Factors associated with Alcohol consumption among University Learners

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Abstract

The aim of the present empirical study investigates factors associated with alcohol consumption among Botho University learners. A questionnaire on factors associated with alcohol consumption was administered to collect data from learners across various disciplines. A simple random sampling method was used to select a sample of 236 students. To analyse alcohol consumption patterns and reasons for consumption among learners, percentages were used. The results indicated that most learners who belong to the category of male, aged between 17-20 years, living with parents showing light, moderate and heavy alcohol consumption patterns. Learners who belong to the category of parents with less education, low family income, studying accounts and health information management, and female learners' show non- alcohol consumption patterns. The inferential statistics, Chi- square shows that there is association between alcohol consumption and gender, subject specialization, year of study, family income and awareness on health risks. The Fisher's Exact test shows there is association between living status and parental educational qualification. The suggestions made to include health topics that enhance in depth understanding on risks associated with alcohol and recommendations for further research is made based on findings.

Keywords: Alcohol consumption, Alcohol drinking /consumption patterns, Gender, Age, Subject specialization, Educational qualifications, Family income, Health risks, Social risks

Introduction

The main objective of any educational university is to provide quality education with quality learning experiences to learners. Quality education should promote learners' good physical, social, and mental health. Research shows many universities are experiencing alcohol abuse by learners (Biott, Boitt, Othieno, & Obondo, 2016; Dodd, Glassman, Arthur, Webb, & Miller, 2010). Excessive drinking of Alcohol among the learners is closely associated with health, social, academic, and economic risks. The global status report on alcohol and health (2014) shows that in the year 2010, the age 15-year-olds or older group consumed 6.2 litres of pure alcohol. 5.9% of global deaths are attributed to alcohol (World Health Organization, Global status report on alcohol and health, 2014). Various alcohol control policies such as written national policy of alcohol, excess tax on alcohol, legal drinking age limit of alcoholic beverages as 18 years and national monitoring systems to observe alcohol related issues in order to address problems caused by alcoholic abuse (Pitso & Obot, 2011; World health organization,2014). Despite all measures to control alcohol abuse, it is a continuous problem in educational institutions affecting learners' health, social, and academic learning. Excessive alcohol leads to morbidity and mortality of the human population (Conti & Dorthy, 2012; Sinkamba, 2015). Many factors might contribute to alcohol abuse, which needs to be investigated.

Research problem

There are many factors associated with alcohol abuse at individual learners' level and societal level. The factors include both genetical and environmental factors. It is difficult to establish the role of the genetic factors in alcohol abuse. The environmental factors play a significant role in alcohol abuse. The present study is limited to discussing factors related to learners at individual and family level. The factors that are associated with individual level are learners gender, age, living status, marital status, degree programme they enrolled in and year of study. The factors at family level are associated with educational qualification and income of parents.

Many research results indicated that the frequency of alcohol consumption is different in males and females. The prevalence of heavy episodic drinking in males above 15 years is 12.8 % and females is 1.5% in year 2010 in population (World Health Organization, 2014). Empirical

results of research of AIDS Impact survey II indicated that in age group 10-64 years 48.9% of males and 27.7 % females consumed alcohol. It also indicated that there is a difference in frequency of alcohol consumption between males and females. In the age group of 10-64 years 14.8% males and 5.1% females consumed alcohol 1- 2 days in a week (Botswana central statistics office, 2009). A high percentage of male drinkers have more high-risk drinking behaviour than females (Dodd, Glassman, Arthur, Webb, & Miller, 2010). It is also noted by the World Health Organization (2014) that most females abstain from alcohol. These differences in drinking patterns might be due to gender roles prescribed by the society and culture which in turn are reinforced through in-formal and formal education.

Age is another factor associated with alcohol consumption. Adolescents are more prone to alcohol abuse. The age group 13- 18 years is engaged in alcohol drinking (Sinkamba, 2015). Worldwide 15-year-olds or older consuming alcohol constitute 16% (World Health Organization, Global status report on alcohol and health, 2014). It is reported that underage drinking and binge drinking are problematic. Learners who might have been exposed to alcohol drinking patterns at an early age tend to develop elevated risk drinking habits (Dodd, Glassman, Arthur, Webb, & Miller, 2010). It might be assumed that the learner who started drinking from an early age might develop dependency on alcohol rather than learners who start drinking later.

