EFFECTS OF DRUGS AND ALCOHOL ABUSE ON PERFORMANCE OF STUDENTS IN PUBLIC DAY SECONDARY SCHOOLS IN NYANGATI WARD MWEA-EAST SUB-COUNTY,KIRINYAGA COUNTY, KENYA

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DECLARATION

This research Project Report is my original work and has not been presented to any university for academic award.

SIGNATURE: ……………………… DATE: …………………………………

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SUPERVISOR

This research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

I dedicate this to my father, the late Alex Njiri, my beloved mum, Rose Makanga, beloved wife Rebecca Makanga and my three siblings.

ACKNOWLEDGEMENT

I take this opportunity to thank God, who guided me through until I have successfully completed my research project.

Lots of gratitude goes to my supervisor, Dr. Anne Aseey, for her unwavering supports and more so, the encouragement that kept me motivated.

I wish to thank my family and especially my siblings, Julie, Yvonne and Agnes. Their love gave me inspiration and this was all my driving force all through those hard times. Their unlimited financial support was not exceptional. I owe them much gratitude and how I wish I could show them how much I love and appreciate them.

I cannot forget to thank my course mates and friends for their assistance and constant encouragements. Were it not for you guys, I wouldn't have made it to this far.

Not forgetting the entire PGDE department in the University, my gratitude showers on you all for your much support, more so, your moral support.

May God bless you, all.

ABSTRACT

The major concern of the study was that despite Kenya introducing strict alcohol regulations "Mututho law" and the endless efforts made to create awareness on effects of alcoholism; high school students continue to indulge in binge drinking and other drug taking-thinking it's normal. This often leads to drug abuse and alcohol dependence. Mental illness is one of the effects of alcoholism. This study was formulated to investigate the effects of drug abuse and alcoholism on the performance of a student which was measured using the following level of factors: the number of hours taken during drug taking and alcohol consumption (in the 8 months of learning), the number of drugs and drinks (glasses) taken per occasion and the average grade point of the student in the academic year of reference (GPA).The year of reference used was second year of the study in high school. The data was collected using questionnaires whereby 95 printed questionnaires were administered to the respondents (students) in five sampled schools in Nyangati Ward. These schools are: Nyangati sec school, Gakuo Sec school, Mungara Sec school, Kiorugari sec school and Urumandi sec school. The questionnaires enabled the researcher to obtain quantitative and qualitative data. Pilot testing was conducted in one of the mentioned schools, Nyangati Sec School; this helped the researcher to improve the questionnaire and enhanced the validity and reliability of the research instrument. The data collected was cleaned, edited and classified in order to achieve accurate deductions and inferences to answer the researcher's questions. Qualitative data was examined through content analysis and quantitative data was analyzed through descriptive statistics and inferential statistics. According to the findings, coefficient for the number of hours consumed during drinking was (b_2) = -0.55, coefficient for number of glasses taken was (b_1)= - 0.63 and the constant was ($\propto$) =65.189. Therefore the regression model became $\hat{y} = 65.189 - 0.63x_1 - 0.55x_2$.In a nutshell, the researcher discovered that the GPA of students in public day secondary schools was largely affected by alcohol consumption of different kinds of brews. It was shown that the hours used in drinking and numbers of drugs/glasses of alcohol consumed per academic year were significantly affecting the performance of students. In that, it was directly proportional that, the more drugs/ alcohol one consumed and the more time (hours) one used in consuming drugs/alcohol the low the GPA was noted. The study recommended that learning institutions (and more so the public day secondary schools who have greater accessibility of the drugs/ alcohol which is just sold within their reach) should use this prediction model so as to prepare students for the bright future by finding ways on how they can minimize alcohol consumption among students before the situation gets out of hand. The study suggests that, a comparative study can be conducted in other high (boarding) schools to assess the extent, factors and causes of alcohol intake in them, a study can be carried out to investigate the remedies that can be put in place to abate the rate of drug use/alcoholism among students and also a study can be carried out to determine whether different brands of alcohol affect the performance of a student in the same.

ABBREVIATIONS AND ACRONYMS

SAMHSA   Substance Abuse and Mental Health Services Administration

NSDUH   National survey on Drug Use and Health

NIAAA   National Institute on Alcohol Abuse and Alcoholism

BAC   Blood Alcohol Concentration

W H O   World Health Organization

NACADA   National Campaign against Drug Abuse

ADA   Alcohol Drug Abuse

GPA   Grade Point per Year

SPSS   Statistical Package for Social Science

KCSE   Kenya Certificate of Secondary Education

AUD   Alcohol use Disorder

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CHAPTER ONE

INTRODUCTION

1.1 Back Ground Information

Alcoholism addiction is a dependence on alcoholic liquor or the psychological instability and impulsive conduct coming about because of liquor reliance. It is otherwise called alcohol use disorder (AUD) and liquor reliance complaint is a wide term for drinking of liquor that outcome into disputes. It was at first partitioned into two kinds; for example liquor abuse and liquor reliance.

In a medicinal comprehension, liquor abuse is said to exist when either at least two of the accompanying conditions are available:

(a) A individual devours a lot of liquor over a drawn out time.

(b) Accessing alcohol and devouring it takes up a lot of time.

(c) Liquor is firmly wanted.

(d) Usage of alcohol results in not satisfying the ideal obligations.

(e) Usage of liquor leads into medical issues (e.g psychological instability) and social issues.

