UNIVERSITY OF CAPE COAST

FACTORS CONTRIBUTING TO SUBSTANCE USE AMONG SENIOR HIGH SCHOOL STUDENTS IN THE KUMASI METROPOLIS, GNANA

STEPHEN ANKRAH

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BY

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Thesis submitted to the Department of Guidance and Counselling of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Guidance and Counselling**.**

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature…….Date……..

Name:……...

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature…… Date…….……..

Name:……..

ABSTRACT

The study examined factors that contribute to substance use among senior high school students in the Kumasi Metropolis. The study was carried out employing the descriptive survey design. A sample of 385 SHS 2 students was used for the study. Stratified and simple random techniques were used to select the respondents. The data collected were analysed using frequencies, percentages, standard deviation, mean and simultaneous multiple linear regression. It was revealed that the substances used mostly by the students were coffee and alcohol with percentages of 21.9% and 6.3% respectively. It was further revealed that familial factors such as parental usage of drugs, ineffective monitoring by parents and poor parent-child relationship influenced the use of substance by the students. Peer pressure and influence of the media were identified as social factors. It was further found that personal factors such as poor school performance, self-esteem and stress influenced the use of drug by the students. It was concluded that the most abused substances (alcohol and coffee), are all legal substances. Also, in terms of relative contributions, familial factors contributed most, followed by personal and social factors**.** In view of this, it is recommended that the Guidance and Counselling unit of the various SHSs be encouraged to organize regular and comprehensive guidance programmes on drug use to sensititize students on dangers of substance use and abuse. Besides, the study recommends that parents desist from using alcohol and other illicit substances in the presence of their children.

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My special thanks also go to Dr. Stephen Doh Fia (HOD), Dr. Sylvia Ocansey and Prof. Joshua A. Omotosho all of Department of Guidance and Counselling, University of Cape Coast who helped me in diverse ways to make the study successful. I also acknowledge Mr. Francis Ankomah for his prompt responses and support throughout the study.

DEDICATION

I wish to dedicate this work to my late father, Akwasi Twumasi-Ankrah, my wife, Miss Faustina Hagar Asante and my children (Samuel Twumasi-Ankrah and Purity Achiaa Ankrah) for their inspiration and support throughout my master's degree programme.

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CHAPTER ONE

INTRODUCTION

The global agenda to ensure and promote healthy lives and wellbeing across all at all ages as specified in the Sustainable Development Goal (SDG-3) may not be realised, if the issue of high incidence of substance use and abuse is not addressed. The Target 5 of the (SDG-3) states "Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol" It is noteworthy to state that substance use and abuse especially among the youth has become a major public health challenge affecting many nations of which Ghana is no exception. Though, illicit drug use appears to be generally stable, the trend has continued rising in several developing countries. For instance, approximately 5% (230 million people) of global population have used narcotic drugs at least once in their lives World Health Organization [WHO] (2019).

Several studies have underscored that having adequate knowledge on causative factors regarding substance use, is one of the effective ways of addressing the menace. However, many research studies in Ghana focused on other variables without much emphasis on factors leading to its high usage in the country. Since most of the changes that underlie adolescence developmental processes make them highly susceptible to engage in deviant behaviours, such as substance use in their search for identity Erikson, as cited in Antiri, Fia & Nyarkoh-Sampson (2012). It was therefore necessary that the

study was conducted at Senior High School level where most people who use substances were initiated into the act.

Background to the Study

According to the WHO (2018), substance abuse refers to the *"harmful use of psychoactive substances including alcohol, tobacco and illicit drugs"*. However, substance use is the misuse of drugs or using not prescribed drug for curative purpose (Oakley & Ksir, 2002). The major impacts of substance use and abuse on society are adverse health effects on individuals and social vices as well as heavy financial burden on the individual, family and society. Moreover, the adverse effect on the individual may take several forms that is, behavioural, physiological and cognitive (Jorge et. al, 2018). Across the world, an estimated 11.8 million people die each year due to substance use and abuse (World Drug Report, 2018). The report further stressed that more than 271 million individuals within the age category of 15- 64 had consumed drugs in the previous year.

Also, more than 35 million people worldwide suffer from drug use disorder while only one in seven of these people receive treatment. These pieces of evidence from the global level tend to suggest that the practice of substance use and abuse in recent times has exacerbated especially among adolescents across the world. For instance, in countries such as the United States of America, United Kingdom, Norway and Turkey, statistics by the United Nations Office on Drugs and Crime (UNODC) suggest that substance abuse remains very high mostly among adolescents in those countries (World Drug Report, 2018).

Likewise, within other regions like Africa and Asia, a meta-analysis conducted by the Center for Behavioural Health Statistics and Quality [CBHSQ] (2014) revealed that the practice of substance use was excessively high among adolescents within the age group of 12–17 years. In sub-Saharan African, the issue of drug use among students in senior high schools is not different. For instance, in a study by Olawole, Ogundipe and Adeloye (2018) found that a significant proportion of psychoactive substance users and abusers are adolescents. Their findings indicated that an estimated 47% of global adolescents hooked on drugs reside in Sub-Saharan Africa (SSA) countries.

Moreover, according to Interpol and the Institute for Security Studies [ISS] (2018), Sub-Saharan Africa will experience the largest rise in illicit drugs used globally in the next three decades. They attributed this phenomenon to changes in drug flows, urbanization and high youth population. It was further stressed that for the past two decades many countries in Africa have become transit point for the global trade in illicit drugs. Due to this, many young people have become involved in the trade and also as users.

The observation confirmed at the global level seems not to be different from the ones established at the local context as a national survey conducted by the Ministry of Health (2004) and the World Health Organisation (2004) within the then ten regions of Ghana revealed that drug usage was most prevalent among the youth with some beginning the act at age six and some as during age 23 and with most beginning the practice within their teens. Adolescents tend to be risk takers, as they feel vulnerable and experience

stress associated with this transition preiod. Hence, the period of adolescence is sometimes characterized with illicit substance abuse. This is mainly because, adolescence becomes the period where new identity is created or formed.

Many civil society organizations, professionals like doctors and teachers, the media, concerned citizens and policy makers have all expressed their views and worries about substanceabuse among adolescents in recent times in the country. For instance, a study by [CBHSQ] (2018) reported an upsurge in drug use among young people. The report further stressed that, about 70% of inmates at the psychiatric hospitals are within the ages of 14-32 and this is mostly attributed to drug abuse. Also, on 12th March 2019, Ghanaweb reported;*"New trend in drug abuse: Youth mix opium with 'weed"*.

According to the publication, Dr. Omuojine, a psychiatrist at Komfo Anokye Teaching Hospital (KATH) in Kumasi, observed that the substance locally known as 'tie' which the youth consume to make them 'high' is more dangerous and could lead to mental illness. He further stressed that the psychiatric unit of KATH had been receiving many patients recently who confessed to taking 'tie'. This was disclosed during the opening of a 10-day training programme organised by the Narcotics Control Board [NACOB] in kumasi.

Moreover, on 11th May 2019, Daily graphic reported; "Headteacher beaten to death by teenage 'wee' smokers". According to the reporter Naa Lamiley Bentil, the headteacher of Salvation Army Basic School at Asiakwa in the Eastern Rgion, Mr. George Somuah Bosompem was beaten to death by four young men who were between the ages of 17-19 years. Assessing the

rampant incidence of youth inolving themselves in drugs and its related consequences in recent times, it raises a concern which calls for a thorough investigation.

The consequential effect of substance use on adolescents happen to be very daunting as evidence suggests that the continuous practice of this act will move the adolescents away from activities that may be very keen to their cognitive and emotional development. Similar view was shared by Lopes, N'brega, Del Prette and Scivoletto (2013) as their study observed that continuous addiction to substance abuse exposes the young person to several forms of risks notably among them are; road accidents, unprotected sex, theft, gangs affiliation, vandalism among others.

Likewise, drug use among adolescents has been found to lead to other outcomes such as the spread of HIV/AIDS and behaviours leading to juvenile delinquency (Whitesell, Bachand, Peel, & Brown, 2013). Aside these morbidity effects, other empirical studies undertaken have all demonstrated the negative effects substance use has on adolescents' cognitive developments such as poor verbal memory, bad visuospatial function, poor attention span and poor academic workby (Nguyen-Louie et al. 2015; Squeglia, Spadoni, Infante, Myers & Tapert 2009; Hanson, Cummins, Tapert & Brown 2011).

Moreover, the increasing rate of substance use among adolescents has been attributed to several factors such as the increased independence adolescents begin to enjoy coupled with their incessant desire to experiment with things they come into contact with (Senanayake, et al., 2018),pressure from friends, parental influence among others. According to Gray and Squeglia (2018), identifying the main threat that predisposes adolescents to

substance misuse needs further investigation because it has become the most efficient way to address this menace in its natural setting.

Since cultural values differ, it is not in all instances that factors that have been confirmed in one nation becomes applicable in another, therefore undertaking studies within individual countries may enable such nations to identify which of the potential causal factors has the most predicting effect within its context. The preceding discussions form the bedrock for investigating the main factors contributing to the increasing rate of substance use among senior high school students.

Statement of the Problem

Adolescence remains a critical developmental stage where a significant component of their physical, cognitive, emotional, social and behavioural developments begin to take shape (Gray & Squeglia, 2018). Nonetheless, the numerous neurobiological changes that underlie the adolescence developmental processes make them highly susceptible to engage in risk-taking behaviours in their search for identity Erikson, as cited in Antiri, Fia & Nyarkoh-Sampson (2012). Hence, most people who engage in substanceuse were initiated into the act duringtheir adolescent stage.

Many researchers (Sloboda, Glantz & Tarter, 2012; Lipperman-Kreda, Gruenewald, Grube, & Bersamin 2017; Horta, Costa, Prado, & Oliveira-Campos, 2014) have all established that having adequate knowledge of all the possible factors that trigger adolescents' substance usage may assist relevant state organizations to develop appropriate interventions to suppress its increasing rate among the population. On the contrary,it comes as a surprise that most of the studies in this regard have often beens pearheaded by global

organizations such as WHO/UNODC and in advanced economies as well as in Asian regions with less emphasis to the Sub-Saharan Africa, particularly Ghana.

Within the context of Ghana, some studies have been conducted on substance use and abuse among adolescents (Brown, Pereko & Eliason, 2013; Elliason, Sandow, Asechaab, Kpangkpari & Asiaktiwen, 2018; Nkyi, 2014; Glozah, Komesuor, Adu & Aggrey, 2017; Owusu-Sarpong & Agbeshie, 2019). Nevertheless, what has to be noted is that most of the works predominantly focused on the impacts of substance abuse on students, knowledge and attitude of students towards substance abuse, tramadol usage among the youth, prevalence of cigarette smoking among others without much emphasis on the factors increasing its patronage among Ghanaian adolescents.

In the Kumasi Metropolis, reports from the media and other anecdotal evidence suggest that substance use and abuse exist. For instance on 3rd July, 2014, Ghanaweb reported 70% of junior and senior high school students in the Ashanti Region involved in drug abuse. Again, investigation conducted by the pharmacy council within the Kumasi Metropolis revealed that some youth take a mixture of tramadol and codeine to make them 'high' (BBCNEWS, 4th May, 2018). In a related publication by Ghanaweb on 12th March, 2019, titled; *New trend in drug abuse: Youth mix opium with 'weed' in Kumasi.*

However, no study has been conducted within the metropolis to find out why young people are involved in the menace. Moreover, as new forms of substances continue to emerge with diverse immediate and long-term consequences, knowing the factors that contribute to it remains relevant since it is through this knowledge that effective pervention and intervention

programmes can bedeveloped to minimize its occurrence (Whitesell, Bachand, Peel & Brown, 2013). It is therefore necessary that consistent updates on substance use and its related causes could make significant impact in terms of suitable and vigorous interventions towards the amelioration of substance abuse among the youth, if not total eradication. Therefore, there was the need to embark on this study to find out the factors that contribute to substance use among senior high school students within the Kumasi Metropolis.

Purpose of the Study

The study examined contributory factors associated with substance use among Senior High School (SHS) students in the Kumasi Metropolis in Ashanti Region of Ghana. Specifically, the study sought to:

1. identify the commonly used substances by SHS students in the metropolis.
2. determine the familial factors that contribute to substance use among SHS students.
3. examine the social factors that contribute to substance use among SHS students.
4. identify personal factors that cause substance use among SHS students.
5. examine the relative contribution of familial, social, and personal factors that contribute to substance use among SHS students?

Research Questions

The study was guided by the following research questions:

1. What are the commonly used substances by SHS students in the Kumasi Metropolis?

2. What are the familial factors that contribute to substance use among SHS students?
3. To what extent does social factors influence substance use among SHS students?
4. What are the personal factors that contribute to substance use among SHS students?
5. What is the relative contribution of familial, social and personal factors that contribute to substance use among SHS students?

Significance of the Study

1. For policy direction: The findings of the study may assist relevant state organizations to be cognisant of the causal elements which contribute to substance use among Ghanaian youth and subsequently develop appropriate interventions or suggestions that may help to manage the predicting effects of these factors. Moreover, knowing which of the factors has the most prevailing effects on senior high school (SHS) students' substance use will help the government and other organizations to channel adequate resources in minimizing its effect.
2. Literature relevance: Findings from this research will function as a reference materials for other researchers desiring further investigation in this area. It will also provide new perspective to the existing literature particularly from the context of Sub-Saharan Africa as most of the studies in this region have been initiated by global organizations.
3. Stakeholders: The findings from the study would be relevant to school heads, teachers/counsellors, parents and students. It will equip them with in-depth knowledge and empirical evidence of all the possible

causes of substance abuse among students. Such information and knowledge will ensure the enactment of applicable preventive measures that will ensure that the rate of students' involvement in drug menace is reduced.

Delimitations

The study focused on familial, social and personal factors that contribute to substance use among senior high school (SHS) students. As such, the main emphasis was on how these factors contribute to (SHS) students' engagement in substance use. Moreover, the geographical scope of the study was the Kumasi Metropolis. In view of that, only public second cycle schools within the Metropolis constituted the study population.

Limitations

Some school authorities were unwilling to allow the students to respond to the questionnaire due to the COVID-19 pandemic. In view of that some teachers in the selected schools were engaged to administer the questionnaire on behalf of the researcher. Again, due to the pandemic only second year students were on campus and therefore served as the respondents. Self-report survey, which was employed as a means of data collection, has some disadvantages. Participants might be unwilling to respond to the items honestly, especially when their own teachers guided them to respond to them in spite of the confidentiality and anonymity.

Definition of Key Terms

Substance or Drug: Any natural or artificial substance other than food that by its chemical nature alters the function of a living organism.

Substance Use: Using not prescribed drug for curative purpose or using drugs excessively without prescription or misuse of drugs**.** Examples of commonly used substances are alcohol and caffeine.

Substance abuse: Is any illegal use of a drug or use of legal drug in a manner that deviates from approved medical direction.

Psychoactive Substance: Any substance or drug which affects a person's perception, mood, behaviour and way of thinking.

Familial factors: Factors that emanate from the influence of parental cultural values or lifestyles of parents. These include family use of drugs, inadequate monitoring and poor parent-child relationship.

Personal factors: This refers to factors that emanate from within the individual that motivate him or her to engage in substance abuse. These include the psychological component of the individual such as self-esteem and anxiety.

Social factors: Factors emanating from day-to-day interactions between friends in their environment. It also includes the influence of the media such as advertisement.