Learner subject specialities might also be a contributory factor. Certain high demanding subjects might be associated with alcohol drinking. Some subjects such as health information management might give detailed understanding on health-related concepts. Several factors might discourage or delay onset of alcohol drinking or dependence. For example, learners who are living with parents have close monitoring from parents, about any disconnectedness from school and peer pressure etc. They can support and give timely advice wherever necessary, which might prevent or delay alcohol consumption. Parent(s), friends and spouse are essential for emphatic understanding to the problems faced by learners during their academic learning and are influential through engaging learners in weighing disadvantages of alcohol abuse, about health, social and academic risks.

Another crucial factor is family background such as the parent's education; for example, parents with higher qualifications might give appropriate advice for learners. There are higher chances of educating children about risks involved and consequences of alcohol abuse. Therefore, parents play a pivotal role that enhance any interventionist and preventing programmes. Prevention methods can reduce, mitigate and eliminate certain risks (Leblane, Drolet, Ducharme, Arcand, Head &Alphonse, 2015).

Another factor that helps in preventing alcohol abuse is learners' awareness on health, social, economic and educational risks associated with alcoholic consumption. Learners should be aware of individual health risks associated with excessive alcoholic consumption. Excessive alcoholic consumption leads to devastating consequences especially at individual level on health. Excessive alcohol consumption is associated with many diseases and injuries (World Health Organization, Global status report on alcohol and health,2014). Excessive alcohol dinking is associated with health risks such as alcohol induced disorders in the nervous system, cardiovascular system, functioning of liver and pancreas, and immune system. Alcohol use can onset various diseases such as alcohol induced cardiomyopathy, atrial fibrillations, ventricular tachycardia, arrhythmias, hypertensions, strokes, fatty liver, alcoholic hepatitis, liver cirrhosis, hepatic encephalopathy, pancreatitis, suppression of immune system and cancers (World Health Organization, Global status report on alcohol and health,2014; Clegg & Mackean, 1994). Therefore, alcohol can affect various organs and tissues of a person. There are many signs and symptoms associated with alcohol induced diseases and alcohol induced disorders which can affect normal functioning of the physical and mental functions. Beside the various signs and symptoms of alcohol induced diseases it might impair motor coordination, ability to think, plan and solve problems, remember and learn, which has implications on a learner's academic learning. In addition to the above, it also affects the perception and behaviour of the learner.

Excessive alcohol abuse also leads to problems of public health by spreading of sexually transmitted diseases. It also causes a heavy burden on the society economically. Conti and Dorthy (2012) noted that excessive drinking of alcohol might lead to devastating consequences of physical, social problems such as risky sexual behaviour, potential development of alcohol use disorder, and academic failure. The World Health Organization (2014) suggests that alcohol remains an addictive drug and contributes to chronic diseases, mortality and accidents across the globe. Considering the above discussion, the present research addresses the following research questions.

Research Questions

The following research questions were considered for the present research:

(1) What are the patterns of alcohol consumption and reasons for alcohol drinking among the learners?
(2) What is the association between alcohol consumption and learner's gender, age, subject specialties, level of study, living status, marital status, parents' educational qualifications and family income.
(3) Is there any association between learners' level of awareness on health risks, social risks of alcohol and their alcohol consumption?

Objectives of the study

The following research objectives are considered in the research

(1) To analyse alcohol consumption patterns and reasons for alcoholic drinking among learners.
(2) To find out association between alcohol consumption and learners gender, age, subject specialities, level of study, living status, marital status, parents' educational qualifications and the family income.
(3) To determine the association between learners' level of awareness of health risks, social risks of alcohol and their alcohol consumption

Hypotheses of the study

The following hypotheses are considered for the following research

Hypothesis 1

Ho_1: There is no association between the alcohol consumption and learners, gender, age, subject specialization, year of study, living status, marital status, parents' educational qualifications and family income.
H_{a1}: There is an association between the alcohol consumption and learners gender, age, subject specialization, year of study, living status, Marital status, grade point average and parental educational qualifications and income of the family.

Hypothesis 2

Ho_2: There is no association learners' level of awareness on health and social risks of alcohol and their alcohol consumption.