The more youthful age has taken up the conduct of drinking as a typical lifestyle. As indicated by the World Health Organization (WHO), about 2.6 million individuals die yearly, and a lot more neglect to make it in life because of sicknesses and wounds as an outcome of unsafe alcohol consumption. Furthermore, liquor is consistently influencing

the young in developing nations and Kenya isn't a remarkable nation confronting such repercussions from alcohol taking and misuse.

Alcoholism is devastating to a person's health (physically, emotionally and even mentally) and even in the learning process. Getting intoxicated has negative effects on concentration, memory and attention of a learner for approximately 48 hours after a night of liquor drinking; this is as noted by St. Lawrence University. This in turn reduces the number of study hours which proportionally reduces the performance of a student. Overwhelming drinking by learners initiated positive blood liquor levels the next day, influencing how they wake up (warm up) for class and the nature of how information is prepared and eventually put away in the psyche.

Many people mess with it that liquor debilitates or harms memory, the happenings that happen during inebriation or during liquor utilization have further-arriving at consequences for cerebrum memory and information or aptitudes procuring capacity. "Inebriation is delivered by transitory debilitation of mind receptors key in making long haul recollections in colleges" a duke University study recommends. Moreover, youthful grown-ups appear to have a larger number of difficulties learning while at the same time drinking than more established grown-ups, thus generally influenced.

Binge drinking is a pattern of drinking that brings blood alcohol concentration (BAC) levels to 0.08 g/dl. This typically occurs after 4 drinks for women and 5 drinks for men in about two hours (NIAAA).

The substance Abuse and Mental Health Services Administration (SAMHSA), which conducts the annual National survey on Drug Use and Health (NSDUH), defines binge drinking as drinking 5 or more alcoholic drinks on the same occasion on at least 1 day in the past 30 days.

Heavy drinking is drinking of five or more drinks on the same occasion for five or more days within 30 days (SAMHSA).

1.2 Statement of the Problem

The most noteworthy extent of individuals with liquor issues are aged somewhere in the range of 13years and 29years, an age section that incorporates most of enlisted secondary school learners. Indeed, overwhelming liquor use has been all around recorded among secondary school and colleges learners and to make the situation worse they embrace heavy-drinking for the first time during their teenage.

Nyangati ward is a growing area surrounded and internally invaded by illicit brew oasis where chang'aa and other cheap brews are readily available.

Given that high school study is challenging to many high school students (as noted in most KCSE results released annually) then this relates well to students' drinking and their academic performance. The relationship between problematic alcohol consumption and academic performance is a concern for school heads, since the grade points of students are drastically reducing year after year.

This raises a concern to investigate how alcoholism affects the students' performance (more so to the public day school students who have easy access to the commodity than their counterparts in boarding schools) and to predict the future performance of students so as to take precautions and come up with strategies to reduce alcohol consumption in schools in Nyangati Ward and thereby maintain high grade points.

This research focused on the prediction of the GPA of a student using the number of hours of drinking and number of glasses taken in every academic year as the predictors.

1.3 The Purpose of the Study

The major reason of this study was to find out the impacts of liquor addiction on the GPA of public day secondary school students and the multiple regression models for estimating the yearly GPA of a student.

1.4 Objective of the Study

i. To determine the fit multiple regression model that estimates the average grade point of a student with respect to the number of hours taken during drinking and the total number of drinks (in terms of glasses) consumed yearly.

ii. To test reliability of the calculated multiple regression model on the appropriacy to measure the future average grade points per year at the school

iii. To evaluate the impacts and the degree of liquor utilization in the performance among day school learners in secondary schools.

iv. To examine influence and the extent for drinking inside the educational time and how it is influencing learners' GPA.

1.5 Research Question

This research work targets to answer the following questions:-

i. Which is the best regression model that can be used to predict the GPA of a student in public day secondary school relation to total drinking hours and the number of drinks taken per year?

ii. Is the model reliable?

iii. Which of the two independent factors affects largely the GPA of a student?

1.6 Significance of the Study

Nyangati ward is one of the developing wards in Kirinyaga County, and the communities around rely heavily on education so as to achieve its developmental goals after its residents go through the education system. The aim of the study was to find out the extent of alcohol consumption using two main factors that is; the number of drinking hours and the amount of alcohol taken at a time. The above listed factors enabled the researcher to know how alcohol consumption affects the performance of a student's GPA.

This will help the area administration, the education heads in the area and the entire fraternity of the ward leadership to take precautions on the most affected areas. The findings of the study have both theoretical and practical implications for the future of ward dwellers and students of other learning institution within the county and generally at national level.

Theoretically, the findings of this work may contribute to the expansion of wits among students and young people on the negative effects in their performance after one becomes an alcoholic. This will help young learners to make wise decisions in their life and increase their GPA in the country due to reduced alcohol and illicit brews consumption.

Practically, the study attempted to sensitize the learning institution's stakeholders nationally to pursue possible actions for controlling the situation before it runs out of hand.

The discoveries got may challenge policy makers, leaders in the education institutions and other stakeholders to fully push the comancy to Drinks Control Act, 2010 which seeks to control and regulate the manufacturing, production, sale, promotion, distribution and consumption of alcoholic drinks. The objectives of the Act mainly focus on a public health approach to mitigate harmful effects of alcohol abuse.

Finally, the findings of the study may also be of help to National Campaign against Drug Abuse (NACADA) which supports the declaration of alcohol and drug abuse as national disaster and proposed integration of Alcohol Drug Abuse in all junior and senior school offering the basic education. The study may form a basis for further research in other drugs commonly abused by students in learning institutions.

