

**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCE
UNIVERSITY OF GHANA**

**ALCOHOL USE AMONG SENIOR HIGH SCHOOL STUDENTS
IN THE GA CENTRAL MUNICIPALITY**

BY

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DECLARATION

I, Joyce Annor, declare that except for the other people's investigations which have been duly acknowledged, this work is the result of my own original research done under supervision and that this dissertation, either in whole or in part has not been presented elsewhere for another degree.

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DEDICATION

“If it has not been for the Lord on my side, someone should tell me where I will have been”.

I dedicate this thesis to my lovely husband, Ernest Essien and son, Westwood Fiifi Essien for their understanding for all the time spent away from home. To my dad, Mr Edmund Offei- Annor for all the financial support, my mum, Madam Doris Annor for been there all the time and finally to my spiritual father, Rev. Joey Sarpy, for believing in me when all hope is gone.



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ABSTRACT

Introduction and Objectives: The second cycle institution corresponds with late adolescents. Adolescence is a period marked by increasing participation in health risky behaviors such as alcohol use. The use of alcohol at this critical age can lead to serious health outcomes such as causing harm to body organs such as the liver and sometimes injuries. It is also associated with negative social and behavioral consequences such as unsafe sexual behavior. This study therefore aims to determine the prevalence of alcohol use and the factors that influence alcohol use among Senior High School students in the Ga Central Municipality.

Methods: A quantitative cross sectional descriptive survey design was used. Cluster sampling of 392 SHS1 and SHS2 students between the ages of 15 to 19 years from two selected schools in the municipality completed a structured questionnaire. Data was analyzed using SPSS 20.0 software and results presented in frequency tables. Test of association and correlation between explanatory variables and the outcome of interest was done using chi-square.

Findings: Alcohol use prevalence was 35% and the types of alcoholic beverage preferred by the respondents were beer and wine. Significantly, there was very low effect of alcohol use and curiosity was the reason for alcohol intake. The principal influencing factors of alcohol use was advertisement and peer pressure.

Conclusion: Alcohol use still remains a problem among adolescents. However, a comparison of the two schools used in the study revealed that there was no significant recording that may suggest a difference in prevalence, effects, influence of alcohol use among the two schools. In view of this fact, it can also be concluded that alcohol use has no relationship in the nature of the school attended, be it public SHS or a private SHS.

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LIST OF ABBREVIATIONS

AOD's	Alcohol and Other Drugs
CDC	Center for Disease Control and Prevention
DA	District Assembly
ERI	Edmund Rice International
ESU	Experimental Substance Use
GCMA	Ga Central Municipal Assembly
GES	Ghana Education Service
CHPS	Community Based Health Planning
GHS	Ghana Health Service
MTF	Monitoring the Future
NIAAA	National Institute on Alcohol Abuse and Alcoholism
SHS	Senior High School
TPB	Theory of Planned Behavior
UPR	Universal Periodic Review
WHO	World Health Organization



CHAPTER ONE

INTRODUCTION

1.1 Background of study

Many researchers have shown that alcohol is among the most important public health problems with their genesis in adolescence (Moss, Chen, & Yi, 2014; Pearson, Lima, & Kelley, 2011; Stolle, Sack, & Thomasius, 2009). Worldwide and in Ghana, alcohol is the only psychotropic substance most widely used by adolescent (Pinsky, Sanches, Zaleski, Laranjeira, & Caetano, 2010). Adolescent alcohol use is a considerable health problem because it contributes to the leading causes of adolescent morbidity and mortality (Chun & Linakis, 2012). In 2011, the World Health Organization reported that nine percent of annual deaths of youth between the ages of 15 to 25 years were attributed to alcohol related causes (WHO Global Status Reports on Alcohol and Health, 2009). The negative consequences of adolescent alcohol use are well documented, and include decreased academic achievement, depression, other substance use, unintentional injuries and serious road traffic accidents. Although the minimal drink age is 21 years in Ghana, some begin at childhood. This may continue to rocket into late adolescents (Oppong Asante, Meyer-Weitz, & Petersen, 2014).

A study conducted by Monitoring the Future (MTF) on American adolescents in high school came up with a number of reasons for alcohol use. Respondents primarily emphasized the effect, which is referred to as a taste, euphoria, which makes them to feel relaxed. High on the list was curiosity about the substance effect cited by one-half of the population of the students interviewed. Contrary to this, fewer adolescents truly admitted to the use of the alcohol as a result of problematic situation. Approximately one-fourth of adolescents who have ever taken alcohol revealed that they got involved because alcohol helps them escape from their problems (O'Malley, Johnston, & Bachman, 1998).

Factors such as lifestyle, access to alcohol advertising, high level of stressful situations coupled with anxiety, low self esteem of an individual, symptoms such as depressive, peer pressure susceptibility, and other problems related with their education were considered as facilitators of alcohol consumption among adolescents (Díaz-Anzaldúa & Díaz-Martínez, 2011). Other factors include, genetic predisposition, parental or familial influence. Even a small amount of alcohol use produces consequences which may lead to risky behaviors including sex, high suicidal rate due to violence, Juvenal crime and struggles with friends. Illicit drug use a increases the public health problem (Doku, Koivusilta, & Rimpelä, 2012). Alcohol stands to be the only psychotropic drug which is accepted and encouraged by the greater culture (Malta, 2012), allowing the people to practice the use at the early age even ten years. This practice increases the dependence overtime (Malta & Mendes, 2012; WHO, 2002). As reported the prevalence study in Brazil, the experimentation of alcohol ranged 48% to 71% with a regular use of 27% (Pinsky, Sanchez, Zaleski et al., 2010). Evidence of alcohol use among the adolescents group in sub-Sahara Africa suggests that a huge proportion of teenagers have used or are presently taking in alcohol. Kuria (1996) found alcohol use prevalence 15% among secondary school students in Kenya. Alcohol prevention programs in Ghana are few and the restricting of advertising alcohol beverages is a challenge. The epidemiological shape of alcohol use is a problem. To examine factors association is also a difficult and a complex-burden. This when possible would have prevented or control alcohol misuse especially to the young population.

The aim of the study is to determine the prevalence of alcohol use and the factors that influence alcohol use among Senior High School students

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1.2 Problem Statement

Despite the widespread interventions to raise awareness of the harmful effect of alcohol use, global data suggest an increase in alcohol use among young people (Global Status Report, 2007). Ghana has a young population. Over half of the estimated 25million people are below the age of 25 years and one in five Ghanaian is an adolescent. Reports from educators in Ghana suggest that alcohol and other drugs are increasable becoming a major problem in Ghana (Adu-Mireku, 2003; Coffie, 2010) with estimation that 40% of youth may be abusing alcohol or other drugs. Worldwide, alcohol use causes an estimated 3% death (1.9 million) in a year.

In 2006, WHO reported that the top ten causes of admissions in psychiatric hospitals in Ghana in 2002, substance abuse ranked second next to schizophrenia at 17.43% and ranked fourth among out- patient cases at 16.3% (WHO, 2006). The Ghana Police Service has estimated that about 70% of all crime is alcohol or drug related (Ministry of Interior Workshop Report – The Role of Security Agencies in Ghana, 2006). In 200 7, there was an increased in admission at the Pantang Hospital by 21.1% compared to the previous years. In Ghana, as a legal product, alcohol is readily available to minors (Adu-Mireku, 2003; Dixon, Ham, & Lewis, 2009). Also, alcohol related sexual assaults, personal inflicted injuries and death do suggest that the involvement of adolescent in alcohol use is developing to be a public health problem in the country. Up to date, data available is scanty. Despite the effort of the Ghana Education Service, school heads and, health professionals, the problem still remain because it is well rooted in the second cycle institutions in Ghana (Owusu, 2008). The study therefore seeks to find out the prevalence and factors leading to alcohol consumption among senior high school students in the Ga Central Municipality.

1.3 Research Question

The following research questions will guide the study

- ❖ What is the prevalence of alcohol use among students in the selected senior high schools?
- ❖ What types of alcohol does students in the senior high school use?
- ❖ What are the perceived effects of alcohol use among SHS students?
- ❖ What are the factors that influence alcohol use among SHS students?

1.4 Study Objectives

1.4.1 General Objectives

The general objective of the study is to determine the prevalence and factors that influence alcohol use among senior high school students in Ga Central Municipality.

1.4.2 Specific Objectives

- ❖ To assess the prevalence of alcohol use among SHS students.
- ❖ To identify the types of alcohol students of SHS use.
- ❖ To determine the perceived effects of alcohol use among SHS students.
- ❖ To determine the factors that influence alcohol use among SHS students.

1.5 Significance of the Study

The similarities in alcohol use pattern among adolescents all over the world are far greater than their differences; worldwide trends have suggested increases in many dimension of adolescent alcohol use (Coffie, 2010). The senior high school years correspond with adolescence and has become a time of increased alcohol use and abuse which can result in long term effects on both physical, psychological well being of students, impeding the attainment of their traditional adult roles (Nimako, 2012; Owusu, 2008). Yet available data

on alcohol use among adolescents in Ghana is limited and this may limit government's ability to plan and implement appropriate public health interventions to reduce alcohol consumption among adolescents. Therefore conducting such a study will provide a school based data that could help in planning public health interventions to control alcohol use among adolescents. The study would also contribute to the existing literature to guide future research on alcohol use among adolescents in Ghana.

1.6 Conceptual Framework

Theories and models are said to be useful in planning, implementing and evaluating interventions (Watson, 2002; Margoluis, Stem, Salafsky, & Brown, 2009). In recent times, psychologists and other social science researchers base the explanation of substance use including alcohol use, experimentation, and abuse on Cognitive and Behavioral theories (Coffie, 2010). This study adopted the constructs in the Theory of Planned Behavior (TPB); which was propounded by Ajzen in 1988. The theory proposes a model which measures how human actions are guided. It predicts the happening of a particular behavior provided that behavior is intentional. In other words, the Theory of Planned Behavior is a theory which predicts deliberate behavior, because behavior can be deliberative and planned.