H_{a2}: There is an association between learners' level of awareness of health risks, social risks of alcohol and their alcohol consumption

Significance of the present study

The present research gives insight into the volume and consumption patterns among the learners of Botho University. It also analyses the reasons for alcohol consumption. This type of analysis provides the basic understanding behind consumption/ drinking of alcohol. This study also educates or conveys a health message to learners. The study also analyses the association between alcohol consumption patterns and factors associated with learners in educational settings. This type of information is useful to develop and modify the educational programmes that create awareness leading to prevention and reduction of alcohol abuse. It also helps the university authorities and government to take appropriate strategies to develop the policies. The present research will also be helpful to parents and society in understanding learners' reasons for alcohol consumption.

Methodology

To study alcohol consumption patterns among the learners, reasons for alcohol drinking and factors associated with alcohol consumption. Both quantitative and qualitative paradigm of research and cross-sectional survey were selected.

Population, sample, and sampling methods

The population of the present study consists of learners' form Botho University, Francistown campus. Learners differ by gender, age, subject specialities, year of study, living status, and marital status. The learners' family backgrounds also differ based on the parents' education and income level. The sampling used for the present study is simple random sampling procedure to select the predetermined sample of 236 learners. This is approximately 47 % of Botho University, Francistown learners' population.

Research Instruments

The data was collected from the learners by using questionnaire on the Factors Associated with Alcohol consumption. The questionnaire was developed from pre-existing questionnaires, by drawing, adopting and modifying some statements based on context of the study; for example, the alcohol consumption patterns from Core Alcohol and Drug Survey long form developed by Presley and colleagues. In order to determine alcohol consumption patterns both frequency of alcohol consumption and volume of alcohol (based on standard drink) is considered. The remaining questionnaire statements were developed based on the conceptual framework of study; for example, reasons for drinking and not drinking alcohol, first time consumption of alcohol at different educational levels, statements related to awareness of health and other risks associated with the alcohol abuse. After developing questionnaire statements, it passes on through several stages of development which involved piloting and peer editing. To eliminate ambiguity of the statements, the questionnaire statements were peer edited by biology, medical specialist persons and English language experts. It is also piloted by requesting six learners to respond to the questionnaire statements. Based on their responses some statements and responses were modified, created and edited to improve clarity.

Format of questionnaire

The final questionnaire consists of part A, Part B, and part C. The Part A consists of Biographical information about

learners' gender, age, degree programme enrolled in the University, year of study, living status, marital status, parents' educational qualifications, and income of the parents. Part B of the questionnaire consists of questions related to volume of and frequency of alcohol consumption, reasons for alcohol consumption, and first alcohol drink consumption etc. Part C of the questionnaire consists of statements pertaining to health risks associated with alcohol abuse. It also contains statements which include social risks associated with alcohol abuse. The Likert-type rating scale on a five-point continuum is used. In this scale the respondent is asked to indicate the level of agreement with each statement contained in the instrument. The numerical scores are attached to their responses. The numerical scores are summed up and taken as individual total scores. The questionnaire contains the cover letter, clearly explaining the purpose of the research. It also requests voluntary participation of the learners and guarantee for confidentiality of their responses. Permission to conduct the study was also sought from the campus manager of Botho University, Francistown. The ethical principles of research are followed.

Research Instruments' Validity and Reliability

To validate the questionnaire, a pilot study was conducted, and questionnaire statements were subjected to experts' scrutiny; based on their suggestions the questionnaire statements were revised. For the present study, reliability was measured by using the Cronbach's alpha -coefficient is .904. The Cronbach's alpha value calculated for subscales on awareness of health risks associated with alcohol consumption statements is .89. The subscale for awareness of social risks associated with alcohol consumption is .883.

Administration of Research Instruments

The questionnaire was administered in August 2017 randomly. The questionnaire was administered personally by researchers to increase the response rate. The questionnaire contains the covering letter to explain the purpose of the research and the learners were requested to participate as their cooperation and honesty in their responses was important for the nature of the study. The respondents took an average of 25 minutes time to complete the questionnaire.

Statistical Data Analysis procedure

Data was analysed in two ways. First and foremost, it was subjected to descriptive statistical analysis and secondly it was subjected to inferential statistics based on the formulated hypotheses. Data from the questionnaire was compiled and coded into coding sheet of statistical package for social sciences (SPSS version 21) for analysis. Quality control procedures were followed. The research

question and research objective based on learners' alcohol consumption and reasons for alcohol consumption, descriptive statistics such as frequency and percentages were used. Formulated research hypotheses based on association between learners' alcohol consumption and selected variables, were analysed by inferential statistics Chi-square test and Fisher's Exact test.

Results

First and foremost, the percentages of returned questionnaire were reported. The research results are presented according to three research questions that underpin the present study.

