

Determinants of Alcohol Addiction among Consumers in Enugu, Nigeria

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Abstract

In spite of several alcohol-related harms, consumption pattern towards alcohol addiction in Nigeria is on the increase. This study attempts to identify the determinants of addictive alcohol consumption among consumers in Nigeria. Using a causal research design, 250 alcohol consumers were purposively sampled. Data were collected using a structured questionnaire and analysed using the multiple regression analysis in SPSSWIN version 22. The findings reveal that there is a combined effect of the latent variables- peer group, price, socio-cultural environment and government intervention on consumers' alcohol addiction ($R=0.673$, $R^2=0.452$ and $p= 0.008$). In conclusion, peer group influence, price of alcoholic beverages, socio-cultural environment and level of government involvement in alcohol regulation have a direct and significant influence on alcohol addiction. Theoretical and policy recommendations were made; as well as practical implications.

Keywords

Alcohol, Addictive Consumption, Consumer Attitude, Beverage Drink, Drug Gateway Theory

1. INTRODUCTION

Alcohol Consumption in the world over is as old as mankind. Consumption patterns however vary from country to country and even amongst ethnic groups (Benneth, Campillo, Chandrashekar & Gureje, 1998). In the traditional African society, alcohol is mostly consumed during festivities, and often used for entertainments by adult males. It is also used to celebrate and commemorate significant life milestones such as births, deaths, marriages, graduations, promotions etc (Roche, Bywood, Freeman, Pidd, Borlagdan and Trifonoff, 2009). To a reasonable extent, women, youths and children are made to abstain from alcohol consumption in most African societies (Odejide, 2006).

In Nigeria, alcohol consumption predates the colonial era. Locally brewed alcoholic beverages are usually produced and consumed almost immediately with little or no quantity left for sale. The entry and habitation of the Europeans and colonial masters into Nigeria largely popularised the consumption of alcoholic beverages locally from western countries as alcohol became readily available to men and women of all ages on a commercial basis (Dumbili, 2013). Recently, it has been observed that there is a shift in the pattern of consumption, drinking

frequency, quantity consumed per event and the reasons for such consumption thereby leading to an unusually high level of addiction and misuse of the product.

Beside the environmental factors, other alcohol-related harms from addictive consumption could be seen from three dimensional levels of drinking, namely: the volume consumed, the pattern of drinking, and the quality of alcohol consumed (Rehm, Room, Graham, Monteiro, Gmel & Sempos, 2003; Rehm, Kanteres & Lachenmeier, 2010; WHO, 2010). Three obvious consequences of excessive alcohol intake are observed; toxic effects on the organs and tissues of the body resulting to damage and failure of the organ to function optimally; intoxication of the consumer leading to loss of physical coordination and consciousness; and alcohol dependence, whereby the drinker's self-control over his or her drinking behavior is impaired (Babor, Caetano, Casswell, Edwards, Giesbrecht & Grahamet, 2003; WHO, 2007).

The harmful effects of alcohol consumption lead to top five risk factors for disease, disability and death, throughout the world (WHO, 2011; Lim, Vos, Flaxman, Danaei, Shibuya, & Adair-Rohani, 2012). Furthermore, it is a causal factor for more than 200 diseases and injury-related conditions (WHO, 1992). Researchers argue that addictive consumption of alcohol can also cause serious social and economic consequences for both individuals and the society at large other than the consumer alone (Anderson, Chisholm, & Fuhr, 2009; Sacks, Roeber, Bouchery, Gonzales, Chaloupka, & Brewer, 2013). It is believed to be responsible for 3.2% of all deaths annually and 5% of deaths in people between the ages of 5 and 29 years across the globe (WHO, 2007). Excessive consumption of alcohol has further not been without more negative consequences like road accidents, sexual assault/unplanned sexual activity and physical injuries (Baer, Kivlahan and Marlatt, 1995; Weschler, Dowdall, Davenport and Castillo, 1995). High rate of drinking can therefore lead to lost productivity, accidents, disability, early death, crime, neglect of family responsibilities, and personality deterioration (Cook and More, 2000).

The tendency to behave in a particular way is as a result of the attitude held by the individual towards the attitude object. To influence a person's behavior, a change in the person's attitude towards the behavior is often required; and attitudinal change can be achieved through persuasion and social influence (Wendy, 2000). Hence, this study seeks to identify the predictors to this new attitude towards binge drinking among Nigerian youths.