Alcohol use is based exclusively on an adolescent's decision to engage in the substance specific behavior. It assumes that human behavior is motivated by intentions. In turn, these decisions are determined by three determinants; namely an individual's attitudes towards a behavior, the subjective norms, and the perceived behavioral control (Ajzen, 1991).

Social intention, an alternative measure for action suggests an individual to make a conscious judgment or conclusion to execute an action (Conner and Armitaye, 1998). TPA claims that intentions are affected by an adolescent attitude regarding their own

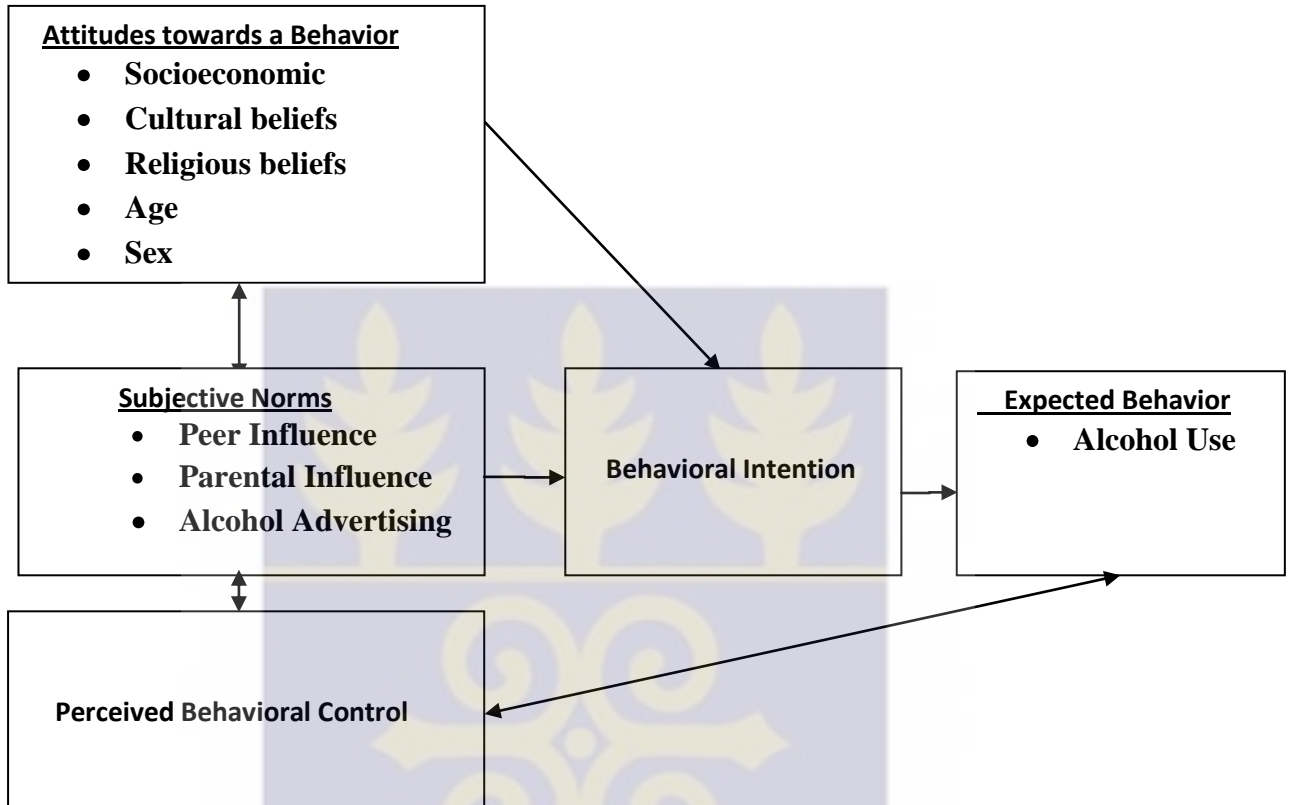
experimental alcohol use (EAU). This presumes that the adolescents holds positive attitude towards EAU if the expected benefits of alcohol valued more than the expected cost. By and large, the stronger the intention, the more likely is the person to execute the behavior. For example, socioeconomic background may have impact on the behavior, whether conforming or deviant, it is more likely that the person become economically or socially reinforced. According to TPB, attitude towards the behavior refers to the extent which an individual possesses a positive or a negative feelings about behavior of interest. It entails the consideration of the outcomes of carrying out the behavior. For instance, culture, which is the way a group of people live; may instill values and norms regarding alcohol use among adolescents and these may be influential in determining student attitude towards alcohol use.

Subjective norms are a person's own estimate of the social pressure to perform the target behavior. Subjective norms are assumed to have two components which work in interaction: belief about how other people, who may be in some way important, would like to behave. In other words, it refers to whether most referents (significant or influential persons such as family members, pastor, best friends) approves or disapproves of their behavior as well as how motivated they are to act in accordance with their expectation (Ajzen, 1999). Presuming therefore, adolescents will feel strong pressure to use alcohol if they believe rightly or wrongly that important friends and family members endorse their alcohol use. Another example is the media: an adolescent student may watch a star or celebrity who he or she admires in the media advertising an alcohol beverage. This student may be motivated to consume the drink that the celebrity is advertising. Citing Anderson et al (2009), *exposure to alcohol advertising increases the likelihood that an adolescent will start with consuming alcohol.*

Perceived behavioral control signifies an individual's vision about the performance of the behavior (Ajzen, 1991). It is mostly guided by self-confidence and esteem. To conclude, the simple assumption of the model is that, the more positive the attitude, supportive subjective norm, and higher the perceived behavioral control, the more likely it is that a person will perform that behavior.



Figure 1: Conceptual Framework



Source: Adopted the Theory of Planned Behavior (TPB) by Ajzen 1991



CHAPTER TWO

2.0 LITERATURE REVIEW

Studies on alcohol use among adolescents will be reviewed under the following; the definition of alcohol, prevalence of the alcohol substance use especially among adolescents, the effects of the substance use and the factors associated in alcohol use among adolescents.

2.1 Definition of Alcohol

Ethanol, also called alcohol is a colorless flammable liquid which can be found in wine, beer, spirits and other drinks. It can also be used as fuel or and as industrial solvents. Alcohol is the product of fermentation of yeast, sugars and starches. Alcohol is a drug (Bai, Anderson, & Moo-Young, 2008) and it is classified as an a depressant. This means that, it slows down vital functions of the resulting in slurred speech, unsteady movement, inability to quickly react as well as the ability to think rationally and distorts ones judgment. Alcohol exerts an effects on every organ of the human body (Bai, Anderson, & Moo-Young, 2008; Guo & Jun, 2010). It depresses the central nervous system. Alcohol can readily be absorbed by the small intestines. It can quickly travel to the central Nervous system and depresses the system (Messing, 2014; Zakhari, 2006). The metabolism of this substance takes place in the liver. This action of metabolism is accomplished by the liver enzymes. The liver metabolizes a portion of alcohol at a time remaining left over circulates throughout the human body. The real intensity of the alcohol on the body is proportional to the intake. Therefore Individual reactions are varied to the alcohol, and this can be due to many reasons and factors that are present. Some of the factors could be age, gender, the physical condition (weight, fitness level etc) the amount of food the person

consumed before taking a drink. Other influencing factors include drugs or prescription of medications and family history of on the alcohol problems (CDC, 2000).

2.2 Alcohol Use among Adolescents

Adolescent alcohol use is a serious concern owing to potential short to long term outcomes for the health and safety of the individual as well as the number of associated adverse social consequences (Woods, 2011). According to the American Academy of Pediatrics, Committee on Substance Abuse, Alcohol Use and Abuse, (2011), the association between heavy adolescent alcohol use and road traffic accidents, suicide, violence and high risk sexual behaviors is well documented (Stolle, Sack, & Thomasius, 2009)

Alcohol is the most widely used substance among adolescents (O'Malley et al., 1998). In recent years, alcohol use among adolescents worldwide has increased significantly, with the age of at which drinking is started, decline (Coffie, 2010). This, it appears due partly to availability and the ease of getting alcohol by minors and partly to the marked improved marketing strategies by producers of alcoholic beverages, in their quest to maximize profit.

Also, in the bid to show how matured they are, adolescents are particularly attracted to alcohol, therefore leading to its consumption.

2.3 Prevalence of Alcohol

Statistics showed that in Europe, nearly if not all (9 in 10) of the 15-17 year old students have used alcohol and at the some point in their life (Currie et al., 2004). Most of the adolescents have begun consuming the substance as early as the age 13 years. Data from the 2003 European School Survey Project on alcohol and other drugs found the average amount of alcohol drunk by 15-17 year olds on their last drinking occasion was 60g, thus

six drinks (Hibell et al, 2004). A study carried out in Europe comprising 61000 students from 30 countries, indicated that, the overall prevalence rate of alcohol use was high. 60.6% Of all students in grade seven to nine had drunk alcohol in their life, and 27.7% within the last month.

Data from the notable National Longitudinal Alcohol Epidemiologic Study conducted in the United State of America has substantiated that the lifetime average alcohol consumption of both the dependent and the alcohol abused personalities show a striking decrease in numbers with increasing age at onset of use. For those with in the aged 12 years old or younger than the latter at first use, the prevalence of the lifetime alcohol or its substance dependence was calculated to be 40.6%, whereas those who were initiated at 18 years of age were totaled 16.6% and at 21 years was 10.6%. Similarly, in subsequent studies, the prevalence of a life time alcohol and its substance abuse was 8.3% for the age population initiated at 18 years and 4.8% for those that were initiated at 21 years.

