Relationship Between Attachment Styles And Risk For Problematic Drug Use Among Undergraduate Students In Selected Universities In Kenya

Hellen Atieno Owuor*
M.A Counselling Psychology
Kenyatta University. Kenya
Email Address:atie.hellen79@gmail.com

Dr. Muchiri Karega*
Department of Psychology
Kenyatta University. Kenya
Email Address: karega.muchuri@ku.ac.ke

Abstract

Problematic drug use among university students has serious consequences on their overall wellbeing, has potential to inhibit successful transition to the work force, and could predicate substance related problems later in life. Problematic drug use impacts socioeconomic development by affecting potentially skilled work force and increasing the burdens of both the healthcare and the criminal-justice systems. Whereas many studies have been conducted among students in universities in Kenya, most ignore the multidimensional underlying factors including behaviour, attitudes and motivations, that influence propensity to problematic drug use. This study was designed to determine whether there is a significant difference in the risk for problematic drug use among students with different attachment styles. Attachment style here refers to the socio-emotional behavioural systems that guide how individuals manage their needs for emotional security. Attachment styles thus play an important role in how people self-adapt. The study employed a correlational research design using self-administered questionnaires to collect information on both attachment style and drug use. A sample of 400 respondents was selected from four universities, two public and two private, located in Nairobi and Kiambu counties. Statistical analysis of the findings of the study showed significant correlation between attachment styles and problematic drug use, meaning that individuals who manifest anxious attachment style have a higher risk for problematic drug use. This finding has a major implication of prevention and treatment of problematic drug use since effectiveness is to a major degree predicated on an individual's attachment pattern.

Keywords: problematic drug use, Attachment styles, University students, Kenya.

Introduction

Problematic drug use among young adults aged between 18-29 years has been and continues to be a major concern to governments across the globe. This is because of its serious negative health related and socio-economic consequences affecting both the user and their surrounding communities (NACADA, 2017; United Nation Office on Drugs and Crime [UNODC], 2018). For instance, the World Health Statistics Report by World Health Organization [WHO] (2016) pointed out that nearly 25% of total deaths among people in this age group were related to drug use. This percentage is higher than that of global drug related deaths which is recorded at 11.6%. Further, governments across the world are concerned because trends indicate an upward trajectory in drug consumption (WHO, 2016; UNODC, 2018; Arnett, 2014)

Although drug abuse problems affect the entire spectrum of society, (Odejide, 2006; Oshodi, Aina, & Onajole, 2010), it is becoming increasingly evident that university students are at a higher risk of recruitment into drug consumption than other people groups. This has been affirmed by different national surveys and research studies (NSDUH, 2016; Rahmania et al., 2015; Atwoli et al., 2010; Ndegwa et al., 2017; Osman et al., 2016; Labrie, 2012; Arnett & Sussman, 2014). Further to this, Arnett 2014 found that university students have a higher problematic drug use prevalence than their non-university peers.

The reason behind this is that university study is a major transitional period for the students, who experience independence and freedom from direct

adult and family supervision, self-decision-making, and intense academic pressures. Sharing living quarters with strangers, forming new social groups and balancing social engagements with academic and other life responsibilities adds to the pressure. All these change can be very stressful for an individual and thus increase their attachment needs (Arnett & Sussman, 2010).

Problematic Drug in Kenyan Universities

Problematic drug use by university students has different consequences which include: Increase in drug related deaths by 8% within the last decade (National Survey on Drugs Use and Health (NSDUH) report (2016)); Increase in number of students who report driving under influence of at least one drug from 25.5% to 31.4% (Labrie, 2012); Poor academic performance, physical and sexual assault, vandalism and even death (Labrie, 2007); Other long term problems (Patrick, Schulenberg, O'Malley, Johnston & Bachman, 2011).

Studies carried out in Kenyan universities have shown similar patterns as those reported in other nations. The prevalence of lifetime use of at least one drug among students in various universities ranged between 77% and 84% (Ndegwa, Munene, & Oladipo, 2017; Atwoli, Mungla, Ndung'u, Kinoti, Ogot, 2011; Andanje, Rintagu,& Mundia 2011). Problematic drug use was also relatively higher among university students compared to their non-university (Ndegwa, Munene, & Oladipo, 2017).

