
Psychoticism as a Correlate of Involvement in Risky Sexual Behavior Among Students in Secondary Schools in Nyakach Sub-County Kisumu County, Kenya

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To cite this article:

Omanyo Abraham Otieno. Psychoticism as a Correlate of Involvement in Risky Sexual Behavior Among Students in Secondary Schools in Nyakach Sub-County Kisumu County, Kenya. *American Journal of Applied Psychology*. Vol. 7, No. 1, 2018, pp. 14-20.

doi: 10.11648/j.ajap.20180701.13

Received: October 2, 2017; **Accepted:** October 17, 2017; **Published:** March 27, 2018

Abstract: Risky sexual Behavior is a common habit among young people in the world, but its relation with Psychoticism has not been explored exhaustively, especially in Kenya. The study aimed at establishing correlation between Psychoticism and involvement in risky sexual Behavior among students in secondary schools in Nyakach Sub-county using a Correlational research design. A multistage random sampling was used to determine a sample size of 46 schools (88%) and 390 students (22%). Data was collected using Eysenck's Personality Questionnaire (EPQ) and Risky Sexual Behavior Questionnaires. Data was analyzed using descriptive statistics (frequency, percentages and mean) as well as inferential statistics (Pearson Correlation). The major findings of the study showed a significant relationship between Psychoticism and involvement in risky sexual Behavior ($r=0.025$). In conclusion the relationship is weak and positive hence psychotic personality is likely to participate in risky sex.

Keywords: Psychoticism, Risky Sexual Behavior and Strategic Counseling

1. Introduction

Momtaz and Mohammed [1] on the research topic: Sexual Risk among substance users and its relation to personality profile. 100 participants were used in the study. The quasi experimental design was used. The result showed that there was statistically significant difference in extroversion and neuroticism between cases of control. There were statistically significant difference between the cases and controls in terms of sexual sub scale of RAB. There was a significant correlation between Psychoticism and criminality sub scales in Eysenck personality questionnaire and the RAB in the case group. Whereas the study reviewed above entailed sexual risk among substance users and its relationship to personality. It did not single out risky sexual Behavior on its own hence the present study bridged the gap by looking into the relationship between personality and involvement in risky sexual Behavior.

Durvasula and Reagan [2] on the research title: Personality and sexual risk in HIV positive gay man. The present study

examines the association between wide variety of personality variables and sexual risk factor because gay population has high HIV prevalence in the United States. A sample of 107 HIV positive gay was used in the study. Personality was assessed multi-dimensionally using MCMI – III, Personality Assessment Screener (PAS) NEO – PI – R, Sensation Seeking Sides (SSS) and a structured clinical interview to asses' personality disorders. The results revealed that a greater proportion of men with cluster B personality disorder (PD) diagnosis (borderline, narcissistic, antisocial or histrionic) reported having two or more sexual partners compared to those without a cluster BPD. Psychotic features, and hostile control scales were observed in men who reported consistent condom use(less risk). While the above reviewed study looks into risky sex and personality among gay men, it did not consider gay females and students. The present study bridged the gap by considering the students in the assessment of risky sexual Behavior.

Annette, Elizabeth and Ostergen [3] on the study: Youth, Sexual risk – taking Behavior and mental health: A study of University students in Uganda. A sample of 980 students was used. Self administered questionnaire assessing socio demographic and religious background factors, mental health, alcohol use and sexual Behavior was used. The result showed that Psychoticism was also significantly associated with high numbers of sexual partners. Female students were found to be at more risk of engaging in risky sexual Behavior than their male counterparts. Whereas the above reviewed study focused on risky sex and mental health, the present study only focused on personality and how it is related to risky sex.

Brown, Lubman and pexton [4] on the topic: Sexual risk Behavior in young people with first episode psychosis. Sixty seven sexually active young people with first episode psychosis and 48 healthy control participants (aged 18 – 29) closely matched on assessing a comprehensive range of sexual risk Behavior. The result was that few differences in the rates of sexual risk Behavior were reported by the first episode sample and their peers. Compared with control participants, young people with the first episode psychosis reported significantly more inconsistent in condom use. Whereas the above reviewed literature focused on risky sexual Behavior among people with first episode of psychosis, it did not relate it with personality; hence the present study focused on normal people without psychosis and personality dimension was considered.

