demonstrated that alcohol consumption was significantly associated with several socio-environmental factors. Significant relationships were observed between alcohol consumption and availability of alcohol ($\chi^2 = 11.40$, $p = 0.001$), price ($\chi^2 = 42.93$, $p < 0.001$), proximity ($\chi^2 = 39.86$, $p < 0.001$), peer influence ($\chi^2 = 41.01$, $p < 0.001$), and other identified environmental factors ($\chi^2 = 98.57$, $p < 0.001$). However, weak regulation was not associated with alcohol consumption ($\chi^2 = 1.12$, $p = 0.290$). These findings indicate that alcohol use within the study area is strongly influenced by a combination of social and environmental conditions rather than by a single factor operating independently. The strong associations observed for availability, proximity, and peer influence support previous findings emphasising the importance of environmental accessibility and social interaction in sustaining alcohol use behaviours (Walls et al., 2020; Dimova et al., 2023; Sudhinaraset, 2016). The non-significant relationship observed for weak regulation may suggest that, although respondents perceive regulation as inadequate, other contextual factors, such as social acceptance and accessibility, exert a greater direct influence on drinking behaviour.

About psychological implications, depression emerged as the most frequently reported experience associated with alcohol consumption, with 39.0% of respondents reporting depressive experiences. Other psychological experiences, including memory loss (9.0%), insomnia (7.3%), and reduced cognitive functioning (8.3%), were reported at relatively lower proportions. Although these findings are based on subjective self-reports rather than clinical diagnoses, they suggest possible psychosocial consequences associated with alcohol consumption within the study population. Similar findings have been reported by Mungai and Midigo (2019), who observed substantial relationships between alcohol use and adverse mental health outcomes. Likewise, Dumbili and Swahn (2023) found that repeated and socially reinforced drinking practices may contribute to emotional distress and other psychosocial challenges among alcohol users. The comparatively lower reporting of some psychological experiences in the present study may reflect variations in individual susceptibility, social perceptions of alcohol-related symptoms, or underreporting associated with the sociocultural sensitivity surrounding alcohol use within Northern Nigeria.

CONCLUSION

This study examined the prevalence and socio-environmental determinants of alcohol consumption in the Sabon Gari area of Kano State, Nigeria. Findings revealed that alcohol consumption is common within the study area and is significantly associated with factors such as availability, price, proximity, and peer influence. Inferential statistical analysis further demonstrated that accessibility and social interaction factors exert considerable

influence on alcohol consumption behaviour. These findings suggest that alcohol consumption within the study area is shaped by broader social and environmental conditions rather than individual factors alone.

The study also found that some respondents associated alcohol consumption with experiences such as depression, insomnia, memory loss, and reduced cognitive functioning; however, these outcomes were based on subjective self-reports and should be clinically diagnosed psychological disorders.

The study therefore recommends increased public awareness programmes, community-based interventions, and further studies employing more advanced approaches and validated psychological assessment tools.

LIMITATIONS OF THE STUDY

The study combined multistage cluster sampling with elements of convenience sampling due to accessibility constraints, willingness to participate, and respondents' mobile nature. Consequently, the findings may not be fully generalizable to the entire population of Kano State or other urban settings in Nigeria. The study also relied largely on self-reported responses regarding alcohol consumption patterns and psychological experiences. As such, responses may have been influenced by recall bias or underreporting, particularly given the sensitive nature of alcohol use within the socio-cultural context of Northern Nigeria. Moreover, the psychological experiences reported by respondents were not based on clinical assessments or validated psychological diagnostic instruments. They should therefore be interpreted as subjective experiences associated with alcohol consumption rather than medically diagnosed psychological conditions. Despite these limitations, the study provides useful sociological and public health insights into alcohol consumption patterns and socio-environmental influences within the Sabon Gari area of Kano State.

ETHICAL CONSIDERATIONS

Participation in the study was voluntary, and informed consent was obtained from all respondents prior to data collection. Respondents were assured of confidentiality and anonymity, and participation was entirely voluntary. Participants were also informed of their right to withdraw from the study at any stage without any negative consequences.

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Data Availability

The dataset generated by the study can be obtained from the corresponding author upon reasonable request.

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Declaration of Competing Interest

The authors declare no competing interests which may influence the outcome of the study.