The problematic drug use by university students results into various consequences that include fatal and non-fatal injuries; academic failures (Ndegwa et al., 2017); violence and other crimes (Rono, 2014); unsafe sexual behaviour (Atwoli et al., 2011); accidental and self-inflicted injuries (Ndegwa et al., 2017); and, is associated with long term repercussions to health and wellbeing (Masudi, 2011).

The consequences of problematic drug use among university students extend to communities neighboring the campuses, which include physical, verbal and sexual assault, vandalism and aggressive confrontations, and sleep disturbances (Masudi, 2011).

Attachment Styles and Problematic Drug Use

A majority of the interventions programs carried out by universities in Kenya at policy, preventative and curative levels focus on manifesting behaviours but ignore the underlying factors (Rono, 2014 and Patrick et al., 2011)). This approach is problematic since drug use is multidimensional, encompassing behaviours, attitudes, and motivations.

In the recent past, research studies (Kassel et al., 2008; Thorberg and Lyvers, 2010; Borhani 2013; Rahmanian et al., 2015) have focused attention on the role of psychosocial factors, and more specifically relational factors in the incidence, prevention, and treatment of problematic drug use. Relational variables such as parenting styles, parental drug use (Rahmanian et al., 2015) and interpersonal interaction and attachment patterns (Borhani, 2013; Thorberg and Lyvers, 2010; Rahmanian et al., 2015) have been correlated with Substance Use Disorders (SUDs). The link between familial factors and problematic drug use are important since the family system is the individual's basic socializing agent.

The attachment bond, which an individual establishes in early infancy through interaction with caregivers, influences behaviours, thought and emotions throughout their lifespans (Dick, & Agrawal, 2008). The bond is expressed differently by differnent individuals based on how they percieve their attachment figure. These differences are reffered to as Attachment Styles.

Attachment styles are thus the socio-emotional behavioural systems that guide how individuals manage their needs for emotional security (Mikulincer & Shaver, 2013). Attachment styles play an important role in how people self-adapt and avoid risk behaviours, more so during times of major transitions (Rahmanian et al., 2015).

Attachment styles exhibited by individuals are closely linked to psychological wellbeing (Molnar et al., 2010), support seeking (Kassel et al., 2008), social interaction (Laundrau & Short, 2010), and

intrapersonal as well as interpersonal functioning (Kuijper et al., 2012). Studies show that insecure attachment styles are more likely to be associated with negative emotion, poor coping skills, immature mechanisms, impaired cognitive styles and interpersonal conflict (Borhani, 2013). The insecure attachment styles in addition lead to eating disorder and aggression (Landrau and Short, 2010), affective problems, psychological distress (Thorberg and Lyver, 2010) and addiction (Davidson and Ireland, 2009; Therberg and Lyvers 2010; Borhani 2013). On the other hand, secure attachments appear to be a protective factor for promoting healthy development and higher sense of wellbeing.

Empirical studies confirm that patients addicted to alcohol and other psychoactive substances are very likely to have insecure attachment styles and to display severe anxiety and avoidance in attachment dimensions (Wyrzkowska et al., 2014, Borhani 2013, Thorberg & Lyvers 2010). In their research, Wyrzkowska et al (2014) found that individuals who have insecure attachments and have Substance Use Disorders often manifest higher levels of anxiety, depression and schizoid traits, and alexithymia.

It is therefore necessary to note that different attachment styles manifest through different pathways (Rahmanian et al., 2015). This was affirmed by Stepp, Morse, Yaggi, Reynolds, Reed, & Pilkonis (2008) and Landrau and Short (2010) who established that anxious attachment style is associated with interpersonal sensitivity, interpersonal aggression and need for social approval; while avoidant attachment style is associated with low level of interpersonal sensitivity and need for social approval. It is from this background that different studies are now drawing a connection between Problematic Drug Use and attachment styles.

These studies, however, have had two shortcomings. One, they review attachment styles from a broad perspective and analyse the insecure attachment styles deeper; and Two, they were carried out in high income countries.

Investigating Attachment Styles and Problematic Drug Use in Kenyan Universities

This study therefore set out to examine the role played by specific attachment styles on problematic drug use among university students in Kenya.

