

# Substance use among Adolescents Residing in Perceived Hotspots in Zimbabwe: Prevalence and Correlates. (A Study of Sigola)

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## ABSTRACT

This study investigated prevalence of alcohol and substance use among adolescents in Sigola, a community deemed a hot spot for drug abuse. It also examined the association between drug use and subjective wellbeing, stress and risk behaviors. This study adopted a quantitative approach and a cross sectional survey design guided the inquiry. Participants were adolescents selected from the five villages of Sigola using a purposive proportional quota sampling technique. The researcher adopted four validated instruments. CRAFT examined prevalence. Satisfaction with Life Scale explored subjective wellbeing. The Risky Taking Questionnaire examined risky taking while the Perceived Stress Scale examined stress levels among adolescents. Descriptive statistics guided the analysis of demographic data. The Chi Square test complimented the Pearson Correlation to determine relationships between variables. Results revealed that 28% of adolescents were using substances. Adolescents were also getting high with unfamiliar substances. Gender differences showed drug use more prevalent among males. Life satisfaction was lower among substance users. Stress levels were also significantly high among drug users. A positive linear relationship existed between substance use and stress. A similar relationship existed between substance use and risk taking. Results justified the need for urgent measures to curtail the substance use pandemic in Zimbabwe.

## BACKGROUND

Abuse of drugs and other substances has recently become more widespread globally. Gunda and Mbwirire (2020) claim that several countries are fighting the drug epidemic. Smyth and Saulnier's (1997) observation that recent trends show a substantial increase in alcohol and other illegal drug addictions support the foregoing. The UN (2014) also stated that 243 million people used illegal substances globally in 2012. Although incidence vary from country to country, there has recently been an alarming rise in drug use in Zimbabwe. According to Chiseva (2022), Zimbabwe is currently one of the continent's top nations for having high prevalence substance use among the 15 and 19 years' age group. A report by Manica (2022), showed that teenagers in Zimbabwe had developed such imaginative thinking skills that they were now getting high with some unexpected substances such as diapers. Matutu (2019) found substance use among Zimbabwean youths very high. Similar sentiments were echoed by Macauley (2014), and Tshili (2022). So dire is the situation that in February 2021 the president of Zimbabwe declared substance abuse a threat to national security and launched an Inter-Ministerial Committee to tackle this pandemic.

Studies reviewed further proved that alcohol abuse was high among in communities with a culture of tolerating high alcohol consumption such as military bases (Robb 2009, Bray et al 2009, Machinkati and Signh 2008 & Padden et al 2011) and small scale mining communities (Mafongoya, Maroveke and Muzenda 2021). Adolescents are mostly affected since they are likely to model such maladaptive

behaviours such as drug abuse. Boys were found to be more prone to use drugs as compared to girls (Boateng and Agbezde 2019). The vicarious learning theory of Bandura (1965) which postulates that human beings acquire maladaptive behaviours through observing and learning from what they see in their environment supports the foregoing. It is argued that adolescents residing in drug prone areas most likely to use drug because they learn it from their environment. Armies do have zero tolerance for illicit drug and substance abuse and testing positive results in stiffer penalties. Though incidents of hard drug usage remain limited, alcohol misuse remains a major challenge in military bases (Ames 2004 and Jordan 2022). Ames and Cunradi (2004) further argue that military personnel often use alcohol in an attempt to cope with stress, boredom, loneliness, and the lack of other recreational activities. Due to shortage of accommodation in military barracks, soldiers and their families may settle in rented accommodation in surrounding communities further exporting base behaviours into surrounding localities. According to some arguments, interactions between military service members and the local people often lead to the infusion of base behaviours into local communities. According to a survey by Sirko et al. (2019), the presence of a military base had an impact on the municipality's quality of life. Further research revealed a connection between social behaviours in military camps and those seen in the neighbourhood. Sirko et al (2019) further argue that there are relationships between military units and local populations of various types and intensities, influenced by both internal and external variables. Reversion Affairs Division (2022) in Japan attributed the high incidents of maladaptive behaviours among its youths to the establishment of an American base nearby. Studies further revealed that most drug abusers start experimenting with drugs during adolescence (Nusrat 2022 and the American Addiction Centre 2022).