1.7 Assumptions of the study

The assumption of the research involved the following;

1. The respondent provided accurate responses to questions on the questionnaire.

2. The data collected followed a normal distribution.

3. The GPA of a student was only affected by alcohol consumption.

4. There is no Multi co-linearity between the independent factors and other variables which can affect the GPA of a student.

5. Each academic year is made up of 8 months.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Information from a few national examinations demonstrate that drinking and scholastic disability are related (Engs et al., 1996; Perkins, 1992; Presley et al., 1996a,b; Wechsler et al., 1994, 1998, 2000b). Notwithstanding learners' very own recognitions that liquor use has created scholastic disability, a few examinations have uncovered a reliable relationship between lower self-revealed grade midpoints and more significant levels of liquor utilization (Engs et al., 1996; Presley et al., 1996a, b). In any case, it can't be resolved from these investigations whether heavier hitting the bottle hard per term is liable for lower grades.

Many studies, in any case, have explicitly represented those restrictions and have endeavored to address for them in their examination structures. One such investigation of 429 learners at an enormous Midwestern college found just an unassuming job for liquor contribution in negative instructive results (Wood MD et al., 2000). The negative impact of liquor utilization was generally articulated on instructive achievement in school among those understudies who positioned as high scholarly entertainers during their secondary school years. Another examination, a longitudinal examination of liquor use by 444 secondary school learners enlisted as green beans, found that a significant part of the relationship between liquor use and scholarly issues during essential level seemed, by all accounts, to be because of a child contrasts that originated before secondary school affirmation (Wood PK et al., 1997).

Singleton and Wolfston (2009) analyzed liquor utilization, measure of rest, and scholastic execution. The creators show the connection between: liquor utilize and rest; liquor use and scholarly execution; and rest and scholastic execution. The members from Northeastern were 89% white, 98% went between the ages of 13-22 years, and 82% boarded in schools. To put it plainly, they estimated and presumed that students who drink more liquor keep up poor rest designs, which adversely influences academic performance.

Gillespie etal (2007) inspected liquor, marijuana, and cocaine use among secondary school pupils. The scholar found that two out of five secondary school learners in the United States are gorge consumers. As indicated by the Federal Bureau of Investigation, there were more than1.25million captures for tranquilize misuse infringement in 2004(Gillespie etal2007). Liquor and drugs use can prompt poor basic leadership, such as overstepping the law, sexual maltreatment, getting in battles, and so on. Of the respondents, 92.4% were white and the normal age was 22.3years.

This examination found that somewhat more than 68% announced utilizing liquor and/or drugs during the previous year. Gillespie et al.(2007)looked at how often a student savored liquor seven days which at that point decided what number of mixed beverages they expend by and large. This still didn't address the topic of whether the normal time taken on drinking influences the GPA of a learner.

Gillespie etal. (2007) just inquired about one University in the South, which had a lower respondent rate than anticipated. In this way, the investigation was less generalizable to the whole school populace. Another restriction was that the examination directed by Aertgeerts and Buntinx (2002) happened in the United Kingdom, so this investigation is likewise less generalizable to the Africa secondary school learners populace, which are their developing stage.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The motivation behind this part is to layout the system that was utilized by the scholar to lead this research. System portrays the general way to deal with look into structure. It is a procedure or a game plans those connections techniques to results. The strategy incorporated the research plan, area of the investigation, the objective populace, test size and inspecting system, explore instruments (pilot testing, legitimacy and unwavering quality of the instruments) information assortment methodology, information examination procedure and moral thought.

3.2 Research design

The investigation utilized a mix of subjective and quantitative methodologies, a methodology upheld by Kothari (2009) when he contends that quantitative and subjective research are totally unrelated methodologies, rather the most helpful research discoveries regularly results from fittingly applying the two ideal models. It is important for the investigation to have this two delayed methodologies as the quantitative stage yielded numerical information while the subjective stage portrays information.

This study embraced a blend of enlightening overview and naturalistic structure strategy to discover the situation. Mamia (2005) states that distinct study other than discovering realities may likewise bring about the plan of significant standards of information and

answer for critical issues. By utilizing this structure the researcher had the option to set up the impacts of drugs/liquor utilization on learners' exhibition (GPA) in day mixed schools in Nyangati Ward.

3.3 Location of the Study

This research was conducted at Nyangati mixed secondary school, Kiorugari sec school, Urumandi Sec School, Mutungara mixed sec School and Gakuo mixed Sec School. These five schools are amongst the eleven day schools in Nyangati ward, Mwea East sub-county, in Kirinyaga County. Nyangati ward is one of the most affected wards amongst the twenty wards in the county which is affected by drugs abuse and more so, alcohol consumption. This is catalyzed by the availability of money flow which emanate from the horticultural activities and the rice farming (which are labor intensive) in this area. Therefore, the labor sources tend to emanate from the young energetic group who include the school attending group.

3.4 Target Population

Students in public day secondary schools in Nyangati ward were my target population. Students from the mentioned schools were used to conduct the research work. And from them, a sample was drawn to give the information (data).

3.5 Sample Size and Sampling Procedure

Determining the sample size

Due to resources and time constraints and g30n order to reduce errors, it was not possible to study the entire school population therefore a manageable sample was selected.