This study hypothesized that there is no significant difference in risk of problematic drug use patterns across different attachment styles. It employed the Self-Medication Hypothesis and Attachment Theory to provide context for analysis and discussion of the findings.

Methodology

Undergraduate university students between the ages of 18 and 29 were selected from two public and two private universities in Nairobi and Kiambu counties. The universities that were selected draw their students from all counties in the country. This enabled the research to capture a wider scope and varied environments occupied by the Kenyan university student population hence making the study representative.

The study used a mixed method of sampling to select the sample for the study. These included purposive sampling of counties with the highest number of both public and private universities and stratified sampling for selection of both public and private universities. The participants in the study were then selected using simple random method until the sample size was arrived at. The Yamane (1967) Formula for determining sample size was used to arrive at the sample:

Equation 1: Yamane's Formula for sample size determination

$$n = \frac{N}{1+ N^* (e)^2}$$

N= 62,954 (Target population)

e= margin of error, 0.05

n= 62,954/1+62,954* (0.05)2 = 399.9

Therefore the sample population was 400 students.

Research Design

The study adopted a correlational research design

to establish the relationship between the study variables. This design was appropriate in the study as it used the data collected to assess the degree and variation in the relationship that exists between attachment styles and problematic drug use among university students.

Materials and Measures

The study the Experiences in Close Relationships - Revised (ECR-RS) questionnaire (Fraley, Waller, and Brennan 2000), was used to measure attachment while the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) (WHO 2003) was employed to collect data on risk of problematic drug use.

The ECR-RS questionnaire is a self-report instrument designed to assess attachment patterns in a variety of close relationships. The same 9 items are used to assess attachment styles with respect to 4 targets (i.e., mother, father, romantic partner, and best friend). To score ECR-RS items for relation specific attachment style, two scores, one for attachment-related avoidance and the other for attachment-related anxiety, were computed for each interpersonal target (mother, father, partner, friend). The avoidance score was computed by averaging items 1 - 6, while reverse keying items 1, 2, 3, and 4. The anxiety score was computed by averaging items 7-9. These two scores were computed separately for each relationship target. A general attachment style was computed by averaging scores across the domains.

The ASSIST is a questionnaire that screens for all levels of problem or risky substance use in adults. It consists of eight questions covering tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants (including ecstasy) inhalants, sedatives, hallucinogens, opioids and 'other drugs'. For each substance, the scores received for question 2 through

7 were added up. A score is provided for each substance and grouped into low (0-3), moderate (4-26) or high risk (above 26). A general risk score was arrived at by averaging the score for each question.

For validation, the study depended on Humeniuk et al. (2008) who established construct validity of ASSIST by testing significant correlations between ASSIST scores and measures of risk factors for the development of drug and alcohol problems (r = 0.48-0.76). Discriminative validity was established by the capacity of the ASSIST to discriminate between substance use, abuse and dependence. Receiver operating characteristic (ROC) analysis was used to establish cut-off scores with suitable specificities (50-96%) and sensitivities (54-97%) for most substances.

The internal consistency reliability of Cronbach's Alpha of the ECR-R questionnaire on the other hand has been established at 0.89 (Wyrzykowska et. al 2015). Appropriateness of the instrument was further established through a pilot study.

The questionnaires were individually administered to the respondents by the researcher. Descriptive and inferential statistics were used to analyse the collected data. Descriptive statistics such as percentages and measures of central tendency were used to describe the data collected. Inferential statistics including T-test and ANOVA were used to test hypotheses. All these analyses were aided by use of the Statistical Package for Social Sciences (SPSS).

Results

Demographic Characteristics of the Sample

The sex and age distribution of the respondents in the study is summarized in Table 1 below;

Table 1: Age and sex distribution of Study Population

	Sex		Total
Age Bracket	female	Male	
<21	49	73	122(30.2%)
21 to 22	78	77	155(38.4%)
>22	56	71	127(31.4%)
Total n (%)	183(45.2)	221 (54.8)	404 (100)

The mean (SD) of participants' age was 22.42 (2.45) years while most of the respondents were in their second and third (65.9%) years of university education, as indicate in Table 2:

Table 2: Distribution by year of study

	Sex		
Year of Study	Female	Male	Total
Total	49	73	122(30.2%)
21 to 22	78	77	155(38.4%)
>22	56	71	127(31.4%)
Total n (%)	183(45.2)	221 (54.8)	404 (100)

Distribution of Attachment styles among university students in Kenya.