Further studies revealed that drug and substance abuse was also rampant in communities where small scale mining activities (chikorokoza) is practiced (Mafongoya, Maroveke and Muzenda 2021). Further studies by Kwabena (2015), Mtetwa and Shava (2003) and Ocansey (2013) supports the foregoing. Ocansey (2013) attributes the high drug use to the belief among artisanal miners that hard drugs give them extra strength to work.

It was further noted that the use of illicit drugs has been associated with poor mental health outcomes among consumers. Wong (2023) conducted a study in rural China to evaluate the link between substance use and subjective wellbeing among youths. The research showed a link between substance use and poor subjective health. Studies by Moore et al. (2018), Luty (2008) and Clifford et al. (1999) revealed that substance use and poor subjective health are tightly related. Howard et al. (2010) in the UK further examined the association between substance use and subjective wellbeing among schoolchildren. Results proved that drug use among adolescents had a negative effect on one's subjective health. Drinking alcohol, using drugs, and smoking were connected to worse subjective health, according to other studies (Karatzias, Power & Swanson 2001). Deligranni et al (2019) further found that frequent marijuana use and binge drinking were all highly linked to lower levels of life satisfaction. Addiction associated with substance use accounts for the lower life satisfaction among drug users.

In a related survey conducted by the Centre on Addiction in (2012), 46% of teenager drug users reported experiencing high levels of stress. When compared to those who report low levels of stress, substance users had high stress levels. Additionally, the study showed that those with high stress levels were twice as likely to smoke cigarettes as compared to those with low stress levels. Zebrak & Green (2017) conducted a study to look at the connection between risky behaviours and teen drug use. According to the data, teens who used drugs reported more dangerous behaviours than those who did not. In a related study, Thombs et al. (2009) found adolescents who use drugs exhibited high-risk behaviours such as drunk driving and over speeding. Brooke and Brooke (2002) in Columbia assessed the relationship between risky sexual behaviour and drug use among adolescents. The results demonstrated that adolescents who used drugs more regularly had greater sexual activity, more unprotected sex, and were more likely to get pregnant earlier in life. Mejia, Chauvet and Fernandez (2022) in a related study reported similar results.

Sigola, a community 30 Km North East of Bulawayo city serves as the best example of a community whose youths are most likely influenced by both the presence of a military camp and small scale mining activities. A military camp established during the colonial era in the area still exists. This community relies on the camp facilities for most of its daily services such as bars where alcohol is sold at discounted prices as compared to local civilian outlets. The discovery of isolated gold deposits in the area attracted significant number of artisanal miners (makorokoza) from Bulawayo and outside Matabeleland. Reports from local leaders revealed that a significant number of adolescents in the area left school to mine gold since it is an easy way to get money. In Zimbabwe small scale artisanal miners are well known for perpetrating ill social behaviours such as drug abuse, murder and rape. The availability of cheap alcohol and hard drugs among “makorokoza” ensures a steady supply to youths in the area who in most cases have been seen loitering in the local business centres either drunk or high on drugs most of the days. According to reports, a significant number of adolescents in the area take drugs. Resultantly this has led to an increase in risky behaviours such as theft, assault, rape, and murder cases currently bedevilling the neighbourhood. According to police reports, Mukula, Tshamathe, and Imbizo shopping centres are some of the identified locations where drugs are reportedly being peddled. This ready market has also resulted in the sprouting of unregistered beer outlets known as (shabeens) where hard drugs and illicit cheap brews known as tumbwa and njengu are being sold. The adolescents in the neighbourhood are reported to make up the main consumers. The current research aims to investigate substance use prevalence and determine its relationship with stress, subjective wellbeing and risk taking among adolescents in Sigola a community.