The sample size was be ascertained via indicating the desired accuracy with the aid of specifying a sure on the error of estimation to be tolerated. Since it was not a critical study, an error of 0.104, α-level of 0.05 was selected.

$$z\alpha/2\sqrt{\frac{pq}{n}} = d$$

Where;

n =the sample size desired

z =the standard normal deviate at the required confidence level

p= the proportion inside the target population envisioned to have the traits being measured.

q = 1- p (optimum confidence limit – p)

d =error

Substituting in the formula

$$1.96\sqrt{((0.5*0.5)/n)} = 0.7$$

$$n = \frac{1.96^2*0.5*0.5}{0.104^2}$$

$$n = 88.8$$

$$n \approx 90$$

Table 3.1 Sample size Determination

Schools	No of respondents	Gender	
		Male	Female
Nyangati	20	12	8
Kiorugari	20	10	10
Urumandi	20	13	7
Mutungara	20	11	9
Gakuo	15	8	7
TOTAL	95	54	41

3.6 Research Instruments

Researchers use instruments to collect data, the instrument developed for a research is crucial as it leads to correct data collection which in turn leads to correct findings. The instruments can be a pencil and paper test, a questionnaire or a rating scale (Gakuu et al. 2015).

Questionnaires were used to give detailed and first-hand information to the researcher. The researcher personally used questionnaire to collect data, 95 printed questionnaires were administered to students and they were given one day to fill in questionnaires, from there they were requested to drop them to a specific place to be collected by the researcher. The respondents in the research were the students from the mentioned schools and majorly the form two and three students. The questionnaires were received in light of

the fact that they are steady, reliable, and uniform thus offering a goal and obliging perspective on issues. This consequently permitted drawing of inductions from the investigation (Sarantakos, 2005).

A closed questionnaire became used to acquire facts for this study. The researcher used quantitative and qualitative research approach to design and collect data. For the quantitative survey the researcher administered a questionnaire (in appendix) which gave the respondents an opportunity to give anonymous answers and facilitate the collection of data within a day. The questionnaire consisted of three main sections; Section 1 indicated the demographic information, section two involved students' administrative details and section three indicated the alcohol and drugs consumption details. The questionnaire had closed-ended questions, a Likert type of scale rating for some opinions and a few open-ended questions. Given the nature of the study objectives, primary data was collected by adopting pragmatism approach to administer and collect the questionnaire.

3.6.1 Piloting the Instruments

The data collection tool (questionnaire) was pretested for validation of the content in it. The Piloting was conducted in one of the mentioned schools, Nyangati Sec School, but the finding of the data was not used in the final study. This piloting helped the researcher to identify questions that did not make sense to the respondents, wrong phrasing of questions and unnecessary repetition. This pretest helped the researcher improve the questionnaire and enhanced reliability of the instrument.

Pretest sample ranges from 1% to 12% depending on the sample size (Mugenda (2003).

For this research, the researcher adopted a 10% pretest sample which gave a sample of a

sample of 11 respondents in Nyangati Sec School. The questionnaires was administered

to six form three students and five form two students who were requested to fill the

questionnaires and encouraged to give feedback regarding the questions in the research

instrument.

3.6.2 Validity of the Instruments

Instrument validity shows how much an exploration instrument estimates what it should

gauge. Garg and Kothari (2014) clarify that the legitimacy of an instrument is the

measure of the instrument to accurately measure the intended variables and the

truthfulness of the research results. Content validity was achieved by developing clear,

precise and easily understood questions in the questionnaire which aimed at reducing any

ambiguity in the data collection tool. Validity of the instrument was carried out by the

supervisor, through her much scrutiny of the developed questionnaire.

3.6.3 Reliability of the Instruments

According to Boit et al. (2009), reliability is the measure of the data collection tool to be

consistent in yielding similar and expected results, even when tested several times. The

method the researcher used to measure reliability is the Cronbach Alpha Test method

where the researcher administered the data collection tool twice on the same pilot in a

span of three weeks without changing the conditions.

The two sets of data collected was then tested for similarity using the correlation coefficient, the result got was greater than 0.75 indicating the data collection tool was reliable.

3.7 Data Collection Procedures

The researcher made use of primary data which refers to data originally collected for the very first time from the field. The use of primary data has been demonstrated by numerous authors and researchers who suggest/assume that primary data has revolutionized growth of social science discipline. The 95 questionnaires were printed and issued to the respondents. Prior to data collection, the researcher had written a letter of transmittal of records series units at the want to undertake research; he photocopied it and posted the same in strategic locations (at the form two and three noticeboards).

Data collection was done in Nyangati mixed secondary school, Kiorugari sec school, Urumandi Sec School, Mutungara mixed sec School and Gakuo mixed Sec School. The data collection was done during the second term of the academic year 2019.

3.8 Data Analysis Techniques

The finalised questionnaires were collected from the respondents and responses tabulated. The information gathered was cleaned, edited, coded and classified in order to achieve accurate deductions and inferences to answer the research questions. Content analysing was used to get the qualitative data while statistics and inferential statistics were used to get the quantitative data. The information the researcher gathered was coded

and examined by the computer based Statistical Package for Social Studies (SPSS) version 20 to draw the quantitative and qualitative analysis. After that, the analyzed data was used measure the correlation of the independent and depended variables, then the results tabulated. Multiple regressions were then used to measures whether the relationships between the independent and dependent were strong or weak.

3.9 Ethical Considerations

Ethics when used in social research means creation of a trusting relationship between those who are targeted in the research and the researcher. In ensuring that trust is created, it is important that communication is properly planned and managed, that risks are reduced and merits are maximized.