2. LITERATURE REVIEW

2.1. Consumers' Attitude

Hawkins, Best and Coney, (2004) gave a broad definition of attitude as 'an enduring organisation of motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment'. More specifically, 'attitude refers to knowledge and positive or negative feelings about an object or activity' (Pride and Ferrell, 1991). It is also seen as the 'overall evaluation that expresses how much we like or dislike an object, issue, person or action' (Solomon, 2004). Attitude serve four functions: *the utilitarian function*, which is founded on the principle of reward and punishment, that is the utility derivable from the behavior of individuals forming positive attitude towards rewarding behaviors and negative attitude against behaviors with negative consequences; *value-expressive function*, when attitudes are formed not based on the product benefit but to express the individual's self-concept, values and lifestyle; *ego-defensive function*, relates to attitudes formed as a means of protecting the individual's self-image and ego from external threats and internal feelings/shortcomings; *knowledge function*, based on individuals need to know and organise beliefs, if a consumer thinks positive about a brand, it helps reaffirm his opinion, and makes decision making simpler

and faster (Grewal, Mehta & Kardes 2000; Katz, 1960). A certain attitude can fulfil several functions; however, only one shall be dominant at all times (Voicu, 2013).

Attitude formation is a function of three components or dimensions (Hawkins, et al., 2004). This tri-component model includes the cognitive, affective and conative components. The cognitive component comprises the consumer knowledge and belief about the product which could be from personal experience, as well as marketers' communication. The affective component refers to the feelings and emotional content in the individual towards the product. This arouses the like and dislikes towards a product. The conative or behavioral component emanates from the other two components; it is the expressive component which shows the readiness of an individual to act on his/her belief and feelings, otherwise called action tendency of an attitude. All the three components of attitude are relevant, but they might vary in the degree of importance according to the motivation regard to an attitude object. A clear examination of these components will reveal the interdependence amongst them.

2.2. Addictive Behavior

The term addiction refers to a brain disorder which features a compulsive engagement in 'rewarding' stimuli, despite adverse consequences (Volkow, Koob, McLellan 2016; Taylor, Lewis & Olive, 2013). O'Guinn and Faber (1989) attempts a definition of compulsive consumption as 'a response to an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behavior that will ultimately cause harm to the individual and/or others.' As Faruk and Wolfgang (2001) opine 'a good is addictive if its consumption leads to more compulsive consumption of the same good in the future'. They, therefore, defined addiction as the widening of the gap between an individual's choice and what would have been his choice prior to exposure to the addictive stimuli. Nestler (2013) opines that there are two properties that characterise an addictive behavior; they are reinforcing (increases the likelihood of the person to seek exposure to them) and rewarding (they are perceived as positive and desirable behaviors). Addiction occurs through genetic transfers and also epigenetic mechanisms; it is a result of high exposure to an addictive stimulus such as gambling, cocaine, morphine etc (Olsen, 2011; Ruffle, 2014). Becker and Murphy (1988) view the consumption of addictive good as an investment that increases the return of future consumption of that good.

2.2.1. *Peer Group and Socio-Cultural Environment Influences on Consumption of Alcoholic Beverages*

Research has shown that individuals who are always in the company of those who drink are most likely to start drinking (Reifman, Barnes, Dintcheff, Farrell & Uhteg, 1998). This assertion is supported by Manski (1993) who said that individuals involved in excessive alcohol intake are likely to have friends who drink alcohol as well. Bosari and Carey (2001) opine that there are three basic determinants of peer influence on student drinking: "overt offers of alcohol, modelling and social norms". An individual's peer group serves as a model of influence and facilitates his exposure to alcohol consumption and addiction. This is more for individuals with higher social approval needs (Caudill and Kong, 2001) and who can be classified as social drinkers. The desire to associate with the specific relevant others can have an overriding influence on attitudes towards alcohol consumption with the attractiveness of the group providing a more powerful motivation (Rose, Bearden & Manning, 2001). Beyond the need for social acceptance and approval by the peer group are instances of coercion experienced by some individuals to avoid derision from the social group (Marcoux and Shope, 1997; Park, Ashton, Tammie, & Moon, 1998).