The questionnaire returned from learners mainly came from females (56.4%), age group 21-25 years (43.6%), health Information Management (46.2%), 3rd year learners (46.6%), living with parents (22.9%), living single (72.0%), parents' educational qualification below form 5 (47.0%) and income below 1000(33.9%) (see Table A1)

Presentation, analysis and interpretation of results for research question and objective based on alcohol consumption patterns and reasons for alcohol consumption

To answer research question and objective based on alcohol consumption patterns and reasons for alcohol consumption, the descriptive statistics like frequencies and percentages were used.
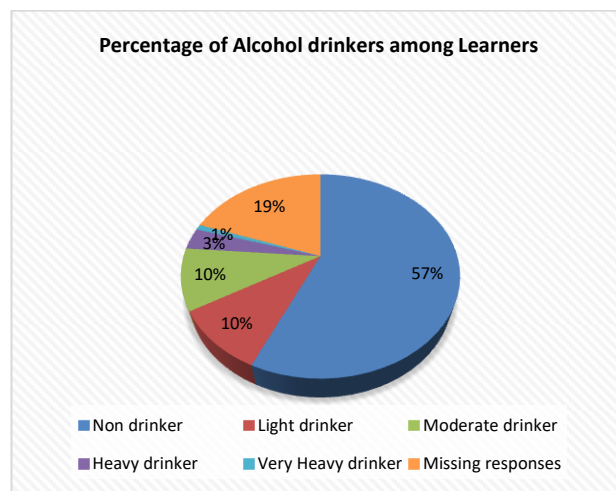
Figure 1 Percentage of Alcohol consumers among learners

57% of learners are non- alcohol consumers, 10% of learners show the light and moderate drinking patterns each. 3% and 1% learners show the heavy and very heavy alcohol drinking patterns respectively. It is important to note that 19 % response was missing (see Figure 1).

Alcohol Consumption Patterns According to Gender, Age group, Subject specialization, Year of study, Living status, Marital status, Parents' Educational Qualifications and Income

The percentage of non- alcohol consumers are more in female students (76.69%) compared to their male counterparts (62%). Light alcohol consuming patterns are more evident in female (12.78%) compared to the male (8%) learners. The Moderate (22%) and heavy (8%) alcohol consuming patterns are evident in males than females (9.02%, 1.50%) learners. The 21-25 years age group (70.87%) exhibited non- alcohol consumed patterns than compared to other age groups. Light (13.88%); heavy alcohol consumption (5.55%) more evident in age group 17-20 years; The moderate alcohol consumption pattern is evident in 26-30 years. Learners subject wise analysis shows that percentage of non-alcohol consumers are more in accounts (100%) and in Health Information Management (71.56%) compared to other subjects. Light alcohol consumption pattern is more evident in computer studies learners (23.53%) compared to others in subject specialities. The percentage of Moderate (41.67%), heavy (25%) and very heavy alcohol consumers (16.67%) are higher among the learners in Business management.

Year wise analysis shows 3rdyear learners exhibited more non- alcohol consuming patterns (83%). The moderate (30%), heavy (23%) and very heavy alcohol consuming patterns (2%) are evident in 4th year learners. Learners living with parents shows light (22.22%), and moderate (22.22%) alcohol consumption patterns. Married learners show 100% are non- alcohol consuming pattern.