The 2009 survey carried out in the United States, of more than 46,000 made up of grade 8th, 10th, and 12th students sampled in more than three hundred and eighty (380) schools nationwide revealed that, there was a change in that the prevalence of alcohol use in the previous 30 days to the research had sharply decline in older students. The prevalence observed of being drunk once in at least the previous month was proportional to the level of grade at the time 5.4% for 8th graders, 15.5% for 10th graders, and 27.4% for 12th graders (Johnston, O'Malley, Bachman, Schulenberg, 2009). Australia produced the following statistics: 19.2% of adolescents by then reported consuming one or more alcohol drinks reportedly in the previous three months (Hodder, Daly, Freund, Bowman, & Wingers, 2011). Similar Study conducted in the Brazil reported that the existing prevalence of alcohol experimentation ranged from the previous figure of 48.3% to 71.4% in adolescents, the study conducted also reported 27.3% regular use of alcohol, 22.1% of

registered drunkenness at some time in their past time of life and 8.9% were heavy use among adolescents (Pinsky et al., 2010).

Reports from the school surveys conducted across the African continent showed that the use and the abuse of drugs among adolescents begin with alcohol (Obot, 2004; Odejide, 2006). Another study conducted by Peltzer (2009), on substance use among school going adolescents students in six African countries (Kenya, Namibia, Swaziland, Uganda, Zambia, and Zimbabwe) findings indicates that 6.6% of the students surveyed engage in a risky alcohol use (two or more per day for at least a period of 20 days or more in a month). According to Fatoye (2003), a study conducted among some senior secondary school students in South Western Nigeria revealed this finding that 13% of students reported as current alcohol users while 26% had ever consumed alcohol. A study conducted in Cape Town, South Africa, sampling about thirty-nine high schools reported a prevalence rate for previous month as 31% alcohol use (Fisher, Parry, Evants, Muller, & Lambard, 2003). A study carried out on substance use among senior secondary school students in Atteridgeulle, Gauteng, South Africa involving 809 students reported that alcohol was the substance most commonly used by the students. It also came to light that, about 51.4% of the students had consumed alcohol at some point in their lives. The prevalence use for the past month as report by the study was 18.1%.

To this date, majority of the present available information on alcohol use among our adolescents in Ghana has come from a small number of some cross-sectional research studies which are often conducted in single location most especially the urban areas (Lampthey, 2005; Adu-Mireku2005) and inferring from this information's on police arrest and seizures. In a survey in Ghana, it was known that the prevalence of alcohol use among second cycle institutions was 15.3%, out of which figure14.6% of the respondents said they drunk two or more drinks per day (Owusu, 2008). A study conducted by Nimako

(2012) ,among SHS students in the Kintampo Municipality came up with a prevalence of 25.5% with the majority being male students (62.55%).

2.4 Effects of Alcohol on Adolescents

It is highly evident that from mid adolescence to the early adulthood life, there are major increases in alcohol use which also has its related problem (Bonomo et al., 2004; Wells et al., 2004). Not just that, adolescents progressively uses alcohol in a precarious manner. For example in Europe, about 9 out of 10 adolescents population between the ages of 15 and 17 years used alcohol in some point in their early short life (Currie et al., 2004). Children and adolescents' body cannot cope with alcohol the same way as an adult can. In as much as they have smaller physique, they lack the knowledge of drinking effects. They have no framework for assessing the drinking habit and also, they have not built up the ability to withstand the alcohol. According to some researchers, adolescents with heavy alcohol consumption and dependence are usually predispose to harm, which includes poor mental health, poor education outcome and increased risk of crime in early adulthood (Jefferis et al., 2008; Englund et al., 2008). Alcohol use therefore has medical, psychiatric, as well as social consequences.

2.4.1 Medical Consequences of Alcohol use

Alcohol use among adolescents causes multiple organ problems (Schinke, Schwinn, & Cole, 2006). Alcohol as a substance is readily absorb from the stomach by the body via the small intestines, the second phase is then distributes to every body organ, tissue, and cells through the circulation(Cederbaum, 2012). Most of the circulating alcohol with in the blood is then been absorbed in the body by the liver (hepatocytes). This action is fast, and the alcohol gets broken down as a waste called carbon dioxide, water and into energy. The

chemical substances which are excreted through the body kidneys do account for about 95 to 98 per cent of the alcohol a human consumed. The other percentages escaped from the body unchanged through sweat, breath, and urine (WHO, 2011). Medical consequences of alcohol can range anywhere from acute organ damage to chronic damage. Acute complications may, a situation which occurs soon after alcohol consumption; while chronic complications occur after prolong use. However, some complications may be reversed or treated soon after halting alcohol use, but others may be non reversible and permanent (Vanderwaal et al., 2001; Nimako, 2011).

The liver as an important organ is known to be primarily affected by alcohol (Osna, 2010). Heavy uncontrolled drinking can take a toll on the liver which eventually can lead to a number of problems such as liver inflammations, alcohol hepatitis, fibrosis and cirrhosis (Blachier, Leleu, Peck-Radosavljevic, Valla, & Roudot-Thoraval, 2013). Alcohol liver disease (ALD) is the most common and most serious complication of long term alcohol use (Osna, 2010). The ALD have been identified into stages; Stage 1, known as alcoholic fatty change, is characterized by the deposition of fats in the liver making it enlarged. Stage 2 is characterized by progressive liver damage leading to jaundice. The stage is referred to as alcoholic hepatitis. Alcoholic pre-cirrhosis is the third stage, with liver damage. *The stage four is the permanent liver damage, often referred to as the alcoholic cirrhosis* (Thomson et al., 2008). Liver dysfunction of any of the first three stages above can be reverse after a period of 3-4 weeks when you observe abstinence from alcohol, but for the fourth stage it is deadly on the other hand and is irreversible. Cirrhosis can lead to additional complications like vomiting blood, spleen enlargement and even death (Zakhari, 2006).

Alcohol always interferes with the brain in the communication pathways (Witt, 2010), affecting the way the brain functions. These adverse disruptions of the Central Nervous

System can change the mood and behavior, and makes it difficult to think or reason out things clearly and move with coordination. During adolescent, alcohol leads to the structural changes observed in the hippocampus (a part of the brain involving learning process) (De Bellis et al., 2000). If care is not taken, a high levels can render a permanently impairment of the brain development (Spears, 2000).

Drinking excessively or much on a single dose occasion at any time can damage the heart muscles causing problems which may include cardiomyopathy; stretching and drooping of the heart muscles, many other symptoms ranging from the chronic shortness of breath to the heart failure (Room, Babor, & Rehm,2005; Shirref, 1997). Other complications include arrhythmias (irregular heartbeats), stroke, and high blood pressure.

Although alcohol as a substance is absorbed mainly through the body from the small intestine, the undeviating effect on to the inner lining of the human stomach (M., W., & M., 2012) leads to a condition known as acute gastritis. This attacks in an acute phase which often leads to vomiting. Repeated damage to the stomach lining can lead to hyperacidity known as peptic ulcer (Teyssen & Singer, 2003). Excessive or prolong alcohol can also lead to stomach cancer (Franke, Teyssen, & Singer, 2005), Pancreatitis is an acute inflammation to the pancreas and usually triggered by binge drinking, and symptoms being presented as piercing pain in the belly. Pancreatitis can result inability to digest food (Tremblay, 1996). Long term alcohol consumption leads to a decrease production of the white blood cells, a condition which weakens the immune system leading to the easier target for diseases (Szabo, 1997). Chronic drinkers are in many cases more liable to contract such diseases like pneumonia, tuberculosis, than people who do not drink much (National Institute of Alcohol and Alcoholism, 2001).

Adding to the long list of effects of alcohol is poor diet (WHO, 2003). This is more observable in poor communities where alcohol is of pitiable quality, the wellbeing of this

people can be further affected which will be leading to a vicious cycle of uncontrolled alcohol consumption and poor health (Nimako, 2011). The wealthy human class can consume fairly a substantial huge amount of alcohol and have no direct complications from alcohol. However, the heavy alcohol consumption coupled with rich the diet can in most cases lead to obesity, an associated complications called diabetes and hypertension (Scarborough et al., 2011)

2.4.2 Psychiatric Consequences of Alcohol

When compared to adults, adolescents use of alcohol is much more likely to be heavy (Danielsson, Wennberg, Hibell, & Romelsjö, 2012), which makes alcohol use by that age group very treacherous. According to Brausch and Gutierrez, (2010), alcohol use disorders are a threat factor to suicide attempts, also found an association between lower minimum legal drinking age and suicide. The Psychiatric medical conditions are most likely to be co-occurring with alcohol usage among adolescents population include mood disorders, predominantly depression; attention deficits or hyperactivity disorder; anxiety disorders; conduct disorders; bulimia; and schizophrenia (Woods, 2011)

2.4.3 Social Consequences of Alcohol Use

Alcohol use among youths is the principal contributor to adolescent death (that is, motor vehicle crashes, homicide, and suicide) in the United States (National Institute of Alcohol Abuse and Alcoholism, 2009). Many motor vehicle accidents account for the most leading cause of death for American youths. The Youth Risk Behavior research conducted in the United States revealed that in the 30 days preceding the research, there was a 29.1% of student population nationwide who had ridden one or more times in a vehicle either driven by themselves or another person who had been drinking alcohol. About the figure

of 10.5% students reported that they had driven a car by themselves or other vehicle driven by someone else at least once when they drink alcohol (Clarks, 2004). The Center for Disease Control and Prevention (1991), came up with a remarkable hypothetical connection under the influence of alcohol leading to motor vehicle accidents which involved adolescents and the youthful population; and confused the fact that, afterwards the legal drinking age was moved to 21 years for the young generation in the United States. The death toll for individuals younger than 21 years in the states then significantly reduced. Teenagers who do drink and drive are lesser than adults, but the risk of accidents amongst this group is higher than those of adults who drink and drive (American Academy of Pediatrics, 2008).