### **The Study Objectives.**

- To examine prevalence of substance use among adolescents in Sigola.
- To determine the relationship between substance use and subjective well-being among adolescents in Sigola community.
- To determine the relationship between substance use and stress among adolescents in Sigola.
- To examine the relationship between substance use and risk taking among adolescents in Sigola community.

### **Hypothesis**

H1: Drugs abuse among adolescents in Sigola is high.

H2: There is a relationship between substance use and subjective wellbeing among adolescents in Sigola.

H3: There is a relationship between substance use and stress among adolescents in Sigola.

H4: There is a relationship between substance use and risky behavior among adolescents in Sigola.

### **Key Terms Defined**

**Subjective wellbeing.** SWB is defined as “people’s cognitive and emotive judgments of their lives,” according to Diener (2000, p. 34). This study will focus on cognitive evaluations as assessed by the satisfaction with life scale.

**Substance Use.** For this study, it entails the utilisation of any psychoactive substance, including alcohol as determined by the CRAFT screening instrument.

**Adolescents.** In this study, it entails any young person between the ages of 10 and 19 years, as defined by WHO (2023).

**Hotspots:** Areas where alcohol abuse or illicit drug use is rampant.

## METHODOLOGY

### Quantitative Approach

The investigation used a quantitative approach to investigation. Numbers are useful in quantitative researches to describe phenomena (Chireshe 2006). According to Chireshe (2006), the quantitative approach is suitable for descriptive studies that seek to examine correlations between variables. The descriptive nature of the current study made the quantitative approach more appropriate. The quantitative approach was found appropriate because it employs numerical data that guarantee measurement precision.

### The Cross Sectional Survey Design

The current study adopted the cross sectional survey design to understand the prevalence of substance use and selected correlates. According to Cohen, Manion, and Morrison (2011) surveys gather information at a specific time with the aim of describing the nature of current conditions, identifying benchmarks against which current conditions can be compared, or figuring out the connections between particular events. The survey method, according to David and Sutton (2004) in Chireshe (2006), is the most suitable for gathering factual and attitudinal data. The current study is to identify prevalence of substance abuse among adolescents and draw correlates areas, which as noted by Thomas (2022) are best addressed by cross sectional survey designs. Surveys are useful in gathering data that may be analyzed to make comparisons, according to Chireshe (2006). The cross sectional survey was appropriate for this investigation since it enabled comparisons of respondents on prevalence of substance abuse among adolescents living close to military camps and draw correlates. By utilising the cross sectional survey design, it was easy to understand and draw conclusions on drug and substance usage among teenagers who live close to military bases. Surveys also have the benefit of being inexpensive and simple to perform.

### Study Participants

The participants were adolescents drawn from Sigola villages. They were selected from the five villages surrounding Llewelyn barracks military camp.

### Inclusion and Exclusion of Participants

**Inclusion criteria.** Adolescents between ages 13 to 19 formed the research participants. They were selected because they lived in Sigola area. Participants were selected because of their close association with the camp and mining areas hence they are most likely to have been influenced by these two environments.

**Exclusion criteria.** Teenagers who lived in communities away from Sigola were not included in the study.

### Sample and Sampling Procedure

Records from a needs assessment survey conducted by the National AIDS Council of Zimbabwe UMGUZA district office in (2020) revealed that approximately 2000 adolescents reside in the area of study distributed as shown in the below table. Villages were given quotas according to the number of adolescents in each village as shown in Table 1.

Table 1. Distribution of respondents according to villages

Village	Number of adolescents	Sample size
New settlements (amavilagini)	380	59
Spezini	340	53
Tshamathi	430	67
Sigola	420	65
New plots	430	67

Table 1 shows the distribution of participants according to villages. A purposive proportional quota sampling approach was utilized to select participants from each village. A sample of 310 was selected from the five villages. The proportional quota sampling was found useful since it ensured all villages were adequately represented in the study. This method was selected because it is easy, simpler and ensured all localities were proportionally represented. The method furthermore eliminated sampling bias. Participation from every village in the study area helped prevent over or under representation of participants in the study.