The learners (78.38%) exhibited non- alcohol consumption pattern if the parent qualification is less and highest (100%). Learners from lower family income shows that (78.75%) abstain from alcohol consumption (See Table A2).
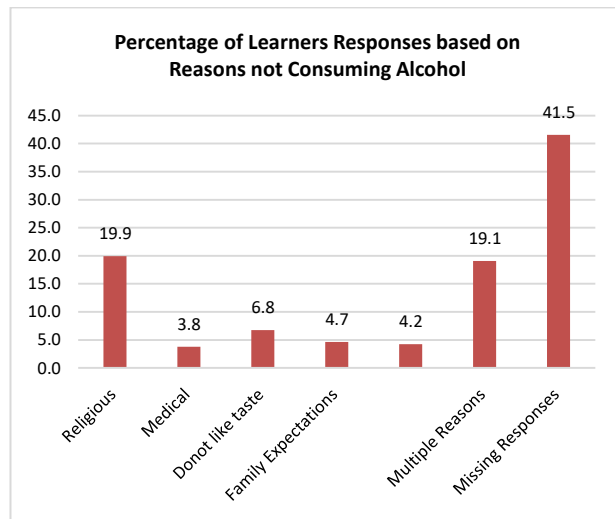
Reasons for consuming alcohol
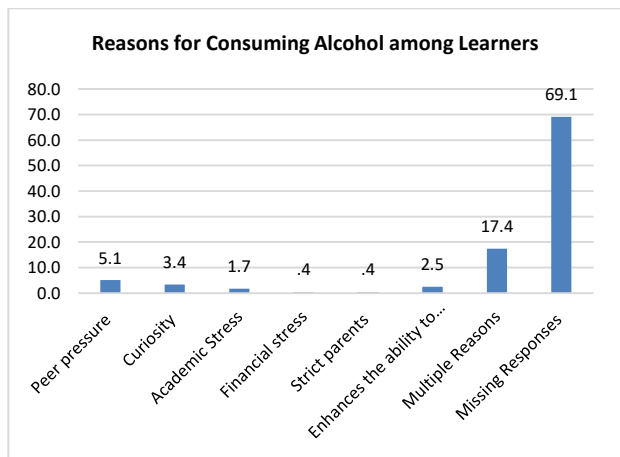
Figure 2 Percentage of learners Reasons for consuming Alcohol

17.4% of learners indicated multiple reasons for consuming alcohol, followed by 5.1% due to peer pressure. The other reason is curiosity (3.4%) and enhancing ability to deal with demanding situations (2.5%). It is important to note that 69.1 % responses were missing (see Figure 2)

Reasons for non-consumption of alcohol

Figure 3 Percentage of learners' responses based on Reasons for Non- Consuming Alcohol

The main reason for not consuming alcohol they attributed to religious factors (19.9%), several responses indicated multiple reasons for not consuming alcohol (19.1%). 6.8% learners indicated main reason is that they do not like the taste and followed by family expectations (4.7%). It is important to note that 41.5% responses were missing (see Figure 3).
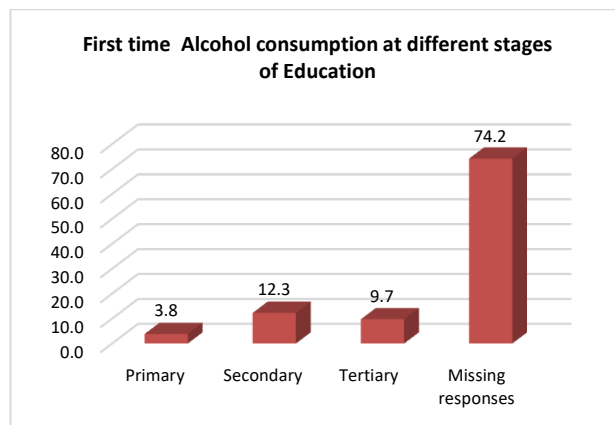
Figure 4 Percentage Responses of Learners about First

 Alcohol drink consumption at various stages of Education 12.3% indicated that they first consumed alcohol at secondary education level, followed by 9.7% in Tertiary education level and 3.8% started at primary stage of education (see Figure 4).
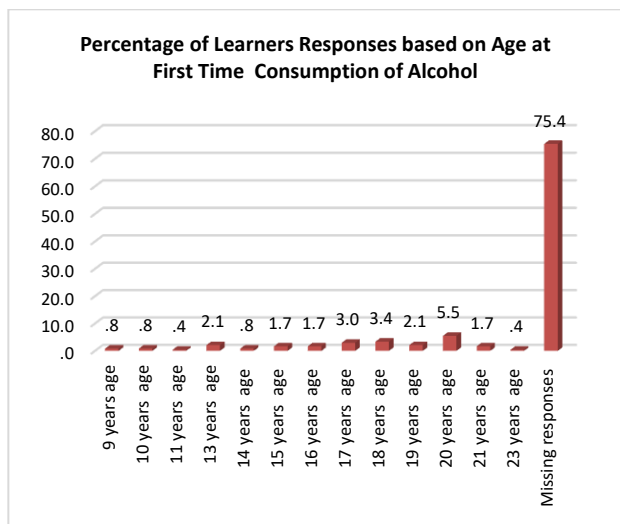
Figure 5 Percentage of Learners Responses based on Age at First Time consumption of Alcohol

Learners started alcohol consumption as early as 9 years old (0.8%). The percentage of responses indicated that between age groups 13 to 20 years most of them had started consuming alcohol (See Figure 5).