Researchers have consistently reported to the association of alcohol use with other risky behaviors like physical assault, sexual behavioral risk-taking and other substance use (Simkin, 2002; Clark, 2004; Irons, 2006; Champion et al, 2004). According to Bonomo (2001), adolescent alcohol use is associated with increased automobile accidents and injuries sustained which leads to death, suicide, absenteeism's, poor academic performance, loss of consciousness, memory blackouts, involvement to fighting, property damage, peer criticism and broken friendships, date rape and unprotected sexual intercourse that places the adolescents at risk of STD's, HIV infection and unplanned pregnancy.

Alcohol is implicated in relationship breakdown, domestic violence and poor parenting, including child neglect and abuse (Nimako, 2011; Frimpong, 2010). Family members of people who are alcohol dependent have high rate of psychiatric morbidity, and growing up with someone who misuse alcohol increases the likelihood of teenagers taking up alcohol early and developing alcohol problems themselves (Latendresse, 2010). In a related study in Ghana, 15.1% of high school students who reported to have taken alcohol, also reported

getting drunk and getting into problems with their friends, family or fighting with their friends (Owusu, 2008).

2.5 Factors Influencing Alcohol Use

Despite the fact that alcohol is the most harmful drug for an individual as well as for society (Nutt, King & Philips, 2010; Bouwmeester, 2012.), alcohol is integrated in many cultures as an aspect of everyday life. Alcohol is integrated in such a way that literature even talks of the term “alcohol culture”.

Factors influencing alcohol use among adolescent will be looked at under the following sub topics; social norms, religion and alcohol advertising.

2.5.1 Family and Alcohol Use

Family is defined as a group of specified people related to each other either by blood, by marriage, or through legal adoption (Abotchi, 1998). Families do play important roles always in the actual development of alcohol and other drug related problems among youth (Rowe & Liddle, 2006; Hawkin, 2001). Parental influence is a critical factor in adolescent drinking (Kim & Neff, 2010). In a study conducted in Wisconsin, among high school students, reported suggested that 53.3% of the students reported that parental influence was instrumental in their intake or no-intake of alcohol (Nash, McQueen, & Bray, 2005). In the great United States alone, 7 million of the children younger than 18 years are children born of alcoholic parents (Ethan, 2000).

Drug and other substance use by parents, older siblings and liberal parental attitude towards alcohol use by adolescent foretell greater risk of young alcohol use (Moghe et al., 2011). Research confirms that parents who are liberal about discipline and do not enforce any rules are more likely to end up their old life with children who drink on a regular basis

(Jackson, Dickson, 1999; Yu, 2003). Children born of parents who abuse alcohol are at high risk of many indecent behavioral and medical problems such as delinquencies, marked learning disorders, psychosomatic complaints, and involving in drinking or alcoholism as with adults (Adger, 2001).

2.5.2 Neighborhood and Alcohol Use

The term neighborhood has been defined as social unit or social network (Frisbie, 1988; Wellman, 1979). Theories of neighborhood influences clearly demonstrated the devastating influence of neighborhood on the entire gamut of adolescent behavior (Coleman, 1998). These influences are brought about through mediating paths such as local organizations, informed social control, forming deviant peer groups, helping of social network and parents' characteristics. The community substance use also predicts the individuals behavior (alcohol inclusive) use behaviors (Brown et al., 2008). Rates of use are higher in communities in which alcohol is less expensive and easily obtainable. A study by Crum (1996), for instance showed that residing in a disadvantaged neighborhood increases the likelihood that adolescents were offered various kinds of substances (alcohol inclusive) and develop heavy drinking patterns (Karvonen & Harja 1997). Maldelanu (1965), see alcohol consumption as part of cultural artifacts. In most African countries including Ghana, alcohol is use during marriages, naming ceremonies, libation pouring, funeral ceremonies and so on. The type of drink, amount and place, rate of intake, time, sex, age and associated rituals could be traced to socio-cultural settings (Owusu, 2008; Heath, 1991). Social norms regard alcohol use as having fun, meeting old and new friends: no wonder alcohol consumption among adolescents is a true reflection of the larger societal norms, attitudes, and practices (Hope, 2003; Nimako, 2001).

2.5.3 Peer Influence and Alcohol Use

Peer influence is seen as a strong determinant of public drunkenness (Kelly et al., 2012). Having influential friends who are frequent users of alcohol or other substances is a predictor of alcohol use among adolescents. The social norm approach is a theory used to explain the influence of social norms on behavior. Social norms refer to caregivers and peers. The theory states that human behaviors influenced by incorrect perceptions of how other member of our own social group thinks or acts. Applied to alcohol use among adolescents, an adolescent assumes that other adolescents attitudes towards alcohol are more accommodating than expected and that they assume that other adolescents consume more that what they really consumes.

2.5.4 Advertising and Alcohol Use

Alcohol advertising plays an important role in sustaining a cultural environment in which drinking is seen as normal and shapes adolescents perception and attitudes towards alcohol use (Gerbner, 1995).

Alcohol advertising plays an important role in having to encourage youth to drink (Saffer & Dave, 2006). For those who haven't started to drink, the expectancies' of these youths are influenced by a normative assumption about teenage habit of drinking as well as in observing parents, peers and other role models and celebrities are on the various media to increasingly portray the use (Anderson, 2009). Considerable effort in research has shown that the media which the youth is exposed to can make them and adolescents more likely to experiment the intake of alcohol (Strasburger, 2002; American Academy of Pediatrics, 2007). Media (such as television, movies, billboards, and internet), are known to be very significant in promoting alcohol use through attractive and mesmerizing manner. According to Austin and Knaus (2000) there is an association between exposure to

portrayal of alcohol use on the media and positive drinking expectancies by adolescents. In a research conducted among older adolescents between the ages of 14 and 18 years with alcohol use disorders, showed considerably superior brain activation to alcohol beverage pictures that control youths, predominantly in brain areas linked to reward, desire and positive effect (Tapert et al., 2003). Chen and Grube (2002) also asserted that young people, having more positive sentimental responses to substance called alcohol hold more favorable drinking expectancies, they perceive a greater social approval for drinking, believe drinking is more common among peers and adults, and intend to drink more as adults. Most times, paying attention to advertising presupposes that the viewer is getting some reward or benefits from it, most basically that they are doing perceived right thing by consuming the advertised product (Aitken et al., 1998).

2.5.5 Region and Alcohol Use

Religion is for a lot of people, an aspect of everyday life (Ammerman, 2014). Religion can also be of influence on alcohol consumption (Jeynes, 2006). Religious variables such as religious preference, religiosity and alcohol prohibition are important for certain drinking patterns (Michalak et al., 2007). It is also known that students who indicate to be part of a religion reports less alcohol consumption than students who report not to follow any religion. Also, students with no religious affinity, report significantly higher level of frequency and quantity of drinking and getting drunk (Galen & Rogers, 2004).

In conclusion, existing literature indicates a high number of alcohol uses among students in second cycle institutions. A lot of factors such as social norms, peer and parental influence have been identified as a few predictors of alcohol use among adolescents. However, not many studies have been done on alcohol use among students in second cycle

institutions in Ghana. This study sets out to contribute to existing in the literature on alcohol use among adolescents in Senior High School.



CHAPTER THREE

3.0 METHODOLOGY

3.1 Study Design

The study was a quantitative cross-sectional survey that administered questionnaire to a cross section of Senior High School (SHS) students. This was done in such a way that students in all levels were represented.

3.2 Study Area

The study was conducted in two selected Senior High Schools (SHS) in the Awoshie electoral area of the Ga Central Municipality. This assembly was carved out of the Ga South Municipality in June, 2012. The Ga Central Municipal Assembly (GCMA) lies within latitudes $5^{\circ} 48'$ North and within Longitude $0^{\circ} 8'$ East and $0^{\circ} 3'$ west and covers a Land Area of 103.44 sq km. it shares boundaries with Accra Metropolitan Assembly to the south, Ga West to the east and north and Ga South to the west. The estimated population by the Municipal Population Census Unit (MPCU) for 2015 is about 169,393 people. The population of the municipality is about 49.9% male and 50.1% female. There are about 52 communities in the municipality with Sowutum as the capital. The population is a youthful one, with about 58% less than 24 years.

In terms of education, in the public sector, the Ga Central Municipal Assembly (GCMA) has only one (1) public SHS, eleven (11) JHS, fourteen (14) primary schools and twelve (12) kindergartens. Most of them lack libraries, ICT centers and recreational grounds. The private sector has eleven SHS/ Vocational/ Technical schools, one hundred and forty-seven JHS and about two hundred (200) primary and kindergarten schools. The Municipality is prided with two (2) universities. The GCMA has twenty-one (21) health

facilities; twelve private hospitals, eight maternity homes and one Community Based Health Planning (CHPS).

The only public school in the municipality will be chosen and named School A and one out of the eleven private SHS's, one will be randomly chosen and name School B. Both schools are mixed schools. School A has a total population of one thousand nine hundred (1900) with hundred (100) teachers and fifty non teaching staffs. It offers courses in science, general arts, business and visual arts. School B on the hand has a total population of one thousand two hundred and offers courses in science and arts. Both schools are located in Awoshie.

3.3 Study Population

The study population included all students from School A and School B from SHS 1 and SHS 2 between the ages of 15- 19 years.

3.4 Sample Size Determination

The sample size for the study was determined taking the following factors into consideration: Using a study done in Ghana in 2011 in the Kimtampo Municipality, with a finding of 25% prevalence among SHS students, and at 95% confidence interval and a margin of error of 5%, the sample size was calculated using the Cochran sample size proportion.

Total number of students = 3,100

$$N = z\alpha^2 \cdot p(1-p)/d^2$$

Where $z\alpha^2$ = 95% confidence level = 1.96²

$$d^2 = \text{error of margin} = 5\% = 0.05^2$$

$$p = \text{prevalence} = 25\% = 0.25$$

$$n = 1.96^2 \times 0.25(1-0.25) / 0.05^2$$

Therefore $n = 288$ (minimum sample size)

Taking into consideration a 30 to 35% non respondents and errors, a sample between 374 to 388 respondents were used in the study. 420 questionnaires were distributed but 392 were filled.

