

Influence of Personality Issues on Effectiveness of Substance Abuse Preventive Measures among Secondary Schools in Kakamega County, Kenya

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ABSTRACT

This paper analyses the extent of influence of personality issues on the effectiveness of substance abuse preventive measures among secondary students in Kakamega County through cross sectional survey design. The study was guided by social cognitive theory. The target population was 59675 form three students, 1080 class teachers, 530 G/C teachers and 12 sub-county directors of education in the study area. Multi-stage sampling, simple random and purposive sampling techniques were used to select sample size; 381 students, 108 teachers, 53 g/c teachers and 12 sub-county directors. Structured questionnaires, focus group discussion guides and interview guides were used to collect data. The data was treated through descriptive statistics, correlation and simple linear regression. Qualitative data was transcribed, analysed and reported according to emerging themes. Supervisors were consulted to determine the face, content, and construct validity of the instruments while reliability was tested using Cronbach's alpha of reliability coefficient index for data collection instruments was above 0.8 both for teachers and students. The researcher guaranteed the anonymity of respondents. The study established that there is a positive association between personality issues and the effectiveness of substance abuse preventive measures. The study concluded that there is a statistically significant influence of personality issues on the effectiveness of substance abuse preventive measures as evidenced by a positive association [$F(1, 269)=80.959, P <.05$] and [$F(1,58)=P<.05$]. Finally, the study recommended that teachers should provide emotional support to students since these highly promotes the prevention of substance abuse.

Keywords: Effectiveness, Influence, Personality Issues, Preventive Measures, Substance Abuse

I. INTRODUCTION

Substance abuse is perceived as the self-administration or introduction of abnormal quantities of psychoactive substances into one's body through chewing, sniffing, snuffing, sucking, smoking, or rubbing on one's body, if not injected, for wrong intentions (World Health Organization, 2016), a definition that this study adopted. Substance abuse among adolescents is associated with negative outcomes in both physical and mental health (Rooke et al., 2020). Hokm et al. (2018) emphasize that high-risk individuals can be identified by looking at their family history and character qualities. More importantly, some people feel that drug abusers are predisposed to addiction because of flaws in their character. Although these factors do not directly cause substance abuse, they might increase a person's vulnerability to it (Rooke et al., 2020). Similarly, Karki (2017) found out that students' drug usage was significantly influenced by mental aspects such as their thought patterns, behaviour, personality traits, self-esteem, and coping abilities. A proper foundation for emotional growth, which greatly influences behaviour, should be provided for by the environment in which adolescents grow up (National Authority for the Campaign against Alcohol and Drug Abuse [NACADA], 2019). Further still, schools must ensure that such an environment prevails. Failure means students will not manage their emotions successfully, and the seeds for emotional dysfunction are therefore sown. Such a situation leads to behavioural problems, including substance abuse (Wanjama et al., 2013).

The rising prevalence of youth involvement in substance abuse is a global and national problem that needs immediate response (WHO, 2014). From the perspective of prevention, the United Nations Office of Drugs and Crime (2017) confirms that nations around the world are taking action to curb substance abuse before it spreads to a wider population. Allen et al. (2013) support the idea the idea that various programs aimed at reducing teenage substance abuse have been proven to be successful, hence the definition of effectiveness. Karki (2017) highlights the importance

of addressing the issue of substance abuse prevention in Nigeria. Despite extensive efforts, the war on drugs has made minimal progress in the country, according to The World Drug Report (2018). This lends credence to Cheloti's (2013) argument that substance abuse is a complex issue that calls for a wide range of strategies to solve it and that no single approach, no matter how well-structured, is capable of effectively addressing it across the board in educational institutions. The term 'issues' as used in the study refers to anything whose influence is not clear.

The National Council on Drug Abuse (2014) promotes a view emphasizing that preventive measures targeting the root of the problem are essential to reduce substance abuse and assist individuals in leading healthier lives. Still further, the ongoing interventions in Kenya to prevent and reduce substance abuse take a psychological approach, which includes enabling the youth to say "no" to substance abuse. Controlling one's own emotions, impulses, needs, and actions is a key part of a well-developed personality (Otingi, 2012). Further, it is the responsibility of educational institutions to foster such an atmosphere of adequacy, and that is why if pupils don't learn to control their feelings, they'll have a hard time overcoming emotional difficulties later in life.

Substance abusers have personality weaknesses, making them vulnerable to substance abuse; however, human beings have the capacity to deal with this behaviour problem. Several preventive measures have been implemented in schools; however, substance abuse is still significant. Oteyo (2013) notes that no progress has been made over the past two decades despite several efforts to reduce substance abuse, and the researcher is unaware of any such studies documented in Kakamega County. Recent reports from the Kakamega County Education Office indicate that despite the efforts schools make to involve students directly and indirectly in prevention, the vice is still rampant (Republic of Kenya, 2013). So the question is, to what extent do personality issues influence the effectiveness of substance abuse preventive measures?