Organization of the Study

This research holds five distinct chapters. Chapter One comprised the background discussions, the problem being considered, the overall goal and specific objectives, research questions and the hypothesized significance of findings. It also considered delimitations and limitations of the study.

Chapter Two reviewed relevant literature on the concept of substance use, theories of substance use which included Social Learning Theory, Social Control Theory and Drug sub-culture Theory. The rest were the most

commonly used substances by students, factors that contribute to substance use and the relative contribution of familial, social and personal factors.

Chapter Three comprised the research methods. This included the research design, population, sample and sampling procedure, data collection instrument, validation of the instrument, data collection procedures, ethical consideration and data analysis. Chapter Four was made of the results and discussions while Chapter Five included the summary, findings, conclusion, recommendations and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The purpose of the study was to examine the factors that contribute to substance use among senior high school (SHS) students in the Kumasi Metropolis. This chapter covered the review of related literature which focused on the conceptual review, theoretical review and empirical studies. The chapter is organised under the following sub-headings:

1. Conceptual review
    b. The Concept of Substance Use
    c. Types of Substances or Drugs
    d. Characteristics of Senior High School Students
2. Theoretical review
    a. Social Learning Theory
    b. Social Control Theory
    c. Drug Sub-culture Theory
3. Empirical review
    a. Commonly used substances by Students
    b. Factors Contributing to Substance Use
    c. Relative Contribution of Familial, Social and Personal Factors
4. Conceptual Framework

Conceptual Review

This section provides some definitional issues to some concepts or variables in this study.

The Concept of Substance Use

Substance use denotes the persistent consumption of drug for non-medical purpose with the intention of altering the state of the mind (Evans & Skager, 1999). Similar view was expressed by Byoos (2009), as the habitual use of substance or drug to change ones' emotion or state of consciousness. He further described it as the use of natural or artificial chemical substances for non-medical purpose with the intention of altering the natural bodily functions and processes. This implies that the use of drug is not meant to treat any ailment but rather influence the individual to behave in a certain pattern. Ben-Danyansah (2003), Plested and Smitham (2007) described substance abuse as the consumption of drugs for purposes other than what it was proposed for, without medical authorization and has the capacity for changing the mood and behaviour of the individual. This includes the use of illicit drugs like cocaine and marijuana, misuse of prescription and over-the-counter medications.

However, the WHO (2018) refers to substance abuse as *"the harmful use of psychoactive substances including alcohol, tobacco and illicit drugs"*. Psychoactive drug constitutes a group of drugs that have the ability to affect the mind; it influences perception, mood and behaviour of the individual. Weiten (2007) describes psychoactive drugs as chemical substances that alter psychological, emotional or behavioural functioning. Psychoactive drugs can be categorised into legal and illegal. The legal ones are not under international control but the illegal drugs are under international control and may not have

licit medical purpose (UNODC, 2014). This implies that legal drugs can be abused when its usage deviates from the approved medical direction, specifically when not prescribed by a qualified medical officer.

Substance abuse embodies the consistent and habitual use of illicit substance and is characterized by negligence of responsibilities, profound injuries and accidents, legal issues, or relational difficulties (American Psychiatric Association, 1994). Generally, substance abuse could cause the user or individual to dedicate substantial amount of time and effort in acquiring and consuming the substance because of the person's high dependence on the drug (American Psychiatric Association). Usually, failing to use the addicted drugs could trigger some form of withdrawal symptoms with diverse consequences depending on the drugs.

Types of Substances or Drugs

The United Nations Office on Drugs and Crime [UNODC] (2019) has grouped psychoactive substances into five:

1. **Opioids:** is a common term describing opiates and their synthetic equivalents. They are natural occurring alkaloids discovered in opium poppy. They mainly used in medicine for managing pain stemming from circumstances such as traumatic injuries and accidents, surgery, and other diseases. Several pharmaceutical opioids are meticulously guided by a Single Convention on Narcotics Drugs of 1961 while the rest are controlled under the Convention of the Psychotropic Substances of 1971. They can be injected, smoked or taken orally. Examples are morphine, codeine, heroine, hydrocodone, oxycodone, methadone and tramadol.

Short-term effects: Euphoria, apathy, not feeling hunger and pain, drowsiness, nausea, impaired mental functioning, convulsion, unconsciousness and death.

Long-term effects: Baldini, Von Korff and Lin (2012) identified the following effects of opioid overdose on patients' prescribed for long-term therapy to manage chronic pain. These include central nervous system disorders such as dizziness and sedation, cardiovascular effects like heart failure, myocardial infarction and musculoskeletal effect such as fractures. Others are endocrine system effects like sexual dysfunction, infertility and decreased levels of testosterone in males and estrogen in females. Several types of opioid like morphine can lead to pneumonia in elderly patients.

Withdrawal symptoms: Feeling of unpleasantness, aches and pains all over the body, dilation of pupil and insomnia.

2. **Depressants:** this type of substance decreases energy levels and induces sleep by decreasing central nervous system (CNS) stimulation and behavioural activity. Drugs in this category are alcohol, barbiturates and benzodiazepines. They are also known as sedatives hypnotics and can be taken orally or injected. Alcohol is the most common one that can be found in Ghana. Alcohol comprises of a different types of beverages that contain ethyl alcohol including wine, beer, distilled spirits and local gin 'akpeteshie'. The level of ethyl alcohol in such beverages ranges from 4% to 40% and sometimes more in higher-proof liquors. According to the National Institute on Drug

Abuse (2017), the following effects are associated with depressants use:

Short-term effects: Slow brain function, poor concentration, fatigue, lowered blood pressure, lack of coordination, visual disturbances, difficulty or inability to urinate, suicidal thought among others.

Long-term effects: Depression, breathing difficulties, sexual problems, chronic fatigue and sleep disorders.

Withdrawal symptoms: Insomnia, high body temperature, nausea, hallucinations, convulsion and agitation.

3. **Stimulants:** These groups of substances act on the central nervous system and increase vigilance, intensified arousal and cause behavioural excitement. It can be plant based substances such as cocaine (derived from coca leaf) or synthetic ones which includes amphetamine and methamphetamine. Stimulants can be mild or strong. The mild ones include caffeine and nicotine while cocaine, amphetamines and methamphetamine are the strong ones. Some of the strong ones have been approved for medical use, for instance amphetamines are used for treating attention deficit hyperactivity (i.e., sleep disorder) and as an appetite suppressant. They can be taken oral, smoked, sniffed or injected. Brande (2021) identified the following as some of the effects of stimulant drugs:

   Short-term effects: Increased sexual desire and performance, increased sociability and self-esteem**,** sense of super abundant energy, suppression of appetite, improved attention among others.

Long-term effects: Extreme weight loss, reduced sexual function, gastrointestinal problems, paranoia, depression, seizure, prolonged sleep disorders, reduced appetite, irregular heart beat and mood swings. Other effects are Poor judgment, flexibility and impulsivity (American Psychological Association, 2011).

Withdrawal symptoms: Severe exhaustion, sleep disorders, depression and anxiety.

4. **Hallucinogens:** are diverse group of drugs that provoke distorted state of consciousness, perception, thinking and feeling couple with different ranges of auditory and visual hallucinations. Most of the usual hallucinogens are regulated under the Convention on Psychotropic Substance of 1971. They can be natural or synthetic and are taken orally. Examples include LSD, mescaline and psilocybin. In some cultures, they used it in religious ceremonies.

   National Institute on Drug Abuse (2021) identified mental illness (i.e. Parkinson's disease, senility and schizophrenia) and effects on the brain (i.e. sexual, perceptual and sensory behaviour) as major effects associated with hallucinogens. Specific short and long term effects include the following:

   Short-term effects: Emotional swings, impaired judgments, anxiety, panic reaction, nausea, dilated pupil and feeling of depersonalization.

   Long-term effects: Persistent psychosis (i.e., paranoia, mood disturbances, visual disturbances and disorganized thinking), flashbacks and development of tolerance for the drug.

Withdrawal symptoms: Speech problems, anxiety, depression, memory loss, weight loss and suicidal thoughts

5. **Cannabis:** is the hemp from which marijuana, hashish and tetrahydrocannabinol [THC] are derived. There are two sub-species of the plant (*Sativa* and *Indica*). The plants contain 70% of unique compounds known as phytocannabinoids. Cannabis use is regulated beneath a Convention on Narcotic Drugs of 1961 as amended by the 1972 protocol (schedules one and four). Marijuana is a combination of dry leaves, flowers, stems and seeds taken from the plant while hashish is obtained from the plant's resin. THC, which is the psychoactive ingredient in cannabis can be synthesized and used for the treatment of certain diseases like glaucoma and in chemotherapy (Weiten, 2007). It is taken into the body in the form of smoke, vapour and can be mixed with food.

Effects of cannabis: Huw (1996) observed anxiety, physical and mental health problems. Jacobus and Tapert (2014) identified alternation in brain functioning, impairment in neurocognitive performance, anxiety, suicidal tendencies and psychotic symptoms as some of the short-term effects**.**

Long-term effects: Buddy (2020) identified the following;

Cognitive problems- impaired connectivity in specific regions of the brain.

Mental health- increased risk of schizophrenia, psychosis, depression and anxiety especially among adolescence.

Heart problems- increased risk of heart attack.

Bone health- increased risk of reduced bone density which can increase the risk of bone fractures.

Cancer- increased risk of lung and testicular cancer.

Breathing problems such as chest colds, bronchitis and lung infections.

Withdrawal symptoms: Insomnia, loss of appetite, tremors, depression and petulance.

Drug Schedules

Drugs or substances can be classified into five schedules based on the customary therapeutic use and the abuse of the drug (United States Drug Enforcement Administration).

Schedule I: These are substances which have no therapeutic use and they are likely to be abused. They are used for research purposes. Example includes heroine, Lysergic acid diethylamide (LSD) and ecstasy.

Schedule II: Drugs in these categories have high prospective for abuse less than those in schedule I. Its use can lead to severe psychological dependence and are considered dangerous. Some examples are cocaine, oxycodone, morphine and fentanyl.

Schedule III: These are drugs or substances with a moderate to low physical and psychological dependence than schedule I and II substances. Examples are codeine, ketamine and anabolic steroids.

Schedule IV: These are drugs, which are unlikely for people to abuse lower levels of addiction than those in schedule III. Examples include valium, tramadol and activan.

Schedule V: These are categories of substances with lower potential for abuse than schedule IV drugs. They are normally made up of preparations containing small quantities of certain narcotics. Schedule V drugs are used for analgesic, antitussive and antidiarrheal purposes. Examples are Lyrica, Lomotil and some cough mixture preparations with less than 200mg of codeine.

Characteristics of Senior High School Students

Most Senior High School (SHS) students in Ghana are within the middle to late-adolescent stage of life. Puberty brings social awareness and adolescents become aware of themselves. The awareness of their attitude is reflected in their social behaviour. They strive to attain the approval from their peers, either from the same or other sex. The emotional strains, which result from these changes mostly, trigger the youth to be nervous, insecure, fearful and distrustful of others (Antiri, Fia & Nyarko-Sampson, 2012). They emphasized that the social group, which the adolescent most closely associate with, determines to a large extent the sort of individual into which he or she will develop. According to Shertzer and Stone, as cited in Antiri, Fia & Nyarkoh-Sampson (2012), the greatest influence comes from primary groups such as family and close friends.

Generally, there is no common agreed way of defining the concept adolescence. Most often, many authors have sought to describe the concept from an age description perspective with some seeing it as a period of transition. Hence, it can be described in several ways taking into account factors such as physical, social, cognitive development and age. For instance, American Psychological Association (2002) described adolescence as the

period from the beginning of puberty until an individual reaches his/her full economic freedom.

According to the WHO (2014), adolescence constitutes the evolution period from infancy to adulthood and usually covers the age period of 10 to 19. It is regarded as a very important stage in an individual's development as the substantial aspect of the person's physical, cognitive, emotional, social, and behavioural changes transpire here (Gray & Squeglia, 2018). Moreover, it is often cited that adolescence is characterised with licit and illicit substance abuses. This is mainly because, adolescence becomes the period where new identity is created, hence it is at this period that an individual gets an incessant desire to experiment with things they come into contact with. These descriptions clearly indicates that adolescence is more than age as it equally has to take into account the changes that occurs in the physical, cognitive, emotional, social, and behavioural aspect of an individual.

Theoretical Framework

According to Kennedy, Davies, Ryan and Clegg (2017), using theories to guide scientific enquiry generally seeks to achieve two key purposes; first it helps investigators to identify the main predictors of an individual or group behaviour and secondly rely on these identified to recommend or institute a targeted intervention that can either facilitate phenomenon occurrence or reduce its occurrence within its natural setting. When it comes to adolescent substance abuse, some of the key theories often used to explain the elements contributing to adolescent engagement in drugs abuse include the drug-subculture theory, social control theory and social learning theory.

Social Learning Theory

Social learning theory is among the common theories that have been widely used to explain people engagement in deviant behaviour such as substance use. The theory as propounded by Akers (1998), asserts that individuals acquire abnormal behaviour through their interactions with individuals and groups who indulge in negative and thus such behaviours are imitated. In essence, persons or groups who serve as role models have major influence on the promotion of deviant behaviours such as crime, robbery and drug abuse. Akers established his theory from the earlier works of Sutherland's criminological theory of differential association, B. F. Skinner's operant conditioning theory and Bandura's social learning as cited in Schultz, (1981). The theory is built around four key antecedents namely; differential association, definitions, imitation, and differential reinforcement.

Differential association depicts individuals or adolescent usually interrelate with and their significance to the life of the adolescent. Generally, these individuals by their destructive behaviours can escalate or lessen the probability of an adolescent engagement in drug use (Krohn, et al., 2016). According to Akers (1998), differential association becomes a key predictor in an adolescent engagement in drug use since it outlines the core perspective with which the adolescent could witness others abusing substance (imitation), confront a spur that intensifies an adolescent likelihood to engage in drug use in the near future (differential reinforcement), or even acquire the definitions or attitudes approving of substance abuse.

Hence, differential association particularly with peers is acknowledged as a strong determinant of adolescent engagement in substance abuse. For

instance, in the studies of Brooks, Magnusson, Spencer and Morgan (2012) and Pratt et al. (2010) it was established that adolescent that had a strong differential association with peers who promote negative behaviours were more likely to engage in substance abuse. Similar conclusion was made in the study of Obioma (2012) as the study results revealed that male students who previously seem not be ardent drug users began to practice the act when they became friends with drug users within the same school.

However, definitions constitute the attitudes and perception of a person concerning the harmful impact of a deviant behaviour (Marcum, Schaefer, Vito, Higgins, & Ricketts, 2015). According to Marcum et al. (2015), the more an adolescent regards a particular behaviour as bad, the less likelihood that the adolescent or individual will engage in such act or behaviour. Nevertheless, the meaning an individual form about behaviour with regard to its rightfulness or wrongfulness will largely depend upon his family position on the behaviour. Hence, parent plays a significant role in adolescent definition because the family becomes the first intimate social group an individual will belong (Bahr, Hoffmann, & Yang, 2005).

According to Bahr et al. (2005) when parent position on substance abuse is deemed as favourable, adolescents are more likely to regard it as a lawful act and consequently engage in its usage. Imitation on the hand depicts the extent to which the individual model his/her behaviour after a close role model. Largely, these role models could take the form of family members or close friends. On the last element that is, differential reinforcement constitutes the consequences associated with the performance of a given behaviour or act (Krohn, et al., 2016). It generally tends to look at the cost that comes with the

performance of an act as well as the benefits the individual receives from performing a particular act. For instance, adolescents who positively rewarded (euphoric effects) for consuming a particular drug will quite usually continue using the drug, whereas the contrary holds when the individual receives negative outcomes (Marcum et al., 2015).