As is indicated in Table 3, the secure attachment style was most prevalent (44.3%) followed by avoidant and anxious attachment styles at 30.8% and 24.7% respectively. A mean (SD) score of secure attachment style was 11.46 (2.56), avoidant attachment style was 9.34 (3.32), and ambivalent attachment style was 7.93 (3.47)

Table 3: Distribution of attachment styles among students

Attachment	Sex	Frequency	Mean	SD
Secure attachment style	Female	76	11.57	2.60
	Male	104	11.31	2.48
Avoidant attachment style	Female	56	9.59	3.22
	Male	68	8.96	3.46
Anxious attachment style	Female	52	7.95	3.68
	Male	49	7.92	3.13

A T-Test analysis of the mean scores of both anxiety attachment dimensions and avoidance attachment dimensions did not show any significant differences with relation to sex. The findings however showed that in the avoidance dimension, men reported finding it easier to get close to others when compared to women, $t(402)=2.03$, $p<0.05$.

Drug use patterns among university students in Kenya.

On analysis of patterns of drug use, the study found that 76% of the respondents had used at least one drug in their lives, with 46.3% having used at least one drug in the three months prior to the study. The frequency of this use varied from once a month (25%) to daily use (2%) as indicated.
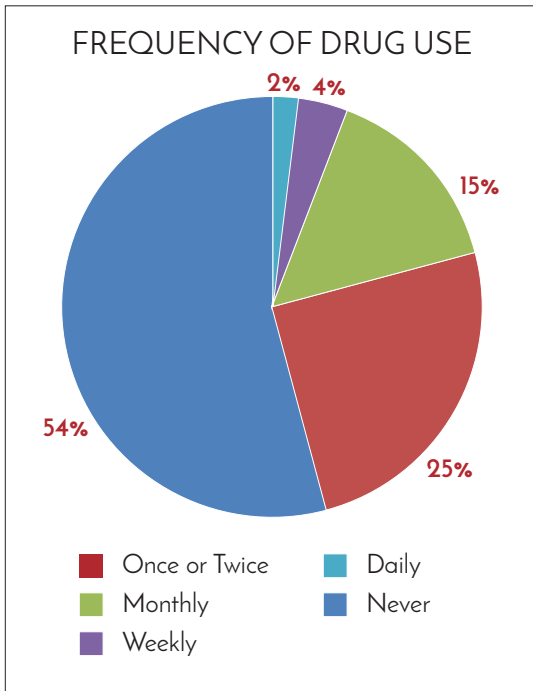

Figure 1: Frequency of Current Drug Use

Drugs used by university students

The most common used drug among the respondents was alcohol (72.4%), followed by sedative or sleeping pills, tobacco and cannabis at 24%, 16.2% and 7.7% respectively. All the other drugs had prevalence of less than 1%.

Risk of Problematic Drug Use among University Students

A weighted average score for ASSIST items was carried out to come up with a general risk assessment for problematic drug use among the respondents. As

shown in Figure 2, 83.8% of the respondents had low risk of problematic drug use, while 16.2% had moderate to high risk.
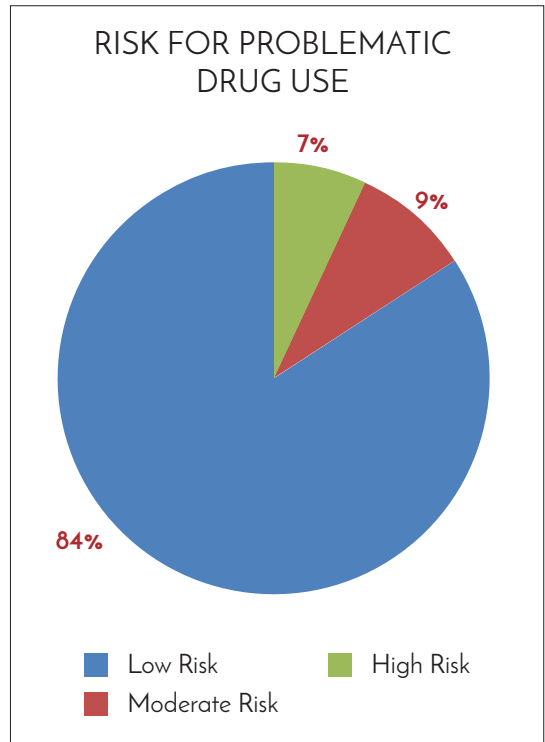

Figure 2: Risk for Problematic Drug Use

Problematic Drug Use Across Sex

As is shown in Table 4, male students had a higher prevalence (20.3%) of risk of problematic drug use compared to female students (11.5%).