Unruh [5] on the dark triads and risky Behavior conducted a research with a sample of 115 under graduate college students using a survey design. Hierarchical regression analysis showed that there was a significant interaction between Psychoticism and life history on mating risk, which included engaging in unprotected sex and multiple sexual partnerships. The above reviewed study focuses on the dark triads: narcissism, Machiavellianism and psychopathy, neglecting the other personality dimensions. The present study bridged the gap by considering other personality dimensions.

Sonja and Stewart [6] on the research: risk taking Behavior and criminal offending: an investigation of sensation seeking and the Eysenck personality questionnaire. The research used 92 male offenders in two Southeast Queensland prisons. Eysenck's Psychoticism trait was demonstrated to be a clear marker of the more broad impulsive, unsocialized sensation seeking factor rather than representing a super-trait in its own right. While the above reviewed study focuses on risk taking Behavior and criminal offending among prisoners, leaving the youths and schools, the present bridged the gap by involving the youths and schools in the study of relationship between personality and involvement in risky sexual Behavior.

Verhulst [7] on the research topic: the nature of the relationship between personality traits and political attitudes, conducted a survey research on a sample of 20,559 participants. The results indicated that Psychoticism was strongly related to conservative positions on punishment,

religion and sex attitudes. Psychoticism and social attitudes were due to a common genetic influence. Whereas the above reviewed study focuses on personality traits and political attitudes, the aspect of risky sexual Behavior is left out. The present study bridged the gap by considering the aspects of risky sexual Behavior as part of sex attitudes.

Watson and Pulford [8] conducted a research on personality differences in high risk sport amateurs and instructors. The study involved 38 men and 28 women across three groups of participants. The results indicated that amateurs scored significantly higher on Psychoticism and self efficacy than the instructors and non-participants. Whereas the above reviewed study focuses on personality differences in high risk sports, the aspect of risky sexual Behavior is left out. The present study bridged the gap by investigating the relationship between Psychoticism and involvement in risky sexual Behavior.

Michael, Tandrea and Nadine [9] conducted a research on impact of Psychoticism on perceived hassles, depression, hostility and hopelessness in non-psychiatric Africans (n=134). The results indicated that Psychoticism has substantial effect on several important characteristics: perceived daily hassles, depression and hostility. Depression mediated the association between Psychoticism and hopelessness. Psychoticism appears to cause meaningful dysfunction even among non-psychiatric individuals. Whereas the reviewed study focuses on impact of Psychoticism, its relationship with risky sexual Behavior is not explored. The present study bridged the gap by considering relationship between Psychoticism and involvement in risky sexual Behavior.

Ndetei [10] conducted a cross sectional study of co-occurring suicidal risk and Psychoticism in Nairobi (n=691). The results indicated that significant positive correlation ($p < 0.05$) between Psychoticism and suicidal symptoms. Whereas the above reviewed literature involves a cross sectional study in Nairobi, the student population was left out. The present study bridged the gap by investigating the relationship between Psychoticism and risky sexual Behavior.

Kajialeena [11] on research dissertation university students attitudes towards HIV/AIDS in Finland and Kenya using comparative study among 525 first year students (Finnish 411 and Kenyan 114) reported that sexual risk was significantly related to psychotic signs. Whereas the reviewed study focuses on students' attitude towards HIV/AIDS, the idea of personality and risky sexual Behavior is left out. The present study bridged the gap by considering personality and Psychoticism.

Otieno [12] reported on the risky HIV sexual Behavior and depression among university of Nairobi students and found out that prevalence rates of HIV infection among the youth are disproportionately high compared to that of other age groups in Kenya. The percentage of those who had even been diagnosed with sexually transmitted infections was 9.71% and for HIV was 3.04%. Nearly 30% reported having had multiple partners in the previous 12 months, 27.4% of the

students did not use condoms with sexual partners and 21% had engaged in sex after drinking within the previous 3 months.