1.1 Statement of the problem

In the recent past, there has been an upsurge in the abuse of busaa and changaa in the Western region of Kenya, inclusive of Kakamega County, and current statistics indicate that more than half of substance abusers are aged 10–19 years (NACADA, 2021). Another survey, NACADA (2019), established that alcohol abuse prevalence among secondary school students in Kakamega has reached 23.4%, which is far above the national average of 12.2%. Gunnarson et al. (2012) acknowledge that enhanced knowledge about predisposing factors for substance abuse is necessary for the development of effective preventive interventions for substance abuse. In addition, Nabunya (2012) found that people with healthy attitudes and feelings were not likely to involve themselves in socially unacceptable behaviour. Oteyo (2013) notes that no progress has been made over the past two decades despite several efforts to militate against substance abuse, and the researcher is unaware of any such studies documented in Kakamega County. Recent reports from the Kakamega County Education Office indicate that schools involving students directly and indirectly have hardly borne fruit (Republic of Kenya, 2013), and little success has gone into preventive measures in the county (Mazuri, 2014). The study therefore sought to determine the extent to which personality issues influence the effectiveness of substance abuse preventive measures among secondary school students in Kakamega County. This was by way of interrogating the hypothesis: "There is no statistically significant influence of personality issues on the effectiveness of substance abuse preventive measures among students."

1.2 Specific Objective

(i) To assess the influence of personality issues on the effectiveness of substance abuse preventive measures among secondary students in Kakamega County.

1.3 Research Hypothesis

H01: There is no statistically significant influence of personality issue on effectiveness of substance abuse preventive measures among students in Kakamega County.

II. LITERATURE REVIEW

2.1 Theoretical Review

The current study focused on a theory from a developmental perspective because it explores biological, emotional and cognitive domains. To better comprehend the relationship between personality issues and the underlying substance abuse preventive measures, this study draws on Social Cognitive Theory (Bandura, A, 1977). Based on this theory, responses of school actors were used to assess the extent to which personality issues influence the efficacy of preventive measures.

2.1.1 Social Cognitive Theory

This study draws on Social Cognitive Theory as postulated by Albert Bandura in 1977 to bring out the relationship between personality issues and the underlying substance abuse preventive measures. Bandura (1977)

contends that humans are both consumers and contributors to their surroundings and that personal, behavioural, and environmental variables interact dynamically and reciprocally to shape psychological functioning. Furthermore, the social and psychological effects of the environment shape the development and modification of people's perceptions, beliefs, and cognitive skills. One of the strengths of social cognitive theory is that it encompasses five main variables that explain how behaviour is learned and maintained. The five variables are crucial in explaining why the students will continue abusing substances despite the preventative measures that have been put in place. The sixth and last one describes what individuals do with the capacity they have to deal with situations before them. According to the study, students' responses to preventive measures will depend on the beliefs or perceptions they hold about the knowledge and skills they have in the area of substance abuse.

2.2 Empirical Review

A proper foundation for emotional growth, which greatly influences behaviour, should be provided for by the family and the environment in which young people grow up. Schools have an obligation to ensure that such an environment prevails. Hokm et al. (2018) note that high-risk individuals can be identified by looking at their family history and character qualities. Some people feel that drug abusers are predisposed to addiction because of flaws in their character. A study by Research New Zealand. (2013) revealed that students' mental health and wellbeing were negatively impacted by academic stress; some students who experienced academic stress turned to substance misuse. Similarly, the Zucker and Harford (1983) study found that stress is brought on by anger, irritation, and boredom among college students, who are more likely to drink in an effort to blend in with their peers. According to a study on the effects of substance abuse on secondary school students in Nigeria, Alan and Bryman (2012) concluded that substances were abused to alleviate pain or discomfort, to achieve euphoria or fantasy, or to escape unpleasant reality. These are all possible psychological motivations for substance abuse. This corroborates with another study's findings by Buehler and Gerard (2013), which support the view that drinking increases positive feelings of self-esteem.

However, a favorable emotional climate and environment aid in the formation of healthy attitudes and sentiments, which are crucial to a person's optimal growth. This suggests that those with positive mental health are less likely to get involved in negative actions. Dunne et al. (2017) argue that teaching mental health helps students grow as individuals and contributes to their social and academic success. Further, the student body should be involved in developing and implementing any preventive measures for the pupils so that they may take pride in them. This is done in light of the fact that lasting transformation originates inward (Otingi, 2012).

Researchers have found that substance abuse challenges require counseling and therapeutic attention, mainly offered through guidance and counseling services in institutions of learning. Nabunya (2012) conducted a study on the role of guidance and counseling in the management of student discipline in learning institutions in Kenya and found that optimum development of individuals comes through providing an emotional climate and environment that assists in mental health development. This confirms the argument brought out by Bandura (1977) that the environment in which an individual lives gradually shapes his or her behaviour. The study found that people who suffer from emotional frustrations will find life generally miserable and unable to adjust. Guidance and counseling are therefore crucial to achieving a healthy emotional climate. However, the study did not address the extent to which personality issues can influence preventive measures of substance abuse, which the current study went further to investigate.

III. METHODOLOGY

3.1 Study Area

Kakamega County is located in the western part of Kenya. The County is made up of twelve sub-counties namely; Lurambi, Ikolmani, Mumias East, Matungu, Shinyalu, Khwisero, Butere, Lugari, Malava, Likuyani, Matete and Navakholo. It has a total of 491 secondary schools of which 95 are girls' schools, 32 are boys' schools, 251 are mixed day and 113 are mixed day and boarding (National Council for Population Development (NCPD, 2010)). Kakamega has a poverty index of 49.2% and 57% of the population live below the poverty line and the literacy level is 72.7% (Republic of Kenya (ROK, 2019)). Small-scale economic activities coupled with a high poverty index are contributing factors to the consumption of busaa and changaa which are cheap and easily available in the study area (NACADA, 2019).

3.2 Research Design

The study adopted a cross-sectional survey design because the intent was to identify and describe the extent to which personality issues influence the effectiveness of substance abuse preventive intervention among secondary school students in Kakamega County. Kothari and Garg (2014) observe that a cross-sectional survey enables collection of data at one point in time only and provides for comparison of different groups within the study.