## **RESEARCH INSTRUMENTS**

The researcher adopted four instruments already in psychology practice. These tools were selected because they have high validity and reliability in previous studies.

### **CRAFT Substance Use Screening Tool.**

The CRAFT screening test is one of the tools that was found suitable to examine substance use among teenagers in Sigola. The purpose of this test, according to Dalla, Zumbo, and Poole (2011), was to measure teen drug use. According to research, CRAFT's excellent sensitivity, specificity, internal consistency, and test-retest reliability make it an effective instrument for detecting alcohol and drug abuse (Dalla, Zumbo and Poole 2011). According to Mitchell et al (2014), the CRAFT questionnaire was assessed against the DSM-5. It proved strong in differentiating between those with from those without substance use. Knight et al. (2002) claim that multiple research has demonstrated the viability and dependability of CRAFT as a tool for assessing adolescent substance use. The tool was also selected because it is culturally sensitive and can easily be adapted for use in any study context.

Satisfaction with Life Scale (SWLS) was utilised to assess the subjective wellbeing of participants. The two main components of subjective well-being are the cognitive component and the emotional component, according to Pavot et al. (1993). The cognitive/judgment portion of the SWLS was used in this study to assess subjective wellbeing. According to validation experiments conducted by Diener, Emmons, Larsen, and Griffith (1985), the SWLS has a single factor, strong internal consistency, is trustworthy, and offers content that is suitable for a variety of demographics. The Fordyce Scale's significant correlations with other wellbeing variables further indicate its convergent validity.

### **Perceived Stress Scale (PSS).**

Since this test is frequently used to gauge stress levels in adults and adolescents, it was utilized to assess teen stress levels in Sigola. It was agreed that PSS should be used to assess stress levels among adolescents since it has been proved useful in identifying how much someone has felt over the past month and how unexpected, unpredictable, and overwhelming life events have been. The PSS-10 reportedly demonstrated good internal consistency in populations of both adults and college students, according to Liu (2020). The PSS demonstrated a significant internal consistency among teenage populations in China and the United States, according to further research (Kechter 2019 and Liu et al. 2020). Chinese teenagers' PSS-10 scores were significantly correlated with stressful events.

### **Data Collection Procedures**

The researcher initially sought authorization from village heads to conduct the study. Convenient dates for the dissemination of the questionnaires were decided upon after obtaining permission from the local leaders. The researcher personally delivered the instruments to adolescents in respective villages on agreed dates. Each of the four instruments was printed with concise instructions on how to complete it. Personally delivering the instruments to the participants allowed the researcher to clarify issues raised by participants during the data collection process. This enabled the collection of rich data and eliminated more errors



associated with responding to survey questionnaires by participants. This was consistent with the positivist methodology the researcher used for this investigation.

## DATA ANALYSIS

For this investigation, the researcher made use of descriptive statistics. Pearson correlation and the chi-square test of association were utilized to determine the relationship between drug use, satisfaction with life and stress. Data was analyzed in this study using statistics expressed as percentages. Tables and charts were used because they provided the researcher with a fast summary of the data. For quick statistical analysis of the data, the researcher used SPSS version 23. Closed-ended questions from the filled questionnaires were coded for easy statistical analysis.

## Ethical Considerations

**Informed Consent.** Potential negative effects of the study were availed to the participants before the commencement of the study. Participants in this study were given plenty of time to contemplate participation in the research after weighing the benefits and drawbacks of doing so. The majority of the research subjects were teenagers hence permission was sought from parents. Any potential harm that may arise from participation were properly disclosed to the participants. Participants were further briefed before the study that participation was voluntary and that there were no penalties for not participating.

**Harm to Participants.** To reduce harm, in this study, questionnaires did not include any questions that violated participants' constitutional rights, invaded their privacy, or posed harm to their self-esteem. By allowing the participants to complete the questionnaires in their homes, where their safety was ensured, the researcher ensured that participants were not subjected to any physical damage. Further information regarding potential dangers was provided to the respondents to participate in the study from an informed point of view.