Hirschman (1992) states the perception with which a society conceptualises a behavior, event or experience inevitably affects the social responses to those experience or behavioral patterns. Berridge and Edwards (1981) reports that in the eighteenth and nineteenth centuries, drugs such as opiates, cannabis and cocaine were not viewed as a social problem but alcohol consumption was seen as a sign of lack of morals (Musto, 1973). Awoyinka (2012) observes the prevalence of alcohol in all cultures of the world and its mood modifying features. The cultural norms and values that define what, where, when and how we drink, and who we drink with, are mediated between people over time thus leading to the constant change of ideas on drinking and drinking practices (Roche et al., 2009). Similarly, the society, institutions, and cultural beliefs have been suggested as having roles to play in addictive alcohol consumption. Factors such as societal drinking behaviors, extent of parental supervision and monitoring of children, and family conflict have roles to play in the level of alcohol consumption and subsequent addiction of off springs (Turner, Larimer & Sarason, 2000; Bray, Getz & Baer, 2000; Caldwell and Darling, 1999). Hence, we hypothesized as follows:

Hypothesis one: *Peer group pressure influences alcohol addiction.*

Hypothesis two: *The socio-cultural environment has significant impact on alcohol addiction.*

2.2.2. Price of Alcoholic Beverages and Alcoholic Consumption

Anderson and Baumberg (2006) opine that the addictive nature of alcohol implies that the short-term price elasticity of alcoholic beverages is smaller in absolute value than the long-term price elasticity indicating that change in consumption is usually smaller than the price changes. Brunn, Kettil and Edwards, (1975) observed that the price elasticity of alcohol is asymmetric in the sense that a decrease in price by a certain amount will lead to a higher increase in consumption than the effect of a price increase of the same amount. Studies have found that increase in prices of alcoholic beverages disproportionately reduce alcohol consumption by young people, and also have a greater impact (in terms of alcohol intake) on more frequent and heavier drinkers than on less frequent and lighter drinkers (Anderson & Baumberg, 2006). The increase in alcohol prices has also been found to reduce binge drinking to the point of intoxication (Osterberg, 2001). Price variation affects the drinking habit and frequency in all types of beverages and across all population of drinkers; light and heavy drinkers alike (Wagenaar, Salois & Komro, 2009).

The economic theory of demand posits that consumption and price are inversely related; meaning that the higher the price, the lower the quantity demanded and consumed of a product. Beside policies for reducing alcohol consumption and its related harm, governments may have also ignored increasing the price of alcoholic products through raised taxes on alcoholic beverages; even when that is done, the intent may still be for raising revenues rather than discouraging consumption (Chaloupka, Grossman and Saffer, 2002). Several studies have confirmed price responsiveness of alcohol consumption (Nelson 1999; Kenkel 1993, 1996; Manning, Blumberg, and Moulton. 1995). However, similar to cigarette, the addictive nature of alcohol makes it difficult when analyzing price effects on alcohol consumption.

From the foregoing discussion, we hypothesize thus:

Hypothesis three: *Price of alcoholic beverages influences alcohol addiction.*

2.2.3. Government Involvement and Alcohol Addiction

The rising global alcohol addiction and its related harm necessitated the World Health Assembly (WHA) to call for effective alcohol policies among member states (WHO, 2005). Nigeria, being one, adopted the resolution. This resolution had as its main thrusts, commitment

of leaders to the policy, control of alcohol marketing and availability as well as price control aimed at controlling purchase. However, there is yet to be a formulated alcohol policy in Nigeria.

Despite the apparent high incidence of health, social, and economic implications of addictive alcohol consumption, it has remained a relatively low public health policy priority in most countries of the world (WHO, 2014). Alcohol consumption is common in Nigeria due to its unrestricted availability. Oluwaniyi (2010) argues that successive governments in Nigeria have underplayed the formulation of appropriate policy measures for alcohol consumption. Perhaps, the high revenues accruing to most developing countries from alcohol consumption suggests why successive governments rather than enunciate regulatory policies against the consumption habits seek to maximise incomes, and in consequence, neglect the inherent social, psychological, and health risks. In Nigeria, the credibility of the source of the warning message “*drink responsibly*” as used in a number of alcohol promotional messages is in doubt and as Andrews (1995) opines, reasonably affects its ability to lead to attitudinal change. From the foregoing discussion, we hypothesized thus:

Hypothesis four: *Poor policy formulation and implementation has a relationship with consumers’ alcohol addiction.*