3.3 Population and Sampling

The target population for the study consisted of 12 education officers, 530 G/C HoDs, 1,080 class teachers and 59,675 form-three students drawn from 491 secondary schools (ROK,2019) A sample size of 381 students was determined using the Krejcie and Morgan table. This was followed by cluster sampling and proportionate sampling of schools. Simple random sampling of class teachers and Guidance and Counseling HoDs. Sub-County Directors of Education were purposively selected. The overall sample size for participants was 554.

3.4 Instruments

Data collection was done by use of a self-administered questionnaire, interview guide and focus group discussion guide which were intended to collect data on demographic factors, evaluate the influence of personality predisposing the level of influence of personality issues on substance abuse and personality issues on effectiveness of substance abuse preventive measures.

3.5 Validity and Reliability

Independent experts majorly from the Department of Educational Psychology in MMUST were engaged to examine the content of items contained in the questionnaire. Their feedback was closely similar, which ascertained that the questionnaire was valid. A pilot study was conducted in Bungoma County, Kenya for the sake of ensuring that the instrument is reliable. Forty-eight questionnaire sheets were distributed and filled by the 48 respondents, five interview guide sheets were filled by 5 HoD G/C teachers and 1 sub-county director of education and one focus group discussion was filled by one group of students from a randomly selected school. Saleemi (2014) recommended a reliability of 0.70 and above, therefore each instrument was reviewed until it yielded Cronbach's alpha Coefficient scores ranging from 0.735 to 0.894.

3.6 Statistical Treatment of Data

Different statistical procedures were applied in data treatment. The data was then subjected to descriptive and inferential analysis based on measures of central tendency, correlation and simple linear regression. The items in the questionnaire were framed on a five-point Likert scale where 5 meant, very strongly 4 = moderately strong 3 = Neutral 2= moderately low 1 = very low, thus 5 represented a high level of influence of personality issues on substance abuse preventive measures, while 1 indicated a low level. Based on mean score (μ) 3.00 was adopted as the baseline for data analysis and interpretation. Therefore a variable with a mean score of at least (μ) 3.00 was interpreted as having strong influence, and below (μ) 3.00 were interpreted as non-issues in the study area.

IV. FINDINGS & DISCUSSIONS

4.1 Response Rates

This section presents and discusses the findings of the study. The section begins with the presentation of response rate and demographic factors. A total of 489 copies of questionnaires were administered to teachers and students in schools that were sampled in Kakamega County. Of these, two hundred and seventy (270) copies of questionnaires from students, twenty seven (27) copies of questionnaires from class teachers, thirty two (32) copies of interview guide from HODs of guidance and counseling, twelve (12) copies of interview guide from Education officers and 7 copies of FGD for students were returned. This represented a questionnaire response rate of 70.9% for students, 60.4% for HODs Guidance and counseling, and 25% for class teachers in interview guide and 100% for Education officers.

Table 1

Response Rate

Category	Sampled	Responded	Response Rate (%)
Students	381	270	70.9 %
Teachers	32	19	60.4 %

All distributed questionnaire items were filled and received back with convincing responses of 70.9% and 60.4%. Interviewees sat and responded to the questions of the interview, rendering a response rate of 100 percent.

4.2 Demographics of Respondents

The respondents were asked to indicate their gender and their response was as shown in Table 2.

Table 2
Students, Teachers and Sub-County Directors by Gender

Respondent Category	Teachers		Students		Sub-County Directors	
	Frequency	%	Frequency	%	Frequency	%
Male	26	44.1	159	48.9	8	66.7
Female	33	55.9	111	41.1	4	33.3
Total	59	100	270	100	100	100

Table 1 shows the respondents’ socio-demographic characteristics in detail. Female teachers were 55.9%, while male teachers were 44.1%. Male directors of education were 66.7%, while 33.3% were female. Male students were 48.9%, while 41.1% were female. This finding reveals the unequal representation of gender in secondary schools. This is attributed to the fact that substance abuse is a social activity that engages more male than female respondents. In addition, more female than male teachers take the lead role in managing substance abuse; which implies that gender in this study partly plays a role in determining the level of influence of this social interaction on substance abuse preventive measures. In terms of age, 4.1 of the students were between 13 and 15 years old, 6.1% were between 16 and 18 years old, followed by 27.1% between 19 and 20 years old, and 7.4% were over 20 years old. Therefore, the majority of the three students who took part in the research are between the ages 16 and 18., an age bracket that is critical for students to experiment with substances.