3.5 Sampling Methods

A Cluster Sampling technique was employed by the researcher with each class of learners being regarded as a primary sampling unit. Cluster Sampling is a technique used in dividing the population under study into groups known as clusters and then randomly selecting some of the groups, and then collecting data from all members of the selected groups.

A single sequential list was compiled of all the thirty (30) SHS1 and SHS2 classes in School A and in School B based on the subjects offered. The subjects were Science, General Arts, Business, Home Economics and Visual Arts for School A. School B only offers Science and Arts. Sixteen (16) classes were then selected from this list by random sampling. All the students in the selected 16 classes were invited to participate in the study.

The study only included participants from SHS 1 and SHS 2 because SHS 3 students had completed the West African Secondary School Certificate Examination (WASSCE) and had vacated before the data was collected. A valid sample of 392 students out of the 420

questionnaires administered were collected and analyzed from the two selected SHS schools in the municipality. Equal number of male and female respondents, that is, 196 respectively were analyzed and compared on measures relating to the study.

3.6 Data Collection Tool

The study employed quantitative approach to data collection. The measurement tool for the study was a self-administered questionnaire, available in English language. The research team in collaboration with the school authorities came to a conclusion that the students were comfortable with the English language and hence the translation of the questionnaire into other local dialect was not done. The questions were open ended and close ended. It included questions related to socio-demographic characteristics, socioeconomic characteristics, alcohol use, means of getting alcohol, family and peer alcohol use and so on.

3.6.1 Procedure

The study received ethics approval from the Ghana Health Service Ethical Committee. A letter of introduction from the School of Public Health was sent to the Director of Education in the Ga Central Municipality to seek authorization to conduct the study. After approval giving, copies of the introduction letters were sent to the head of the two selected schools. These letters were sent before the study commenced. During this visit, the Heads of the schools were briefed of the researcher purpose and what the study aims to achieve. Due to time constraint and in order not to interfere with school activities, the research team were giving just a day to collect data in each school.

A passive parental consent procedure was employed. A leaflet was sent to the guardians of the students, which entitles information about the nature of the research and their right to

refuse their child's participation. A refusal form was attached to the leaflet. If the form was returned, it was assumed that the consent had been given by the guardian. Informed assent was sought from the students whose parents did not refuse to allow them participate? Those students whose parents did not want were excluded from the survey as well as those who themselves wished not to participate. A total of 430 questionnaires were administered.

Two research assistants were recruited. Training involved introduction to the purpose of the study. The principal researcher ensured that the assistants were familiar with study objectives and methodology and they were thoroughly taken through the questionnaire. The research assistants were involved in carrying out the pilot study and they were also introduced to the heads of the selected schools.

In both schools, the researcher was present with the assistants throughout the entire data collection. The selected students were allowed to ask questions for clarification, they were assured of confidentiality and anonymity. The subject of voluntary participation was emphasized to allow any student who wishes to withdraw from the study to do so, but none did. Selected participants were taken through the questionnaire as a group. Sitting arrangement was done in such a way to discourage communication and any form of discussions. Each participant was given two pens before the start of the study and a Yogurt after completion. School heads and teachers were given diaries and pens. A total of two days was used for the data collection.

3.7 List of Variables

Dependent Variable

Alcohol Use

Independent Variables

Demographic background

Parental Influence

Alcohol advertising

Religious beliefs

Cultural Beliefs

Peer influence

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3.8 Quality Control

The Research Assistants underwent a 2-day training where they were introduced to the research protocol and the questionnaire and made to undergo interview simulations to polish up his skills. This was important in order to familiarize them with the questionnaire administration and thus reduce inconsistencies and biases during the explanation.

Each question was explained in English to ensure that participants understood clearly what the question meant. Furthermore, participants were encouraged to ask the research team any question for clarifications.

Teachers and members of staff were not allowed to sit in the classroom during the time when students were completing the questionnaire. To ensure quality of work, the researcher accompanied the research assistant to every school to collect data and to cross-check on data collected. All questionnaires were collected from participants and checked

for completeness and accuracy and any irregularities at the school. All data collected were kept by researcher for analysis and report writing. At the data analysis stage researcher again checked that data was complete and consistent.

3.9 Data Analysis

Data from questionnaire was analyzed using SPSS 20.0 software and results presented in frequency table and descriptive analyses. The descriptive statistics was used to ascertain information about the prevalence of alcohol use; the comparisons of variables between the two schools used for the study and assess the major aspects of media that influenced alcohol use among the respondents. Test of association and correlation between explanatory variables and the outcomes of interest was done using Chi square tests.

3.10 Ethical Consideration

Ethical clearance was sought from the Ghana Health Service Ethical Review Committee. Permission from the Municipality Education unit, from the school authorities, parents/guardians and students was also sought for before commencement of the study.

3.11 Pretest or Pilot Study

The questionnaire for the study was pre-tested with two SHS. The researcher and the research assistants carried out the pilot study. Points to be noted and assessed during the pretest included, availability of the sample needed for the full study, desire of the students to participate, clarity of the language used and time needed for administering the questionnaire. Based on feedback from the pre-test the questionnaire was modified to ensure its suitability to the study.

3.12 Limitations of the Study

- ❖ The total number of schools used in the study was not a representative of the various schools in the municipality, which is a total of 13 schools.
- ❖ The SHS 3 students were not available to participate in the study. This group may have been older and therefore would have more knowledge and experience concerning the topic of study.
- ❖ The presence of some staff members may have influenced the responses of the study.
- ❖ The authorities in school B considered their students to be of strong religious and moral standing and therefore were reluctant in making them part of the study. This may have influenced the responses of the participants in that school.
- ❖ The average weather conditions (rains) affected the budgeted funds for transportation which in turn affected the time used in the data collection.
- ❖ Finally, sessions carried out during the raining season and before school closing time may affect participant's responses in the bid to complete the questionnaire and leave especially the day students.



CHAPTER FOUR

4.0 ANALYSIS AND RESULTS

This chapter presents findings of the study obtained from the analysis. This is done in relation to the study's objectives. Findings reveal that a total of 392 SHS students completed the structured questionnaire out of the 421 questionnaires distributed.

4.1 Socio-demographic Characteristics and Alcohol use

Table 4.1 shows the summary of the demographic details of respondents of the study. There were 392 respondents involved in the study with equal number of males (196) and females (196). The age distribution ranges from 15 to 19 years with a mean age of 16.9 years and a standard deviation of 1.171.

Majority (92.3%) of the respondents were Christians. Also, 55.9% (219) of the respondents were in SHS 1. The Akan speaking people were in the majority (62.5%) followed by Ewe and Ga. It came to light that most (64.1%) of the respondents were living with both parents.



Table 4.1: Socio-demographic Characteristics of Respondents

Variable	Frequency	Percentage
Age		
15	45	11.5
16	116	29.6
17	112	28.6
18	77	19.6
19	42	10.7
Gender		
Male	196	50
Female	196	50
Religion		
Christianity	362	92.3
Islam	27	6.9
Traditional	1	0.3
No religion	2	0.5
Ethnicity		
Ga	52	13.3
Ewe	58	14.8
Akan	245	62.5
Other	37	9.4
Form		
SHS 1	219	55.9
SHS 2	173	44.1
Living with		
Single parent	85	21.7
Both Parents only	103	26.3
Parents and siblings	148	37.8
Other relatives	46	11.7
Living alone	4	1
Non-respondent	6	1.5

4.2 Prevalence of Alcohol Use

The study showed that about a third of respondents (137), attested that they have taken alcohol before. Assessing their current intake of alcohol, it came to light that, majority of the participants who had taken alcohol, no longer take alcohol with only 5.8% reporting that they still drink alcohol. This is shown in Table 4.2 below.

The kind of alcoholic beverages that were reportedly taken by those who had taken alcohol before were beer, wine and dry gin. Only two people said they had taken all the three categories of alcohol before.

When the 137 participants were asked about their means of getting these alcoholic beverages, varied responses were provided. These details are highlighted in Table II below with the highest being from friends and lowest being from buying the alcoholic beverage

Table 4.2: Prevalence of Alcohol Use

Variable	Frequency	Percentage
Alcohol Intake		
Yes	137	35
No	249	63.5
Non- Response	6	1.5
Total	392	100
Current Alcohol Us		
Yes	8	5.8
No	129	94.2

Table 4.3: Preferred Alcoholic Beverage

Variable	Frequency	Percentage
Beer	61	44.5
Wine	22	16.1
Spirit	48	35
All the above	2	1.5
Non-response	4	2.9

Table 4.4: Means of Getting Alcohol

Variable	Frequency	Percentage
Parental supervision	12	8.8
Relatives offer	8	5.8
Home without parental knowledge	27	19.7
Friends	39	28.5
Bought	7	5.1
Non-respondent	44	32.1

4.5 Perceived Effects of Alcohol Use

Delving into the effects of alcohol use on respondents, the study revealed that majority of the participants' reported no physical effect of taking alcoholic beverage. About 95% of the respondents disclosed that they have not suffered any effect of alcohol use assessed. However, 8.7% (34) of the participants reported that they were involved in one form of accident or the other. The effects of alcoholism that the respondents were assessed on were inability to study, getting into a fight, missing out on important things, being embarrassed or causing embarrassment to others, neglecting one's duties, getting to school drunk or high, passing out or fainting and being involved in an accident due to one's alcohol intake or that of other people they were with (Table 4.5)

Table 4.5: Perceived Effects of Alcohol Use

Variable	Frequency	Percentage
Inability to study		
Yes	21	6.4
No	366	93.6
Getting into a flight		
Yes	18	5.1
No	372	94.9
Missing out on important things		
Yes	13	3.8
No	377	96.2
Being embarrassed		
Yes	14	4.3
No	375	95.7
Neglecting duties		
Yes	21	5.9
No	369	94.1
Being shunned by family members		
Yes	14	4.1
No	376	95.9
Getting to school drunk		
Yes	10	3.1
No	380	96.9
Passing out		
Yes	14	3.3
No	379	96.7
Being involved in an accident		
Yes	34	8.7
No	358	91.3

4.6 Factors that Influence Alcohol Use

Examining the factors that influences alcohol use revealed that peer pressure is the most influential among students with parental or sibling influences being the least. This information is detailed in Table 4.6.