2.2.4. Theoretical Underpinning: Gateway Drug Theory

The gateway theory also known as stepping stone hypothesis provides an explanation for young people’s drug intake adoption process. It states that the use of one drug increases the risk of progressing to a higher more harmful drug later and this risk increases with the frequency of use (Jensen, Melberg and Jones, 2005). Choo, Roh and Robinson (2008) suggest that licit drugs such as alcohol and tobacco serve as a gateway for the use of other illicit drugs. The Gateway Hypothesis holds that substance use typically follows a series of stages or progressions. Specifically, individuals typically progress from non-use of any substance as a child to use as a child, to use of alcohol and/or tobacco in early adolescence, potentially followed by use of marijuana and/or other illicit drugs (Kandel, 2002). Pudney (2003) underscored three mechanisms which form the basis for the gateway effect; the consumption of soft drugs create a psychological need for stronger experiences of the same type; the act of obtaining and using soft drugs exposes the consumer with other drug users and suppliers whom they otherwise would not have been in contact with and the experience of soft drug with no explicit harmful effects appears to contradict the negative publicity given to illicit drug use and encourage use of more hard drugs.

2.2.5. Empirical Evidences

In a study of rural consumers of alcohol and its effects on livelihood in Enugu state by Dimelu et al (2011), it was found that predictors of choice of alcoholic beverage consumed were availability (53%), ability to produce (50%), costs/prices (46.7%) and prestige (43.3%). Taste, advertisement and suitability for the body were found to be insignificant. In a similar study of the prevalence of alcohol among commercial drivers in Uyo, availability of the alcoholic beverage was found to be a major determinant of alcohol use (Akpan and Ikorok, 2014). Also in a related study carried out in tertiary institutions in Southwest Nigeria by Adekeye, Adeusi, Olufunke, Ahmadu and Muyiwa (2015), parental use and peer influence were found not to be significant influencing factors on students’ use of alcohol, however, age was found to be a strong predictor. In contrast, Trang while studying Vietnamese females found that peer group influence and desire to socialise while drinking, are the main drivers of beer consumption intention. However, the study also revealed that parents have less impact on their children’s

intention to drink beer. Netz (2009) in a study of attitudes of Thai consumers towards beer products found that gender and income levels have a significant influence on attitude.

Jensen et al. (2005) opine that if the use of soft drugs has a causal effect on the progression to more harmful drugs, policy makers should endeavour to nip in the bud excessive consumption of these soft drugs. However, man's action as a rational being is executed having in mind the expected outcome, the amount of control he has over the performance of such action and the required resources to achieve that.

Extensive researches have been conducted in search of factors and determinants of adolescent consumption of alcohol (Crundall, 1995). However, only a few of these studies have differentiated between determinants of alcohol abuse/misuse and moderate/normal consumption. This led Donovan (1997) to opine that similar factors influence trial, ongoing moderate consumption and excess consumption. Kilty (1990) supported this assertion when he found that predictors of 'normal' consumption behaviors are also the influencers of 'problem' drinking. It is the opinion of Labouvie (1990) and Cloninger (1987) that excess consumption of alcohol is a combination of factors, personal and structural. Therefore this study will also seek to make a proposition for the combined effect of factors that determine consumers' addictive consumption of alcohol.

3. METHODOLOGY

The research design used in this study is the causal design. This was adopted due to the wide and inclusive coverage of the study and its desire to find out the interactions among variables under study. Primary data was used for the study and were obtained from responses to questionnaire items on the subject matter.

The study population comprised of youths aged 18-50 years who consume alcoholic beverages and live in Enugu metropolis. The researchers judgementally and purposively chose a sample size of 250 respondents for the fact that this population is infinite. Due to the nature of the study, respondents were approached purposively at the points of consumption and their consent got before administering the questionnaire.

In a bid to collect data for the research, a closed ended questionnaire was carefully designed and structured to elicit responses from the respondents. The questionnaire employed the five-point Likert scale ranging from Strongly Agree to Strongly Disagree in measuring the variables and comprised of two sections; section A comprises of demographic information of the respondents while section B captured the subject matter responses of the respondents. The items used in measuring the latent variables were adapted from previous similar studies such as Basu et al (1998), WHO (2017), Dielman et al (1987) and Wang et al. (2008).

Reliability of the research instrument was tested using the Cronbach alpha reliability test in SPSSWIN version 22 for each of the latent constructs and the reliability indices are all above the 0.7 benchmark as opined by Nunnally and Bernstein (1994). It ranges from 0.7 to 0.84 showing that the instrument used is internally consistent (See Appendix). Table I presents detailed information on the respondents demographics.