UNAIDS report [13] on prevention of HIV among young people found out that condom use among young people with multiple partners stood at 67.3% for males and 37.1% among females. It was also noted that the young people were aged 15 to 24 years. The cumulative HIV data (children 14 years and above) from 2012 to 2014 were as follows in Nyakach: 50332 children were under cotrimoxazol therapy for HIV, 6 under WHO stage 4, 260 under WHO stage 1, 608 under prophylaxis therapy, 215 under WHO stage 2, 19 enrolled ART, 68 enrolled ART PMTCT, 34 on PEP and 581 not started on ART (KHIS, 2014) [14].

Following the KHIS data [14] for people living with HIV/AIDS in Nyakach Sub County, it is evident that persistence in risky sexual Behavior is a major problem among the residents of Nyakach especially among young people. The causes of high prevalence of risky sexual Behavior in Nyakach may be attributed to socioeconomic, cultural, developmental and Behavioral aspects of life. As it is observed from the above literature and data from international level to local level, risk sexual Behavior is a significant issue affecting young people in schools in various ways. The present study therefore sought to establish the relationship between Psychotic personality subtypes and involvement in risky sexual behavior among the secondary school students in Nyakach Sub County, Kenya. The following hypotheses were tested: H_A : There is statistically significant relationship between Psychoticism personality subtype and involvement in risky sexual Behavior. H_0 : There is no statistically significant relationship between Psychoticism personality subtype and involvement in risky sexual Behavior.

2. Methodology

A correlational research design [43] was used to study extraversion and involvement in risky sexual Behavior considering the target population of 15,678 students in 54 secondary schools in Nyakach. A multistage random sampling was done at divisional level, school and class room level. A sample size of 46 schools (88%) and 390 students (22%) was obtained. The following are sampling matrices

Table 1. Sampling matrix for respondents.

Sample units	Sampling method	Target population	Sample size	Percentage
Schools	Simple random	52	46	88%
Students	Simple random	15,678	390	22%
Division	Simple random	3	3	100%

The Eysenck’s personality questionnaire (EPQ) [21] and risky sexual Behavior questionnaire [22] were administered to the sampled participants. Once the research permits from

university or NACOSTI had been granted, letters of transmittal were prepared and personally delivered to prospective and respective participant to seek their willingness and consent to participate in the study. Two days were used to get and fix appointments dates. On the dates of data collection, the Researcher supervised the administering of the instruments personally. Accuracy in data recording was emphasized by confirming key issues with respondents before closing the session. The exercise of data collection took a week; each respondent was given at least 20 minutes to fill questionnaires. The quantitative data collected from the study was analyzed in different ways using the version 19 of SPSS. During the study, a number of ethical considerations were maintained. The potential research participants were provided with information which enabled them to make an informed decision as to whether they want to participate in the research study or not. The informed consent was obtained from respective school heads and students, who were the informant. The confidentiality was upheld at all cost by ensuring there were no details in the questionnaire which could reveal the identity of the participants.

3. Results and Discussion

3.1. Questionnaires Return Rate

There was 100% response rate for schools since the questionnaires were administered to students in all the sampled 46 schools in Nyakach Sub-County. This was achieved because the researcher made sure he visited all the sampled schools during data collection. However, there was 99.7% return rate of questionnaires for students (Table 2) in which all the questions in the questionnaires were answered. The high questionnaire return rate was achieved because the researcher made call backs and administered the instruments to each respondent in person to ensure that each and every respondent took part in the study. However, one of the student respondents did not fully complete the questionnaire having filled in most of the answers but failed to answer some parts. This lead to the less than 100% return rate. Table 2 shows the comprehensive questionnaire return rate for different categories of respondents and sample target.

Table 2. Questionnaire Return Rate.