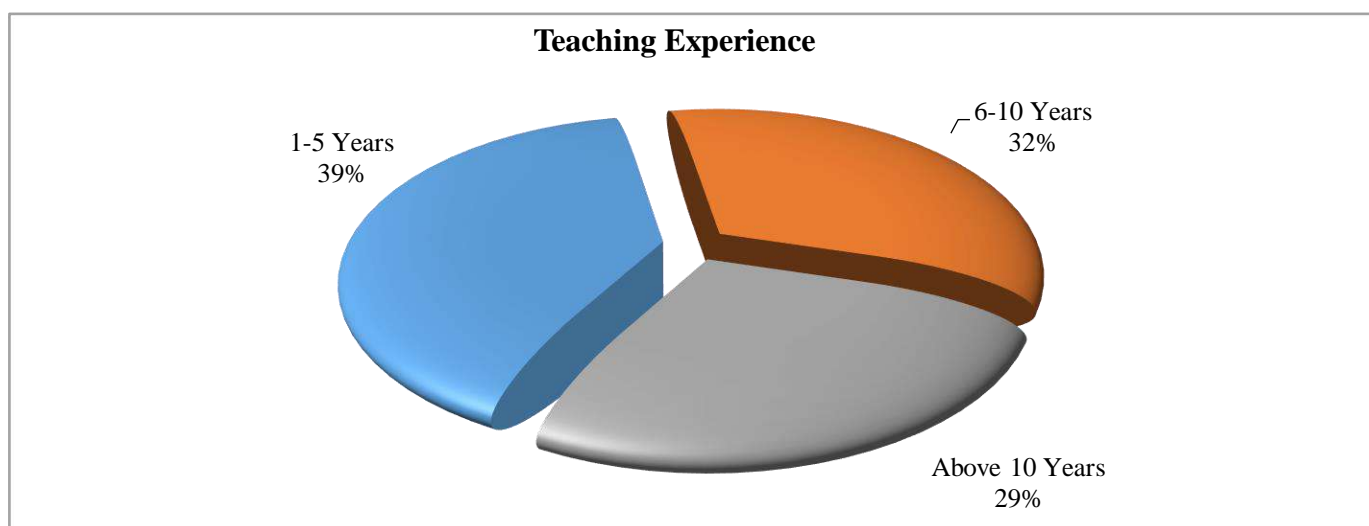


Figure 1
Distribution of Teachers by Experience

As regards teachers’ experience (Figure. 1) HoDs’ guidance and counseling and class teachers’ teaching experience was 1–5 years, followed by 6–10 years and finally above 10 years. Therefore, the majority of the teachers’ experience is between 1 and 5 years, a pointer to the fact that teachers in this category were more willing to participate in this research. There were 7 Focus Group Discussion Guides (FGD) for students, one for each school type. Each group had a membership of 10 respondents.

The study’s main objective was to evaluate the extent to which personality issues influence the effectiveness of substance abuse preventive measures among students. Correlation and simple linear regression were calculated to test the influence of the independent variable (personality issues) on the dependent variable (effectiveness of substance abuse preventive measures). Each of the respondents was provided with seven statements on personality issues that influence the effectiveness of substance abuse preventive measures. The seven statements were rated on a five-point rating scale of 1 to 5, with the following scores ranging from 1 “very weak,” 2 “moderately weak,” 3 “neutral,” 4 “moderately strong,” and 5 “very strong.”

4.3 Descriptive Statistics

4.3.1 Personality Issues and Effectiveness of Substance Abuse Preventive Measures

The participants were asked to indicate the extent to which personality issues influence substance abuse. Their response was as shown in Table 2. **Key:** 5 = Very Strong, 4 = Moderately Strong, 3 = Neutral, 2= moderately weak, 1 = Very Weak, STD=Standard Deviation, M=Mean, Ag.M=Aggregate Mean, N=329.

Table 3
Personality Predisposing Issues on Substance Abuse

Personality issues	Respondent category	Opinion							
		SA 5	MA 4	N 3	MD 2	SD 1	Mean	Std dev	Ag.M
Risk taking behaviour	Students	15.18% 41	17.03% 46	23.70% 64	25.56% 69	18.52% 50	3.84	2.765	3.775
	Teachers	27.11% 16	37.28% 22	20.33% 12	10.17% 6	5.08% 3	3.71	1.287	
Coping with stress	Students	35.55% 96	28.88% 78	13.70% 37	16.97% 46	5.17% 14	3.75	2.714	3.75
	Teachers	18.64% 11	38.98% 23	22.03% 13	11.86% 7	8.47% 5	3.75	1.168	
Being on their own	Students	18.51% 50	32.22% 87	27.03% 73	15.24% 41	6.69% 18	3.63	1.162	3.755
	Teachers	18.64% 11	32.20% 19	23.72% 14	12.07% 7	12.07% 7	3.88	1.019	
Aggressiveness	Students	15.18% 41	30.37% 82	18.51% 50	18.59% 51	17.10% 46	3.34	1.067	3.535
	Teachers	13.55% 8	25.42% 15	23.72% 14	22.41% 13	13.79% 8	3.73	1.080	
Rebelliousness	Students	29.62% 80	30.00% 81	15.55% 42	12.59% 34	12.22% 33	3.41	1.206	3.41
	Teachers	15.25% 9	16.94% 10	23.72% 14	25.42% 15	18.64% 11	3.41	1.134	
Self confidence	Students	15.55% 42	34.07% 92	18.51% 50	16.67% 45	15.19% 41	3.10	1.377	3.395
	Teachers	35.59% 21	28.81% 17	13.55% 8	16.95% 10	5.08% 3	3.69	1.103	
Easily convinced	Students	26.7% 72	35.9% 97	15.6% 42	9.63% 26	12.22% 33	3.87	1.118	3.975
	Teachers	18.64% 11	32.20% 19	27.11% 16	15.25% 9	6.78% 4	4.08	.988	
Majority do so	Students	31.85% 86	34.44% 93	11.48% 31	9.63% 26	12.59% 34	3.39	2.825	3.355
	Teachers	15.25% 9	30.50% 18	18.64% 11	18.64% 11	16.95% 10	3.32	1.074	