Majority of 68.9% (270) of participants said they had access to at least a source of media with 27% (106) saying they did not have any source of media to access. The remainder 4.1% (16) failed to offer an answer to this question. Out of the 270 participants who divulged to having access to media, 79.3% (214) watched the television, 9.6% (26) listened to radio, 14% (38) disclosed that their mobile phones served as a means of getting information and 0.7% (2) said they read magazines to get information they needed.

Further probing disclosed that 54% (74) of the 137 participants who have taken alcohol before were encouraged by advertisements. From this number, 44 were encouraged by the use of celebrities which accounted for 59.4%. This was followed by the use of particular persons in alcohol advertisements who were seen as role models by these students constituting 18.9% (14). Also, 17.5% (13) said music encouraged them and the remaining 4% (3) of were encouraged to take alcohol through the use of animation.



Table 4.6: Factors Influencing Alcohol Use

VARIABLES	FREQUENCY	PERCENTAGE
General Influence of Alcohol:		
Peer Pressure	26	6.6
Advertisement	18	4.6
Social Media	15	3.8
Parent/ Sibling Influence	11	2.8
Availability/Accessibility of Alcohol	13	3.3
None	297	75.8
Perceived Influences on Others:		
Peer Pressure	137	35.0
Advertisement	35	8.9
Social Media	31	7.9
Parent/ Sibling Influence	7	1.8
Availability/ Accessibility of Alcohol	22	5.6
None	148	37.8
Access to Media		
Yes	270	68.9
No	106	27.0
Sources of Information		
Television	214	54.6
Radio	26	6.6
Magazines	2	0.5
Mobile Phones	18	9.7
None	105	26.8
Advertising Encouragement		
Yes	74	18.9
No	289	73.7
Aspects of Advertisements		
Use of Celebrities		
Musicals	44	11.2
Animation	13	3.3
Use of Role Models	3	0.8
None	16	4.1
	301	76.8

4.7 Reason for Alcohol Use

Out of the 137 respondents who attested to have taken alcohol, majority (45%) said curiosity about alcohol and its effects was the reason for their intake. The reason for getting drunk was the least. This is shown in table 4.7.

Table 4.7: Reason for Alcohol Use

Variable	Frequency	Percentage
Curiosity	61	44.5
Offer from parents	17	12.4
Friends encouragement	20	14.6
To flee from problems	10	7.3
To get drunk	6	4.4
Non-response	23	16.8

4.8 Comparisons of Schools used for the Study

Comparing the demographic characteristics of the two schools, A and B used for the study, School A is a government SHS which presented 198 participants for the study while School B is a private SHS and offered 194 participants. It was found that School B is averagely older than school A with a mean of 17.1 (SD1.144) as against School A with the mean age of 16.7 (SD 1.178). There were more male participants from School A in the study which represented 58.1 % (115) of their 198 participants with 42% (83) females. School B however, involved more females in the study, 58.% (113) and 42% (81) males. Majority of the participants from both schools belonged to the Christian religion with 88.9% (176) and 95.9% (186) in School A and School B respectively. The Akan ethnic group was the highest in the study, with 46.5% (92) in School A and 78.9% (153) in School B.

By comparing the schools, 39.4% (78) of the participants in school A attested to taking alcohol before while 30.4% (59) of the participants attested to have taken alcohol before in

school B. Also, 7.7% (6) in School A and 3.4% (2) of the participants in school B said they still take alcohol. Beer is the most preferred beverage for participants in both schools. Curiosity was the most influential in driving most of the students to take alcohol representing 50% of the 78 who took alcohol in school A and 37.3% out of the 59 students who took alcohol in school B.

The study revealed that, majority of the students in both schools did not suffer any of the effects that were assessed in the questionnaire. This can be attributed to the significantly higher percentage who said they have not tasted any alcoholic beverage before. The average percentage of students who have been involved in some form of accident due to alcohol use was however higher in school A than school B. Overall, the average number of students who said they have not suffered any negative effect from the use of alcohol was about 95% in both schools. It is noteworthy to reveal that two participants from school B did not provide responses for the questions in this section. Table V.

Analyzing the influences that push SHS students to take alcohol divulged that peer pressure is the most influential factor of alcohol use in both schools. For school A, 12 (15.4%) out of the 78 students who attested to have taken alcohol before said it was due to pressure while in school B, 14 (23.7%) of the 59 students who took alcohol said it was due to peer pressure. This was then followed by the availability or accessibility of alcohol where in school A 10 (12.8%) students said they took alcohol because they had access to it or it was readily available to them. However, students who took alcohol from school B were mostly influenced by advertisement aside peer pressure and 8 (13.6%) people attested to be influenced by advertisements. From the total sample, 37.9% (75) of the participants in school A believed peer pressure influences others to take alcohol while in school B, 32% (62) students believed same. Social media was believed to be the next influential factor on other people in school with 10.6% (21) of the sample while

advertisement was believed to be next influential factor of alcohol use with other people in school B thus 7.7% (15). With some participants having attested to having access to media, it was seen that using celebrities influenced students the most when it came to using alcohol with school A revealing that 22 (28.2%) of the 78 preferred that and 22 (37.3%) of the 59 who said they took alcohol preferring it. The next aspect of advertisement that was revealed to influence students to take alcohol was the use of role models and this was evident in both schools.

4.9 Test of Associations of Explanatory Variables

This section offers the summary of the associations of some variables of interest in tables VI-XII using the Chi-Square tests. These variables were demographic background, religious beliefs, cultural beliefs, parental influence and alcohol advertisement which served as the independent variables to measure their relationships with on alcohol use of SHS students, which was the dependent variable. The abbreviations and symbols below represent the following. Degree of freedom (df), Pearson Chi-Square value (X^2), the significant (p) value ($p < 0.05$) and Phi value (ϕ).

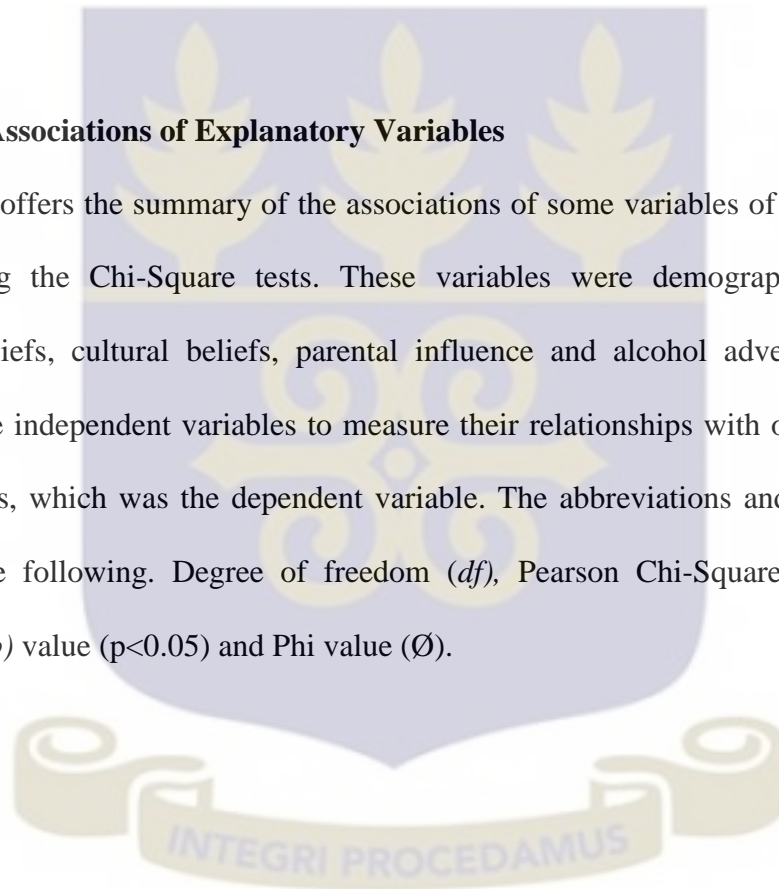


Table 4.9: Association between Demographic Characteristics and Alcohol Use

Variable	Alcohol use		X ²	P-value
	Yes (%)	No (%)		
Age			22.49	0.128
15	9(20.0)	36(80.0)		
16	37(31.9)	79(68.1)		
17	41(38.0)	67(62.0)		
18	31(41.3)	44(58.6)		
19	19(45.2)	23(54.8)		
Gender			20.07	0.001
Male	88(45.6)	105(54.4)		
Female	49(25.4)	144(74.6)		
Religion			10.09	0.608
Christianity	132(37.1)	224(62.9)		
Islam	3(11.1)	24(88.9)		
Traditional	1(100)	0(0.0)		
No religion	1(50.0)	1(50.0)		
Ethnicity				
Ga	26(50.0)	26(50.0)	29.73	0.003
Ewe	27(49.1)	28(50.1)		
Akan	79(32.8)	162(67.2)		
Other	4(10.8)	33(89.2)		
Form			6.05	0.195
SHS 1	76(35.5)	138(64.5)		
SHS 2	61(35.5)	111(64.5)		
Living with				
Single parent	39(45.9)	46(54.1)	24.43	0.661
Both Parents only	35(34.7)	66(65.3)		
Parents and siblings	45(31.00)	100(69.00)		
Other relatives	15(32.6)	31(67.4)		
Living alone	2(50.00)	2(50.00)		

The results of the analysis in table 4.9 indicate that, there exist a significant association between gender and the ethnicity of a student in the Ga Central Municipality and the tendency to take alcohol with P-values of 0.001 and 0.003 respectively. However, there was no significant association between age, sex, form, religion and the person of influence living with.