## RESULTS

### Response Rate

Figure 1. Response rate and refusal rate

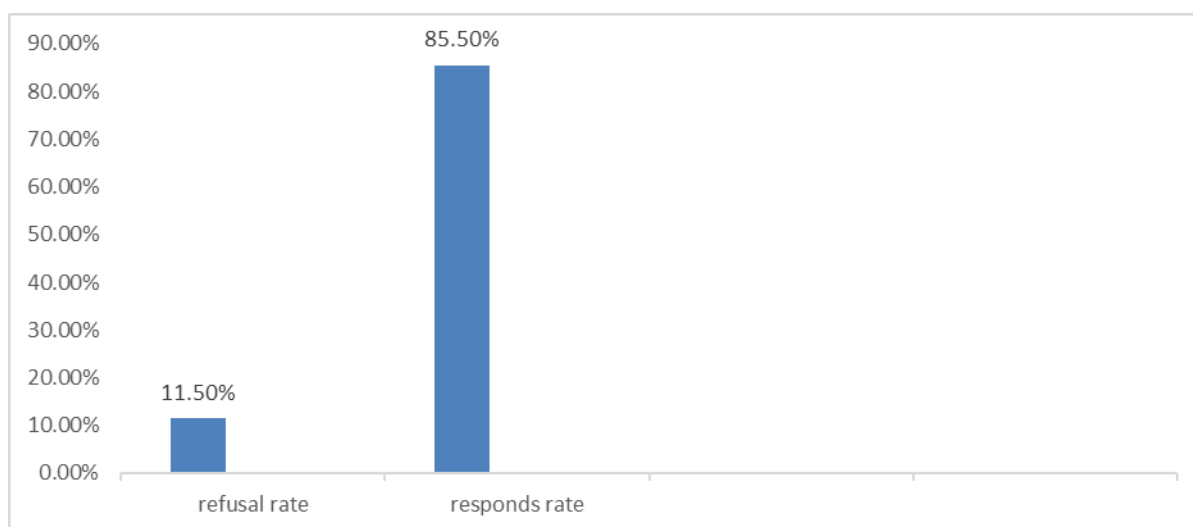


Figure 1 shows the response rate and the refusal rate. Response rate for this research was 88.5 % while A

### Prevalence of Substance Use Among Adolescents in Sigola

Figure 3. Substance use among adolescents

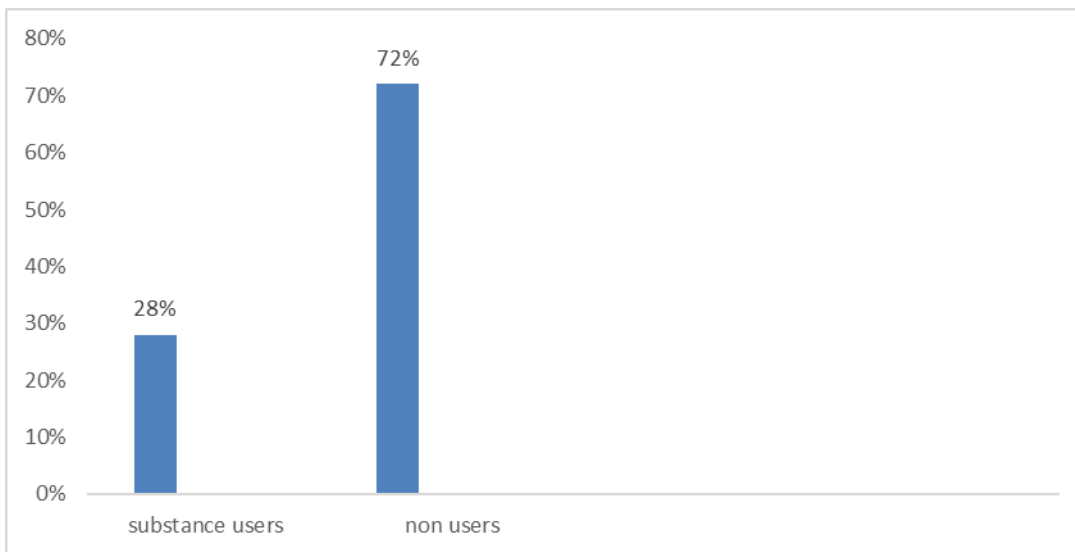


Figure 3 above shows prevalence of substance use in general among adolescents in Sigola. Almost a third of adolescents in Sigola take substances, as shown by 28% adolescents who reported using substances.