Findings from risk-taking in Table 3 reveal that 25.56% of students and 10.17% of teachers were of the view that risk-taking behaviour among students had a moderately low influence on the abuse of substances, while 18.51% of students and 5.08% of teachers agreed that it had a very low influence. However, 15.18% of students and 27.11% of teachers were of the view that risk-taking behaviour had a very strong influence on substance abuse, while 17.03% of students and 37.28% of teachers felt that it had a moderately strong influence. This is an indication that the majority of teachers were of the view that this behaviour had a moderately strong influence, while the majority of students disagreed. Further still, 23.70% of students and 20.33% of teachers believed that they were not sure whether risk-taking behaviour among students influenced them to abuse substances. This is justified by the high level of divergence in views between students and teachers, as reflected in the ($\delta = 32.765 > 1.287$). Risk-taking behaviour is an attribute of total independence, a characteristic quite familiar to adolescents, which accounts for the findings, whereas teachers perceive it as the cause of substance abuse. This corroborates with Dishion et al. (2002), who found that some school risk factors that can influence students to engage in substance abuse are inappropriate classroom behaviour such as aggression, impulsivity, and poor social coping skills.

Further, the assessment revealed that 35.55% of students and 18.64% of teachers were of the idea that coping with stress had a very strong influence on substance abuse, while 28.88% of students and 38.95% of teachers felt it had a moderately strong influence. An indication that coping with stress is one aspect that is highly rated in the abuse of substances. This is supported by the moderate aggregate mean ($\mu = 3.75$), which is above the baseline value. According to the researcher, students look for ways of managing their psychological problems in the best way possible, including coping with stress by abusing substances. This view is supported by Buehler and Gerard (2013), who reported that university students who witnessed stress due to anger, frustration, and boredom consumed alcohol to fit in.



Further still, findings revealed that 18.51% of students and 18.64% of teachers observed that withdrawing from their normal life activities had a powerful influence on the abuse of substances, whereas 32.22% of students and 32.20% of teachers were of the view that this aspect had a moderately strong influence. However, 27.03% of students and 23.72% of teachers were neutral. The findings therefore imply that withdrawal syndrome, which is an unhealthy mental status, attracts the abuse of substances. This is further reflected in the high mean score of 3.63 for students and 3.88 for teachers. This is close to Masese et al.'s (2012) view that youths are under serious threat from substances. Many commit arson because they are not provided with emotional support and are found to have been under the influence of substances.

Study assessment revealed that while 15.18% of students and 13.55% of teachers were of the view that aggressiveness had a very strong influence on the abuse of substances, 30.37% of students and 25.42% of teachers agreed that it had a moderately strong influence. This is an indication that the majority of the respondents observed that aggressiveness had a moderate influence on substance abuse. This is supported by the moderate aggregate mean of ($\mu = 3.755$), which is above the baseline value. In the view of the researcher, sometimes aggressiveness is sustained with the help of substances, which become a defense mechanism. This is in line with the Manrique et al. (2013) study, which further outlined the emotional problems faced by students as feelings of frustration, depression, anxiety, and low self-worth, which predispose learners to substances. The focus group discussion corroborated the findings. Most of the students portrayed a favorable view regarding the influence of personality issues on substance abuse. A participant during FGD (focus group discussion) observed:

'There are those students whose behaviour is never dictated by what they see or hear what others say. They believe in themselves' (FGD 5, 23, 2022).

4.3.2 Effectiveness of Substance Abuse Preventive Measures

To assess the effectiveness of substance abuse preventive measures, seven constructs were included in the tool, as shown in Table 4, for students and teachers, respectively.

Table 4
Effectiveness of Substance Abuse Preventive Measures

Item	Respondent	Opinion							
		SA 5	MS 4	N 3	MD 2	SD 1	Mean	Std dev.	Ag. M
One-on-one counselling	Students	15.55% 42	34.07% 92	18.51% 50	16.67% 45	15.19% 41	3.60	1.323	3.715
	Teachers	28.81% 17	31.50% 18	15.25% 9	12.07% 7	12.07% 7	3.83	.985	
Gender counselling	Students	26.66% 72	35.92% 92	15.55% 42	9.63% 26	12.22% 33	3.54	1.184	3.645
	Teachers	18.64% 11	38.98% 23	22.03% 13	11.86% 7	8.47% 5	3.75	1.060	
Random Searches	Students	31.85% 86	34.44% 93	11.48 31	9.63% 26	12.59% 34	3.43	1.186	3.45
	Teachers	18.64% 11	32.20% 19	23.72 14	12.07 7	12.07% 7	3.47	.989	
Dormitory based counselling	Students	27.77% 75	30.37% 82	25.92% 70	6.29% 10	9.63% 26	2.82	1.191	2.925
	Teachers	13.55% 8	25.42% 15	23.72% 14	22.41% 13	13.79% 13	3.03	1.313	
Guidance Sessions	Students	29.62% 80	30.00% 1	15.55% 42	12.59% 34	12.22% 33	3.75	1.244	3.915
	Teachers	28.81% 17	31.50% 18	15.25% 9	12.07% 7	12.07% 7	4.08	.988	
Surrogate parenting	Students	19.25% 52	38.51% 4	21.85% 59	11.11% 30	9.26% 25	3.52	1.172	3.685
	Teachers	15.25% 9	33.89% 20	18.64% 11	16.95% 11	5.25% 9	3.85	1.229	
Parent involvement	Student	9.6% 26	14.1% 38	18.1% 49	30.37% 82	7.77% 75	3.57	1.232	3.735
	Teachers	16.94% 11	23.72% 14	15.25% 9	32.20% 19	1.86% 6	3.90	.989	

The findings in Table 4 below reveal that 15.55% of students and 28.81% of teachers agreed that one-on-one counseling practice had a very strong influence in the prevention of substance abuse, while 34.07% of students and 30.5% of teachers were of the opinion that the strategy had a moderately strong influence. However, 18.51% of students and 15.25% of teachers were not sure, whereas 16.66% of students and 12.07% of teachers were of the view that one-on-one counseling had a moderately weak influence. This therefore implied that the majority of the respondents agreed that the one-on-one strategy had a moderately strong influence, an indication that it effectively addressed substance abuse among students. This opinion is in agreement with Nabunya (2012) that guidance and counseling play a pivotal role in students' behaviour, management, and correction in schools. However, the results are not in line with those of Boitt (2015), who showed that the guidance and counseling programs in schools were ineffective because of a lack of trained staff and facilities and poor implementation.