As rightly indicated by Pratt et al. (2010), extensive works have confirmed the reliability of the four elements of Akers Social learning theory as good predictor of individual engagement in variety of deviants and other offenses including drugs. Hence, with its wide validity it becomes the main theoretical framework for this research with social control theory and drug-subculture as supporting theories. Moreover, the key foundation with the Social learning theory is that substance abuse as one of the deviant behaviours in the society is a learned behaviour, which tends to be shaped by the consequences (i.e. the anticipated consequences) of the behaviour. Hence, adolescent likelihood to engage in substance abuse will to a large extent be informed by elements such as, differential association, definitions, imitation, and differential reinforcement. On this point, this study seeks to use the three theories to examine the familial, social and personal factors that contribute to substance abuse among Ghanaian adolescents.

Social Control Theory

This theory was developed by Gottfredson and Hirschi (1990). It hypothesizes that in the upbringing of a child; a parent determines both the inner and outward dynamics that shape a child's moral nurturing. This implies that during the developmental period of the child, the parents continued to shape the ego that structures the socialization and the development of social

bond (Ikoh, Smah, Okwanya, Clement & Aposhi, 2019). According to Gottfredson and Hirschi, such social interaction and attachments predict the behaviours the child will put up during adulthood, such as behaviour about submission to rules and regulations. Moreover, they emphasized that, social control theory hypothesized that the behaviour of an adolescent can be shaped momentously by *"attachment and commitment, commitment and involvement, and attachment and belief"*.

Attachment in this regard constitutes the relation the adolescent has with their parents, friends, and school whereas commitment signifies the adolescent professional and/or educational ambitions and/or reputation (Gottfredson & Hirschi, 1990). According to Krohn, Loughran, Thornberry, Jang, Free-Gallant and Castro (2016) the attachment places significant emphasis on the relationship between parent and an adolescent, indicating that the deeper the attachment of an individual and their parent, the lower the prospect of engaging in substance abuse. Hence, when attachment is strong, the adolescent is likely to take parental views into consideration before acting upon and for that the probability of engaging in drug is minimized.

Involvement is conceptualized to incorporate partaking in established activities, which at the end leads to socially regarded success and status goals. Meaning, adolescents who seek to achieve conventional goals will try as much as possible to disengage in substance abuse since such acts may threaten the realization of those goals as well as investments made in the area of learning, schooling, etc. (Krohn, et al., 2016). Generally, many conventional goals demand education and as such, the school becomes a key to adolescents' development hence, strong commitment to school is seen to have the ability to

reduce adolescent likelihood to engage in substance abuse (kubrin, Stucky & Krohn, 2009).

The final aspect of the social control theory is belief. With belief, it is argued that adolescents who trust in the ethical justice of the law and regard their parents as having the right to set rules are more likely to desist from substance abuse or even engage in other deviant acts. Generally, these aspects of the social control theory are hypothesized to act in an addictive manner hence, the feebler these four components are, the higher the probability that the adolescent will engage in substance abuse (Krohn, et al., 2016)

Drug Sub-Culture Theory

This theory asserts that the factors that induce an adolescent to engage in substance abuse emanate from the influence of the parent cultural values or selection of friends and friendship pattern (Ikoh, Smah, Okwanya, Clement, & Aposhi, 2019). The drug sub-culture theory gets its motivation from the effectiveness of socialization, where an adolescent builds his or her emotional bonds with parents, or "the significant others," and acceptance in the moral order supporting conventional affections (Kaplan, 1975). The theory likewise receives substantial backing from the social learning theory of Akers (1998) and the differential association theory of Sutherland and Cressey (2004) where these theories argue that adolescents may engage in drug abuse by imitating or following the lifestyles of their parents or closest friends.

In this regard, adolescents may see their parent engagement in substance abuse as a support for their engagement in the same act or drug use (Whitesell, Bachand, Peel, & Brown, 2013). In the case of significant others influence, peers' social approval of a drug use or the imagined benefits for

practicing the act has been identified to entice substance abuse among adolescents that have weak bonding with their family (Ikoh et al., 2019). For instance, in the studies of Trucco, Colder, Bowker and Wieczorek (2011) and Tucker et al. (2011), it was observed that adolescent propensity to engage in substance abuse bends to be greater when they believe that their endorsement or fame within a group will increase by using a drug. Hence, when an adolescent group approval depends on their willingness to practice what the group does, it tends to increase their prevalence to engage in substance use. Accordingly, the drug-subculture theory asserts that adolescent's engagement in substance abuse could either emerge from "significant others" influence or "generalized others" influence.

Empirical Review

Commonly Used Substances by Students

Drug use and its connected health consequences tend to be very high among the youth (World Drug Report, 2018). For instance, results released by the United Nations Office on Drugs and Crime (UNODC) posited that the magnitude of drug use among the adolescent is very high most especially among Western countries such as the United States of America [USA], United Kingdom, Norway and Turkey (World Drug Report, 2018). Consistent observation was made by the Center for Behavioral Health Statistics and Quality (2014) as their results identified adolescents within the age group of 12–17 as the group that frequently engages in substance abuse. On this point, this section seeks to identify the types of drugs that are mostly abused by young people.

Alcohol

Alcohol intake remains one of the most used substances among adolescents within both developed and emerging economies. Its increased accessibility and availability make it the most abused substance among adolescents' (Kasolo, 2014). At the global level, it is estimated that close to 2.5 million mortalities each year due to its excessive intake. Hence, it has been identified as the third largest cause of chronic diseases and cost economies an average of 210 to 665 billion dollars in a year (Kyei & Ramagoma, 2013). Across the world, alcohol has been identified as the most used substance among students particularly students within the age group of 13 to 15years (World Health Organization, 2017).

Likewise, in a study conducted by the National Institute on Drug Abuse (2012) in two countries thus, the United States of America and Brazil, it was established that close to 72% of USA adolescents and 65.2% of Brazilian adolescents identified alcohol as their most consumed drug. Moreover, in a study by Miech, Johnston, O'Malley, Bachman and Schulenberg (2016) made comparable claim to that of the National Institute on Drug Abuse (2012) as their results identified alcohol and marijuana as the highest widely abused drugs by adolescents in the United States of America.

Similar observation was made by the WHO, on youth and alcoholism found out that, 61.7 million adolescents that lost their lives in 2014 due to incidence of traffic accidents, suicide and homicide; the main contributor to these occurrences came as a result of the youth excessive intake of alcohol (World Health Organization, 2014). Generally, alcohol remains the only psychotropic drug which is accepted and encouraged across many cultures due

to its acceptability and availability. This has encouraged many young people to commence its use at an early age. A person's excessive intake of alcohol increases his or her dependence on it (Kasola, 2014).

The increasing rate of alcohol consumption among adolescents in developed economies seems not to be different from adolescents in the Sub-Saharan Africa as a report released by Kuria (1996) suggests that nearly 15% of Kenyan adolescents in secondary schools were engaged in alcohol intake. Also, in a study conducted by Odejide (2006) on status of drug use and abuse in Africa, it came to bear that the most commonly substance used by Nigeria youth is alcohol followed by cigarettes. Also, a study done by Peltzer (2009) in six nations of Africa (i.e. Kenya, Namibia, Swaziland, Uganda, Zambia, Zimbabwe) confirmed the same trend as the study results identified alcohol as the most consumed substance among students within those countries.

Similar trend has been confirmed in Ghana, as a primary research done by Adu-Mireku(2003) on the prevalence of alcohol, cigarette and marijuana revealed that close to 40% of Ghanaian youth in secondary schools have in one way or the other taken alcohol in their lifetime. Moreover, in a study conducted by Kwofie (2018) on the causes connected to substance use among senior high school students ranked alcohol as the most used substance among the youth. Hence, they identified alcohol as one of the substances that is mostly abused by Ghanaian students.

Generally, it has been observed that substances that seems to be legal for consumption for instance alcohol and tobacco, becomes the first substances that are used to initiate most youth into substance abuse (Olthuis, Darredeau, & Barrett, 2013). Meaning, an adolescent early exposure to these

drugs will consequentially lead him or her to use other hard drugs as he or she progresses throughout the initiation or learning process. For instance, it has been established that adolescents that engage in risky alcohol intake stand a greater chance of using other forms of drugs, such as solvents, cannabis, tobacco, anxiolytics, amphetamines, and cocaine (Galduro´z & Noto, 2000). Similar conclusion was made by the USA Department of Health and Human Services (2004) as their report asserted that excessive intake of alcohol results in the intake of other substances such as, cannabis, tobacco and cocaine.

Tobacco

Evidence tends to suggest that the use of tobacco products has reduced in recent times (Johnston, O'Malley, Miech, Bachman & Shulenberg, 2017) and for the first time the number of males using tobacco globally on the decline [WHO], (2019). According to WHO (2020), despite the reduction in nominal figures of tobacco use, the effects on its users is tremendous and have a higher risk of severe diseases and death if infected with COVID-19. Tobacco use is very destrustive and caused the death of an estimated eight-million individuals annually (WHO, 2019). According to the publication by WHO on global tobacco epidemic, an estimates of 43 million youg people between the ages of (13-15) years used tobacco in 2018.

The report further stressed that approximatly 244 million women used the product within the same period. Globally, South-East Asian Region has the highest rate of tobacco use of more than 45% of people 15 years and above. Moreover, over 80% out of 1.3 billion of gobal consumers of tobacco reside in developing countries where the incidence of tobacco-related diseases

and death is highest. The tobacco products used includes; cigarettes, pipes, cigars, smokeless tobacco products and heated tobacco (WHO, 2019).

Even though the use of tobacco products seems to have been reduced at the global level, some evidence still tends to suggest that adolescents within the age group of (12-19) have one way or the other tested a tobacco product, involving the use of traditional cigarettes (13%), electronic cigarettes (11%), cigars (8%), hookahs (7%), and smokeless tobacco (4%) (Ambrose, Day, & Rostron, 2015). In Ghana, similar trend was found in a study by Owusu-Sarpong and Agbeshie (2019) in their work investigating cigarette smoking among adolescents attending school in the Eastern Region. Findings revealed that the incidence of smoking was 14%. The study found that 32% of those who smoked were introduced to the act when they were less than 10 years.

Cannabis

Another drug that seems to have enjoyed high level of usage among adolescent across the globe is cannabis. On the global level, cannabis has been identified among the most frequently used forbidden substance with users estimated to hover around 120 million to 225 million abusers. In a global report published by the United Nations Office on Drugs and Crime (UNODC) based on available data from 130 countries, revealed that in 2016 alone 13.8 million youth mostly students within the age bracket of 15-16 years. This estimate is around 5.6% of the total population in that age group has consumed cannabis at least once in the past 12 months (World Drug Report, 2018).

Again, a recent report by UNODC affirms its high ascendency among the youth with most adolescents identifying as their most used drug (World Drug Report, 2018). It perceived ease of accessibility coupled with the

perceptions of its low harmful effects tends to make it the most favoured drugs among most adolescents in developed economies. Also, its increasing usage among most adults could be somehow attributed to some government decisions to legitimize its usage among some category of patients especially those living with diseases like terminal cancer, epilepsy and neurological ailments in their treatment (World Health Organization, 2016; National Academy of Sciences, 2017).

On a country level, a survey done by the Brazilian bureau on drugs identified cannabis as the illicit drug that has the highest usage among Brazilian adolescents particularly those within the age bracket of 12 to 17 (Secretaria Nacional de Polı´ticas sobre Drogas , 2009). Its usage within public schools tend to be much higher as in the same report, it was established that nearly 5.9% of Brazilian students in public schools had used cannabis in their life time before. In the same South American context, a comparative study of drug use among university students within the age brackets of 18-25and older people in countries such as, Bolivia, Colombia, Ecuador and Peru revealed that, cannabis was the third most consumed drugs among university students in those countries after alcohol and tobacco (UNODC, 2016).

It was also established that nearly 20% of the students in Colombia had used cannabis in the last one year when compared to 5% in Bolivia and Peru (UNODC, 2016). This implies that, Colombia student's were15% likely to use cannabis in their life time than students from Bolivia and Peru. Also, in a report by UNODC (2012) it was established that cannabis usage was highly prevalent among most Sub-Saharan African countries especially in Kenya, it

was established that 10.% of adolescent within the age brackets of 15 to 17 years had used cannabis before.

In a World Health Organization (WHO) research on drug facts, high school and youth trends undertaken in Zambia on grade 7 to 10 students, it was revealed that close to 35.5% of the students were identified as active cannabis users (National Institute on Drug Abuse, 2012). However, in a comparative study conducted by (UNODC, 2012) on prevalence of substance abuse in South Africa and USA among adolescents between the age group of 13 to 22 years, it was revealed that only 12.7% of South African adolescents as compared to 33.4% of USA adolescents identified cannabis as their most favoured substance abuse.

Coffee (Caffeine)

Caffeine is the most used psychoactive substance in the world (Norton, Lazev & Sullivan, 2011; dePaula & Farah, 2019). Coffee is the main natural source of the alkaloid which is odourless, slightly bitter and can be found in other products such as tea and cola nuts. The use of caffeine (coffee) in doses up to 400mg per day is safe for healthy adults. In moderation, caffeine is a mild stimulant and effective for athletic performance, improves airway for asthma patients, help to prevent type-two diabetes among others. However, it is unsafe in high doses (i.e., more than 400mg per day) or taken for a long time. This can lead to insomnia, anxiety, chest pain, agitation, irregular heart-beat, and even death (dePaula & Farah). As at 2018, the US Food and Drug Administration (FDA) considered it unlawful for caffeine products to be sold to consumers in bulk (webmd.com).

There are many research findings, which have indicated high consumption of caffeine by people. For instance, in a study conducted by Norton, Lazev and Sullivan (2011) on patterns of caffeine use using a sample of 685 college students in US and survey as the research instruments. The study found that caffeine use was prevalent. The study further explained that about 98% of the students have consumed caffeine and 89% reported past 30-day used of the product. The reasons attributed to the use were to help them stay awake especially during examinations and sometimes a combination of caffeine with alcohol during entertainment. The study further revealed that the consumption of caffeine increases as their age and year in school also increases. This implies that final year students would be consuming more caffeine than their counterparts in first year.

In Ghana, similar study was conducted by Assabil (2010) on abuse of psychotropic substances using 600 students from junior and senior high schools in the Bosomtwi and Atwima-Kwanwoma Districts with questionnaire as the research the instrument. The study found out that coffee and alcohol were the most abused substances with a prevalent rate of 94% and 31% respectively. Moreover, in a research conducted by Lieberman et al. (2012) on caffeine use among Active Duty USA Army Soldiers with a sample of 990 Army personnel and questionnaire as the research instruments. The study found out that about 80% of USA adult population consumes caffeine regularly with a mean daily intake of 347mg among consumers.

Synthetic Drugs

The latest in the field of substance use is new forms of synthetic drugs, which are gradually receiving much acceptance and patronage by most youth.

For instance, drugs such as “ecstasy”, methamphetamine, cocaine, ketamine and Lysergic acid diethylamide (LSD) tend to be the new form of drugs that are mostly used by adolescents in high-income countries (World Drug Report, 2018). However, when it comes to adolescents in developing economies, substances such as thinner, petrol, paint, correction fluid and glue have become some of the new emerging substance commonly used among adolescents in these regions. (World Drug Report, 2018). According to Dell, Gust and MacLean (2011) the recent increase of these inhalants among the youth in developing countries can be attributed to its low cost, lawful and extensive accessibility and its ability to swiftly stimulate a great sense of elation among the users.