4.10 Association between Advertisement and Alcohol Use

The table 4.10 indicates that there was a significant association between advertisement and alcohol use among the students, $p=0.001$.

Table 4.10: Association between Advertisement and Alcohol Use

Variable	Alcohol use		P-value
	Yes	No	
Advertisement			0.001
Yes	62	62	
No	12	221	



CHAPTER FIVE

DISCUSSIONS OF FINDINGS

5.0 Introduction

The study was carried out mainly to determine the prevalence and the factors that influence alcohol use among SHS students in the Ga Central Municipality. This chapter therefore reveals the major findings from the analyzed data and the overall conclusions of the study after which recommendations are made.

5.1 Socio-Demographic Characteristics and Alcohol Use

The study revealed that there is no significant association between the age of respondents and their tendency to use alcohol ($p=0.128$). This finding is in contradiction to a study carried out by Ntowbea- Cofie, (2010) in the Dangme West District showing a significant difference in age between those who drink and those who do not, where ($p=0.003$).

The study also shows a relationship between gender of the respondents and their tendency to use alcohol ($p=0.001$). This concurs to a study by Adu-Mireku, (2003) among SHS students in Accra which reported that boys are more likely than girls to use alcohol. Also, the findings concurs with a Global School –Based Survey done in Uganda 14% and 12% of boys and girls aged 13-15 years, respectively reported that they took alcohol so much that they got drunk.

There was no significant relationship between religion and alcohol use among the respondents ($p=0.608$). The finding on religion and alcohol consumption is not in line with Galen & Roger (2004), assertion that student who indicates to be part of a religion report less alcohol use compared to those without any religion.

Alcohol use is among participants in Form 1 and Form 2 is similar. One would have expected a higher proportion of users in Form 2 than in Form 1. This is probably due to

the similarities in ages among students in both classes. But a significant relationship existed between ethnicity and alcohol use among the respondents.

5.2 Prevalence of Alcohol Use.

The study reveals that 35% of the total sample attested to have taken alcohol. This can therefore be used as a conclusion that there is a prevalence of alcohol use among SHS students who participated in the study. The finding from the study therefore concurs with the findings of Boschloo, Reeuwijk, Schoevers, and Penninx, (2014) as well as the findings of Corte and Sommers, (2005). The value also shows that the prevalent rate in the Ga Central Municipality is higher than that obtained from the Kintampo Municipality when similar studies were done by Nimako, (2012) and Adu- Mireku, (2003) among SHS students in Accra with alcohol use prevalence of 25.7.

Relating the findings of the current intake of SHS students in the Ga Central Municipal to that of a study done among SHS students in South Western Nigeria (Fatoye, 2003), there is a major decrease in alcohol use with a recording of 5.8% from this study as against the 13% obtained from that study.

5.3 Preferred Alcoholic Beverage

The study further shows that the type's alcoholic beverages preferred are mostly beer and wine. However, beer is reported to be the most preferred category of alcoholic beverages contributing 44.5% of the number who said they enjoyed alcohol. This is true for a study conducted by Tanski et al, (2011) in the UAS among 2699 youth between the ages of 16 to 20 years in the USA. The finding showed that about 42% the respondents attested that beer is the alcoholic beverage of preference.

5.4 Reasons for Alcohol Use

The study revealed that, the major reason that made students in SHS take alcohol for the first time was out of curiosity. This reason contributed 44.5% of the entire assessed reasons used in the questionnaire. This was followed by friends' encouraged with the minority reason being for the purposes of getting drunk with 4.4%. The finding is in contradiction to (Kim & Neff, 2010) that parental alcohol intake is primary influencer to an adolescent alcohol use. Also, a study conducted in Wisconsin by (Nash, McQueen & Bray, 2005) among High School students showed that, 53.3% said that parental influence was instrumental to the intake and no-intake of alcohol.

5.5 Effects of Alcohol Use

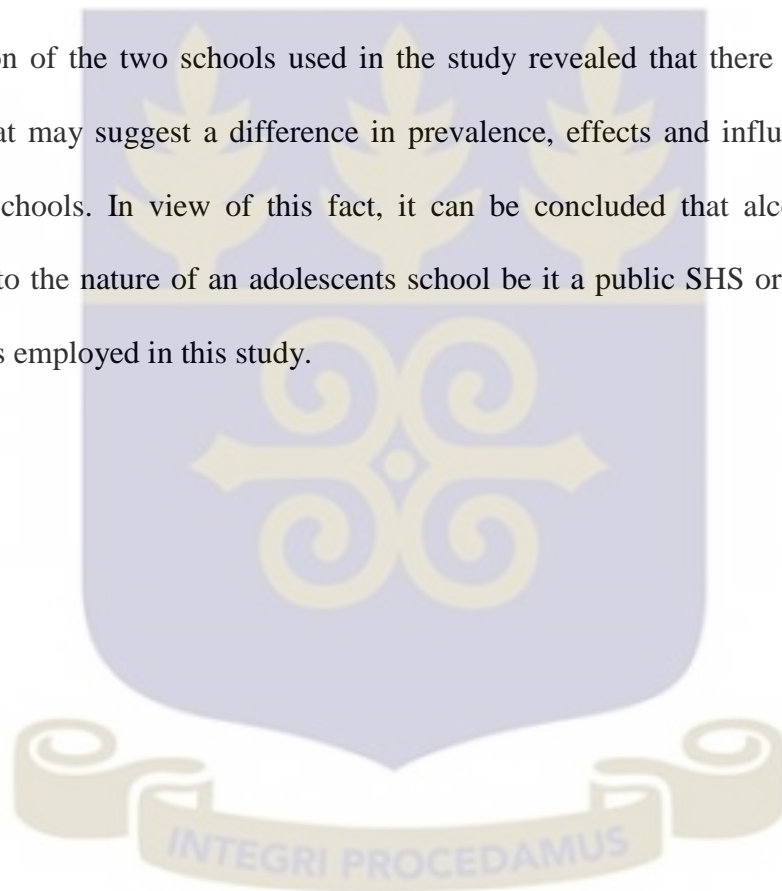
Also, the study brought out information that there was a significantly no effect of alcohol use among SHS students. Close to 95% of the respondents said they have not experienced any of the effects of alcohol stated in the questionnaire used in the study. There were no medical, psychiatric or social consequences that can significantly be attributed to the use of alcohol by SHS students in the Ga Central Municipality. Effects like poor diet found in the studies of WHO (2003), peptic ulcer (Teysse & Singer, 2003) among other significant effect from other studies were not found out in this study.

5.6 Factors Influencing Alcohol Use

The study revealed that alcohol advertisement and peers are the major influences of alcohol use among students. The findings somehow confirms the assumption made by Anderson et al (2009), that exposure to alcohol advertising increases the likelihood that an adolescent will consume alcohol.

Parental influence, religious beliefs, students' level in SHS and the age of students did not have any influence on the use of alcohol by students. That being said, it is noteworthy to reveal that gender and ethnicity or cultural beliefs are significant influences of alcohol use among students although their influences have weak correlations. The findings gotten from the studies of Kim and Neff, (2010) have therefore been contrasted by this finding. There is also a contradiction in the findings of Latendresse, (2010) which offered that parental influence affects the alcohol use of adolescents.

A comparison of the two schools used in the study revealed that there is no significant recording that may suggest a difference in prevalence, effects and influences of alcohol among the schools. In view of this fact, it can be concluded that alcohol use has no relationship to the nature of an adolescents school be it a public SHS or private SHS for that matter as employed in this study.



CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The results obtained from the study suggested that there was a low prevalence of alcohol use among SHS students in the Ga Central Municipality. For those who took alcohol, the principal factors that influenced them to drink were alcohol advertisement and peer pressure. There were however, no reported significant effects of alcohol on the students who use it.

6.2 Recommendations

- ❖ Similar studies should include SHS 3 students and also out of school adolescents in the community.
- ❖ The mesmerizing nature of alcohol advertising on our Medias should be reduced.
- ❖ The influence of peer pressure should also be tackled especially in our second cycle institutions to reduce its negative effects on adolescents by focusing on its positive sides
- ❖ The study also showed that majority of the respondents live with their parents and they serve as their main of pocket money. Parents should use this opportunity to moderately give their children just the amount that they need. Also parents should live a model life worthy of emulation by their children and neighbors.
- ❖ Finally, the youth should have life skills both in schools and the community so as to give them less time to indulge in risky behaviors such as alcohol misuse and abuse.

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APPENDICES

Appendix A: Questionnaire

INTERVIEWER:

This questionnaire is to best help us to understand the effects, and factors that influence alcohol use among adolescents between the ages of 15 to 19 years in two selected SHS schools in the Awoshie area of the Ga Central Municipality.

Your participation in the study is completely voluntary. We would also like to assure you that all information collected in the course of the study will remain confidential.

The name and questionnaire number only help us to identify the respondent in case clarification is needed but your name will not appear on any document coming out of the study

→ Ask for oral consent.

Thanks a lot for your participation. In case you have any questions, please let us know.

Please also ask when you have a problem understanding a question.