Presentation, analysis and interpretation of results for association between alcohol consumption and learners gender, age, subject specialities, level of study, living status, parental education qualification and family income

Ho$_1$: There is no association between the alcohol consumption and learners, gender, age, subject specialization, year of study, living status, marital status, parents' educational qualifications and family income.
Below are results of the Chi-square and Fisher's Exact test results for the above Null Hypothesis

Table 1 Chi-square and Fisher's Exact Test results and probabilities based on association between alcohol consumption and learners Gender, Age, Subject specialities, Year of study, Living status, marital status, Parental educational qualification and family income

Variables (*n*)	Pearson Chi-Square Value	df	Asymp. Sig. (2-sided)
Association between Gender and Learners' alcohol consumption (n=183)	4.420[a]	1	.036*
Association between Subject specialty and Learners' alcohol consumption(*n*=187)	32.199[a]	3	.000*
Association between Year of study and Learners 'alcohol consumption(*n*=188)	11.818[a]	2	.003*
Association between Family Income and Learners' alcohol consumption (*n*=159)	12.076	3	.007*
Fisher's Exact test			
Association between Learners age group and Learners' alcohol consumption(*n*=142)			.949
Association between Living status and Learners' alcohol consumption(*n*=179)			.006*
Association between Learners marital status and Learners' alcohol consumption(*n*=171)			1.000
Association between Parental educational qualification and alcohol consumption(*n*=172)			.007*

A Chi-squared test of independence was performed to examine association between alcohol consumption and gender. The calculate $\chi 2(1, N = 183) = 4.420$, $p = .036$. A significant association was found between gender and Alcoholic consumption $p< .05$. A Chi-squared analysis showed a significant association between subject specialization and learners' alcohol consumption $\chi 2(3, N = 187) = 32.199$, $p = .000$. The results of the chi-square test of independence also shows there is significant association between year of study and learners' alcohol consumption $\chi2(2, N = 188) = 11.818$, $p = .003$. A chi-squared analysis also shows that there is significant association between the family income and learner's alcohol consumption $\chi 2(3, N = 159) = 12.076$, $p =. 007$.

Fisher's Exact test results shows association between alcohol consumption and living status $p =.006$; and parental educational qualifications p = .006. Therefore, there is association between gender, subject specializations, year of study, living status, parent educational qualifications and income. There is no association between learners age group and alcohol consumption p= .949; learners' marital status and alcohol consumption p=1.000.

Presentation of research results for association between learners' level of awareness of health risks and social risks and alcohol consumption

The results below show the association between the level of awareness of health risks, social risks and alcoholic consumption.

Table 2 Chi- Square results showing Association between Alcohol Consumption Patterns and Awareness on Health and Social risks

Learners Awareness on Health risks - Crosstabulation				
		Learners		
		Non-Alcohol consumption	*Alcohol consumption*	*Total*
Awareness on Health Risks	*Low Level*	*17*	*13*	*30*
	Medium Level	*57*	*26*	*83*
	High Level	*57*	*14*	*71*
Total		*131*	*53*	*184*

	Variables	Pearson Chi-Square Value	df	Asymp. Sig. (2-sided)
1	Awareness of health risks associated with alcohol consumption (*n* =184)	6.2033[a]	2	.045

Learners Awareness on social risks - Crosstabulation				
		Learners		
		Non-Alcohol consumption	**Alcohol consumption**	Total
Awareness on social Risks	Low Level	6	3	9
	Medium Level	51	30	81
	High Level	74	20	94
Total		131	53	184

	Variable	Pearson Chi-Square Value	df	Asymp. Sig. (2-sided)
2	Awareness of social risks associated with alcohol consumption (*n* =184)	5.365[a]	2	.068

A Chi-square test of dependence was calculated based on awareness of health and social risks associated with alcohol consumption. A significant association was found between Awareness of health risks associated with alcohol consumption $\chi^2(2, N = 184) = 6.203, p = .045$. Therefore, null hypothesis is rejected in favour of the alternative hypothesis. No significant association was not found between awareness of social risks associated and alcohol consumption $\chi^2 (2, N = 184) = 5.365, p = .068$.