Tramadol

The latest and commonest of the synthetic drugs that have been identified to be increasing among most youth in Africa is tramadol. A recent report on tramadol use among young people in Africa by the World Drug Report (2018) affirmed this same view as their report identified it as the new form of drug which usage has been gradually increasing among Africa youth hence, called for urgent need to curb its soaring within West-Africa. Similar trend has been confirmed in Ghana as a preliminary investigation done by the Food and Drugs Authority into the various pharmaceutical shops operating within the Ashanti Region confirmed that tramadol was being inappropriately sold over the counter in variance to the national regulations requiring a prescription (International Narcotics Control Board Report , 2019).

Likewise, their investigations confirmed that there has been widespread of high-dosage tramadol tablets with some as high as 120mg and

250mg in the open market. A recent study on tramadol use among high school students by Idowu, Aremu, Olumide and Ogunlaja (2018) confirmed tramadol prevalence among Nigeria youth particularly those within the ages of 16-19 years. Specifically, Idowu and colleagues (2018) study identified tramadol as one of the new emerging drugs that was excessively abused by most Nigeria youths. Interestingly, its increasing usage among adolescents has been linked to the drug ability to boost the user's energy, give them sexual ecstasy and increase their performance in plenty folds (Elliason, Sandow, Asechaab, Kpangkpari, & Asiaktiwen, 2018).

Generally, it has been observed that drugs that seems to be mostly abused by adolescents both in developed and developing economies still take the form of alcohol, cigarette, cannabis or marijuana to new emerging drugs such as ''ecstasy", methamphetamine, ketamine, tramadol, thinner, petrol, paint, correction fluid and glue. However, it has to be noted that adolescent's preference for a particular drug is most often influenced by his or her economic condition or the availability of the drug. For instance, since adolescents in high income economies happen to have improved economic conditions than those in the developing economies, their drug preference often tends to be more skewed towards drugs such as, "ecstasy", methamphetamine, cocaine, ketamine and LSD (World Drug Report, 2018). However, their counterparts in developing economies, their drugs preference tend to be skewed towards thinner, petrol, paint, correction fluid and glue largely because of it low price and widespread availability (Dell, Gust & MacLean, 2011).

Factors Contributing to Substance Use

Familial factors

According to Whitesell et al. (2013), thereare several factors that have been identifiedunder the family related factors that account for adolescents susceptibility to substanceuse. These factors include infanthood abuse and abandonment, parental engagement in substance abuse, parents marital status, parents level of education, parent-child relationships, family socio-economic conditions, child perception that parents' favour the use of drugs and poor monitoring or supervision from home. However, in terms of relative contribution of these factors parents engagement in substance abuse recorded the highest value hence, making it the number one highly ranked factor that accounted for adolescent engagement in substance abuse. The second highly ranked factor was child perception that their parents approve their use of drugs. However, among the factors, parent marital status received the lowest score and as such became the lowest ranked factor.

In a study conducted by Marais and Maithya (2015) on strategies for prevention and intervention of drug abuse among students in secondary schools in Kenya using a sample of 360 students, eight parents and 18 teachers with questionnaire and interview as the research instruments.The study found out that drug abuse was significantly assosiated with having individuals in a family using drug or availability of drugs in the home environment. Similar findings were found by Chebukaka (2014) in the study exploring drug abuse among students in public secondary schools in Kenya using a sample of 181 students and questionnaire as the data collection instrument. The study

discovered that the number one cause of substance abuse among young people is having parents or family members who abuse drug.

Relating to this is the study of Senanayake et al. (2018) which looked into the pervasiveness of smoking, alcohol consumption, illicit substance abuse and their predictors on in-school adolescents. A survey approach was used where questionnaire items were distributed to 3,650 students within government schools. The study found out that, parents substance usage contributes greatly to substance abuse by younger ones within the family. In another study by Ikoh, Smah, Okwanya, Clement and Aposhi (2019) on factors affecting entry into drug abuse among youth in Lafia Metropolis.

The study engaged 520 repondents with questionnaire as the data collection instruments. The findings of the study revealed that lack of parental control is a major factor that contributes to drug abuse among the youth. The study also found that easy accessibility to drugs and gangsterisms which may result from inadequate parental control are also contributory factors. This implies that in a home where any of the family members either the father, mother or siblings abuses drug, the likelihood of the younger ones following similar trend is high.

Another family factor which influence substance abuse among secondary school students is the economic status of the family. This has been confirmed by many researchers for instance; in the study of Mahosa and Makoena (2017) exploring the factors which contributes to drug abuse among male students in South African public secondary schools using asample of 12 students and interview as the research instrument. The study found that the

financial status of the family is a central indicator in determing substance abuse among young people in such families.

Again, a study by Jorge et al. (2018) examined the linkage between socioeconomic factors, peer influence and substance abuse among Brazilian adolescents who fell within the age category of 15 to 19 years. Their study used a two-stage cluster sampling method to select a sample of 475 students from both public and private schools with questionnire as the research instrument. Results from the study revealed that adolescents who stayed in vulnerable areas had higher propensity to engage in substance abuse than those who lived in a secure environment. However, the study further concluded that not all families with weak economic status have their wards engage in drug abuse.

Moreover, in a research undertaken by Onginye, Rolan and Ngozi (2016) on patterns of substance abuse among adolescents secondary school students in Abakaliki using a sample 620 students and questionnaire as the data gathering instrument. The study found out that drug abuse was more prevalent among male older students from divorced or broken homes. Relating to this is the study conducted by Caday (2017) on the causes of drug abuse among college students with interview as the instrument. The findings of the study revealed that substance abuse among adolescents is mainly caused by dearth of attention from parents and feeble spiritual and moral values foundations.

In a study by Alhyas et al. (2015) on adolescents' opinion about substance use andinducingfactors, using a sample of 15 students and interview as the research instrument. The study establihed that the key factors identified

to influence adolescent engagement in substance abuse were parents-adolescent relationship and accessibility of drugs in the home environment. With regard to parent-adolescent relationship, it was revealed that low monitoring and poor parent-adolescents relationship made it easier for peers to entice their colleagues to experiment with drugs. Likewise, the affordability and easy accesibility of substances were identified as some of the factors that increase adolescents engagement into substance abuse.

In a related study by Kodjo and Klein (2002) on their research prevention and risk of adolescent substance abuse; the role of adolescents, families and communities using a sample of 674 students and questionnaire as the instrument. The study found out that the kind of relationship that exist within a family has been identified to have a significant influence on adolescent substance abuse. For instance, families that are characterised with high level of conflicts, the likelihood of younger ones engaging in drug abuse is high.

Additionally, another factor that has been found to contribute to substance abuse among adolescents is childhood maltreatment. According to Child Welfare Information Gateway (2011), childhood maltreatement or abuse takes the form of any act that the child's caregiver applies that results in physical or emotional harm. Many research studies have confirmed this assertion, for instance in a study conducted by Wall and Kohl (2007) on substance use in maltreated youth with a sample of 674 and questionnaire as the research instrument. The study concluded that adolescents found in families characterised with high occurrence of child abuse were extremely prone to participate in substance abuse. Similarly, in a study undertaken by

Singh, Thornton and Tonmyr (2011) on determinant for substance abuse using a sample of 347 students and questionnaire as the research instrument. According to the results of this research adolescents found within abusive families engaged in substance abuse.

Consistent with the aforementioned study is the work of Tonmyr, Thornton, Draca and Wekerle (2010) in their study. The study explored the relationship between childhood abuse and substance abuse among adolescents. Findings showed a significant positive relationship between between physical or sexual abuse and adolescent addiction to nicotine, marijuana, and alcohol use. This presupposes that being a victim of physical or sexual assault increases the vulnerability of an adolescent engagement in substance abuse. Similar works like Kilpatrick, et al., (2000) on their study on risk factors for adolescent substance abuse established that witnessing an abuse of a relative (i.e. mother, father, sibling or friend) on continuous basis could increase an adolescent susceptibility to substance use and abuse.

Similar observation was made by Hamburger, Leeb and Swahn (2008) in their research childhooh maltreatment and early alcohol use among risk adolescents using a sample of 18 students and interview as the research instrument. The study concluded that witnessing violence increases the adolescent vulnerability for developing a substance use disorder when such an individual becomes direct victim of the abuse. Generally, child abuse or maltreatment leads to stress hence, adolescents who are not able to cope with these stressors resort to substance abuse as their coping mechanisms. In some cases, adolescent that are often neglected by their family are found to be at high risk to engage in substance abuse.

Social Factors

Many research studies have demonstrated that there are numerous social factors that contribute to substance use among the youth. These include advertisment on the media, peer influence, negative role modelling, easy accessibility to substances in the environment among others. Peer pressure for instance was identified as the most significant factor that contributes to substance abuse among students in a study conducted by Mesfin, Bachlay Minilk and Melkamu (2017) on magnitude of substance abuse among students. The sample for the study was 268 students and questionnaire as the data collection instrument. Moreover, in a research conducted by Agbonbghale and Okaka (2014) on effects of drug abuse on academic performance of students with a sample size of 459 and questionnaire as the instrument. The study concluded that peer group influence is a major contributor to substance abuse among young people.

In a similar study by Jorge, Ferreira, Kawachi, Zarzar and Pordues (2018) on peer group influence and illicit drug use among adolescent using a sample of 913 students and questionnaire as the research instrument. The study found out that religious events, sports and traditional centred relationship are means that can provide a defenses against illicit drug use among adolescents. Consistent findings were found by Pilkington (2017) in the study understnding young people's drug use. The study used a sample size of 200 adolescents and questionnaire asthe instrument. The findings revealed that youth in group culture are unlikely to involve themselves in substance abuse. It also indicated that religious activities help the youth to stay away fron drug abuse. In comparison with the earlier studies, it implies that if an

individual joins a bad group, the likelihood of engaging in substance abuse is high while on the other hand religious and other well organized activities that are supervised by responsible adult help to prevent such an individual from engaging in substance abuse.

Another factor that many researchers have confirmed to be a major cause of substance abuse among young people is the influence of mass media. For instance, in the study of Pathak and Pokharel (2017) on causes of drug abuse among the youth using a sample of 256 males with observation and questionnaire as research instrument. The study concluded that the mass media, especially where celebraties like film stars and idols are shown on television is one of the major causes of substances abuse among adolescents. Consistent claims were found in the study by Francis et al. (2015) on their study epidemiology of alcohol use and it disorders among young people with a sample of 673 and questionnaire as the data collection instrument. The results identified television advertisement exposure as the main factor that entice adolescents to practice the use of certain drugs in their early ages. Also, the work of Senanayake et. al (2018) confirmed similar trend as product advertisment on televion increases young people's patronage in alcohol abuse and smoking. This implies that as the adolescentssee their favourite personalities advertising certain products like alcohol on television, it entice them to try such products without considering the negative consequences of it.

Again, easy accessibility and low cost of substances that are commonly abused is another factor that contributes to substance abuse. In a study conducted by Kasundu and Mutosi (2012) on factors contributing to substance abuse among the youth using a sample of 120 students and

questionnaire as the instrument. The study found that availability of drugs in the neighbourhood of the individual and low cost of the substances can become a motivating factor for some young people to engage in substance abuse. However, the study further stressed that this could occur when other related factors are associated with it.

Personal Factors

There are several factors that emanate from within the individual that can propel him or her to engage in substance use. For instance in the study of Derzon (2010) on predictors of youth alcohol, tobacco and marijuana use using asample of 20 students and interview as the instrument. The study reveled that a person's risk perception on the harmful consequences of drug is a key factor that can influence adolescent drug use. Similar observation was found in the study of King et al. (2012) on sex and grade level differences on marijuana use among youth. The study used a sample of 15 repondents and interview as the data collection instrument. Results indicated that wrong perception of an individual is a major factor that increases adolescent vulnerability to engage in substance abuse. Hence, male adolescents who perceived marijuana and other substances with less harmful risk were more than usual to be substance abusers than females who had higher risk perception towards substance use.

A similar result was found in the study of Grevenstein, Nagy and Kroeninger-Jungaberle (2015) which explored how a person's risk perception towards tobacco, alcohol and cannabis contributed to their intake of those drugs in their later years in life. The study used a sample of 345 adolescents with questionnaire and interview as the instruments. Analysis discovered a

significant relationship between participants' risk perception and engagement in substance use for all the under studied substances. Again, it was observed that variations in risk perception predict changes in future substance use of tobacco, alcohol and cannabis.

Consistent result was found in the study of Husaini and Mann (2019) on their study adolescent's perception on benefits and intention to use marijuana using a sample of 18 students and interview as the instrument. The study found out that a person's high perception towards the benefits of a drug increases the likelihood of using that drug. As suggested by Villacé, Fernández and Costa (2013) on their study alcohol consumption among young people using a sample of 879 respondents and questionnaire as the data collection instrument. The study found out that decreasing the risk perception of marijuana and other substances as well as increasing its access through legalization tends to increase its usage among adolescents. This implies that when adolescents perception of risk on marijuana decreases, the tendency to use the substance increases and the contrary holds when their risk perception increases.

Again, in a reaearch conducted by Zaman, Razzaq, Hassan, Qureshi and Hanif (2017) on drug abuse among students using a sample of 500 students and questionnaire as the research instrument found. The findings revealed that depression and anxiety are among other factors that account for students substance abuse. Consistent results were found in the study of Owusu-Dabo, Lewis, McNeill, Gilmore and Britton (2009) which sought to pinpoint the main factors that account for students engagement in substance abuse with a sample of 375 students and questionnaire as the data collection

instrument. Results from the study established that factors such as poor school performance, poor problem solving abilities and self-esteem formed part of the personal factors that account for students engagement in smoking tobacco and other related drug abuse.

In a similar study by Petruzzi, Pullen and Lange (2018) on contributing risk factors for substance use among youth in Liberia. The study adopted the qualitative research approach with 72 students engaged in focus group discussion. The study concluded that multiple factors account for students' substance use. These include emotional instability, fear of acdemic failure and unintentional drug use.

Relative Contribution of Familial, Social and Personal Factors

This segment provides an appraisal of studies on contribution of each of the factors. In the study of Nachinaab (2018) on the causes and effects of substance abuse in communities which was carried out in Hohoe-Adaho District in the Volta Region of Ghana. The study adopted survey approach with questionnaire as the data collection instruments. The sample size was 279 youth between the ages of 21-35. The findings of the study revealed that social factors such as, peer group influence is a major contributor of substance abuse among the youth.

Similar study, Bah (2019) examined drug abuse among street children in Gambia. The study employed qualitative approach with structured interview as the data collection instrument. The sample size for the study was 35 made up of five drivers and 30 casual apprentices (i.e., drivers' mate). The study found that peer influence was the leading cause of substance abuse with the aim of getting 'high' to relieve stress, group recognition and to be trusted by

friends. Though, the respondents in the two studies were not students, the findings are significant to the present study in the sense that, the predisposing factors that compel young people into peer influence are the same.

Study conducted by Mohasoa (2018) on substance abuse among adolescents in South Africa using a sample of 12 students between the ages of 12-15. Qualitative explorative design was adopted with semi-structured interview and observation as the main instrument. The findings identified individual, family and environmental factors as the causes of substance abuse among young people. However, peer group influence was the leading factor. Similar study was conducted by Mususa and Matutu (2019) on drug and alcohol abuse among young people in Zimbabwe. The respondents were 2610 youth between the ages of 10-24.