The scholar guaranteed that the moral issues were regarded all through the investigation. The researcher briefed the respondents on the purpose of the research before the data collection kicked off in the field. Only those who consented to the research study and were willing to participate were considered. The researcher assured the respondents of confidentiality and anonymity where necessary.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This segment of research work expounds three major things: - data analysis, presentation and interpretation of what was collected. The researcher analyzed the data collected and expressed the results in percentages, mean, standard deviation and correlation. The findings have been tabulated throughout the chapter and relevance to the study explained. The segment is split into sub-sections that include the response rate, demographic characteristics of respondents in terms of gender. The subsequent sections of the chapter present data on analysis of the dependent variables and independent variables.

4.2 Questionnaire Response Rate

Out of 95 questionnaires administered to the respondents, 89 were filled and returned to the planned destination points; this represented a response rate of 94%. This high response rate was considered sufficient and substantial to draw conclusions on the analysis of this study; Kothari (2007) denotes a response rate of above 70% is considered significant to draw conclusions. The high response rate is attributable to the administration of the pretest questionnaires which was done twice and rectifications done thoroughly and early notification to the respondents on the purpose of the study. Additionally, the researcher's efforts to supervise the data collection process were vital.

Table 4.1: Questionnaire Response Rate

Item	Number	Response rate Percentage
Returned Questionnaires	89	93.6%
Unreturned Questionnaire	6	6.4%
Total	**95**	**100**

4.3 Reliability of the questionnaire

Reliability concerns itself with whether the instruments yield similar results consistently and it measures the degree to which an instrument demonstrates on repeat trials (Gakuu et al, 2015). Many approaches of estimating reliability exist, however, in this study the Cronbach's Alpha methodology was used. Under this method, reliability of each section of the structured questionnaire was treated and tested separately then the measure obtained was scored.

4.4 Background Information of the Respondents

The demographic characteristics of the respondents in this study were examined to verify the gender the table below highlights the respondent's distribution by gender per each sample school.

Table 4.2: Distribution of Respondents by Gender

Schools	No of respondents	Gender	
		Male	**Female**
Nyangati	19	11	8
Kiorugari	18	9	9
Urumandi	19	13	6
Mutungara	19	10	9
Gakuo	14	8	6
TOTAL	**89**	**51**	**38**

On the review of the respondents by gender, it was noted that out of the 89 participants, 38 (42%) were women and 51 (58%) were men. This implies that a good attempt was made by the researcher to include both genders in the project; this is in line with the government's requirement of having a minimum of one third rule of either gender representation in every organization or parastatal.

4.5 Regression Model

The analyzed statistics became of use to calculating a multiple regression model that showed the connection between the dependent variable (average grade point per year (GPA of a student)) and the independent variables: 1. number of drinks (in glasses) consumed per academic year during learning period, 2. The total number of hours used in drinking per academic year during learning period.

The model was of the form:

$$y_i = \alpha + b_1 X_1 + b_2 X_2$$

Where

yi-   Estimated Average grade point of ith student

α -   intercept (constant).

X_1-   Estimated total number of drinks (glasses) taken by the ith student during in every academic year during learning periods.

X_2-   estimated total number of hours taken to drink by the i [th]student in every academic year during learning periods.

b_1 -   coefficient due to number of drinks (in terms of glasses) taken in every academic year during learning period.

b_2 -   coefficient due to the total number of hours taken to drink per academic year during learning period

The variables α, b_1 and b_2 were be evaluated using SPSS and later tested the reliability of the model.

Table 4.3 Descriptive Statistics

	Mean	Std. Deviation	N
the mean grade points of the student second academic year	53.56	8.818	89
number of hours the respondent takes in drinking during the 8 months of learning	90.35	52.024	89
number of glasses the respondent takes during the 8 months of learning	103.85	57.765	89

Table 4.4 Correlation

		the mean grade points of the student second academic year	number of hours the respondent takes in drinking during the 8 months of learning	number of glasses the respondent takes during the 8 months of learning
Pearson Correlation	the mean grade points of the student second academic year	1.000	-.598	-.642
	number of hours the respondent takes in drinking during the 8 months of learning	-.591	1.000	.685
	number of glasses the respondent takes during the 8 months of learning	-.632	.661	1.000
Sig. (1-tailed)	the mean grade points of the student second academic year	.	.000	.000
	number of hours the respondent takes in drinking during the 8 months of learning	.000	.	.000
	number of glasses the respondent takes during the 8 months of learning	.000	.000	.
N	the mean grade points of the student second academic year	89	89	89
	number of hours the respondent takes in drinking during the 8 months of learning	89	89	89

		the mean grade points of the student second academic year	number of hours the respondent takes in drinking during the 8 months of learning	number of glasses the respondent takes during the 8 months of learning
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	number of hours the respondent takes in drinking during the 8 months of learning	.000	.	.000
	number of glasses the respondent takes during the 8 months of learning	.000	.000	.
N	the mean grade points of the student second academic year	89	89	89
	number of hours the respondent takes in drinking during the 8 months of learning	89	89	89
	number of glasses the respondent takes during the 8 months of learning	89	89	89

Table 4.5 Variables Entered/ Removed [b]

Model	Variables Entered	Variables Removed	Method
1	number of glasses the respondent takes during the 8 months of learning, number of hours the respondent takes in drinking during the 8 months of learning	.	Enter

Table 4.6 Model Summary [B]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.661[a]	.460	.446	6.624
a. Predictors: (Constant), number of glasses the respondent takes during the 8 months of learning, number of hours the respondent takes in drinking during the 8 months of learning				
b. Dependent Variable: the mean grade points of the student second academic year				

Table 4.7 ANOVA [b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3077.869	2	1548.924	35.201	.000[a]
	Residual	3759.902	86	43.747		
	Total	6837.571	88			

F(computed) 35.202> F(tabulated) 3.1108 hence the independent variables are very significant in the prediction model.