Interview guide (IG) validated the findings from quantitative data. During the interview one of the Education officers had this to say:

'Reports from the office reveal that guidance and counselling programme has been established in schools. However, its effectiveness is still a challenge since substance abuse cases are still on the rise, as evidenced by many strikes. The causes of these strikes are inclusive of substance' (EO, March 7, 2022).

This therefore implies that schools have embraced one-on-one counseling. This corroborates with NACADA (2021) report that prevention programs addressing individual psychological vulnerabilities help adolescents who are particularly at-risk to deal constructively with emotions arising from their personalities.

Findings revealed that 26.66% of students and 18.64% of teachers were of the view that gender-based counseling had a very strong influence in the area of prevention of substance abuse, while 35.92% of students and 38.92% of teachers agreed that the strategy had a moderately strong influence. This finding indicates that the majority of the respondents felt that gender-based counseling had a moderately strong influence as reflected in the moderate aggregate mean (μ 3.645) which is slightly above the baseline value. This finding implies that issues related to substances are handled easily on gender basis. Learners become more interactive and willing to share their concerns along gender basis.

Further findings revealed that while 31.85% of students and 23.72% of teachers agreed that random searches on students had a very strong influence in dealing with substance abuse, 34.44% of students and 33.89% of teachers viewed it as having a moderately strong influence. This implies that a majority of the respondents felt that random searches had a moderately strong influence. This is normally done during opening day, after long and short holidays, after half term, during tea and lunch break, and before school outings. It is normally effective when students are ambushed either in class, dormitory or just before students report to school after an outing or holiday. This is similar to NACADA, (2021) report which posits that the school shall monitor the learners' abstinence through facilitation of random searches. However, findings from FGD revealed that students seem not to support the idea of random searches. During FGD some students commented:

'Any time teachers open to search our desks am never at peace. This is a lack of trust for us. They embarrass us before our friends.' (FGD 5 March 23, 2022).

Further findings from Table 4 revealed that 30.37% of students and 32.20% of teachers were of the opinion that the involvement of parents in issues to do with substances had a moderately weak influence on preventive intervention. Similarly, 27.77% of students and (72%) of teachers agreed that this aspect had very weak influence. However (9.6%) of students and (16.94%) of teachers were of the view that this aspect had a very strong influence. The study therefore established that the majority of the respondents disagreed that the involvement of parents in matters of substance was effective. This is reflected in an aggregate mean score of (μ) 3.735, thus an indicator of the divergence in views between respondents. Students have no trust in their parents due to fear of the unknown yet parents play a very important role in the moral development of children. This is contrary to what NACADA (2021) report recommends that counselling support system should be provided for learners with either users or non-users of substances. One of the teachers in charge of guidance and counselling commented:

'There is need for an enhanced programme of guidance and counseling focusing on students developing a positive personal image that will enhance self-respect and adherence to virtues than vices' (HoD, February 28 2022).

Further still, while 29.62% of students and 28.81% of teachers agreed that guidance as a form of preventive measure has a very strong influence, 30.00% of students and 30.50% of teachers were of the opinion that the strategy had a moderately strong influence. The congruency in views is reflected in a high mean score of (μ) 3.75 for students and (μ) 4.08 for teachers which are far above the baseline mean score of (μ) 3.00. The study established that a majority of the respondents felt that guidance had a moderately strong influence and therefore effective. In the view of



the researcher, both teachers and students embrace the programme of guidance in schools. This corroborates with Dunne et al, (2017) that asserts guidance and counselling is crucial in achieving a healthy emotional climate.

Findings further revealed that while 19.25% of students and 15.25% of teachers agreed that surrogate parenting had a very strong influence in the area of prevention, 38.51% of students and 33.89% of teachers were of the view that it had a moderately strong influence. On the other hand, a good proportion of students (21.85%; N=59>18.64%; N=11) than teachers were not sure whether surrogate parenting was an effective way of dealing with substance abuse. Therefore majority of the students were of the view that surrogate parenting was effective an indication that students embraced it. This is reflected in a mean score of (μ) 3.52 for students and (μ) 3.85 for teachers, indicating that it is moderately effective. Surrogate parenting calls for commitment and devotion both from teachers and students and by extension school as a whole. This is close to the views of Onrust et al. (2016) that when targeting middle-aged children content should focus on teaching social skills, self-control and healthy behaviour to enhance self- motivation. Response from the education officers indicated that more effective ways be embraced. One commented:

Open forum is quite instrumental since students as growing adolescents like being listened to as they speak out their concerns. Once students realize that they are trusted they will fully take part in activities.’ (EO 6, March, 9, 2022).

This view is supported by Etsula (2017) whose study revealed that harsh treatment from the administration, lack of freedom, and student’s failure to have their grievances addressed creates stress which can lead to the abuse of drugs.