### Prevalence of Substance Use in Relation to Villages

Table 5. Substance use in relation to villages

		Substance use		Total
		No	Yes	
Area/ Village	New settlements	52%	48 %	100%
	Tshamathi	97%	3%	100%
	Spezini	47%	53%	100%
	New Plots	82%	18%	100%
	Sigola	76%	24%	100%

Table 5 shows prevalence of adolescent substance use according to villages. Adolescent substance use is most prevalent in Spezini (53%) and New settlements (48%). Tshamati village had the least prevalence rate (.3%) of adolescent substance users.

### Gender Differences in Substance Use

Table 6. Substance use in relation to gender

		Total	Substance use		Total
			No	Yes	
Gender	Male	156	51.4%	48.6%	100%
	Female	153	71.4%	28.6%	100%
Total		309			

Table 6 shows distribution of drug use according to gender. Substance abuse is more prevalent among

males as compared to females. Almost half (48, 6%) of males are substance users as compared to a third (28.6 %) of females. Results also show substance use cuts across gender.

**Association Between Substance Use and Gender**

Table 7. Chi-Square Tests of association between substance use and gender

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.246 <sup>a</sup>	1	.039		
Continuity Correction	3.737	1	.053		
Likelihood Ratio	4.269	1	.039		
Fisher's Exact Test				.042	.026
Linear-by-Linear Association	4.233	1	.040		
Total	309				

Table 7 shows the association between gender and substance use.  $p = .039$ . This test is significant since  $p < 0.05$ . We fail to reject the  $H_0$  hypothesis that gender and substance use are independent of each other. Results shows that there is an association between gender and substance use.

**Substance Use and Subjective Wellbeing**

Table 9. Satisfaction with life levels among substance users and non-substance users

	Substance use	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction	No	224	22.2857	7.12908	.47633
	Yes	84	20.3095	6.57483	.71737
	Total	308			

Table 9 shows the average level of life satisfaction among drug users and non-users. Life satisfaction is lower among substance users as compared to non-users. Those who reported not taking substances had an average score of 22, 28 while drug users had an average score of 20.31.

**Relationship Between Substance Use and Subjective Wellbeing.**

Table 10. Correlations between substance use and life satisfaction

		Satisfaction	Substance use
Satisfaction with life	Pearson Correlation	1	-.125
	Sig. (2-tailed)		.028
	N	309	308
Substance use	Pearson Correlation	-.125	1
	Sig. (2-tailed)	.028	
	N	308	309

Table 10 shows the correlation between drug use and satisfaction with life according to Pearson correlation



coefficient  $r$ . Drug use and life satisfaction had a correlation coefficient of  $r = -.125$ . The correlation was significant at the 0.05 level of significance. Results reveal a weak negative relationship between substance use and life satisfaction. Substance use to a lower extent is linked to lower life satisfaction among adolescents.

### Substance Use and stress

Table 11. Stress levels among substance users and non-users.

	Do you take drugs	N	Mean	Std. Deviation	Std. Error Mean
STRESS	No	222	16.4279	9.75314	.65459
	Yes	84	20.1429	10.87070	1.18609
	Total	306			

Table 11 shows the average stress levels of drug users and non-users. This data shows that stress level is significantly high among substance users as compared to non-users. The highest score for stress was 40. Those who reported not taking substances had an average score of 16.4 while drug users had an average score of 20.1.