Discussion of Results

The results show that the percentage of Non-alcohol learners are little higher than alcohol consuming learners. It is noted that missing responses were at 19%. The light and moderate alcohol consuming learners' percentage are higher than heavy and very heavy alcohol consuming learners. The empirical results of the present study indicate that most female students abstain from alcohol as opposed to male students. This is evident in moderate and heavy alcohol consuming patterns. Several research studies noted the above observations (World Health Organization, Global status report on alcohol and health ,2014); Botswana Central Statistics Office, 2009; Dodd, Glassman, Arthur, Webb, & Miller, 2010). As I discussed earlier gender specific roles and stereotypes might inherently be regulating the alcohol consuming patterns in females. This empirical study also indicates that light alcohol consuming pattern is evident in age group 17-20 years (Sinkamba, 2015; Dodd, Glassman, Arthur, Webb, & Miller, 2010). It also indicates that moderate alcohol

consuming patterns are more evident in age group 26-30 years. These results might be interpreted in the context of the small sample size of that group. The empirical results also indicate that most of Health Information learners abstain from alcohol drinking than other subject learners. This may be due to in-depth factual understanding of effects of alcohol on their health (Roy, Ikonen, Keinonne, & Kumar, 2017). The empirical results of the present study also indicated that 4th year students show more moderate and heavy alcohol consuming patterns compared to other years of study. The study also reveals that the learners living with parents exhibit more light and moderate alcohol consuming patterns than learners living with friends and alone.

This finding is contradictory to the literature reviewed (Nargiso, Friend, & Florin, 2013; Schwinn & Schiven, 2014). The empirical study also indicated that a majority of learners show abstain from alcohol consumption if their parents' educational qualifications are being less and very high; and low family income. Learners whose parents' education is at post- graduation, degree, and diploma levels show more light, moderate and heavy alcohol drinking patterns. Literature review indicated that parents with higher education level are able to guide their children away from alcoholism (Laghi, Lonigro, Baiocco, & Baumgartner, 2013). Research also indicated that increase in family income leads to increase in alcohol consumption. The research results of Crawford (1995) indicated that family income was positively associated with likelihood of drinking.

Findings of the research indicate that the main reasons for consumption of alcohol for most students is

multiple reasons, such as peer pressure, curiosity and academic stress and enhances the ability to deal with demanding situations. As literature indicates, learners entering the adolescence age pay much attention for identity and recognition among their peer group. During the process to impress their peers they succumb to pressure and start to depend on alcohol to improve communication. Curiosity is another factor playing a role in alcohol consumption. The results of numerous studies show that peer influences were associated with increased alcohol drinking and binge alcohol drinking (Nargiso, Friend, & Florin, 2013; Schwinn & Schiven, 2014). The main reason for not consuming alcohol is multiple factors such as religious affiliation followed by family expectations. Literature review also advises on improving family support (Nargiso, Friend, & Florin, 2013; of Schwinn & Schiven, 2014). Religious beliefs and family expectations might prevent learners from alcohol drinking. The empirical results indicated that most learners started alcohol consumption from secondary school from the age of 13 years to 20 years. It is also important to note that some learners started drinking alcohol at an early age such as 9 years age. Underage alcohol drinking, as reported in several researchers' work leads to alcohol dependency in later years (Dodd, Glassman, Arthur, Webb, & Miller, 2010). The empirical research results of several studies indicated early age consumption of alcohol leads to Alcohol Use Disorder (Stanely, Miller, Beauvais, Walker, & Walker, 2014).

The research results also indicate that there is association between alcohol consumption and gender, subject specialisation, year of study, living status, parental qualifications and family income. The research findings indicate that there is significant association between awareness of health risks with alcohol consumption patterns.

Conclusions

Female learners show non- alcohol consumption patterns than male learners; Age group 17-20 years learners shows more percentage in light; moderate and heavy alcohol consumption patterns; most learners from Health Information Management show non-alcohol consumption patterns. Learners living with parents show more alcohol consuming patterns than other groups. The lower the parents' education and family income the more the learners tend to show non- alcohol consuming patterns. Factors such as learners' gender, subject, year of study, living status, parent qualification, family income and awareness of health risks are associated with alcohol consumption. There is no association between marital status, age and awareness of social risks to the alcohol consumption.

Limitations of the Study

The results are generalized to the learners of Botho University. The Factors are investigated based on learners' and their family background in educational setup. There are many other factors contributing to alcohol abuse. The study is conducted in only one campus of Botho University and sample may not be representative of the other campus and other tertiary institutions.