DEMOGRAPHIC BACKGROUND

No	Questions	Response	Code
1	What is your age?	Write age in years in the box provide	<input type="text"/>
1a	Sex	Male Female	1 2
1b	Form	SHS 1 SHS 2 SHS 3	1 2 3
1c	Religious Denomination	Christian Muslim Traditional No Religion Other, specify	1 2 3 4 88
1d	Ethnicity	Ga Ewe Akan Other, specify	1 2 3 88
1e	With whom do you live with?	only father only mother both father and mother both parents and siblings	1 2 3 4

		other relatives living alone others specify.....	5 6 88
1f	What is your father's occupation?	No work Civil servant Self-employed Transport worker Others specify.....	1 2 3 4 88
1g	What is your mother's occupation?	House wife Civil servant Self-employed Others specify.....	1 2 3 88
1h	Where do you get your pocket money from?	Parents Guardians From working Gifts Others, specify	1 2 3 4 88
1i	How much do you spend on average as pocket money?	Please specify in the box provided.	<input type="text"/>
1j	Do you also work apart from being a student?	Yes no	1 2
1k	Do you know someone who drinks alcohol?	Yes No	1 2
1l	If yes, who is he/she to you?	Friend School mate Classmate Parent Relative Neighbour Teacher Other Specify	1 2 3 4 5 6 7 88
1m	Are you aware that some of your colleague students drink alcohol?	Yes No	1 2

ALCOHOL CONSUMPTION AND FREQUENCY

2a	Have you taken any alcoholic beverage before?	Yes No (skip to Q2d)	1 <input type="checkbox"/> 2 <input type="checkbox"/>
2b	If yes, to Q2a, how old were you when you first took an alcoholic beverage?	Please provide the answer in the box provided	<input type="text"/>
2c	What is the name of the drink you took?	Provide the answer in the box	<input type="text"/>
2d	Do you currently drink alcohol?	Yes No	1 2
2e	In the past year, how often have you had an alcoholic beverage?	Monthly 2 – 4 times a month 2 -3 times in a week 4+ times per week None	1 2 3 4 77
2f	How do you get your alcohol?	Supervised by parents or relative From brothers or sisters From home without parents knowledge Get it from friends Buy on my own (on the street or under false pretense) None	1 2 3 4 5 77
2g	What time of the day do you use alcohol?	At night Afternoon (after school) during school In the morning or when I first awake None	1 2 3 4 77
2h	Which of the alcohol beverages do you drink?	Beer Wine Spirits All None Others specify	1 2 3 4 77 88
2i	How much on an average do you spend on your alcoholic beverage of choice?	Provide answer in the space provided	Gh¢.....
2j	Currently, when you drink alcohol, how much do you usually drink?	1 drink 2 drinks 3-4 drinks 5-9 drinks 10 or drinks none	1 2 3 4 5 77

REASONS FOR ALCOHOL USE

3a	Do you have any reason for drinking alcohol?	Yes No Not known	1 2 3
3b	If yes to Q3a, what is the main reason?	To have fun I like the feeling To relax To cope with stress To be like my friends I am bored I feel sad for myself	1 2 3 4 5 6 7
3c	Why did you take your first drink?	Curiosity Parents or relative offer Friends encouraged me To get away from my problems To get drunk	1 2 3 4 5

EFFECTS OF ALCOHOL USE

For the set of question in this section, indicate how many times this has happened to you while drinking in the last year

4a	Not able to do my homework or study for a test.	None 1-2 time 3-5 times More than 5 times	1 2 3 4
4b	Got into a fight with other people (friends, relatives, strangers)	None 1-2 times 3-5 times More than 5 times	1 2 3 4
4c	Missed out on other things because you spent too much on alcohol	None 1-2 times 3-5 times More than 5 times	1 2 3 4
4d	Went to school drunk or high	None 1-2 times 3-5 times More than 5 times	1 2 3 4
4e	Caused shame or embarrassment to someone	None 1-2 times 3-5 times More than 5 times	1 2 3 4
4f	Neglected my duties and responsibility	None 1-2 times	1 2

		3-5 times	3
		More than 5 times	4
4g	Shun by friends and relatives	None	1
		1-2 times	2
		3-5 times	3
		More than 5 times	4
4h	Missed a day at school	None	1
		1-2 times	2
		3-5 times	3
		More than 5 times	4
4i	Found yourself in a place that you could not remember getting there	None	1
		1-2 times	2
		3-5 times	3
		More than 5 times	4
4j	Passed out or fainted suddenly	None	1
		1-2 times	2
		3-5 times	3
		More than 5times	4
4k	Have you ever been involved in an accident due to drinking that resulted in injury either to yourself or others?	Yes	1
		No	2
4l	Was told by a friend, neighbor, or relative to stop drinking	None	1
		1-2 times	2
		3-5 times	3
		More than 5 times	4

FACTORS INFLUENCING ALCOHOL USE

5a	Generally, What influences you to drink?	Peer pressure	1
		Advertisement	2
		Social media	3
		Parental/sibling influence	4
		Availability/ accessibility to alcohol	5
		none	77
5b	What do you think influences other adolescents to drink?	Peer pressure	1
		Advertisement	2
		Social media	3
		Parental/sibling influence	4
		Availability/ accessibility to alcohol	5
		None	77

5c	Where do you usually get information on alcoholic beverages from?	Advertisement Friends and peers Social media Other, specify	1 2 3 88 77
5d	Do you have access to the mass media?	Yes No	1 2
5e	If yes to Q5d, what are your main media sources?	Television Radio Billboards Magazines Mobile phone Other, specify	1 2 3 4 5 88
5e	Does alcohol advertising encourage you to use alcohol?	Yes No	1 2
5f	If yes to Q5e what aspects of advertisements encourage you to drink?	Use of celebrities Musical Animation Role models Other, specify	1 2 3 4 88



Appendix B: Informed Consent Form

This informed consent form is for all eligible Senior High School students In the Ga Central Municipality who are been invited to take part in the research entitled “**Alcohol Use Among Senior High School Students in the Ga Central Municipality**”.

Name of Researcher: **Joyce Annor**

Name of Institution: **University of Ghana, School of Public Health, Legon.**

Proposal Topic: **Alcohol Use Among SHS students in the Ga Central Municipality.**

This form is in two (2) sessions:

- Information the study
- Certificate of consent

PART 1: Information Sheet

Introduction

For academic purposes, this study seeks to identify the prevalence, reasons, effects and the factors that influence alcohol use among Senior High School students in the Ga Central Municipality.

Your full participation will be of great help to the success of this research. The research will go a long way to add to limited knowledge on alcohol, and help school administrators and the nation as whole to design interventions to control alcohol use among adolescents.

Purpose of the Research

Alcohol use is a one of the numerous Public Health problems and most literature says has its genesis in adolescence. Adolescents are known to abuse drugs and alcohol is said to be the most abused drug by adolescents. The abuse of alcohol can lead to risky sexual

behaviors, violence, Juvenal delinquency, conflicts (with family members and friends), accidents just to mention a few.

We want find ways to stop these vices and we believe that your participation will help us acquire the information needed.

Types of Research Intervention

This research will involve your participation in answering a structured questionnaire that will take about 30 – 45 minutes. You can answer the question yourself or you may be helped by the research team.

If you are uncomfortable in answering any of the questions included in the survey, you may skip and move to the next question. Information recorded confidential; your name will not be included on the form, only a given number will be used to identify you. No one except the research team will have access to your answers provided in the survey.

Participant Selection

You are being selected to participate in this research because we feel that your knowledge and experience as an older adolescent can contribute immensely to our understanding of the factors that influences this age group to use alcohol.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate in the research or not. The choice you make will not have any bearing on your academic, private or personal life. You may change your mind later or stop participating even if you have agreed earlier.

Benefits

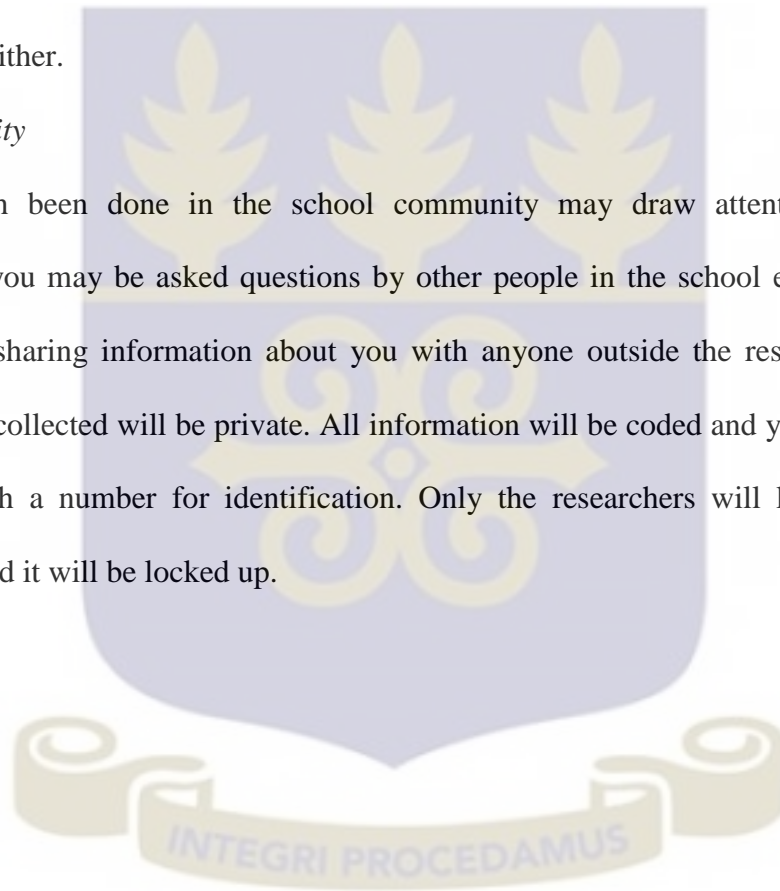
There will be no direct benefits to you but your participation is likely to bring great improvement in the educational system.

Risk

There is no risk involve in taking part I the research. However, we are asking you share with us some very personal and confidential information and you may feel uncomfortable talking about it. You do not have to answer any of those questions if you don't want to do so, and that is fine. Furthermore, you do not have to give any reason for not answering not responding either.

Confidentiality

The research been done in the school community may draw attention and if you participate, you may be asked questions by other people in the school environment. We will not be sharing information about you with anyone outside the research team. The information collected will be private. All information will be coded and your name will be replaced with a number for identification. Only the researchers will know what your number is and it will be locked up.



PART 11: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Initials of Participant _____

Signature of Participant _____

Date _____

Day/month/year

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands the processes involve.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Researcher/person taking the consent _____

Signature of Researcher /person taking the consent _____

Date _____

Day/month/year