### Relationship Between Substance Use and Stress

Table 12. Correlation between drug use and stress

		Substance use	Stress
Substance use	Pearson Correlation	1	.163
	Sig. (2-tailed)		.004
	N	309	306
Stress	Pearson Correlation	.163	1
	Sig. (2-tailed)	.004	
	Total	306	307

Table 12 shows the correlation between drug use and stress levels. The Pearson correlation test was used to assess this relationship. Results  $r = .163$  show a weak positive linear relationship between drug use and stress levels. Substance use is associated with stress levels among adolescents.

### Substance Use and Psychological Risk

Table 13. Comparisons of psychological risk levels between substance users and non-users.

	Substance use	N	Mean	Std. Deviation	Std. Error Mean
Psychological risk	No	216	16.7269	7.29411	.49630
	Yes	81	20.7037	9.39474	1.04386
	Total	297			

Table 13 shows comparison of psychological risk levels between substance users and non-users. Substance users have higher levels of psychological risk as compared to non-users. Substance users average risk level of 21 as compared to 17 for non-users shows higher levels of risk substance users as compared to non-users.

### Relationship Between Substance Use and Psychological Risk

Table 14. Correlation between substance use and psychological risk.

		Substance use	Psychological risk
Substance use	Pearson Correlation	1	.219
	Sig. (2-tailed)		.000
	N	309	297
Psychological risk	Pearson Correlation	.219	1
	Sig. (2-tailed)	.000	
	N	297	298

Table 14 shows the correlation between drug use and psychological risk taking. It shows that substance use increases psychological risk. The Pearson correlation coefficient  $r = .219$  shows there is a positive relationship between substance and psychological risk. Substance use increases psychological risk taking among adolescents.

### Substance Use and Physical Risk

Table 15. Physical risk levels among adolescent substance users and non-users

	Substance use	N	Mean	Std. Deviation	Std. Error Mean
Physical risk	No	224	17.0625	7.94576	.53090
	Yes	84	21.4405	9.82786	1.07231

Table 15 above shows the average psychological risk level of drug users and non-users. Physical risk taking is high among substance users as compared to non-users. Those who reported not taking substances had an average score of 17.06 while drug users had an average score of 21.4.

Table 16. Relationship between substance use and physical risk taking

		Substance use	Physical risk
Substance use	Pearson Correlation	1	.218
	Sig. (2-tailed)		.000
	N	309	308
Physical risk	Pearson Correlation	.218	1
	Sig. (2-tailed)	.000	
	N	308	309

Table 16 shows the relationship between drug use and physical risk taking. Results show that there is a weak relationship between substance use and psychological risk. The Pearson correlation coefficient between the two variables was  $r = .218$ . This show a positive weak linear relationship between drug use and physical risk. Substance abuse increases physical risk taking among adolescents.

## **DISCUSSION CONCLUSIONS AND RECOMMENDATIONS**

### **Prevalence of Substance Use Among Adolescents in Sigola**

A third of adolescents (27.7%) in this study admitted using substances. The information above suggests that approximately a third (27.51%) of adolescents in Sigola use narcotic substances. The high rate of drug use discovered in this survey is consistent with a study by Mcaulley (2014) in which 17% of teenagers confessed using illegal drugs. Similar conclusions were drawn from a research by Manica (2022), which showed that teenagers in Zimbabwe had developed such imaginative thinking skills that they could get high with some unexpected substances. The following substances are prominent examples: njengu in Thshili (2022), crystal meth, used diapers and antidepressants tablets known as “mangemba”. Matutu (2019) who in a study found a prevalence of 50% reported higher figures of substance use among adolescents.

Adolescents' substance use was more prevalent in two villages namely the new settlements villages and Spezini village which had the highest prevalence (53%). The numbers of substance users at the new settlement village can be explained by the close proximity of this particular settlement to the camp and Mukula shopping centre, which has been declared a hot spot for drug peddling by the local police. The new plots are located a few hundred meters away from the camp where alcohol is sold at discounted prices as compared to local outlets. The local police attributed the high substance use prevalence reported for Spezini villagers to the fact that these villages surround the Spezini shopping centre, which was also declared a drug hot spot. Limited small scale mining operations also take place in areas close to Spezini villages.