Table 4.8 Dependent Variable: the mean grade points of the student second academic year

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	65.189	1.541		42.299	.000	62.126	68.253					
number of hours the respondent takes in drinking during the 8 months of learning	-.055	.018	-.327	-3.134	.002	-.090	-.020	-.591	-.320	-.251	.589	1.699
number of glasses the respondent takes during the 8 months of learning	-.063	.016	-.413	-3.961	.000	-.095	-.031	-.622	-.393	-.317	.589	1.699

Looking at the column named beta we see that the number of glasses contribute largely (-0.413) to the GPA than the number of hours a student takes in drinking (-0.327).

Looking at the significance level for the number of hours and the number of glasses (0.002 and 0.000 respectively) <0.005 this simply means that the variables are contributing to the prediction of GPA.

Partial correlation coefficient in the above table shows the linear relationship between each independent variable with the GPA. The number of glasses contribute most to the model since it has the highest partial correlation of (-0.393)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	42.47	65.19	53.67	5.914	89
Std. Predicted Value	-1.894	1.947	.000	1.000	89
Standard Error of Predicted Value	.729	2.559	1.161	.355	89
Adjusted Predicted Value	42.62	65.89	53.72	5.919	89
Residual	-15.404	13.134	.000	6.536	89
Std. Residual	-2.330	1.986	.000	.989	89
Stud. Residual	-2.366	2.032	-.003	1.008	89
Deleted Residual	-15.891	13.746	-.048	6.800	89
Stud. Deleted Residual	-2.433	2.071	-.0045	1.016	89
Mahal. Distance	.081	12.198	1.977	2.096	89
Cook's Distance	.000	.221	.014	.030	89
Centered Leverage Value	.001	.139	.021	.024	89

Table 4.9 Residuals Statistics [a]

a. Dependent Variable: the mean grade points of the student second academic year
b. The highest cook's distance is 0.221<1 and hence there is no need of removing some values.