The study employed the survey method with questionnaire as the data gathering instrument. The study found that multiple factors such as breakdown of family support system, peer pressure, stress and inadequate knowledge about the effects of drug abuse were responsible for substance abuse. While in the study of Mohasoa, qualitative approach was employed, Mususa and Matutu (2019) adopted the quantitative research design, yet the two studies had a similar finding which is peer influence. Their finding is not surprising since many researches on causes of drug abuse has affirmed it as one of the leading factors when it comes to substance abuse among the youth.

On child and adolescent substance use initiation and patterns of use by Kingston, Maya, Cohen-Serrins and Knight (2017), the study used a sample of 86 young adults between the ages of 18-28. Data collection was done using semi-structured qualitative interview. The findings of the study revealed that

poor parental monitoring by parents was the key factor leading to substance abuse by the youth. In a similar study by Mudavanhu and Schenck (2014) on substance abuse amongst the youth in Grabouw, South Africa, the respondents were six parents whose children abused drugs, nine stakeholders from the communities and 20 focus groups. Interview was used to gather the data. The study identified multiple personal factors of which the family plays a major role.

In a qualitative literature review by Rummage (2019) in South Africa, 42 journal articles pertaining to illicit drug use were reviewed. The findings revealed that several factors such as easy availability of drugs, violence, unemployment and weak parental control were associated with substance abuse among the youth. However, family related factors were ranked high. Relating to this is the study conducted by Makoena (2013) on social factors influencing adolescent drug abuse. The study employed exploratory research approach where interview was used to gather data. The Study concluded that family and peer pressure are the main factors that influence abuse of substances by the youth. Some of the family factors include poor family relationship such as poor communication between parents and their adolescent children and unstable home environment. The study however, did not indicate which of the two factors contributed most.

Birhanu, Bisetegn and Woldeyohannes (2013) examined the high prevalence of substance use and associated factors among high school students in Ethiopia. A sample size of 651 students was used with questionnaire as the research instrument. The findings showed that family history and friends' use of substance were the key factors responsible for drug abuse among young

ones. Similar results were found by Renes and Strange (2018) on their study factors affecting drug abuse in adolescent females in rural communities in USA. The study engaged 345 young girls between the ages of 15-21 with questionnaire as the data gathering instrument. The study further found that religious and social skills were found negatively with substance use. From the findings, it implies that the likelihood of younger ones abusing drugs will be less in a home where none of the family members uses drugs. Also parents who monitor their younger ones to ensure that they do not engage in any deviant behaviour and the family which is guided by sound religious principles.

In another study by Adewumi (2017) on psychosocial factors influencing substance abuse among undergraduates students in Nigeria using questionnaire as the data collection instrument. The study adopted the quantitative approach with 150 respondents. The finding revealed that personal factors such as self-esteem and stress which may come as a result of home related factors accounted for the students' use of drugs. However, the study further observed that religious activities serve as a protective factor against drug abuse.

In a longitudinal study by Shek, Zhu, Dou and Chai (2019) on the influence of family factors on substance use in early adolescents in Hong Kong, China. The study engaged 2669 junior high school students with questionnaire as the instrument. The study revealed the critical role of parents in influencing substance use. This implies that the parents' behavioural attitude towards substance use and their relationship with their younger ones will predict their use or otherwise. In a similar study by Foo, Lian and Lee

(2019) on family factors and peer influence in drug abuse in a rehabilitation centre. Interview and semi-structured questionnaire were used with seven respondents. The study identified multiple factors such as family economic status, curiosity and peer influence as factors responsible for drug abuse. However, the study concluded that majority of the respondent confirmed that, they were in that situation due to their bad friendships.

Conceptual Framework

The conceptual frame work decribes the hypothesized relationships among the variables (familial, social, personal factors and substance use). These assumptions are based on critical evaluation of empirical studies and other relevant literature. Figure 1 presents the model depicting the relationships among the variables.

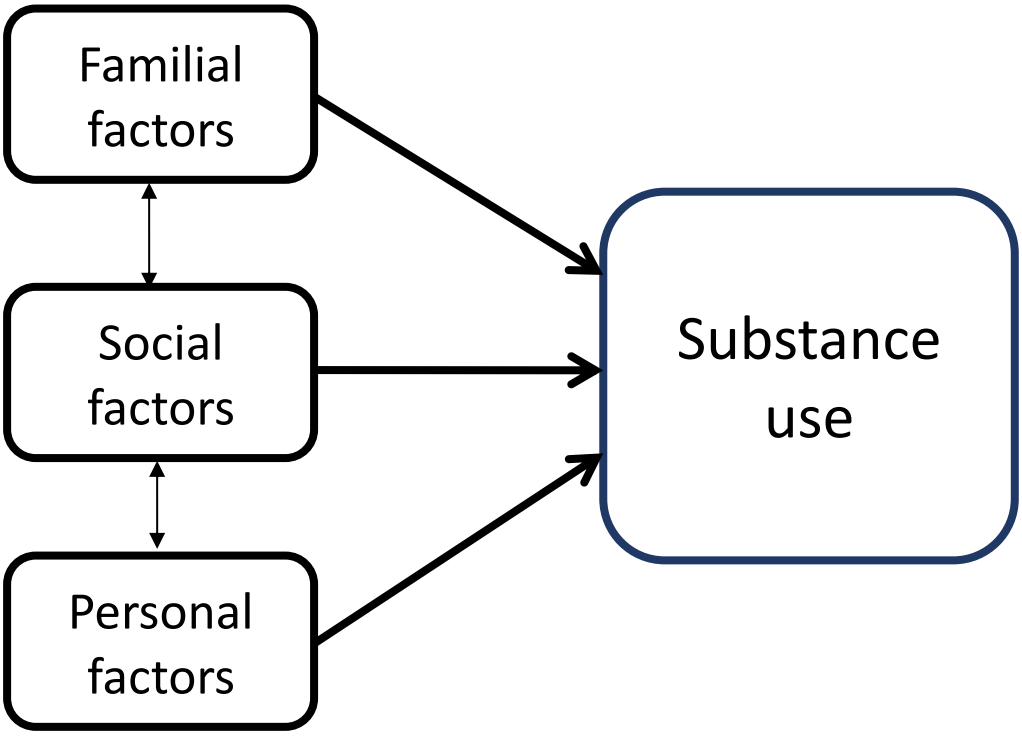

Figure 1: Conceptual Model

Source: Author's own construct (2021)

As shown in figure 1, the study proposes a direct relationship between familial factors and substance use. That is, familial factors such as poor parent-child relationship, poor parental supervision and family record of substance abuse among family members may predict substance use. Again, it is proposed that social factors such as advertisement on television, negative peer influence, easily accessibility and affordability of drugs among others may have a direct influence on student's substance use. Similarly, personal factors such as individual's risk perception that is, whether substance use is beneficial or otherwise, self-esteem, stress and poor academic performance may have a direct influence on substance use. However, there is a relationship among the three (i.e. familial, social and personal) factors.

Chapter Summary

The conceptual review focused on the concept of substance use, types of psychoactive substances and characteristics of senior high school students. Substance use was described as the use of drug for purposes other than what was intended for or harmful use of psychoactive substances which has the ability to affect the mind. Examples of psychoactive drugs include opioids, depressants, stimulants, hallucinogens and cannabis.

With the theoretical review, three theories were used to guide the study. These are social learning theory, social control theory and drug sub-culture theory. The basic assumption of social learning theory is that people acquire or learn deviant behaviour through their relations with primary groups that provide negative role models, definitions conducive to crime, and positively reinforce deviant behaviour. The theory is built around four main antecedents that is; differential association, definition, imitation and

differential reinforcement. The social control theory and drug sub-culture theory assert that the factors that induce young people to engage in substance use and abuse originate from the influence of parental cultural values and their immediate environment.

The empirical review focused on the most commonly used substances where it revealed that alcohol, cannabis, caffeine, tobacco and tramadol were the most abused ones in the literature reviewed. Again, the following were identified as factors contributing to substance use; child abuse and neglect, parental engagement in substance use, poor parent-child relationship and easy accessibility of drugs. The rest were the influence of media, advertisement on television and radio, peer influence, poor academic performance, self-esteem, stress and the individual's perception on whether substance use is beneficial or otherwise.

CHAPTER THREE

RESEARCH METHODS

Introduction

The study examined the factors that contribute to substance use among senior high school (SHS) students in the Kumasi Metropolis. This chapter covered the methodological approaches that were used to undertake the entire investigation. Specifically, it entails the study design and area, population, sample and sampling technique, data gathering instruments, procedure for gathering data and analytical techniques.

Research Design

According to Creswell (2014), research design is the intersection of philosophies, strategies of inquiry and specific method that allow the researcher to address its study objectives judging from the constraints impose on the study. Generally, research design provides the processes as to how the study will collect its data and analyse the data. As the study seeks to examine the factors that contribute to substance abuse among senior high school (SHS) students, it was positioned within the context of descriptive survey design. This design allows the researcher to gather information for testing and answering research questions and hypothesis in a study (Gay, 1992).

Moreover, Best and Khan (1998) maintain that descriptive survey is concerned with the conditions that exist or trends that are developed. Since the issue of substance abuse has been with the society, it was appropriate to use descriptive survey to assess the current status of the main factors that

contribute to it. Descriptive survey has some deficiencies such as, difficulty in getting respondents to answer questions honestly, inability to get in-depth of the problem being investigated among others. On the contrary, survey has the following advantages; it is relatively inexpensive especially in terms of its administration, very large sample with different backgrounds are feasible, making the results statistically significant (Amedahe & Asamoah-Gyimah, 2004). It was therefore necessary to use this design due to the nature of the topic under study which is more appropriate than any other design.

Study Area

The Kumasi Metropolitan is one of the 27 districts in the Ashanti Region of Ghana. Kumasi Metropolitan corresponds to the city of Kumasi, the region's capital. The metropolitan is located in the transitional forest zone and is about 270km north of the national capital, Accra and is located between Latitude 6.35^0 N and 6.40^0 S and Longitude 1.30^0 W and 1.35^0 E and elevated 250 to 300 meters above sea level. It has a surface area of approximately 21.3 square kilometres which is about 0.9% of the region’s land area.

The Metropolis shares boundaries with Kwabre East Municipal and Afigya-Kwabre District to the North, Atwima-Kwanwoma District and Atwima-Nwabiagya North District to the West, Asokore Mampong Municipal and Ejisu Municipality to the east and Bosomtwe District to the South. The population of the Metropolis according to the 2010 Population and Housing Census stands at 1,722,806, with 823,088 males and 899,718 females. The population of youth from the ages of 10-24 is 581,058 representing 33.7%. In all the metropolis percentage share of the total population in the Ashanti Region is 36.2%.

Population

The population of the present research involved all SHS 2 students in public senior high schools within the Kumasi Metropolis. As at the time of the study only Form 2 students were in school due to the COVID-19 pandemic. Records from the Metropolitan Directorate of Education (2019) indicate 20 public SHSs with a total of 22,000 SHS 2 students. Out of these 20 schools, 12 of them are mixed sex while there are four boys' and four girls' schools respectively.

The distribution of the target population is presented in Table 1.

Table 1: Distribution of Students in the 20 SHSs

School	Number of Students		
	Male	Female	Total
Prempeh College	1300		1300
Serwaa Nyarkoh Senior High School		1400	1400
Asanteman Senior High School	660	580	1240
Kumasi Technical Institute	875	220	1095
Adventist Senior High School	607	588	1165
Anglican Senior High School	725	700	1425
Al-Azariah Islamic SHS	208	192	400
Ghana Armed Forces SHS	680	520	1200
Kumasi Senior High Technical School	721	585	1306
KNUST SHS	700	303	1003
St. Hubert SHS	705		705
St. Louis SHS		1042	1042
Kumasi Girls' SHS		878	878
Kumasi Wesley Girls' SHS		700	700
Kumasi High School	1200		1200
Opoku Ware SHS	1325		1325
Pentecost SHS	374	300	674
T.I Ahmadiya SHS	723	619	1342
Islamic SHS	800	500	1300
Osei Kyeretwie SHS	655	645	1300
Total	12258	9742	22000

Source: GES, Kumasi Metropolitan Directorate (2019)

However, since it was impossible to use all the 20 schools for the study, students from five of the schools were used to represent the entire population. The distribution of the accessible population in the five selected schools is presented in Table 2.

Table 2: Distribution of Students in the Five SHSs

School	Number of Students		
	Male	Female	Total
Prempeh College	1300		1300
Serwaa Nyarkoh Senior High School		1400	1400
Asanteman Senior High School	660	580	1240
Kumasi Technical Institute	875	220	1095
Adventist Senior High School	607	558	1165
Total	3442	2758	6200

Source: GES, Kumasi Metropolitan Directorate (2019)

Sampling Procedures

According to Amedahe and Asamoah-Gyimah (2004), sampling is the process of selecting a portion of the population to represent the entire population. Sampling enables the researcher to study a relatively small number of units in place of the target population, and to obtain data that are representative of the entire population. Sarantakos, as cited in Amedahe & Asamoah-Gyimah (2004) identified some factors under which the use of a sample survey is necessary. These include: (1) situations where complete coverage of the population is not possible; (2) when complete coverage may not offer substantial advantage over a sample survey (sampling provides a better option since it addresses the survey population in a short period of time

and produces comparable and equal valid results); (3) sample survey is more economical, since it contains fewer people and requires less printed material, fewer general costs (travelling and accommodation) and fewer experts; (4) samples require less time and produce quick answers.

Based on these factors and considering the target population of 22,000 students, then a sample survey was more relevant and appropriate. The simple random sampling technique was used to sample 385 students from the accessible population of 6200. This was in accordance with the Krejcie and Morgan (1970) criterion for selecting sample size for a target population of 22,000.

Again, the study ensured that each public senior high student within the Kumasi Metropolis had an equal chance of being selected and the need to represent all categories of students, the selection of the five schools was done using stratified random sampling technique. The schools were first stratified into sex strata, namely single sex boys', single sex girls' and mixed sex schools. After that simple random technique, specifically the lottery method was used to select the schools from each of the sex stratum. In all, one school was selected from each of the single sex schools while three schools were selected from the mixed schools. The next stage was the selection of the respondents in each school using simple random method (i.e. lottery method). From the accessible population of 6200 students, the proportionate approach was used to select the sample size from each of the schools. Since 385 students were selected from a total enrolment of 6200 based on the Krejcie and Morgan (1970) criterion, the sample size for each school was determined as follows:

Sample size =enrolment of the school X total sample (385)

Total enrolment (6200)

For example, (sample size for Prempeh College) = 1300 X 385

6200

= 81 students

Therefore, the sample used from each of the schools is presented in Table 3.

Table 3: Enrolment and Sample of Schools for the Study

School	Total Enrolment	Sample used
Prempeh College	1300	81
Serwaa Nyarkoh Senior High School	1400	87
Asanteman Senior High School	1240	77
Kumasi Technical Institute	1095	68
Adventist Senior High School	1165	72
Total	6200	385

Source: GES, Kumasi Metropolitan Directorate (2019)

Data Collection Instrument

The data collection instrument was questionnaire. The questions were closed-ended with options for respondents to select from. The questionnaire was structured into three sections. Section A was used to collect data on demographic characteristics of the respondents such as age, sex, and form. On age of respondents, responses were categorized and coded into three categories ranging from 10-15 years, 16-19 years and 20-24 years. Sex of respondents were categorized and coded into two, male (1) and female (2). The final part was about whom the respondent stays with; both parent, one parent or a relative.