Respondent category	Number targeted for response	Number who responded	Percentage response rate
Boys Schools	2	2	100%
Girls Schools	3	3	100%
Mixed Schools	41	41	100%
Students	390	389	99.7%

Source: Researcher’s data

3.2. Respondents Demographic Characteristics

Student respondents’ sex

The respondent’s sex was very important in this study and the findings are presented in table 3.

Table 3. Student Respondents sex.

Respondent Category	Male		Female	
	Frequency	Percentage	Frequency	Percentage
Boys Schools	22	100%	-	-
Girls' schools	-	-	30	100%
Mixed Schools	169	50.1%	168	49.9%
Overall	191	49.1%	198	50.9%

Source: Researcher's data

Considering the response by sex, majority of the student respondents were girls (58.3%) with boys making only 41.7%. this could be attributed to the fact that more girls schools (3) than Boys Schools (2) were sampled. However, in the mixed schools, there were 53.2% boys respondents to 46.8% girls' respondents. A previous study by Annette, Elizabeth and Ostergren [15] found that female students are more at risk or susceptible to risky sexual Behavior. Therefore, the sex distribution in this study was evenly distributed about the average with males and females balancing out about the 50% average.

3.3. Psychoticism and Involvement in Risky Sexual Behavior

The fourth objective of the study was to investigate the relationship between the Psychoticism and involvement in risky sexual Behavior. Psychoticism is characterized by

overzealous aggressiveness and interpersonal hostility (Peterson, Geher and Kaufman, 2011) [23]. This study interviewed 389 students from which students were gauged on their score on the psychotic scale. From the analysis of the responses, students showing significant level of psychoticism were categorized as psychotic and their opinion on risky sexual Behavior were analyzed and deemed to represent the perspective of psychoticism.

3.4. Determining Psychoticism Personality Sub-type

All the 389 student respondents who completed the survey by answering the questionnaires gave their opinion on how they considered themselves based on questions on the psychoticism scale. Their responses were given on a scale of strongly disagree to strongly agree. The response of the 389 student respondents are shown in the table 4.

Table 4. Students Response on the Psychoticism Scale.

NO.	Psychoticism Scale	SD	D	U	A	SA	Total
1	I always have fun running into walls	194 (49.9%)	165 (42.4%)	22 (5.7%)	7 (1.8%)	1 (0.3%)	389 (100%)
2	I always feel vegetables are oppressed	247 (63.5%)	134 (34.4%)	0 (0.0%)	6 (1.5%)	2 (0.5%)	389 (100%)
3	I always eat soap	184 (47.3%)	196 (50.4%)	3 (0.8%)	5 (1.3%)	1 (0.3%)	389 (100%)
4	I always beat people with sticks	298 (76.6%)	79 (20.3%)	6 (1.5%)	4 (1.0%)	2 (0.5%)	389 (100%)
5	Giant sheep-cows always invade me	207 (53.2%)	171 (44.0%)	3 (0.8%)	6 (1.5%)	2 (0.5%)	389 (100%)
6	I can always amuse myself with a pen for a few hours	76 (19.5%)	301 (77.4%)	4 (1.0%)	6 (1.5%)	2 (0.5%)	389 (100%)
7	I am always amused by the slightest things (such as. lights)	127 (32.6%)	209 (53.7%)	45 (11.6%)	6 (1.5%)	2 (0.5%)	389 (100%)
8	I always dance around after scaring someone	223 (57.3%)	139 (35.7%)	17 (4.4%)	5 (1.3%)	5 (1.3%)	389 (100%)
9	I always run around with a scarf wrapped around my head	279 (71.7%)	102 (26.2%)	0 (0.0%)	5 (1.3%)	3 (0.8%)	389 (100%)
	Average	204 (52.4%)	166 (42.7%)	11 (2.9%)	6 (1.4%)	2 (0.6%)	389 (100%)