REFERENCES

- Akosu, T., Afolaranmi, T., Lar, L., & Chirdan, O. (2020). Prevalence and Predictors of Harmful Alcohol Use in a Suburban Community in North-Central Nigeria. 52–57. <https://doi.org/10.46912/wjmbs.7>.
- Aremu, T., Anibijuwon, I., John-Akinola, Y., Oluwasanu, M., & Oladepo, O. (2021). Prevalence and Factors Associated with Alcohol Use in Selected Urban Communities in Ibadan, Nigeria. *Community Health Equity Research & Policy*, 43, 203–209. <https://doi.org/10.1177/0272684x211006515>.
- Babor, T., Robaina, K., & Jernigan, D. (2015). The influence of industry actions on the availability of alcoholic beverages in Africa. *Addiction*, 110 4, 561–71. <https://doi.org/10.1111/add.12832>.
- Dimova, E., Lekkas, P., Maxwell, K., Clemens, T., Pearce, J., Mitchell, R., Emslie, C., & Shortt, N. (2023). Exploring the influence of local alcohol availability on drinking norms and practices: A qualitative scoping review. *Drug and Alcohol Review*, 42, 691–703. <https://doi.org/10.1111/dar.13596>.
- Dumbili, E. (2013). Changing patterns of alcohol consumption in Nigeria: an exploration of responsible factors and consequences. *Journal of the BSA Medical Sociology Group*7(1): 20 – 33. <http://bura.brunel.ac.uk/handle/2438/13675>
- Dumbili, E., & Swahn, M. (2023). Understanding Heavy Drinking Practices and Alcohol-Related Harms: The Lived Experience of Nigerian Adolescents and Young Adults. *Journal of Drug Issues*, 54, 641–657. <https://doi.org/10.1177/00220426231184151>.
- Federal Republic of Nigeria. (2009). Federal Republic of Nigeria official gazette: Legal notice on publication of 2006 census final results (Vol. 96). Government Printer. Abuja, Nigeria.
- Ghodse, H. & Maxwell, D. (1990). *Substance Abuse and Dependence: An Introduction for the Caring Professions*. London. Macmillan Press.
- Goar, S., Ayuba, G., Tungchama, F., Maigari, Y., Agbir, M., & Audu, M. (2018). Patterns of Alcohol Consumption and Socio-Demographic Factors among Women in North Central Nigeria. *Journal of BioMedical Research and Clinical Practice*. <https://doi.org/10.46912/jbrcp.58>.
- Lasebikan, V., Ayinde, O., Odunleye, M., Adeyefa, B., Adepoju, S., & Fakunle, S. (2018). Prevalence of alcohol consumption and alcohol use disorders among outdoor drinkers in public open places in Nigeria. *BMC Public Health*, 18. <https://doi.org/10.1186/s12889-018-5344-6>.
- Lettieri, D.J., Sayers, M. & Pearson, H.W. (1980). *Theories on Drug Abuse: Selected Contemporary Perspectives*. National Institute on Drug Abuse, Fishers Lane, Rockville, Maryland. METROTEC Inc

- Morojele, N., Dumbili, E., Obot, I., & Parry, C. (2021). Alcohol consumption, harms and policy developments in sub-Saharan Africa: The case for stronger national and regional responses. *Drug and alcohol review*. <https://doi.org/10.1111/dar.13247>.
- Mosby's Medical Dictionary (2004). New Delhi. Galgotia Publication Limited
- Mungai, D., & Midigo, R. (2019). Social and cultural determinants of health: understanding the persisting Alcohol Use Disorder (AUD) in the rural populations in central Kenya. *AIMS Public Health*, 6, 600–611. <https://doi.org/10.3934/publichealth.2019.4.600>.
- Obot, I. (2000). The measurement of drinking patterns and alcohol problems in Nigeria. *Journal of substance abuse*, 12 1-2, 169–81. [https://doi.org/10.1016/s0899-3289\(00\)00047-x](https://doi.org/10.1016/s0899-3289(00)00047-x).
- Odeigah, O., Patton, R., & Trangenstein, P. (2023). Alcohol outlet density and marketing in Abeokuta, Nigeria. *Alcohol and alcoholism*. <https://doi.org/10.1093/alcalc/agad058>.
- Onodugo, O., Ezeala-Adikaibe, B., Anyim, O., Ezeme, M., Ijoma, U., Obumneme-Anyim, I., Okoli, O., Onodugo, P., Okoli, P., & Ekenze, O. (2019). Prevalence and Pattern of Alcohol Use among Adults in an Urban Slum in South East Nigeria. *Open Journal of Psychiatry*. <https://doi.org/10.4236/ojpsych.2019.92014>.
- Radda, S.I. & Dukku, A.M. (2011). The challenges of banning alcohol consumption under the Shari'ah legal system in Kano State, Nigeria. *A Journal of Sociological Study* 1(1): 43–58.
- Sani, A., & Ibrahim, A. (2025). When the Guests Outdance the Hosts: Reverse Acculturation in Sabon Gari Kano. *Scholars Journal of Arts, Humanities and Social Sciences*. <https://doi.org/10.36347/sjahss.2025.v13i08.005>.
- Sills, D.L. (1967). *International Encyclopedia of Social Science: Vol. 3&4*. London. Macmillan Publishing Company.
- Sudhinaraset, M. (2016). Social and Cultural Contexts of Alcohol Use: Influences in a Social-Ecological Framework. *Alcohol Research: Current Reviews*. <https://doi.org/10.35946/arcr.v38.1.05>.
- Sulaiman, S., Dandago, A., Muhammad, M., & Sabiu, T. (2020). Determinants of Takaful Patronage Among Entrepreneurs in Sabon Gari Market, Kano State, Nigeria. *Journal of Accounting Research, Organisation and Economics*. <https://doi.org/10.24815/jaroe.v3i3.17757>.
- Tarter, R.E. & Sugerman, A.A. (1976). *Alcoholism: Interdisciplinary Approaches to an Enduring Problem*. Boston. Addison-Wesley Publishing Company
- Taylor, A., Bewick, B., Makanjuola, A., Qian, L., Kirzhanova, V., & Alterwain, P. (2017). Context and culture associated with alcohol use amongst youth in major urban cities: A cross-country population-based survey. *PLoS ONE*, 12. <https://doi.org/10.1371/journal.pone.0187812>.
- Usman, A. (2026). Implications of the Establishment of the Sabon-Gari System on Economic Activities in Kano, Nigeria. *Sokoto Journal of History*. <https://doi.org/10.36349/sokotojh.2026.v14i01.014>.

- Walls, H., Cook, S., Matzopoulos, R., & London, L. (2020). Advancing alcohol research in low-income and middle-income countries: a global alcohol environment framework. *BMJ Global Health*, 5. <https://doi.org/10.1136/bmjgh-2019-001958>.
- World Health Organisation (2011). *Global Status Report on Alcohol and Health*, J. Gogek and D. Hopkins (eds.). World Health Organisation, Switzerland.