Table 1: Demographic Variables

Variables	Frequency	Percent (%)
Gender		
Male	131	72
Female	51	28

Marital Status		
Single	167	91.8
Married	14	7.7
*No response	1	0.5
Age		
≤20	35	19.2
21-35	131	72
36-50	10	5.5
> 50	2	1.1
*No response	4	2.2
Educational Qualification		
SSCE	8	4.4
Undergraduate	136	74.7
Post graduate	38	20.9
Income Level		
<50,000	117	64.3
50,000-100,000	31	17
>100,000	7	3.8
*No response	27	14.8
Religion		
Christian	176	96.7
Moslem	3	1.6
*No response	3	1.6
Total	182	100

*No response: Cases where respondents did not select any of the categories in the item.

4. RESULTS

Of the two hundred and fifty copies (250) of the questionnaire administered, only two hundred and nine (209) copies, representing 79.7% were returned. Out of this number, only one hundred and eighty-two (182) copies relevant to this study were eventually used for the analyses. The 27 copies excluded did not meet up with the measure for addiction; the respondents' consumption was considered addictive given the frequency and quantity of their alcohol consumption. Heavy drinkers were those who took at least five drinks in one sitting at least once a month. Bearing in mind that the Nigerian beer bottle is about twice what is obtainable in other parts of the world (Obot, 2000), the researchers assumed two bottles taken at a sitting at least twice a month is considered addictive.

4.1. Test of Hypotheses

The hypotheses are tested here using the multiple regression analysis in SPSSWIN version 22.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.673 ^a	.452	.447	1.49090

a. Predictors: (Constant), GOVERNMENT INTERVENTION, SOCIO-CULTURAL ENVIRONMENT, PRICE, PEER GROUP

Table 3. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.560	4	7.890	3.550	.008 ^b
	Residual	393.434	177	2.223		
	Total	424.995	181			

a. Dependent Variable: ADDICTIVE CONSUMPTION

b. Predictors: (Constant), GOVERNMENT INTERVENTION, SOCIO-CULTURAL ENVIRONMENT, PRICE, PEER GROUP

Table 4. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.849	.657		7.383	.000
	PEER GROUP	.050	.039	.127	1.267	.000
	PRICE	.061	.051	.111	1.194	.000
	SOCIO-CULTURAL ENVIRONMENT	.089	.036	.224	2.466	.002
	GOVERNMENT INTERVENTION	.142	.126	.082	-1.122	.003

a. Dependent Variable: ADDICTIVE CONSUMPTION

The regression analysis between addictive alcohol consumption and the influence of price, socio-cultural environment, peer group influence and government intervention is presented in tables 3, 4 and 5. The correlation coefficient, significant values and the number of cases is shown in tables 3 and 4 above. From the tables above, the correlation (R) shows 0.673, the significant value of 0.008 indicates the correlation is significant and implies that there is a positive relationship between addictive alcohol consumption and the latent constructs. The R² of 0.452 indicates that the variation in addictive alcohol consumption can be explained, 45.2% by the identified constructs. At R=0.673 and p=0.008, we do not accept the null hypotheses. Thus, it is indicative that there is a positive relationship between the latent constructs and alcohol addiction.

5. DISCUSSION AND CONCLUSION

The results of the present study confirm the earlier hypotheses by other scholars in different geographical locations and contexts. Similar to other studies, price was found to be a major determinant of alcohol addiction. Studies have found that increases in prices of alcoholic beverages disproportionately reduce alcohol consumption by young people, and also have a greater impact (in terms of alcohol intake) on more frequent and heavier drinkers than on less frequent and lighter drinkers (Anderson & Baumberg, 2006). Changes in alcohol prices have also been found to influence drinking to the point of intoxication. Babor et al. (2010) have shown that increasing the price of alcohol reduces both acute and chronic harm related to drinking among people of all ages. This kind of evidence indicates that heavy or problem drinkers are no exception to the basic rule that alcohol consumers respond to changes in alcohol prices.

Peer influence was found to be a predictor to alcohol addiction. This is consistent with the studies by Moffitt (2001) and Duncan et al. (2005). They found out that alcohol consumption and other substance abuse will affect individuals' choice of peer group. Similarly, Manski (1995) opined that individuals who binge drink are likely to have friends who drink.