Concerning gender differences in substance use, more male adolescents used substances as compared to females. Similar studies revealed that drug misuse was more common in boys than it was in girls (Boateng and Agbeleze 2019). The high prevalence among adolescent boys as compared to girls is attributed to the different ways boys and girls are socialised in African societies. In Zimbabwe, boys are socialised to engage in risk behaviours such as substance use.

### **Relationship Between Substance Use and life Satisfaction**

A comparison between life satisfaction levels between drug users and nonusers revealed lower levels of life satisfaction among substance users as compared to non-users. These results are consistent with a similar study, by Luty (2008) which discovered that substance dependent patients had considerably higher rates of dissatisfaction with life as compared to non-users. Similarly, Clifford et al. (1999) found that substance-using students had poorer life satisfaction in a related research of college students. Deligranni et al (2019) further found that frequent marijuana use and binge drinking were all highly linked to lower levels of life satisfaction. Addiction associated with substance use accounts for the lower life satisfaction among drug users. It takes more effort, resources and time to satisfy the addiction. Once addiction develops, the user literally becomes a slave to the substance of abuse, which negatively affects their wellbeing. The cravings associated with substance addiction further worsens the symptoms resulting in low subjective wellbeing. Results further support findings by Cliford (1999) who found regular marijuana use highly related with lower levels of subjective life satisfaction. The weak relationship found in this study is attributed to the fact that there are other factors that impinge negatively on adolescent's wellbeing. Factors such as hormonal changes associated with adolescents and stressors associated with school may affect negatively on the adolescent wellbeing.

### **Relationship between Substance Use and Stress**

Stress levels were significantly high among adolescents who use drugs. Those who reported not taking substances had an average score of 16.4 while drug users had an average score of 20.1. Results are

consistent with findings by the Centre on Addiction in (2012), that teenagers who use drugs reported experiencing high levels of stress as compared to non-users. Adolescents may resort to substance use to relieve stress. Conversely, substance use may cause stress as well. This weak relationship shows that apart from substance use, there are other factors that may contribute to the high stress levels found in adolescents. In a study, academic pressure was reported to be the biggest sources of stress among adolescents, according to the CDC (2019). Furthermore, adolescence was reported as a chaotic and stressful time for teenagers, according to Erickson (1963).

### **Relationship Between Substance Use and Risk Taking**

Risk taking was found to be high among substance users as compared to non-users. These findings are in line with Brooke and Brooke (2002) findings, which showed that teenagers who reported using drugs more frequently engaged in risky behaviours as compared to non-users. High psychological risk among drug users is not surprising since drug use was found to alter the perception of the user, which increases the chances of risk behaviour thoughts. Drug use was also found to cause cognitive impairment, which may lead to impulsivity and risk taking thoughts. Supportively, Mejia, Chauvet and Fernandez (2022) in a study found out that substance use was highly correlated with risk taking. A weak relationship was noted between substance use and risk taking. This weak association can be explained by the fact that several factors are at play in explaining psychological risk taking among adolescents. Peer pressure is one major factor that can account for the risky behaviours among adolescents even in the absence of drugs.

### **CONCLUSION**

Though the relationships between substance use and stress, subjective wellbeing and risky taking were weak, we fail to reject the null hypothesis and conclude that:

- Substance abuse is high among adolescents who reside in Sigola.
- There is a relationship between substance use and subjective wellbeing among adolescents residing in Sigola.
- There is a significant relationship between substance use and stress among adolescents residing in Sigola.
- There is a relationship between substance use and risky behavior among adolescents residing in Sigola.

### **RECOMMENDATIONS.**

Further research on the unexpected substances utilized by youths to get high need further examination. It is further suggested that drug and substance abuse awareness campaigns be intensified among the youths to curb the increasing levels of substance use among adolescents. Parents and communities should be educated on drug and substance use for early identification and appropriate referrals to professionals. School curriculum should also include drug and substance abuse lessons.

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