Table. 4 Problematic Drug Use in Relation to Sex

Sex	Problematic drug use				
	No, n (%)	Yes, n (%)	x^2	Df	p-Value
Male (N=221)	189(79.7)	45(20.3)	0.20	1	0.65
Female (N=183)	162(40.1)	21(11.5)			

Problematic Drug Use Across Year of Study

As is shown in Table 5 below, the risk was highest among first year students (18.9%), then reducing progressively as one advances in year of study.

Table 5 Problematic Drug Use in Relation to Year of Study

Year of Study	Problematic drug use				
	No, n (%)	Yes, n (%)	x^2	df	p-Value
1st year (N=74)	59 (81.1)	14 (18.9)	6.54	4	0.16
2nd year (N=139)	99 (82.7)	24 (17.3)			
3rd year (N=128)	106 (83.6)	21 (16.4)			
4th year (N=64)	58 (91.6)	6 (9.4)			

Difference in Risk of Problematic Drug Use among Students with Different Attachment Styles

Seeking to establish the relationship between attachment styles and problematic drug use, the mean scores for each attachment style and dimension were cross-tabulated with the risk of problematic drug (Table 6). The results indicated that respondents with low risk of problematic drug use differed from respondents who had moderate to high risk for problematic drug with regard to attachment style. Those with moderate to high risk scored lower (M=7.11 and 6.36 respectively) on the secure attachment scale as compared to those with low risk who had a higher score (M=8.77).

Table 6: Attachment Styles and Risk for Problematic Drug Use

Attachment style	Risk for problematic drug use N=404		
	Low risk M(SD)	Moderate risk M(SD)	High risk M(SD
Secure	8.77 (1.95)	7.11 (2.63)	6.36 (2.17)
Anxious	4.73 (2.85)	6.66 (2.30)	7.01 (2.30)
avoidance	2.54 (2.17)	4.46 (2.25)	5.25 (2.7)
Attachment Dimension			
Anxiety	2.56 (0.79)	2.89 (0.87)	3.84 (0.96)
Avoidance	2.91 (0.80)	3.43 (0.81)	3.61 (0.81)

In terms of the attachment dimensions, respondents with low risk for problematic drug use had lower scores for both anxiety (2.56) and avoidance (2.91) dimensions as compared to those with moderate to high risk for problematic drug use.

Test of Hypothesis

To test the hypothesis that "there is no significant difference in risk of problematic drug use patterns across different attachment styles", a two-way analysis of variance was used in a 2 (risk for problematic drug use) × 2 (gender) scheme. The data comparison met the basic assumptions for the analysis of variance. Based on the results of the analysis of variance shown in Table 7, there were statistically significant differences in attachment styles across risk levels. Respondents who scored lower on the secure attachment scale, while scoring higher on avoidant and anxious attachment scales, had higher scores for risk of problematic drug use. This differed significantly (p<0.001) from those with lower risk for problematic drug use.

Table 7: Two-Way Analysis of Variance for Problematic Drug Use and Gender.

Attachment style	Risk for problematic drug use		Sex		Risk for problematic drug use -sex	
	F	n2P	F	n2P	F	n2P
Secure	48.47**	0.21	0.44	0.00	1.02	0.01
Anxious	53.46**	0.26	0.31	0.00	5.23*	0.03
avoidance	47.51**	0.21	0.00	0.00	4.87*	0.03

*p < 0.05; **p < 0.001

The secure attachment style was differentiated by the presence of risk of problematic drug use and the results are statistically significant, $F_{(1.184)} = 48.47$; $p < 0.001$. Respondents with low risk of problematic drug use were characterized by a higher level of attachment security (M = 8.77) than moderate risk (M=7.11) and high risk (M = 6.36).