Recommendations and Further research

The study recommends further research, including the replication of the present research, and use of a wide range of research instruments. An in-depth research is required to understand alcohol abuse problems across all institutions. The present study also recommends further research, including cultural influences, gender roles, parents' modelling, religious factors, socio economic status, influence of extended family, etc on alcohol consumption patterns. It needs to include education programmes that create deeper understanding on the effects of alcohol on health.

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Appendices

Appendix A

Table A1 Frequency and percentages of responses returned questionnaire according to Gender, Age, Subject specialities, Year of study, Living status, Marital Status, Parents educational qualifications and family Income

Variable	Frequency	Percent
Gender		
Male	50	21.2
Female	133	56.4
Total	183	77.5
Missing Response	53	22.5
Age		
17-20 Years	36	15.3
21-25 years	103	43.6
Above 25 years	3	1.3
Missing Responses	94	39.8
Subject Specialties		
HIM	109	46.2
Business Management	12	5.1
Computer	34	14.4
Accounting	32	13.6
Missing Responses	49	20.8
Year of study		
2nd year	65	27.5
3rd year	110	46.6
4th year	13	5.5
Missing Responses	48	20.3
Living status		
Parents	54	22.9
Spouse	6	2.5
Friends	29	12.3
Single	90	38.1
Missing Response	57	24.2
Marital Status		
Married	1	.4
Single	170	72.0
Missing Response	65	27.5

Educational Qualifications		
Below form 5	111	47.0
Diploma	23	9.7
Degree	32	13.6
Post-graduation	4	1.7
Doctorate	2	.8
Missing Responses	64	27.1
Income		
Below 1000	80	33.9
1-5 thousand	44	18.6
6-10 thousand	14	5.9
Above 10000 thousand	21	8.9
Missing Responses	77	32.6

Table A2 Percentage of learners drinking patterns according to the Gender, Age group, Subject Specialization, Year of study, Living status, Marital status, Parents educational qualifications and Income

	Percentage of Non- drinker	Percentage of Light drinker	Percentage of Moderate drinker	Percentage of Heavy drinker	Percentage of very Heavy drinker
Gender					
Male (*n* = 50)	62.00	8.00	22.00	8.00	0.00
Female (*n* =133)	76.69	12.78	9.02	1.50	0.00
Age					
17-20 years (*n* = 36)	69.44	13.88	11.11	5.55	0.00
21-25 years (*n* =103)	70.87	9.71	15.53	3.88	0.00
26-30 years (*n* = 3)	66.66	0.00	33.33	0.00	0.00
Subject Specialization					
HIM (*n* =109)	71.56	13.76	11.92	2.75	0.00
Business Management (*n*=12)	16.67	0.00	41.67	25.00	16.67
Computer(*n*=34)	61.70	23.53	8.82	5.88	0.00
Accounting(*n*=32)	100.00	0.00	0.00	0.00	0.00
Year of study					
2nd year (*n*=65)	46.00	8.00	8.00	3.00	0.00
3rd year (*n*=110)	83.00	15.00	10.00	2.00	0.00
4th year (*n*=13)	30.00	0.00	30.00	23.00	2.00
Living status					
Living with Parents (*n*=54)	50.00	22.22	22.22	5.56	0.00
Living with spouse (*n*=6)	83.33	0.00	0.00	16.67	0.00
Living with Friends (*n*=29)	79.31	6.90	13.79	0.00	0.00
Single (*n*=90)	77.77	10.00	7.77	3.33	1.11
Marital Status					
Married (*n*=1)	100.00	0.00	0.00	0.00	0.00
single (*n*=170)	70.59	12.35	13.53	3.53	0.00
Parents Educational Qualifications					
Below form 5 (*n*=111)	78.38	11.71	8.11	1.80	0.00
Diploma (*n*=23)	52.17	13.04	17.39	17.39	0.00
Degree (*n*=32)	50.00	12.50	25.00	6.25	6.25
Post-graduation (*n*=4)	50.00	25.00	25.00	0.00	0.00
Doctorate (*n*=2)	100.00	0.00	0.00	0.00	0.00
Family Income					
Below 1000 Thousand pula (*n*=80)	78.75	10.00	8.75	2.50	0.00
1-5 thousand pula (*n*=44)	75.00	9.09	11.36	4.55	0.00
6-10 thousand pula (*n*=14)	57.14	7.14	28.57	7.14	0.00
Above 10000 thousand pula (*n*=21)	38.10	33.33	19.05	4.76	4.76