Source: Researcher's data (2015) n=389

Out of the 389 student respondents who gave their responses on the Psychoticism scale, only 8 (2.1%) scored highly. This number agreed to: having fun running into walls; feeling that vegetables are oppressed; that giant sheep-cows always invade them and that they dance around with a scarf wrapped around their heads. However, the number of student respondents who agreed to the statement that they dance around after scaring someone was slightly higher at 10

(2.6%). These figures included those who just agreed and those who strongly agreed. These findings are consistent with those of Sonja and Sterwart [6] who reported Psychoticism to be clear marker of broad impulsive, unsocial zed sensation seeking rather than representing a super trait on its own. Students who scored highly on the Psychoticism scale were considered to represent Psychoticism. However, these student respondents still showed high levels of the other personality

subtypes. The argument by the researcher was that if they could show such a significantly high score on the Psychoticism scale (based on the questions of the scale) then they were viable as psychotics.

3.5. Psychoticism and Risky Sexual Behavior

The fourth objective of the study sought to determine the relationship between Psychoticism personality subtype and involvement in risky sexual Behavior. The researcher analyzed the performance of students who scored highly on

the Psychoticism scale (n=8) on the risky sexual Behavior scale. The score on various items on the risky sexual Behavior scale was considered to make conclusion on their opinion and vulnerability towards engaging in risky sexual Behavior. Aspects such as carelessness towards sexual activities, attitude and use of condom, drug and alcohol use as well as the tendency to be influenced or swayed into compromising and engaging into risky sexual Behavior were analyzed and are presented in the table 5.

Table 5. Psychoticism Performance on the Risky Sexual Behavior Scale.

Psychoticism Sexual Risks Scale	SD	D	U	A	SA	Total
If my partner wanted me to have unprotected sex, I would probably give in	0 (0.0%)	4 (50.0%)	1 (12.5%)	2 (25.0%)	1 (12.5%)	8 (100%)
If I were going to have sex, I would take precautions to reduce my risk of HIV/AIDS	0 (0.0%)	1 (12.5%)	1 (12.5%)	4 (50.0%)	2 (25.0%)	8 (100%)
Condoms ruin the natural sex act	2 (25.0%)	1 (12.5%)	3 (37.5%)	1 (12.5%)	1 (12.5%)	8 (100%)
I would try to use a condom when I had sex	1 (12.5%)	7 (87.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8 (100%)
Generally, I am in favour of using condoms	2 (25.0%)	0 (0.0%)	1 (12.5%)	1 (12.5%)	4 (50.0%)	8 (100%)
I would avoid using condoms if at all possible	1 (12.5%)	0 (0.0%)	2 (25.0%)	1 (12.5%)	4 (50.0%)	8 (100%)
If I had a date, I would probably not drink alcohol or use drugs	1 (12.5%)	2 (25.0%)	2 (25.0%)	1 (12.5%)	2 (25.0%)	8 (100%)
The idea of using a condom doesn't appeal to me	1 (12.5%)	1 (12.5%)	2 (25.0%)	1 (12.5%)	3 (37.5%)	8 (100%)
With condoms, you can't really give yourself over to your partner	1 (12.5%)	2 (25.0%)	1 (12.5%)	1 (12.5%)	3 (37.5%)	8 (100%)
My sexual experiences do not put me at risk of HIV/AIDS	2 (25.0%)	0 (0.0%)	1 (12.5%)	2 (25.0%)	3 (37.5%)	8 (100%)
When I socialize, I usually drink alcohol or use drugs	2 (25.0%)	0 (0.0%)	1 (12.5%)	5 (62.5%)	0 (0.0%)	8 (100%)
If I were going to have sex in the next year, I would use condoms	2 (25.0%)	1 (12.5%)	4 (50.0%)	1 (12.5%)	0 (0.0%)	8 (100%)
If a sexual partner didn't want to use condoms, we would have sex without using condoms	2 (25.0%)	0 (0.0%)	1 (12.5%)	2 (25.0%)	3 (37.5%)	8 (100%)
People can get the same pleasure from safer sex as from unprotected sex	3 (37.5%)	0 (0.0%)	2 (25.0%)	2 (25.0%)	1 (12.5%)	8 (100%)