Section B of the questionnaire was used to collect data on the commonest forms of substances used by the students. The study adapted the Adolescent Drug Involvement Scale (ADIS) developed by (Moberg & Hahn, 1991). The decision to adapt the instrument was informed by the literature as some of the substances on the list were not familiar within the Ghanaian context. As a result, modifications were made to reflect the local setting. In all, seven substances were in the final questionnaire. These are Tramadol, Valium, Alcohol, Cigarette, Coffee, Cannabis and Cocaine. Substance use frequencies were categorized and coded into five groups; Never Used-(1), Tried but quitted-(2), Use but not regular-(3), Use ones a week-(4) and Use Daily-(5).

Section C of the questionnaire was used to gather data on factors that contribute to substance abuse among SHS students. The study adapted factors contributing to substance abuse scale developed by Gotsang, Mashalla and Seloilwe (2017). The scale is based on 5-point Likert-type scale with the following options; Strongly Disagree-(1), Disagree-(2), Neutral-(3), Agree-(4) and Strongly Agree-(5). A mean score of 3.0 was estimated by summing up the five options and dividing by the number of options, that is ([1+2+3+4+5]/5=3.0). Mean score of 3.0 or above shows agreement to the item, while mean score of below 3.0 shows disagreement.

The section comprises of 19 questions which has been divided into three sub-headings namely familial, social and personal factors. Familial factors consisted of eight questions, personal factors were made up of five questions and social factors consisted of six questions. The number of items remained the same as in the original test but some items were modified. For instance, item (1) “Seeing my father smoking could entice me to try smoking

one day" was changed to "Seeing my parents smoking/drinking could entice me to try smoking/drinking one day". In all five items were re-worded.

Validity of the Instrument

To establish validity of the instrument, initial copies of the instrument were distributed to some colleagues of the department to answer and notify any correction that needed to be made in the instrument. After that, some experts like the study supervisor were consulted to vet the questions especially the commonest forms of substances. This was to ascertain whether the questions really depicted what it sought to measure.

Reliability of the Instrument

The factors contributing to substance abuse scale was pre-tested at Simms Senior High School in the Kwabre East Municipality of Ashanti Region. Data was collected from 55 participants. The collected data was statistically analysed using SPSS version 25. The Chronbach's coefficient alpha of the Substance Abuse Scale is 0.73 and that of the Adolescent Drug Involvement scale is 0.78.

Data Collection Procedure

Prior to the commencement of the data collection, an introductory letter was obtained from the Department of Guidance and Counselling to introduce the researcher as a student (see Appendix B). The necessary ethical clearance was obtained from the College of Educational Studies (see Appendix C). The introductory letter was sent to the Metropolitan Directorate of Education, Kumasi to seek permission for the conduct of the study. After approval had been given, arrangements were made with the heads of the various schools on the specific dates and time for the data collection. The date

for the data collection was based on the approved date and time given by the authorities of each school. The entire administration of the questionnaire was administered by the researcher with assistance from some teachers in the selected schools. In all, the data collection took a period of three weeks to complete. At the end of the data collection, a return rate of 366 representing 95.1% was achieved.

Ethical Considerations

The study adhered to ethical issues regulating the conduct of research at the University of Cape Coast. Privacy, anonymity and confidentiality were ensured. Consent of all participants was sought before data collection commenced. Initially, the purpose of the study was explained to respondents and they were given the opportunity to decide whether they would like to participate in the study or not. After that their consent were sought by completing the consent form. The data collected were kept confidential, names of students or their schools attended were not disclosed in any part of the work. The data collected were analysed as a group, and for that matter, it was not possible to link responses to individual student or school. The data collected were well-managed and kept privately to avoid accessibility of other people.

Data Processing and Analysis

The retrieved data was vetted to ascertain its completeness before it was coded into the SPSS version 25 to facilitate the analysis. Here only the completed questionnaire was used to ensure data uniformity and consistency. Moreover, the statistical tool used in each context was informed by what the research objective sought to achieve. For the first study objective that is, to

identify the most commonly abused substance by SHS students, data on this questionnaire was analysed on the basis of descriptive statistics using frequencies and percentages to identify the trend in the respondents' responses. This analytical method enabled the researcher to identify the commonality in the substance usage.

On research questions 2, 3 and 4, mean and standard deviation were used for the analysis. There were 19 items on 5-point likert-type scale which were scored from 1 to 5 (thus, from Strongly Disagree=1, Disagree =2, Neutral=3, Agree =4 and Strongly Agree=5). A midpoint of 3.0 was used as the basis of interpretation. This is the mean of the responses for each item. The mean scores of all the items were added and divided by the number of responses to obtain the mean of means. Mean scores below 3.0 were regarded as disagreement while mean scores of 3.0 or above depict agreement to the item. The standard deviation indicated the variations of each of the scores away from their mean scores. Finally, simultaneous multiple linear regression was used to find out the relative contribution of familial, social and personal factors that contribute to substance.

Chapter Summary

The study adopted quantitative research approach with the research design being descriptive survey. Five out of 20 senior high schools within the Kumasi Metropolis were used for the study. This included one girls' school, one boys' school and three mixed schools. A sample of 385students was used for the study. Stratified and simple random techniques were used to select the respondents. The research instrument was a questionnaire made up of three

sections. Both descriptive and inferential statistics were used to analyse the data.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The study examined the factors that contribute to substance use among senior high school (SHS) students in the Kumasi Metropolis. The current chapter presents the results of the data collected from the field. Questionnaire was used to gather data from the respondents. The chapter was organised in two parts. The first part presents the results, while the second part presents the discussion of the findings. The results are based on 366 valid questionnaires. This constitutes a return rate of 95.1%.

Demographic Information

This section presents results on the demographic distribution of the respondents. The demographic information covered include age, gender and the person whom the respondents' stay with. Table 4 presents the demographic distribution of the respondents.

Table 4: Demographic Distribution of the Respondents

Demographic variable	Frequency	Percentage (%)
Age		
10-15 years	26	7.1
16-19 years	249	68.0
20-24years	91	24.9
Gender		
Male	214	58.5
Female	152	41.5
Whom they stay with?		
Both parents	218	59.6
One of the parents	105	28.7
Relative	43	11.7

Source: Field survey (2020)

From Table 4, a vast majority of the respondents (68%) were from the ages of 16-19 years, while 24.9% were 20-24years. The study was dominated by male respondents (58.5%); however, 41.5% of the respondents were females. More than half of the respondents (59.6%) reported they stay with both parents, 28.7% stay with one of the parents, and 11.7% stay with a relative.

Main Results

The ensuing section presents the main results of the study. The results were organised in the order of the research questions. Basically, the study was guided by five research questions.

Research Question 1

What are the commonly used substances by SHS students in the Kumasi Metropolis?

The focus of this research question was to determine the substances that are commonly used by SHS students. The substances covered include tramadol, valium, alcohol, cigarette, coffee, cannabis (wee), and cocaine. The respondents were asked to indicate the frequency of use for the aforementioned substances. The responses of the respondents are presented in

Table 5: Commonly Used Substances

	UD		OW		NR		TQ		NU		N/A	
Substance	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Tramadol	-	-	3	0.8	2	0.5	9	2.5	352	96.2	-	-
Valium	-	-	1	0.3	2	0.5	5	1.4	355	97.0	3	0.8
Alcohol	-	-	5	1.4	23	6.3	46	12.6	289	79.0	3	0.8
Cigarette	-	-	1	0.3	1	0.3	14	3.8	344	94.0	6	1.6
Coffee	8	2.2	17	4.6	80	21.9	31	8.5	229	62.6	1	0.3
Cannabis	1	0.3	1	0.3	3	0.8	17	4.6	343	93.7	1	0.3
Cocaine	1	0.3	1	0.3	1	0.3	3	0.8	359	98.1	1	0.3

Source: Field survey (2020)

Note:

UD = Use Daily;

OW = Once a Week;

NR = Not Regular;

TQ = Tried but Quitted;

NU = Never Used;

N/A = Not Applicable

As presented in Table 5, the greater majority of the respondents indicated they never used any of the seven substances listed. However, 21.9% of the respondents indicated they use coffee, but not regular. Nearly 5% use coffee once a week, while 2.2% of the respondents use coffee on daily basis. Further, 1.4% of the respondents reported they use alcohol once a week, 6.3% use alcohol but not regularly, 12.6% tried alcohol, but they quitted it. For substances such as tramadol, valium, cigarette, cannabis, and cocaine, less than 1% each of the respondents uses them either daily, once a week or not regularly.

Generally, from the results, it can be said that the percentage of the use of substances such as tramadol, valium, cigarette, cannabis, and cocaine were low. However, the most used substances were coffee and alcohol.

Research Question 2

What are the familial factors that contribute to substance use among SHS students?

This research question sought to identify the familial factors that could account for substance use among the SHS students. The respondents provided responses to a number of items on family-related factors. Mean scores were used to analyse the responses of the respondents. A midpoint of 3.0 was used

as the basis of interpretation. Mean scores below 3.0 were regarded as disagreement, while mean scores of 3.0 or above depict agreement to the item. Table 6 presents details of the results.

Table 6: Familial Factors

Statement	M	SD
Seeing my parents smoking/drinking alcohol could entice me to try smoking/drinking one day.	3.31	1.50
Seeing alcohol sprang all over my house could cause me to try some in one of the days.	2.19	1.46
When my parents care less about what I do away from home, I am likely to try out using a drug.	3.20	1.49
The strong attachment I have with my parents does not prevent me from engaging in substance abuse.	2.34	1.56
Parents' love for drugs could entice the child to follow their suit by trying out an illicit drug.	3.17	1.58
Not being cherished and love by my parents could lure me to use drug in order to get a good feeling.	3.31	1.43
Being abused physically by parents could make the individual to use drug in order to minimize these emotional hurts.	3.02	1.50
Parents' failure to supervise and monitor what a child does frequently may increase the child's predisposition to substance abuse.	3.25	1.57
Mean of means	*2.97*	*1.51*

Source: Field survey (2020)

Table 6 provides the familial factors that possibly contribute to substance abuse among SHS students. From Table 6, five factors were regarded as a familial factor responsible for substance abuse. These are; seeing my parents smoking/drinking alcohol could entice me to try smoking/drinking one day (*M= 3.31, SD= 1.50*), When my parents care less about what I do

away from home, I am likely to try out using a drug (*M= 3.20, SD= 1.49*), Parents' love for drugs could entice the child to follow their suit by trying out an illicit drug*(M= 3.17, SD=1.58*), Not being cherished and love by my parents could lure me to use drug in order to get a good feeling*(M= 3.31, SD=1.47),*

Being abused physically by parents could make the individual to use drug in order to minimize these emotional hurts (*M= 3.02, SD =1.50*) and the parents' failure to supervise and monitor what a child does frequently may increase the child's predisposition to substance abuse (*M* = 3.25, *SD* = 1.57). However, the remaining two items: seeing alcohol sprang all over my house could cause me to try some in one of the days *(M= 2.19, SD= 1.46)* and the strong attachment I have with my parents does not prevent me from engaging in substance abuse (*M= 2.34, SD=1.56*) were disagreed by the respondents.

Research Question 3

To what extent does social factors influence substance use among SHS students?

The research question examined the social factors that may be responsible for substance use among SHS students. The respondents responded to six items that border on social factors that may influence students to abuse substances that are harmful to their bodies. The responses of the respondents were analysed using mean scores and standard deviation. Mean scores below 3.0 were regarded as disagreement, while mean scores of 3.0 or above depict agreement to the item. Details of the results are shown in Table 7.

Table 7: Social Factors

Statement	M	SD
My desire to look good in the eyes of my peers could entice me to try using the drug they use.	3.20	1.55
The frequent alcohol advertisement on both radio and TV could encourage an individual to try out these alcohols in the future.	3.42	1.58
The society craving for alcoholism could entice an individual to tryout drinking.	2.42	1.43
The desire to be accepted into peer groups could lure an individual to try using the drugs they use.	3.14	1.53
Seeing my closest friend smoking/using drug could entice me to try smoking/using drug one day.	3.00	1.40
Living in a community that has high rate of substance abuse could encourage me to try out some of these drugs.	2.45	1.46
Mean of means	*2.94*	*1.49*

Source: Field survey (2020)

From the results in Table 7, four items were regarded as social factors responsible for substance use among SHS students. Respondents, for instance, indicated that the desire to look good in the eyes of their peers could entice them to try using the drug they use (M = 3.20, SD = 1.55); the frequent alcohol advertisement on both radio and TV could encourage them to try out these alcohols in the future (M = 3.42, SD = 1.58);the desire to be accepted into peer groups could lure an individual to try using the drugs they use (M= 3.14, SD= 1.53)and seeing their closest friend smoking/using drug could entice them to try smoking/using drug one day (M = 3.00, SD = 1.40). However, the respondents disagreed with two items as responsible for substance abuse among SHS students. These are the society craving for alcoholism could

entice them to try out drinking (M=2.42, SD= 1.43) and living in a community that has high rate of substance abuse could equally not encourage them to try out some of these drugs (*M* = 2.45, *SD* = 1.46).

Research Question 4

What are the personal factors that contribute to substance use among SHS students?

The aim of this research question sought to determine the personal factors that may contribute to substance use among SHS students. The respondents were asked five items on personal factors responsible for substance use. The responses of the respondents were analysed using mean scores and standard deviation. Mean scores below 3.0 were regarded as disagreement, while mean scores of 3.0 or above were regarded as agreement to the item. Table 8 presents details of the results.

Table 8: Personal Factors

Statement	M	SD
My desire to feel good could increase my predisposition in substance abuse.	2.10	1.31
The cravings to appear high in the mist of friends could entice an individual to engage in substance abuse.	3.14	1.47
The sense of insecurity could lure an individual to engage in substance abuse.	3.31	1.43
A person's risk perception about substance abuse could increase/decrease an individual involvement in substance abuse.	3.13	1.53
The perceive strength and power associated with drug use could increase an individual's involvement in substance abuse.	3.04	1.51
Mean of means	2.94	1.45

Source: Field survey (2020)

From the factors indicated in Table 8, four of them were adjudged personal factors responsible for substance use among SHS students. The agreed items are the cravings to appear high in the mist of friends could entice them to engage in substance abuse (M=3.14, SD=1.47);the sense of insecurity could lure them to engage in substance abuse (M=3.31, SD=1.43); their risk perception about the benefits and dangers of substance abuse could increase or decrease their involvement in substance abuse (M=3.13, SD=1.53) and the perceive strength and power associated with drug use could increase their involvement in substance abuse (M=3.04 SD=1.51). On the contrary, the item on thedesire to feel good could increase their predisposition in substance abuse was disagreed by the respondents (*M* = 2.10, *SD* = 1.31)

Research Question 5

What is the relative contribution of familial, social, and personal factors that contribute to substance use among SHS students?

The aim of this research question sought to determine the relative contribution of each of familial, social, and personal factors that contribute to substance use among students. Data gathered on this research question were analysed using simultaneous multiple linear regression analysis. The predictor variables were familial, social, and personal factors. The criterion variable was respondents' score on substance use. Table 9 presents details on the model summary.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.149	.022	.13	1.88	1.763

F (3, 319) = 2.39, *p* = .069

Source: Field survey (2020)

From Table 9, the model containing familial, social, personal factors, and substance use was not statistically significant, F (3, 319) = 2.39, p = .069. The model accounted for 13% of the variances in substance use (Adjusted R Square = .13). The results of the Durbin-Watson's test (d = 1.7) showed no autocorrelation. This was because Durbin-Watson's coefficient (1.7) was greater than 1.4 but less than 2.5. Other assumptions such as linearity, homoscedasticity, and normality of residuals were adhered to (see Appendix D). Table 10 presents the regression coefficients.