The level of the anxious attachment style was differentiated both by the presence of high risk of problematic drug use, $F_{(1.184)} = 53.46$; $p < 0.001$, and the interaction of problematic drug use with gender, $F_{(1.184)} = 5.23$; $p < 0.05$. However, it was not differentiated by gender variable. Sex and the interaction of risk for problematic drug use and sex in differentiation of the secure attachment style proved to be statistically insignificant (p>0.05) as indicated in table 4.6. This means that people with higher risk for problematic drug use also had higher scores in terms of anxious attachment style (M = 7.01) than those with low risk (M = 2.54).

Based on these findings, the null hypothesis that stated that there is no significant difference in risk for problematic drug use patterns across different attachment styles was rejected.

Discussions

The findings of this study showed that despite there being a high prevalence of drug use among university students, only 16.3% of respondents had moderate to high risk of problematic drug use. This emerges since experimenting with drugs tends be an exploratory behaviour at this stage of life as is asserted by Arnett & Sussman (2014). However, university students may feel particularly invulnerable to negative life consequences as they adopt an experimental stance toward living (Arnett, 2014), leading to higher risk of problematic drug use.

The study shows that respondents who exhibited higher levels of insecure attachment styles had a higher risk of problematic drug use, while those who exhibited lower levels of insecure attachments in their significant relationships had lower risk of the same. This is consistent with studies by Schindler & Bröning, (2015) and Molnar et al., (2010) who suggested that attachment processes can be a risk or protective factor within a multifactorial model of university students' problematic drug use. Hofler and Kooyman (1996) argued that an individual

might choose a drug as an attachment alternative to relationships. Their higher risk for problematic use could be motivated by the desire to meet the attachment need.

The study found a significant relationship between attachment styles and problematic use of specific drugs. Anxious attachment was significantly correlated with alcohol, tobacco and sedatives while avoidant attachment was significantly related to marijuana. These findings were consistent with those of other studies (Thorberg and Lyvers 2010; Kassel et al., 2008). Thorberg and Lyvers (2010) stated that clients who were undergoing treatment for alcoholism, heroin addiction, or cannabis abuse reported higher levels of insecure attachment and fear of intimacy.

The study therefore confirmed a correlation between attachment security and risk of problematic drug use. This agrees with the Self-Medication Theory which states that drug abuse vulnerability is a result of exposure to drugs in combination with the inability to tolerate or understand one's own feelings (Khantzian, 1997), meaning that problematic drug use is not about pleasure seeking but seeking comfort and contact. Substances relieve psychological suffering and compensate for an alienated sense of self (Khantzian, 2011). Because these individuals have an inability to recognize and regulate their own feelings and sense of self, they act as though they do not need close interpersonal relationships (Khantzian, 2011). This disengagement and alienation from self and others produces immense distress and creates a further reliance on addictive drugs (Khantzian, 2011).

Implication for Treatment and Prevention

This study suggests that counsellors and psychologists should integrate attachment styles during the screening, planning and treatment of problematic use.

This study shows suggests that changing problematic drug use behaviour will be easier when attachment security is fostered. The development of security, on the other hand, will benefit from abstinence from abuse of drugs. Attachment theory stresses the therapeutic alliance as a means to develop more attachment security.

This study shows that professionals working with students who are at a high risk of problematic drug use can seek to establish a therapeutic relationship that fosters the correction of erroneous attachment styles through experiences that help to develop more attachment security. This would be achieved by building trust through consistent communications and maintained availability. This could be through the affected students being able to contact the counselors and psychologists via different means and channels (e-mail, social media, and in-person, etc.) when needed.

This study suggests that counsellors need to incorporate family therapy approaches in the intervention plan for addressing problematic drug use. The family of origin is where attachment relationships develop and can most easily be transformed. Family therapy approaches would also be an appropriate place to address attachment insecurity.

Conclusion

This study established a significant correlation between Attachment Styles and risk of problematic drug use. The need to make connections with significant others, both real and symbolic, are perpetual. The recognition that attachment style plays an important role in how people self-adapt and prevent risky drug use behaviors makes it necessary to build positive, functional attachment styles that can work as protective factors.

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