4.4 Hypothesis Testing

The research hypothesis was:

H01: There is no statistically significant influence of personality issues on the effectiveness of substance abuse preventive measures among secondary school students.’

4.4.1 Correlation Analysis

To examine the association between personality issues and the effectiveness of substance abuse preventive measures correlation analysis was carried out.

Table 5

Correlation Matrix between the Outcome Variable and Its Correlates

		Preventive Measures			Personality Issues
Teachers	Preventive Measures	1.0000			
	Personality Issues	0.7680	0.3080	0.6292	1.0000
Students	Preventive Measures	1.0000			
	Personality Issues	0.6310	0.1293	0.2502	1.0000

Pearson correlation: ≤ 0.35 = Weak correlation; $0.36-0.67$ = Moderate correlation; $0.68-0.89$ =Strong Correlation; ≥ 0.90 = Very strong correlation

From Table 5 personality issues correlated positively with preventive measures.

4.4.2 Regression analysis for personality Issues

Furthermore, simple regression analysis was carried out. The study used a coefficient of determination (R^2) using regression analysis as shown in Tables 6.

Table 6

Linear Regression Analysis between Personality Issues and Effectiveness of Preventive Measures

Model Summary					
	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Students	1	.631 ^a	.433	.423	.43961
Teachers	1	.695 ^a	.483	.474	.45414

a. Predictors: (Constant), Personality issues

From Table 6 linear regression analysis shows that the R-value for students and teachers is at .631^a and .695^a respectively which shows that there is an influence of personality issues on the effectiveness of preventive measures of

substance abuse. R^2 shows .433 and .483 on the variation of the effectiveness of preventive measures of substance abuse caused by personality issues

An analysis of variance (ANOVA) was also done to ascertain whether personality issues were a significant predictor of the effectiveness of preventive measures of substance abuse. The results were summarized as shown in Table 7.

Table 7

ANOVA of Personality issues and preventive Measures

	Model		Sum of Squares	df	Mean Square	F	Sig.
Students	1	Regression	20.159	1	20.159	80.959	.000 ^b
		Residual	90.977	269	.249		
		Total	93.127	270			
Teachers	1	Regression	10.993	1	10.993	53.301	.000 ^b
		Residual	11.756	58	.206		
		Total	22.748	58			

a. Dependent Variable: Preventive measures

b. Predictors: (Constant), personality issues

Results for the ANOVA test as shown in Table 7 indicates that the model had a significant influence on preventive measures [F (1, 269) = 80.959, $P < .05$] and [F (1, 58) = 53.301, $P < .05$] for students and teachers respectively; this indicated that the adopted linear regression model was a good fit to the study dataset. From the regression model, personality issues were statistically significant. The null hypothesis was therefore rejected. This implies that the effectiveness of substance abuse preventive measures in secondary schools in Kakamega County is dependent on personality issues among secondary school students in Kakamega County. This is close to the study of Pere (2018) which sought to examine the preventative strategies influencing drug abuse reduction among the undergraduate students enrolled in public university campuses in Nairobi County. There was a statistically significant association between personal image and drug abuse reduction among students in public university campuses in Nairobi County. In Pere's study, the resulting relation between these variables was significant at 0.05, χ^2 (144, N = 1430) = 135.727, $p < 0.05$. The study therefore concludes that there is a statistically significant relationship between positive personal image among university students and drug abuse reduction. The findings are close to Otingi (2012) assertion that self-esteem acts as a social vaccine that empowers individuals and inoculates them against undesirable behaviour. There was a statistically significant association between guidance and counselling and drug abuse reduction among students in public university campuses in Nairobi County.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

The study concluded that coping with stress, aggressiveness and easily being convinced had a strong influence on the abuse of substances. Further to this, the study concluded that risk-taking behaviour had a moderately strong influence according to teachers but for students it had a weak influence. Further still, the study concluded that personality issues determined effectiveness of substance abuse preventive measures and that the most effective measures are: guidance, one-on-one counselling, gender counselling and involvement of parents.

5.2 Recommendations

It was recommended that teachers should provide social and emotional support to students since these highly promotes prevention of substance abuse. Effective change always comes from within the person through sharing of feelings, values and self-awareness. This can be realised if students are given opportunities to participate in self-management practices in order for them to own the programme.

REFERENCES

- Adebeyi, A. O., Faseru, B., Sangowawa, A. O., & Owaoaje, E. T. (2010). Substance abuse treatment, prevention and policy. *Substance Abuse Treatment, Prevention, and Policy*, 5(75), 1-5.
- Allen, J. D., Litten, C. K., Fertig, L. D., & Barbor, P. P. (2013). Brief group interventions with college students: Examining motivational components. *Journal of Drug Education*, 33(2), 159–176.
- Bandura, A. (1977). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(2), 1-26.