Similar to the study by Dumbili (2012), our findings reveal that the government of Nigeria has no working alcohol policy in place to curtail level of alcohol availability, price control and regulation of alcohol abuse. A WHO report in 2014 corroborates our study; the report states that there is neither written alcohol policy nor national plan, no legally binding regulation on alcohol sponsorship and sales promotion or requirement to include a health warning in advertisements and on product labels. Also there are no restrictions for on/off premises sales of alcoholic beverages with respect to hours, days, places, etc. This is indicative of poor policy formulation and implementation. Inasmuch as there is a national legal minimum age for on and off premises sale on alcohol beverages, its implementation is not known in any part of Nigeria.

From the above findings, it can be concluded that peer influence, the price of alcohol products, poor policy formulation and implementation and the society's stance towards alcohol consumption which is reflected by beliefs, norms and actions significantly reinforce consumers' positive attitude towards addictive consumption of alcohol. This, therefore, indicates that a combination of these factors would contribute to the increasing effect of alcohol-related harm in the society today. By implication, individuals who live in a society where alcohol is accorded a necessary part of the people's social life with little or no noticeable regulation and enjoy affordable cost price, with a large part of their peers consuming alcohol are most likely to engage in trial consumption and with further consumption may slide into addiction. Further the Nigerian government's low level of intervention in the noticeable binge drinking amongst its youth population is indicative of a *lassiez faire* attitude towards alcohol consumption which encourages addiction among youths especially and this calls for new policy frameworks by relevant policy makers against such addictive consumption behavior.

Based on the findings of the study, the following recommendations were made:

1. An attempt to counter some of the positive beliefs and attitudes young people hold towards alcohol which increase consumption frequency among them and also heightened awareness campaigns on the harmful effects of consumption should be made. This would go a long way in declining the desire and drive for alcohol consumption among the vulnerable segments.
2. Government should seriously consider increasing the duties and taxes paid on the manufacture and sale of alcoholic drinks as a way of increasing the price of the product so as to act as a disincentive to its high frequency consumption and addiction.

3. Strong regulation is added to restrict young people's access to alcoholic beverages. This is necessary as there are indications that initial consumption at early age may lead to continual usage of the product and subsequently addiction. Ethical consumption standards among youths can be achieved through strict monitoring and regulatory measures by government against adolescent consumption habits.

Conflict of Interest Statement

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REFERENCES

- Adekeye, O. A., Adeusi, S. O., Chenube, O. O., Ahmadu, F. O., & Sholarin, M. A. (2015). Assessment of Alcohol and Substance Use among Undergraduates in Selected Private Universities in Southwest Nigeria, *Journal Of Humanities And Social Science*, 20(3), 1-7.
- Akpan, G., & Ikorok, M. (2014). The Prevalence of Alcohol Consumption among Commercial Drivers in Uyo Local Government Area, Akwa Ibom State Nigeria, *Journal of Sports and Physical Education*. 1(7), 47-51
- Anderson P., & Baumberg B (2006). Alcohol in Europe – A public health perspective. A report for the European Commission. England: Institute of Alcohol Studies.
- Anderson P, Chisholm D., & Fuhr, D. (2009). Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol, *Lancet*, 373(9682), 2234–2246.
- Andrews, J.C. (1995). The Effectiveness of Alcohol Warning Labels: A Review and extension. *American Behavioural Scientist*, 38(4), 622-632.
- Awoyinka, J. O. (2012). An investigation into the incidence of alcohol usage and abuse among female student of the University of Lagos, Nigeria, West Africa, *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 3(2), 174-178.
- Becker G. S., & Murphy K. M. (1988). A theory of rational addiction, *Journal of Political Economy*, 96 (4), 675–700.
- Bennett, L.A., Campillo, C., Chandrasheka, C.R., & Gureje, O. (1998). Alcohol Beverages Consumptions in India, Mexico and Nigeria: a Cross-cultural Comparison, *Alcohol Health and research World*, 22(4), 243-252.
- Berridge, V., & Edwards, G. (1981). *Opium and the people: Opiate use in Nineteenth century England*. London: Allen Lane
- Bosari, B., & Carey, K. B. (2001). Peer influences on college drinking: A review of the research, *Journal of Substance Abuse*, 13, 391-424.
- Bruun, Kettil, Edwards, Griffith., & Lumio, M.. (1975). Alcohol control policies in public health perspective. Helsinki: *The Finnish Foundation for Alcohol Studies*.
- Choo T, Roh S., & Robinson M. (2008). Assessing the "Gateway Hypothesis" among middle and high school students in Tennessee, *Journal of Drug Issues*. 38(2), 467-492.