Researchers data, 2015 (n=8)

The study found that student respondents showing strong Psychoticism are not steady on their decisions. For example 3 (37.5%) of the respondents agreed that if their partner wanted them to have unprotected sex, they would probably give in. a majority of the respondents in this category which were 5 (62.5%) of the respondents admit that they would avoid using condoms if at all possible. This is consistent with the findings of Kelleher [24] who found that one of the major Psychotic symptoms in adolescence is that they take highly risky choices which might endanger their lives. A similar number agreed that if a sexual partner didn't want to use condoms, they would have sex without using condoms. These findings are consistent with that of Unruh [5] who reported that Psychoticism is associated with unprotected sex and multiple partnerships. The most interesting statistic is that all (100%) of the respondents who scored highly on Psychoticism scale disagree with the statement that they would try to use a condom when they had

sex. This implies that they will not make any effort to protect themselves. According to Kopele and Shumba [25] in their research on ‘Sexual Behaviors and Attitude towards safer sex of Psychology students at a South Africa University Campus’, students attitude towards safe sex is measured by their attitude towards the use of condoms which vary from one personality subtype to the next. These findings are concurrent with those of Verhulst [7] who reported that Psychoticism is strongly related with sex attitudes and Durvasula and Reagan [2] who reported that psychotics’ features were associated with inconsistent condom use. They further added that Psychoticism shows extremely negative attitude towards condom use. On the risky sexual Behavior, the study found that respondents scoring highly on the Psychoticism are more likely to engage in activities that make them vulnerable. For example, 5 (62.5%) of the respondents admitted that when they socialize, they usually drink alcohol or use drugs. Lubman [4] found that

Psychoticism increase the chances of involving in drug abuse which enhance risky sexual Behavior. Psychoticism is significantly associated with multiple partnerships (Annette et al), [3].

3.6. Correlation Between Psychoticism and Involvement in Risky Sexual Behavior

A two tailed Bivariate Pearson correlation coefficient to establish whether a relationship exists between Psychoticism and their tendency to involve in risky sexual Behavior. The results are shown in the table 6.

Table 6. Correlation -Psychoticism and Involvement in Risky sexual Behavior.

Personality subtype	Statistic	Risky Sexual Behavior
	Pearson Correlation	.025*
Psychoticism	Sig. (2-tailed)	.036
	N	8

*Correlation is significant at the 0.05 level (2 tailed)

Source: Researcher's Analysis

The results indicate a strong positive correlation between the Psychoticism and involvement in risky sexual Behavior of $r = 0.025$ which is statistically significant at $P < 0.05$ since our Two-tailed significance is 0.036. The results imply that increases in Psychoticism will results into an increase in the tendency to involve in risky sexual Behavior. Similar findings were reported by Kajjaleena [11] that sexual risk Behavior is significantly related to Psychoticism. Also Watson and Pulford [8] reported that Psychoticism involve themselves more in high risk activities. Since significant level 0.036 is less than common alpha 0.05 we reject H_0 : There is no statistically significant relationship between Psychoticism personality subtype and involvement in risky sexual Behavior, and adopt H_A : There is a statistically significant relationship between Psychoticism personality and involvement in risky sexual Behavior. These findings are in line with Ndetei [10] who reported a significant relationship between Psychoticism and risk taking in suicidality.

4. Conclusion

In conclusion the study found that student respondents showing strong Psychoticism are not steady on their decisions. The study also found that a majority of individuals showing Psychoticism will not make any effort at protecting themselves against unsafe sex. On the risky sexual Behavior, the study found that respondents scoring highly on the Psychoticism are more likely to engage in activities that make them vulnerable to risky sex. There is a statistically significant correlation between Psychoticism and involvement in risky sexual Behavior at $P < 0.05$. The study recommended that categorizing and profiling the students into their most dominant personality subtypes by teacher counselors will be one way that can be used to offer strategic counseling so as to handle various students depending on their personality subtypes, this study proposes” personality

centered counseling approach.”

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