Figure 4.1 regression Standardized Residual

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: the mean grade points of the student second academic year
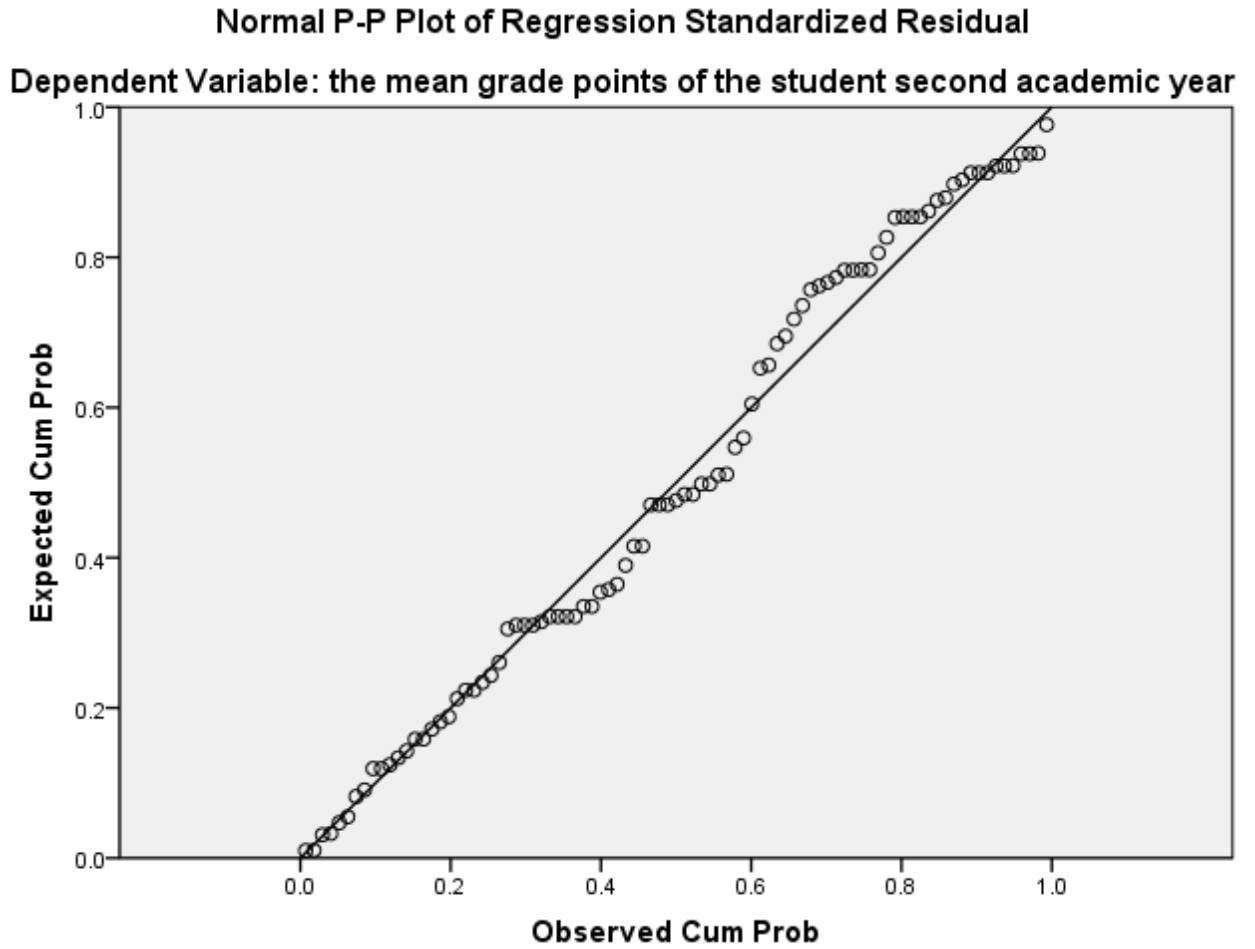
In the above normal plot, the points majorly lie on the straight line (as one can see): this shows normality and linearity.
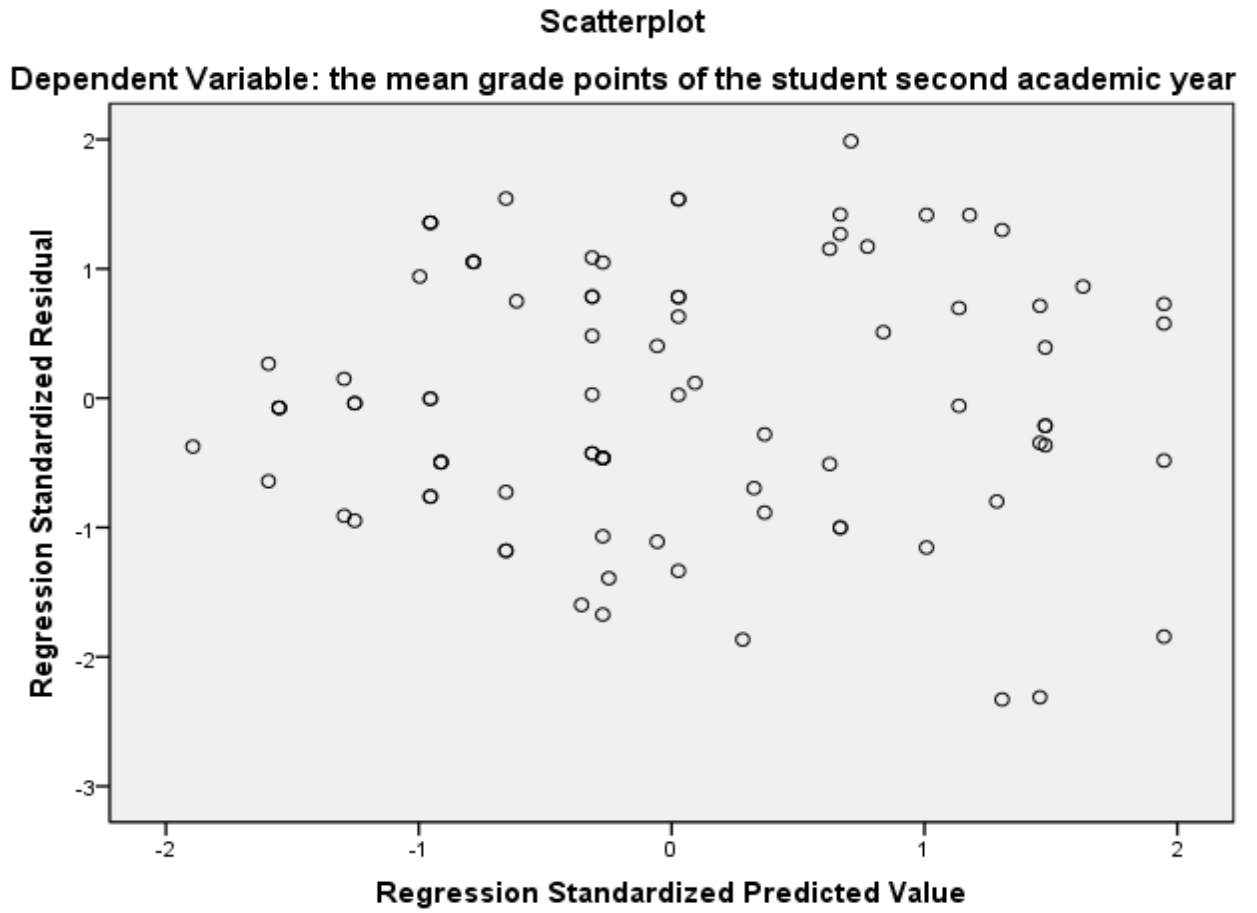
Figure 4.2 Mean grade of the student year two

CHAPTER FIVE

DISCUSSION OF FINDINGS: INTERPRETATION OF THE DATA

5.1 Introduction

This section of the work covers the synopsis of findings, conclusions and recommendations of the investigation dependent on the goal of the examination. In this area, the examination responds to the exploration questions and makes inductions on the whole research. The section additionally traces the proposals made and recommendations for any further research which can be done.

5.2 Summary of the findings

5.2.1 Regression Model

Standard multiple regressions were used where the independent variables were entered in to the equation simultaneously. The coefficients of the regression model are given in table of coefficients above that is in the column of un-standardized coefficients labeled B

Coefficient for number of hours　　　(b_2) = -0.55

Coefficient for number of glasses　　(b_1) = - 0.63

Constant　　　　　　　　　　　　(α) = 65.189

Therefore the regression model becomes　　　$\hat{y} = \alpha + b_1\, x_1\ + b_2 x_2$

$\hat{y} =\ 65.189 - 0.63 x_1\ - 0.55 x_2$

5.2.2 Test of the Significance of the Model

5.2.2.1 Multicollinearity

This alludes to the relationship among the autonomous factors. Multi co-linearity exists when the free factors are exceptionally related. The connection between the factors in our model are given in the table named connections, our free factors appear probably some association with the reliant variable (ideally >0.3). For this situation both of the scales (glasses and hours) associate considerably with the GPA of the understudy (- 0.622 and - 0.591) separately. Additionally the connection between every one of our free factors isn't excessively high (0.641< 0.9) henceforth all factors will be held.