Table 10: Impact of Familial, Social, Personal Factors on Substance Use

	Unstandardized Coefficients		Standardized Coefficients			
Model	B	SE	Beta(β)	T	Sig.	VIF
Constant	34.404	.312		110.331	.000	
Familial	-.315	.143	-.169	-2.210	.028	1.898
Social	-.032	.135	-.019	-.237	.813	2.179
Personal	.118	.139	.067	.847	.397	2.033

*Significant, p< .05

Source: Field survey (2020)

The results in Table-10 shows that there was no multicollinearity since all the variance inflation factors (VIFs) were less than 10. This implies that the relationship between the predictor variables was not strong. The results further showed that both social factors, β = -.019, t = -.237, p = .813; and personal factors, β = .067, t = .847, p = .397 were not significant predictors of substance use. However, familial factors significantly predicted substance abuse, β = -.167, t = -.2.210, p = .028. The result implies that familial factors are more likely to predict substance abuse among the students. Relatively,

familial factors had the highest contribution (β = -.167), followed by personal factors (β = .067) and social factors contributed the least (β = -.019).

Discussion

This section discusses the results of the study. The discussion was organised under the following topical issues:

a. Commonly Used substances
b. familial factors
c. social factors
d. personal factors
e. Relative contribution of familial, social and personal factors

Commonly Used substances

The study identified that the commonly used substances like cocaine, valium, tramadol, cigarette, and cannabis was less 1%. However, the percentage of students who indicated that they tried but quitted was high. For instance, cannabis recorded 4.6%, cigarette 3.8%, tramadol 2.5% and valium 1.4%. The withdrawal of these substances by some of the students after their initial exposure could be attributed to their definition (i.e., attitudes and perception towards the wrongfulness of their abused of those substances). According to Marcum et al. (2015), the more an adolescent regards a particular behaviour as bad, the less likelihood that the adolescent or individual will engage in such act or behaviour.

However, coffee and alcohol were the leading substances used by the students with a rate of 21.9% and 6.3% respectively. Moreover, 8.5% and 12.6% of the respondents indicated they tried using coffee and alcohol but renounced its used. The findings of this study agrees with a couple of studies,

for instance Assabil (2010) on abuse of psychotropic substances by JHS and SHS students in Bosomtwi and Atwima-Kwanwoma Districts, revealed that the prevalence rates of coffee and alcohol were 94% and 31% respectively.

Also, in the study of Norton, Lazev and Sullivan (2011) on patterns of caffeine use among students in USA found out that about 98% of the students have consumed caffeine in their life time. Compare the two aforementioned studies of Assabil and Norton to the current study shows that the prevalence rate of coffee abused in the earlier studies are higher than this study. The high consumption of caffeine by the youth is not different from that of the adult population as it can be affirmed by studies like Lieberman et al. (2012) on their study caffeine use among Active-Duty USA Army Soldiers. The study concluded that about 80% of USA population consumes caffeine regularly.

The rate of alcohol which is 6.3% and 12.6% of the respondents indicating they have tried is an indication that it is one of the most abused substances by students as asserted by the (World Health Organisation, 2017). The finding of this study agrees with other studies like (National Institute on Drug Abuse, 2012; Miech et al. 2016). Their studies found out that 72% of USA and 65%of Brazilian adolescents respectively identified alcohol as their most consumed substance. A similar observation was made by (Adu-Mireku, 2003; Kwofie, 2018) where both ranked alcohol as the most abused substance among the youth in Ghana in their studies. The high abused of alcohol by the youth could be attributed to its increased accessibility and availability within our communities (Kasola, 2014).

Alcohol remains one of the few psychotropic substances which is accepted and encouraged across many cultures. Othuis, Darrendeau and

Barrett (2013) observed that substances that are legal, for instance coffee and alcohol are used to initiate most youth into substance use and abuse. This indicates that an individual's early exposure to these drugs may consequently lead him or her to use other illicit drugs. Galduro'z and Noto (2000), USA Department of Health and Human Service (2004) have asserted that excessive intake of alcohol results in the intake of other substances like cannabis, cocaine and other illicit substances. This implies that, as the study found coffee and alcohol as the most abused substances by the students, their likelihood of using other substances in the future is high.

Familial Factors

From the mean scores of the result, it was found that parental use of drug; inadequate parental monitoring, physical abuse and poor parent-child relationship were the family factors that contribute to substance use and abuse in the Kumasi Metropolis. Parental use of drugs with a mean score (*3.31)* indicates that, the respondents agreed to those items. An adolescent may engage in drug by imitating the lifestyle of their parents (Sutherland & Cressey, 2004). This implies that in a home where any of the family members engages in substance abuse, the likelihood of younger ones imitating the trend is high.

This finding is coherent with Marais and Maithya (2015) whose study revealed that there is a strong relationship between drug abuse and family members using drugs. A similar study conducted by Chebukaka (2014) found that one major factor contributing to substance abuse among young people is having parent(s) who abuse drugs. Relating to the aforementioned studies was the study conducted in Sri Lanka by Senanayake et al. (2016). The findings of

their study concluded that parental substance usage contributes greatly to substance abuse by younger ones within the family. The finding is also consistent with that of Whitesell et al. (2013) in their study familial, social and individual factors contributing to risk for adolescent substance use in Hindawi. The study identified factors such as childhood abuse and neglect, parent marital status, parent level of education, parent-child relationship and parental engagement in substance abuse. It was revealed that parental substance use ranked highest in terms of relative contribution.

The result also identified inadequate parental monitoring and supervision as another factor contributing to substance abuse. As adolescence remain a critical developmental stage where a significant component of their physical, cognitive, emotional, social and behavioural developments begin to take shape (Gray & Squeglia, 2018). These developmental changes make them highly susceptible to engage in risk-taking behaviours in their search for identity Erikson, as cited in Antiri, Fia & Nyarkoh-Sampson (2012). Hence, parents ought to provide their younger ones with adequate monitoring and supervision. The finding is consistent with Caday (2017) in his study of the causes of drug abuse among college students in Philipine. The study found out that substance abuse is mainly caused by lack of attention from parents and weak foundation on spritual and moral values.

In a similar study by Alhyas et al. (2015) in Abu Dhabi, low monitoring by parents and availability of drugs in the home were identified to influence adolescent substance use. However, the findings of the current study disconfirms the availability of drugs in the home as a factor that could entice young people into substance abuse. This could be attributed to the fact that the

mere presence of drugs in the home does not gurantee its usage by the younger ones. The parents may have it in their possession but might not use in the presence of their children.

Another family factor that the study identified is physical abuse by parents. This finding agrees with a couple of studies (Singh, Thornton & Tonmyr, 2011; Wall & Kohl 2007). Their finding revealed that adolescents found in abusive families are prone to engage in substance abuse. In a similar study byKilpatric et al., (2000), Tonmyr, Thornton, Draca and Wekerle, (2010), they observed that witnessing an abuse of a relative continuously can increase an adolescent's likelihood to engage in substance abuse. This presuposes that, being a victim or a witness to a physical abuse increases ones susceptibility to abuse drugs. Consistent with the findings is the work of Hamburger, Leed and Swahn, (2008) in their study chilhhood maltreatment and early alcohol use among risk adolescents. Their study found that witnessing violence do increase an adolescent's vulnerability to develop substance use disorder.

Social Factors

One of the purposes of this study was to find out the extent to which social factors contributed to substance useamong senior high school students. The result identified two main factors; that is peer acceptance/pressure and the influence of mass media. Adolescents look increasingly to each other rather than to parents, teachers and other adults for social rewards and social recognition (Antiri, Fia & Nyarko-Sampson, 2012). In their desperate attempt to achieve peer acceptance, they may resort to deviant behaviour including

substance abuse. The findings that peer influence is one of the factors responsible for substance abuse is in harmony with a couple of studies.

For instance, the work of Mesfin, Bachlay, Minilk and Melkamu (2017) revealed that peer pressure is one of the key factors that influence many youth to abuse drugs. A similar finding was found in the work of Agbonbghale and Okaka (2014) on effects of drug abuse on academic performance of students in Nigeria. Their study concluded that peer group influence contributes greatly to substance abuse among the youth. The peer influence could be attributed to factors such as inadequate monitoring by parents at home, parents' failure to find out what their children do away from home and defective parent-child relationship.

Relating to the finding is the study of researchers (Jorg, Ferreira, Kwachi, Zarzar & Pordues, 2018; Pilkinton, 2017). Their finding revealed that religious activities, cultural based friendship and sports provide a protective effect against substance abuse. This implies that when an adolescent joins any of the aforementioned group, the likelihood of using drug is minimal. This could be attributed to the fact that these groups are well-managed by responsible adults who mentor the youth on sound moral and religious principles.

Another factor that the study found is the influence of mass media especially television.The finding agrees with some few studies (Francis et al.,2015; Senanayake et al. 2018). Their studies found that product advertisement on alcoholic beverages do entice many young people to get initiated into substance abuse. The finding is also consistent with the work of Pathak and Pokhare (2017) on causes of drug abuse among the youth in Nepal.

The study concluded that the use of celebrities and movie 'stars' to advertise alcoholic products poses a great challenge for the youth since some use them as their role models. The findings of the current study is contrary to the work of Kasundu and Mutosi (2012). Their study found that easy accessibility and low cost of drugs were some of the motivating factors for substances abuse among young people in Kenya. This implies that in the current study, availability and low cost of drugs could not be regarded as a factor that entice young people into substance abuse.

Personal Factors

From the result in table 8, three factors were identified for contributing to substance use. These are individual risk perception, poor school performance and depression. Individual risk perception whether substance use is benefitial or otherwise has been confirmed by some researchers as a factor contributing to substance abuse. In the studies of (Derzon, 2010; King et al., 2012), they revealed that a person's risk perception on the harmful consequences of a particular drug is a key factor that influence adolescent substance abuse. For instance, their studies further found that male students who perceived marijuana use with less harmful risk were more likely to engage in its use than their female counterparts who held contrary view.

In congruous with the finding is the research conductd by (Grevenstein, Nagy & kroeninger-Jungaber, 2015; Husaini & Mann, 2019). Their studies found that there was a significant relationship between the risk perception of the respondents and their substance use. Again, the study obseved that changes in risk perception predicted changes in future use of those substances. Hence, if an indivvdual believes that a certain drug will be

benefitial, the likelihood of using that drug is high and vice versa. A similar observation was made by (Vilace, Fernandez & Costa, 2013). Their study concluded that decreasing the risk perception of marijuana and other substances and increasing its access through legalisation tend to increase its abuse by the youth.

Relative Contribution of Familial, Social and Personal Factors

One of the purposes of this study was to find out the relative contribution of the various factors. The result of the study revealed that familial factors contributed most, followed by personal and social factors. This could imply that many parents and guardians have either neglected their roles or engaged in certain practices that promote the use. This finding is consistent with a couple of studies (Birhanu, Bisetegn & Woldyohannes 2013; Kingston, Maya, Cohen-Serrins & Knight 2017; Renes & Strange 2018). Their studies concluded that family factors such as poor parental monitoring or weak parental control and family history of substance use were the major factors leading to the abuse as compared to other factors like social and personal.

In other studies like (Rummage, 2019; Shek, Zhu, Dou & Chai, 2019), though multiple factors such as easy accessibility of drugs, violence and unemployment were identified, both studies recognized the critical role of parents in influencing abuse of substance in their younger ones. The finding of the current study, however disconfirms some earlier studies (Bah, 2019; Foo, Lian & Lee, 2019; Mohasoa, 2018; Mususa & Matutu 2019; Nachinaab, 2018;). The authors found that social factors such as peer pressure and the influence of the media were the leading cause of substance abuse among the youth. Adewumi (2017) found that personal factors such as self-esteem and

stress which may result from home or peer influence was the leading factor in his findings. The contradiction in the current study and the afforementioned studies could probably emanates from the fact that these studies were conducted in different context. While this study was conducted in Ghana, all the former studies were undertaken outside Ghana. Therefore, this could account for some variations in the findings.

Chapter Summary

The substances used mostly by students were coffee and alcohol with a rate of 21.9% and 6.3% respectively. Moreover, high number of students had used alcohol in their life time (i.e. 12.6% used but quitted). The study however, revealed a low percentage of students who used other substances like tramadol, cigarette, cocaine and cannabis. Family related factors that were identified to influence substace abuse are parental usage of drugs, ineffective monitoring by parents, physical abuse and poor parent-child relationship. Two social factors were identified to influence SHS students to engage in substance use and abuse; that is peer pressure and the influence of the media. Personal factors such as an individual's opinion on whether drug abuse is benefitial or not, poor school performance, self-esteem and stress were found to contribute to substance abuse among young people. With the relative contributions of the three factors, familial factors contributed most, followed by personal and social factors.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine factors that contribute to substance use among SHS students in the Kumasi Metrpolis. This chapter presents a summary, conclusions and the recommendations drawn from the study.

Summary

The study examined factors that contribute to substanceuse among SHS students in the Kumasi Metrpolis. The study was carried out using descriptive survey design. The study was guided by five objectives. The population for the study comprised all SHS 2 students in public senior high schools within the Kumasi Metropolis with a total of 22,000. The study however, engaged five schools where 385 students were used for the study. Questionnaire from other reseachers were adapted and used for the study.The scales are Adolescent Drug Involvement scale (ADIS) and factors contributing to drug abuse scale. The data collected were analysed using descriptive statistics (i.e. percentages, frequencies, standard deviation and mean) and inferential statistics (i.e. simultaneous multiple linear regression analysis**).**

Key findings

The following findings emerged from the study:

1. The substances used mostly by students were coffee and alcohol with a rate of 21.9% and 6.3% respectively. Moreover, high number of

students had used alcohol in their life time (i.e. 12.6% used but quitted). The study however, revealed a low percentage of students who used other substances like tramadol, cigarette, cocaine and cannabis.

2. Family related factors that were identified to influence substace use are parental usage of drugs, ineffective monitoring by parents, physical abuse and poor parent-child relationship.
3. Two social factors were identified to influence SHS students to engage in substance use; that is peer pressure and the influence of the media.
4. Personal factors such as an individual's opinion on whether drug use is benefitial or not, poor school performance, self-esteem and stress were found to contribute to substance use among young people.
5. With the relative contributions of the three factors, familial factors contributed most, followed by personal and social factors.

From the study, it was found that familial factors made significant unique contribution to be prediction of the dependent variable, substance use. The other two factors namely personal and social factors did not make a statistically significant contribution to the prediction of substance use. Based on this finding, I present the final model in figure 2.