- Boitt, S. (2015). Evaluation of the challenges in the implementation of the guidance and counselling programme in Baringo County secondary schools, Kenya. *Journal of Education and Practice*, 7(30), 123-345.
- Buehler, C., & Gerard, J. M. (2013). Cumulative family risk predicts increases in adjustment difficulties across early adolescence. *Journal of Youth and Adolescence*, 42(6), 905-920.
- Cheloti, S. K. (2013). *Effectiveness of head teachers' administrative strategies in curbing drug and substance abuse in secondary schools in Nairobi County, Kenya* (PhD thesis, University of Nairobi).
- Dishion, T. J., Kavanagh, K., Schneiger, A., Nelson, S., & Kaufman, N. K. (2002). Preventing early adolescent substance use: a family-centered strategy for the public middle school. *Prevention science : the official journal of the Society for Prevention Research*, 3(3), 191-201. <https://doi.org/10.1023/a:1019994500301>
- Dunne, T., Bishop, L., Avery, S., & Darcy, S. (2017). A review of effective youth engagement strategies for mental health and substance use interventions. *Journal of Adolescent Health*, 60(5), 487-512.
- Etsula, J. M. (2017). *Drugs and substance abuse among secondary school students in Kenya: Prevalence, effects, and management strategies* (Master's Thesis, Moi University).
- Government of Kenya. (2015). *National Education Sector Plan*. Ministry of Education, Science and Technology.
- Gunnarson, M., Gustavsson, J. P., Tengstrom, A., Franck, J., & Fahlke, C. (2012). Personality traits and their associations with substance abuse among adolescents. *Personality Differences*, 45, 356-360.
- Hokm, A., Bakhti, M., Nazemi, M., Sedighi, S., & Mirzadeh Toroghi, E. (2018). The relationship between personality traits and drug type among substance abuse. *Journal of Research & Health*, 8(6), 531-540.
- Karki, S. (2017). *Substance use and psychosocial problems among Nepalese adolescents* (Dissertations in Health Sciences, University of Eastern Finland, Publications of the University of Eastern Finland).
- Kothari, C. R., & Garg, G. (2014). *Research methodology: Methods and techniques*. Mumbai: New Age International (P) Ltd.
- Manrique, M., van Leeuwen, L. D., & Ghesquiere, K. P. (2013). Psychosocial functioning and academic achievement: The Peruvian case. *Universitas Psychologica*, 12(3), 735-737.
- Masese, A., Nasongo, W. J., & Ngesu, L. (2012). The extent and panacea for drug abuse and indiscipline in Kenyan schools. *Asian Journal of Medical Sciences*, 4(1), 29-36.
- Mazuri, A. (2014). The incidence and extent of substance abuse among secondary schools in Mombasa County. *American Journal of Public Health*, 89(4), 1538-1545.
- Nabunya, J. (2012). Substance abuse among secondary school students in Uganda. Field Project, Department of Community Medicine, Muhumbili University College Health Sciences of the University of Dar es Salaam, Tanzania.
- NACADA. (2019). *Status of drugs and substance abuse among primary school pupils in Kenya*. Nairobi, Kenya.
- NACADA. (2021). *National guidelines for alcohol and substance use prevention and management in basic education institutions*. Nairobi, Kenya.
- National Council on Drug Abuse. (2014). *Jamaica national school survey report*. Kingston, Jamaica.
- NCPD. (2010). *Demographic divided opportunities for Kenya*. Government of Kenya, supported by United Nations Population Fund (UNFPA), Kenya country office. Retrieved from <http://healthpolicyproject.com/pubs/384-KenyaDemoDivBrief.pdf>
- Olugbenga, A., Ajayi, O., & Babalola, S. (2020). Parental involvement, peer influence and openness to experience and undergraduates' substance abuse in Ogun East Senatorial District, Ogun State, Nigeria. *Asia Pacific Journal of Multidisciplinary Research*, 8(3), 140-148.
- Onrust, S. A., Otten, R., Lammers, J., & Smit, F. (2016). School-based programmes to reduce and prevent substance use in different age groups: What works for whom? Systematic review and meta-regression analysis. *Clinical Psychology Review*, 44, 45-59. <https://doi.org/10.1016/j.cpr.2015.11.002>
- Oteyo, J. S. (2013). Co-occurrence of alcohol, tobacco and other drugs among secondary school students in Kiambu and Nairobi Counties, Kenya. *International Journal of Education and Research*, 1(3), 1-14.
- Otingi. (2012). Prevention methods and strategies between Finland and Kenya. *Journal of Health Prevention, and Policy*, 13(1), 24.
- Pere, J. (2018). *Preventative strategies influencing drug abuse reduction among undergraduate students in public university campuses in Nairobi County, Kenya* (Doctoral Dissertation, The Catholic University of Eastern Africa).
- Republic of Kenya. (2013). *The alcoholic drinks Control (amendment) bill*. Nairobi: Government Printer.
- Republic of Kenya. (2019). *The alcoholic drinks Control (amendment) bill*. Nairobi: Government Printer.
- Research New Zealand. (2013). *ALAC attitudes and behaviour towards alcohol survey 2009-2011: Republic of Kenya. The alcoholic drinks Control (amendment) bill*. Nairobi: Government Printer.
- Rooke, R., Rasoo, A., Schneider, J., & Levine, J. (2020). *Drosophila melanogaster* behaviour changes in different social environments based on group and size. *Communications Biology*, 3(304), 15-70.



- Saleemi, N. A. (2014). *Quantitative techniques* (3rd ed.). Nairobi: Savani's Book Centre Ltd.
- UNODC. (2017). *World drug report*. United Nations Office on Drugs and Crime, Vienna, Austria.
- Wanjama, Muraya, & Gichaga. (2013). *A handbook for parents and teachers*. Nairobi: Jomo Kenyatta Foundation.
- WHO. (2014). *Global strategy to reduce the harmful use of alcohol*. Geneva: World Health Organization.
- WHO. (2016). *Global strategy to reduce the harmful use of alcohol*. Geneva: World Health Organization.
- World Drug Report. (2018). *United Nations Office on Drug and Crime*. United Nations publication.
- Zucker, R. A., & Harford, T. C. (1983). National study of the demography of adolescents' drinking practices. *Journal of the Studies and Alcohol*, 44, 974-995.