In this model the resilience esteem for every free factor is 0.581, which isn't under 0.10; in this manner, we have not disregarded the Multi co-linearity suspicion. This is additionally upheld by the VIF (fluctuation expansion factor) esteem (backwards of the resilience), which is 1.3772, which is well beneath the cut-off of 10.

5.2.2.2 Outliers, Normality, Linearity, Homoscedacity, Independence of Residuals

These are checked by investigating residuals disperse plot and typical likelihood plot of relapse.

1. **Normality:** this is checked using the normal probability plot,of the points majorly lie on a reasonably straight diagonal line this suggests no major deviations from normality.

2. **Linearity**: this is shown by almost all points lying on a straight line in the normal probability plot. Also in the scatter plot, the points roughly are rectangular distributed with most of the points lying on the center line.

3. **Outliers**: these are values which are higher or lower than the other values in the data set. There is no presence of outliers this is because in the scatter plot there are no points that exceed below -3.3 and above +3.3.

4. **Homoscedasticity**: the change of the residuals about anticipated ward scores ought to be the equivalent for all anticipated scores.

5.2.3 Correlation

This is utilized to depict the quality and bearing of the straight relationship. In the table of correlations it is shown that there is a negative correlation between the dependent variable and the independent variables. The correlation coefficient for the number of hours taken during drinking is -0.591: showing that there is a negative relationship (>0.5) between the GPA of a student reduces with increase in the number of hours of drinking (our variables).

The connection coefficient for the quantity of glasses taken is - 0.622: this shows there is an enormous negative relationship (>0.5) between the two factors; the GPA of an understudy decreases with increment in the quantity of glasses taken during learning time.

To survey the factual centrality of the outcome the analyst evaluated in the table named ANOVA. This tests the invalid speculation that various R in the Population rises to 0. Subsequently the relapse model arrives at measurable importance (Sig = .000, this truly since 0.00<.05).

Glancing in the Model Summary table 4.6 box- labeled R Square; the content in it reveals to us the magnitude of change in the reliant variable (GPA) as clarified by the model (which incorporates the factors number of hours and Total number of glasses). For this situation the worth is .450. Communicated as a rate, this implies our model (which incorporates hours and glasses) clarifies 45% of the fluctuation in GPA.

The balanced r square shows the right r square of for the enormous populace.

5.3 Summary and Conclusions

5.3.1 Introduction

This section gives the summary of the look at, findings and conclusion. Also presented on this chapter are pointers for study that would be accomplished via destiny researchers.

5.3. 2 Summary of the study

The main reason of carrying this research was to investigate a best prediction model for measuring the GPA of a student who is or is not addicted to alcohol taking. In my case I used the number of hours of drug/alcohol taking and the number of glasses of alcohol consumed by high school students as my independent variables. The target population of the researcher was the students in public day secondary schools in Nyangati ward. Data

was collected from 89 students where six students didn't give there filled questionnaires back. It was proved that the best fit regression model was

$$GPA = 65.189 - 0.63x_1 - 0.55x_2$$

5.3.3 Conclusion

The researcher discovered that the GPA of students in public day secondary schools was largely affected by alcohol consumption of different kinds of brews .The regression model drawn from the data collected was fit to predict the future performance of these students. It was shown that the hours used in drinking and numbers of drugs/glasses of alcohol consumed per academic year were significantly affecting the performance of students.

5.4 Recommendations

Learning institutions(and more so the public day secondary schools who have greater accessibility of the drugs/ alcohol which is just sold within their reach) should use this prediction model so as to prepare students for the bright future by finding ways on how they can minimize alcohol consumption among students before the situation gets out of hand.

5.5 Suggestions for Further Studies

Similar studies can be conducted to investigate the remedies that can be put in place to abate the rate of drug use/alcoholism among students. A comparative study can be conducted in other high (boarding) schools to assess the extent, factors and causes of alcohol intake in other schools.

A study can be carried out to determine whether different brands of alcohol affect the performance of a student in the same way for example chang'aa, mkombozi, 'makambo', 'kill me quick', different brands of wines, spirits and beer.

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QUESTIONARE

Please answer the following questions with sincerity .Confidentiality of the information you will give will be highly maintained.

SECTION 1: DEMOGRAPHIC

1. Please indicate your gender

   MALE [ ]   FEMALE [ ]

2. How old are you (years)? ……………………..

SECTION 2: ACADEMICS

3. Indicate the name of your school:

   …………………………………………………………………

4. Please give your accumulated average aggregate points during the indicated academic year inside the box.

   FIRST YEAR AGGREGATE POINTS [ ]

   SECOND YEAR AGGREGATE POINTS [ ]

5. What is your current year of study? …………………….

SECTION 3: ALCOHOL CONSUMPTION

6. Have you ever tasted alcohol?

YES [   ]   NO [   ]

7. Please indicate the time you started taking alcohol in the time range given

WHILE IN PRIMARY SCHOOL [   ]

WHILE IN HIGH SCHOOL [   ]

NEVER [   ]

8. Do you ever drink while in school during learning time?

YES [   ]   NO [   ]

9. Approximately how many drinks do you drink (in terms of the number of glasses) per

month? ....

10. Approximately how much time (in hours) do you utilize per occasion of drinking per

month? ....

Thanks for your response