- Chukwuonye I. I., Chuku A, Onyeonoro U. U., Madukwe O.O., Oviasu E, & Ogah O. S., (2013). A rural and urban cross-sectional study on alcohol consumption among adult Nigerians in Abia state, *International Journal of Medicine and Biomedical Research*, 2(3), 179-185.
- Cloninger, C. R. (1987). A Systematic method for clinical description and classification of personality variants *Archives of General Psychiatry*, 44, 573-588.
- Cook, P. J., & Moore, M. J. (2000). Alcohol. In Newhouse and Culyer., (Eds.), *Handbook of Health Economics* (pp. 375–437). Chicago: University of Chicago Press.
- Crundall, I. A. (1995). Perceptions of alcohol by student drinkers at university, *Drug and Alcohol Review*, 14, 363-368.
- Dielman, T. E, Campanelli, P. C, Shope, J. T ., & Butchart, A. T (1987). Susceptibility to peer pressure, self esteem and health locus of control as correlates of adolescent substance abuse.
- Dimelu., M. U., Agbo, C., & Igbokwe, E. M. (2011). Pattern of alcohol consumption and its effects on livelihood in selected rural communities of Enugu State Nigeria, *Asian Journal of Agriculture and Rural Development*, 1(2), 69-79.
- Donovan, R. J. (1997). A model of alcohol consumption to assist in developing communication strategies for reducing excessive alcohol consumption by young people. Report to Health Department of WA.
- Dumbili, E. W. (2012). 'Drink Responsibly', Die Irresponsibly? The Menace of Inadequate Government Policies to Regulate Alcohol Misuse in Nigeria, *British Journal of Arts and Social Sciences*. 7(1), 23-38
- Dumbili E. (2013). Changing Patterns of Alcohol Consumption in Nigeria: An Exploration of Responsible factors and Consequences, *Medical Sociology Online* 7(1), 22-33.
- Eagly, A.H., & Chaiken, S. (1993). The nature of attitudes, in Eagly, A.H. and Chaiken, S. (Eds.), *The Psychology of Attitudes*, Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Grewal, R., Mehta, R., & Kardes, F.R., (2000). The Role Social-Identity Function of Attitudes in Consumer Innovativeness and opinion leadership, *Journal of Economic and Psychology* 21, 233-252.
- Hawkins, Del I., Best, R. J., & Coney, K. A., (2004). *Consumer Behaviour: Building Market Strategy*. McGraw-Hill/Irwin. 9th Ed.
- Hirschman E. C. (1992). The Consciousness of Addiction: Toward a General Theory of Compulsive Consumption. *The Journal of Consumer Research*, 19(2), 155-179
- Jensen, A. L., Melberg, H. O., & Jones, A. M. (2005). Sequential patterns of drug use initiation- can we believe in the gateway theory? Health, Econometrics and Data Group (Working Paper 05/09).
- Kandel, D. B. (2002). *Stages and Pathways of Drug Involvement*. New York, NY: Cambridge University Press.
- Katz, D., (1960). The functional approach to the study of attitudes, *Public opinion Quarterly*, 163-204.
- Kivlahan, D. R., & Marlatt, G. A. (1995). High-risk drinking across the transition from high school to college, *Alcoholism: Clinical and Experimental Research*, 19, 54-61.