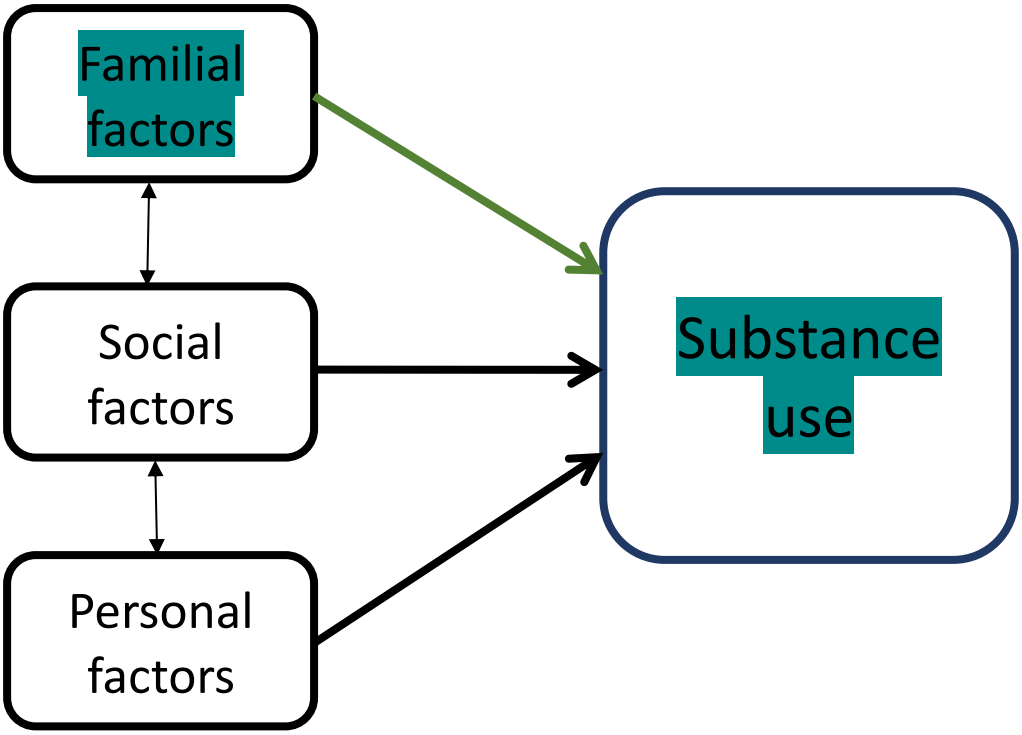

Figure 2: Final model

Source: Field survey (2020)

Conclusions

From the findings, it can be concluded that coffee and alcohol were the most used substances. The high rate of coffee consumption could be due to its apparent use to increase concentration and stay awake during examinations. Moreover, the high prevalence of alcohol could be attributed to its legality across many cultures and easy accessibility in our communities.

The study further concluded that, due to the high usage of coffee and alcohol which are both legal substances, the likelihood of the students to engage in other illicit drugs will be high, if appropriate measures are not put in place to curb the current trend.

It can also be concluded that familial factors contributed most in terms of their relative contributions. This could due to the fact that many young people nowadays either stay with single parent or a relative. For instance, in

the current study more than 40% of the respondents were not staying with both parents where they could received the best of moral training.

Recommendations

The following are recommended based on the findings of the study:

1. The Guidance and Counselling unit of the various schools within the Kumasi Metropolis are encouraged to organize regular and comprehensive guidance programmes on drug use and abuse to sensititize students on dangers of substance abuse.
2. Parents are encouraged to desist from using alcohol and other illicit drugs in the presence of their children. They should also communicate openly with their children regarding both acceptabl and unacceptable behaviour. This will enable the children to know where they stand in relation to their parents, regarding their behaviour. Moreover, parents should intensify their monitory and supervisory roles at home.
3. Children should be encouraged and supported at an early age to take part in recreational activities. This will enable them to use their leisure time constructively.
4. School counsellors are encouraged to handle effectively individual student with special concerns like depression, anxiety, poor academic performance among others.
5. The Kumasi Metropolitan Assembly should take a look at some of their bye-laws that prohibit the sale of alcoholic beverages and other psychoactive substances to minors under 18 years and ensures that there is strict enforcement.

Suggestion for Further Research

1. Further study in this area is recommended to investigate the role of school and home in minimizing substance use and abuse in senior high schools.
2. It is recommended that the study is replicated in other regions with the adoption of both qualitative and quantitatve approaches to get in-depth knowledge of the situation.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

Dear Student,

The aim of this study is to examine the familial, social and personal factors that contribute to substance use among SHS students. This study is for academic purpose only, hence you are kindly requested to fill the questionnaire completely and honestly. *The information you provide will be kept strictly confidential.*

- Please, do not write your name on any page of the questionnaire.
- Thank you in advance for completing the questionnaire!

Instructions: Please tick (√) the response that best describe your view.

Section A: Demographic Information

1. Age: a .10-15 [ ] b. 16-19 [ ] c. 20-24[ ]

2. Gender: a. Male [ ] b. Female [ ]

3. Whom do you stay with? a. Both parents [ ] b. One of the parents [ ]

c. Relative [ ]

Section B: Commonly Used Substance by SHS students.

For each substance listed below, tick (√) the option that best represent your view using the scale: **[5-Use Daily (UD), 4-Use ones a Week (OW), 3-Use but Not Regular (NR), 2-Tried but Quitted (TQ), 1- Never Used (NU)]**

	UD	OW	NR	TQ	NU
Tramadol	[]	[]	[]	[]	[]
Valium	[]	[]	[]	[]	[ ]
Alcohol	[]	[]	[]	[]	[]
Cigarette	[]	[]	[]	[]	[]
Coffee	[]	[]	[]	[]	[]
Cannabis (wee)	[]	[]	[]	[]	[]
Cocaine	[]	[]	[]	[]	[]

Section C: Factors Contributing to Substance Use

These questions seek to examine the factors that may increase a person's engagement in substance abuse, indicate your level of agreement as to how these factors may lure an individual into substance abuse by using the scale: (**5 -Strongly Agree (SA), 4-Agree (A), 3-Neutral (N), 2-Disagree (D), 1-Strongly Disagree (SD**).

	Familial Factors	**SA**	**A**	**N**	**D**	**SD**
1.	Seeing my parents smoking/drinking alcohol could entice me to try smoking/drinking one day.					
2.	Seeing alcohol sprang all over my house could cause me to try some in one of the					

	days.					
3.	When my parents care less about what I do away from home, I am likely to try out using a drug.					
4.	The strong attachment I have with my parents may prevent me from engaging in substance abuse.					
5.	Parents' love for drugs could entice the child to follow their suit by trying out an illicit drug.					
6.	Not being cherished and love by my parents could lure me to use drug in order to get a good feeling.					
7.	Being abused physically by parents could make the individual to use drug in order to minimize these emotional hurts.					
8.	Parent's failure to supervise and monitor what a child does frequently may increase the child's predisposition to substance abuse.					
	Social Factors					
9.	My desire to look good in the eyes of my peers could entice me to try using the drug they use.					
10.	The frequent alcohol advertisement on both					

	radio and TV could encourage me to try out these alcohols in the future.					
11.	The society craving for alcoholism could entice me to tryout drinking.					
12.	The desire to be accepted into peer groups could lure me to try using the drugs they use.					
13.	Seeing my closest friend smoking/using drug could entice me to try smoking/using drug one day.					
14.	Living in a community that has high rate of substance abuse could encourage me to try out some of these drugs.					
	Personal factors					
15.	My desire to feel good could increase my predisposition in substance abuse.					
16.	The cravings to appear high in the mist of friends could entice an individual to engage in substance abuse.					
17.	The sense of insecurity could lure an individual to engage in substance abuse.					
18.	A person's risk perception about substance abuse could increase/decrease an individual involvement in substance abuse.					
19.	The perceive strength and power associated					

	with drug use could increase an individual's involvement in substance abuse.					

APPENDIX B

LETTER OF INTRODUCTION

UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

FACULTY OF EDUCATIONAL FOUNDATIONS

DEPARTMENT OF GUIDANCE AND COUNSELLING

Telephone: 0332091854
Email: dgc@ucc.edu.gh

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref: DGC/L.2/Vol.1/ 126

Your Ref:

27th August, 2020

TO WHOM IT MAY CONCERN

LETTER OF INTRODUCTION

We introduce to you, Stephen Ankrah a student pursuing an M.Phil Programme in Guidance and Counselling at the Department of Guidance and Counselling of the University of Cape Coast. As a requirement, he is to submit a Thesis on the topic: ***"Factors Contributing to Substance Abuse Among Senior High School Students in the Kumasi Metropolis, Ghana".*** We are by this letter affirming that, the information he will obtain from your Institution will be solely used for academic purposes.

We would be most grateful if you could provide him the necessary assistance.

Thank you.

Dr. Stephen Doh Fia
HEAD OF DEPARTMENT

APPENDIX C

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref: CES-ERB/ucc.edu/V4/20-80

Date: 13th October, 2020

Your Ref: .....

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786680

The bearer, Stephen Ankrah ....., Reg. No. EF/GA/19/0019 is an M.Phil. / ~~Ph.D~~. student in the Department of ....Guidance and Counselling..... in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He / ~~She~~ wishes to undertake a research study on the topic:

Factors contributing to substance abuse among senior high school students in the Kumasi Metropolis, Ghana.

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/~~her~~ proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

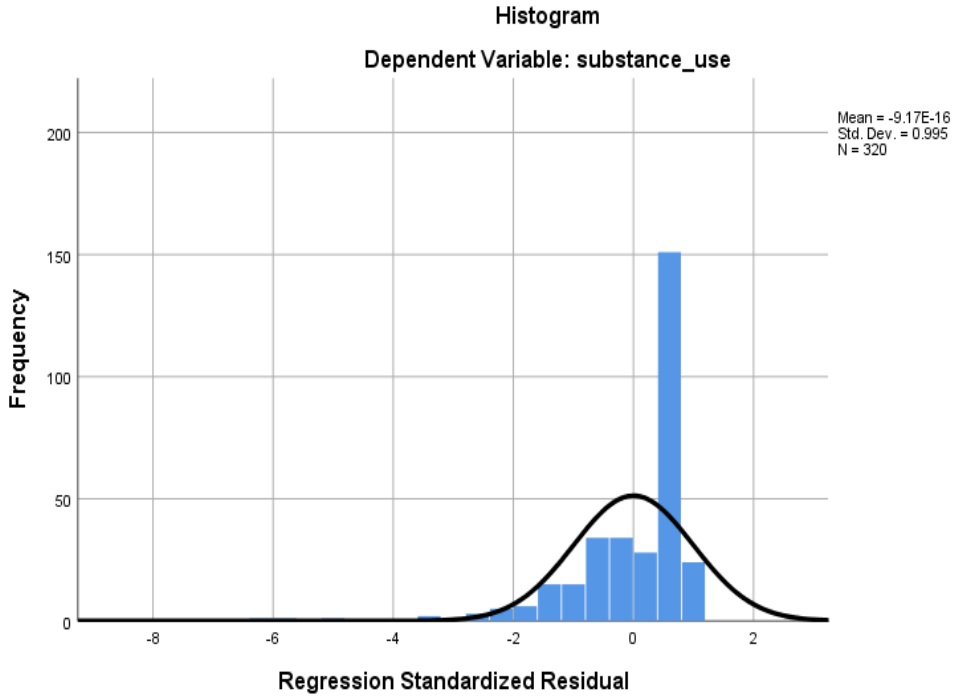
In view of the above, the researcher has been cleared and given approval to commence his/~~her~~ study. The ERB would be grateful if you would give him/~~her~~ the necessary assistance to facilitate the conduct of the said research.

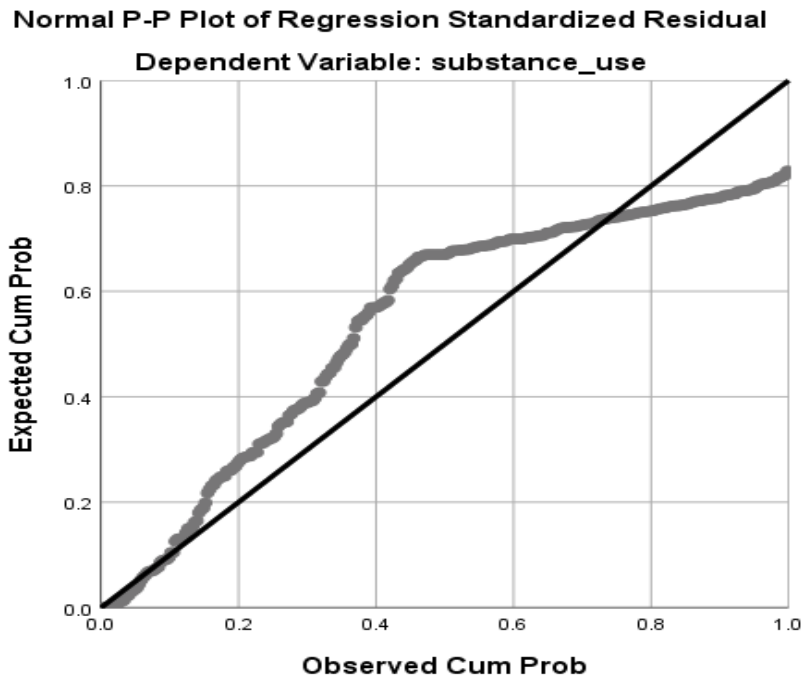
Thank you.
Yours faithfully,

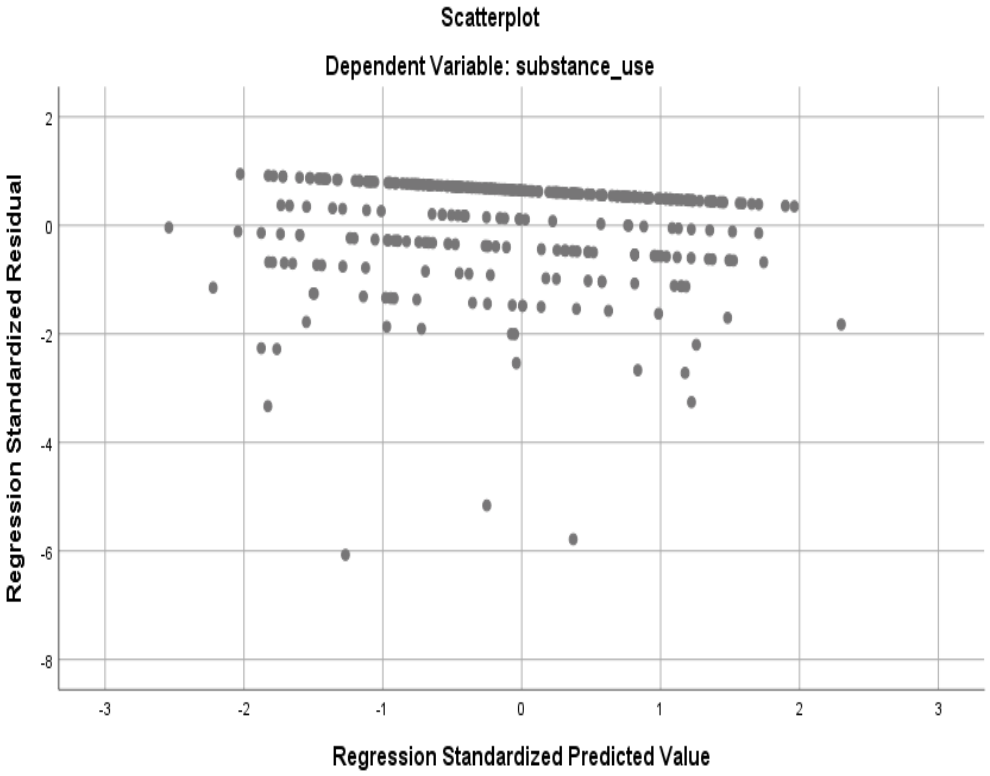
Prof. Linda Dzama Forde
(Secretary, CES-ERB)

APPENDIX D

NORMALITY, LINEARITY AND HOMOSCEDASTICITY ASSUMPTIONS




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: substance_use
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: substance_use
Regression Standardized Residual
Regression Standardized Predicted Value
2
0
-2
-4
-6
-8
-3
-2
-1
0
1
2
3