- Kilty, K. M. (1990). Drinking styles of adolescents and young adults *Journal of Studies on Alcohol*, 51, 556-564.
- Labouvie, E. W. (1990). Personality, alcohol and marijuana use: patterns of convergence in young adulthood, *International Journal of Addiction*, 25(3), 237-252.
- Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K., & Adair-Rohani H (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 380(22), 24–60.
- Manski, C. (1993). Identification of Endogenous Social Effects: The Reflection Problem, *Review of Economic Studies*, 60, 531-542.
- Musto, D. (1973). *The American Disease*, Yale University Press, New Haven, Conn
- Nestler, E. J. (2013). Cellular basis of memory for addiction, *Dialogues Clin. Neurosci.* 15 (4), 431–443
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric theory* (3rd Ed.). New York: McGraw-Hill.
- Obot, I. S. (2000). The Measurement of drinking patterns and alcohol problems in Nigeria, *Journal of Substance Abuse*, 12(1 – 2), 169-175.
- Odejide, O.A (2006). Alcohol Policy in Africa, *African Journal of Drug and Alcohol Studies*, 5(1), 27-40.
- Olsen, C. M. (2011). Natural rewards, neuroplasticity and non-drug addictions. *Neuropharmacology*. 61(7), 1109–1122.
- Oluwaniyi, O. O. (2010). Oil and youth militancy in Nigeria’s Niger Delta region, *Journal of Asian and African Studies* 45(3), 309-325.
- Österberg E (2001). Effects of price and taxation. In: Heather N, Peters TJ, Stockwell T, eds. *International handbook of alcohol dependence and problems*. Chichester, John Wiley and Sons, Ltd.: 685–698.
- Pride, W. M., & Ferrell, O.C., (1991). *Marketing: Concepts and Strategies*, Houghton Mifflin Company. 7th Ed.
- Pudney, S. (2003). The Road to Ruin? Sequences of Initiation to Drugs and Crime in Britain, *The Economic Journal*, 113(486), 182-198.
- Reifman, A., Barnes, G. M., Dintcheff, B. A., Farrell, M. P., & Uhteg, L. (1998). Parental and peer influences on the onset of heavier drinking among adolescents, *Journal of Studies on Alcohol*, 59(3), 311-317.
- Rehm J, Room R, Graham K, Monteiro M, Gmel G., & Sempos CT (2003). The relationship of average volume of alcohol consumption and patterns of drinking to burden of disease – An overview. *Addiction*. 98, 1209–28.
- Rehm, J., Room, R., & Rossow, I. (2003). *Alcohol: No Ordinary Commodity. Research and Public Policy*. Oxford, Oxford Medical Publication: Oxford University Press.
- Rehm J, Kanteres F, & Lachenmeier D. W., (2010). Unrecorded consumption, quality of alcohol and health consequences, *Drug and Alcohol Review*. 29, 426–36

- Roche, A. M., Bywood, P., Freeman T., Pidd, K., Borlagdan, J., & Trifonoff, A. (2009). *The Social Context of Alcohol Use in Australia*. Adelaide: National Centre for Education and Training on Addiction.
- Ruffle, J. K. (2014). Molecular neurobiology of addiction: what's all the FosB about?, *American Journal of Drug and Alcohol Abuse*, 40(6), 428-437
- Sacks, J. J, Roeber, J., Bouchery E. E., Gonzales, K., Chaloupka, & F. J., Brewer, R. (2013). State costs of excessive alcohol consumption, *Am J Preventive Med.*, 45, 474–85.
- Taylor SB, Lewis CR, Olive MF (2013). The neurocircuitry of illicit psychostimulant addiction: acute and chronic effects in humans, *Subst. Abuse Rehabil.* 4, 29–43.
- Voicu, M. C., (2013). A quantitative research of consumers' attitude towards food products advertising. *CMSS*, 1(2), pp 11-20.
- Volkow, N. D., Koob, G. F., & McLellan, A. T. (2016). Neurobiologic advances from the brain disease model of addiction. *New England Journal of Medicine*, 374(4), 363-371.
- Wagenaar, A.C, Salois, M.J. & Komor K.A. (2009). Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 Estimates from 112 Studies, *Addiction*, 104, 179-90.
- Wechsler, H., Dowdall, G. W., Davenport, A., & Castillo, S. (1995). Correlates of college students binge drinking, *American Journal of Public Health*, 85, 921-926.
- Wendy, W., (2000). Attitude Change: Persuasion and Social Influence, *Annual Review of Psychology*, 51, 539–70
- WHO (2005) Public health problems caused by harmful use of alcohol. *Fifty-Eighth WHA. Geneva: WHO.*
- World Health Organization (2007). Alcohol and injuries in emergency departments. Summary of the report from WHO collaborative study on alcohol and injuries. Geneva. WHO.
- World Health Organization (2010). Global Strategy to reduce the harmful use of alcohol 2010. Geneva
- World Health Organization (2011). Global Status Report on Alcohol and Health. Geneva: World Health Organization.
- World Health Organization (2014). Global status report on alcohol and health 2014. Geneva. WHO.
- World Health Organization (2017). Policy in action: A tool for measuring alcohol policy implementation.

APPENDIX

Table I: Reliability Statistics

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
Peer Pressure	0.732	0.729	4
Price of Alcoholic Beverages	0.861	0.849	3
Socio-Cultural Environment	0.794	0.785	5
Poor Policy Formulation and Implementation	0.805	0.791	3
Addictive Consumption	0.700	0.701	2
