

## **INFLUENCE OF LOCUS OF CONTROL, PERCEIVED SELF-EFFICACY AND ALCOHOL USE ON RISKY SEXUAL DECISION MAKING**

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### **ABSTRACT**

The level of risks taken by youths concerning sexual behaviour is increasing everyday and there is dearth of information about the roles of locus of control, self-efficacy and alcohol use. This study thus, examined the influence of these variables on risky sexual decision making among undergraduates. One hundred and thirty undergraduates (67males; 63 females), selected from a public university in Southern Nigeria participated in the study. Results showed that locus of control and perceived self-efficacy exerted no independent but significant interaction effect on risky sexual decision making. Males tended to take higher risky sexual decision making than females. Alcohol use did not influence undergraduates' risky sexual decision making. Finally, gender and alcohol use had a significant effect on undergraduates' tendency to take risky sexual decisions.

*Key words:* Locus of control, self-efficacy, alcohol, sexual decision

### **INTRODUCTION**

Risk involves a situation that may be dangerous or lead to negative outcomes (Afolabi & Adesina, 2011). Sexual decision making are choices made about engaging in sexual intercourse. These include choosing to have

sexual intercourse, to abstain from sexual intercourse, or choosing to use a condom while having sexual intercourse. Risky sexual decision making is a situation whereby an individual decides to partake in sexual intercourse without any form of protection (Afolabi & Adesina, 2011). It may include

having sexual intercourse with multiple partners, with casual partners, unprotected sexual intercourse and intentions to engage in unprotected sexual intercourse.

Situational factors may influence sexual decisions and behaviour during sexual encounters. Most studies have found women to be relatively powerless in sexual decision making. One study (Worth, 1989) found resistance to condom use among majority of women in a drug rehabilitation programme to be the result of a combination of personal preferences, socio-cultural factors and partners' objection to condom use. Worth (1989) reported that, despite awareness of HIV, unprotected sex with intimate partners was nearly always chosen over condom use; as condom use carried the stigma of infidelity and lack of trust.

It is also important to understand the process through which individuals make decisions during specific sexual encounters. An individual's condom negotiation during a sexual interaction occurs within a specific situational context. An individual brings into sexual encounter, his/her own individual characteristics, such as his/her locus of control, perceived self-efficacy and other factors such as alcohol use, which are likely to influence his or her sexual decision and behaviour. Bryan, Aiken and West (1997) reported that the level of power a woman has within a heterosexual relationship could influence her insistence of condom use. Also women who had high levels of both acceptance of sexuality and control over their sexual encounter had better negotiating

skills necessary in promoting condom use.

Locus of control refers to the extent to which individuals believe that they can control events that affect them (Kohler, 1996). The possible connection between locus of control and sexual decision can be captured in the following question: to what extent does an individual believe that he/she can control the kind of risky sexual decisions he/she may or may not want to take? In a sexual context, an internal locus of control would be manifested by a sense of personal agency in sexual decision making (such as deciding to use a condom during sexual intercourse).

Individuals with internal locus of control, believe that events, such as the risky sexual decisions they make, result primarily from their own behaviour and actions, and that they are in control of their actions. External locus of control in a sexual context might be manifested by an attitude that one's partner controls one's sexual health and behaviours or one is destined to become HIV positive. That is, individual's with an external locus of control, believe that events such as the risky sexual decisions they make, is as a result of powerful others, fate or chance.

In a study by Kohler (1996), a significant correlation was found between risk-taking and the variables of gender, critical thinking and locus of control. McIntyre, Saundargas and Howard (1991) found that having an external locus of control was a significant predictor of pregnancies occurring early in adolescence. Crips and Barber (1995) reported that among young

adult drug users, those with an internal locus of control knew they are taking risk, while those with an external locus of control believe they are invulnerable to risk, particularly for HIV. Lavery, Siegel, Cousins and Rubovits (1993) reported that involvement in high risk-activities have been positively associated with personality factors.

Mosack, Randolph, Gomez, Abbott, Smith and Weeks (2010) found that one's ability to make sexual decision, locus of control or a sense of personal agency, is a related construct, and it influences one's ability to negotiate safer sexual behaviour with partners in adulthood among high-risk urban women with and without histories of childhood sexual abuse (CSA). Women who had a history of CSA, tended to engage more in unprotected sexual intercourse, exhibit less relationship control and a high external locus of control for sexually transmitted infection, when intoxicated (Finkelher & Brown, 1985; Miller, 1999). They were associated with engaging in sex work and being intoxicated during sexual intercourse.

Self-efficacy was defined by Bandura (1997) as the extent to which individuals' belief in their ability to succeed in specific situations. We can have a high sense of self-efficacy in certain areas of life and not in others. But a high sense predicts willingness to take on relevant tasks and work to assure that they are accomplished. When self-efficacy is high, we are more likely to be drawn to master difficult challenges, whereas, when it is low, we may avoid those same challenges.

It can also be defined as a person's perception of his or her ability or competence to deal with a specific task. It is the belief that one is capable of performing in a certain manner to attain certain goals. The way in which an individual perceives his/her self, can influence behavioural choices. Individuals with a high sense of self-efficacy, put in effort to take on, or not take on risky sexual decisions and persistence to continue striving despite barriers and setback that may undermine their motivations. In addition, the perceived ability to engage in various types of social interactions may influence people's decisions to use condom. It is plausible that people, who have high levels of social self-efficacy, may feel more comfortable discussing condom use with their partners, ultimately insisting that condoms be used during sexual intercourse.

The influence of specific personality characteristics such as locus of control, perceived self-efficacy and alcohol use, on the use, non use or poor use of contraception has been a particular focus of several investigators. Several studies have examined the association between self-esteem and events (e.g. sexual intercourse, non use of contraception, pregnancy). For example, Harold and Godwin (1979) found that high self-esteem was associated with more positive attitudes towards contraception and more effective contraception use among young adult clients of family clinics. Sexual abuse was associated with reporting lower condom self use. Sexual abuse was also directly predictive of less condom use. In a related

vein, Afolabi and Adesina (2011) found that women who were sexually abused as children are more likely to have had earlier sexual intercourse, lower self-esteem and were more likely to engage in risky sexual behaviours, such as ineffective use of birth control, multiple partners and unintended and aborted pregnancies.

Another factor that may be associated with risky sexual decision making is alcohol use. This may be because alcohol is a pharmacological substance that impairs judgment and decreases sexual inhibition, which may in turn result in an increase in risky sexual behaviours. Alcohol use has emerged as an important, factor in sexually transmitted HIV infection. Alcohol has also been shown to have a psychological component, such that simply knowing that one is drinking may serve to uninhibit behaviour. Not only do individuals believe that they are more likely to engage in sex when drinking alcohol, they also report that they are more likely to engage in unsafe or risky sexual behaviours (e.g. Mcewan, McCallum, Bhopal & Madhok, 1992).

Alcohol intoxication can increase an individual's intention to engage in risky sexual decisions like unprotected sex (MacDonald, Fang, Zanna & Martineau, 2000), decrease perception of its negative consequences (Fromme, Amico & Katz, 1999) and impair verbal condom negotiation skills (Maisto, Carey, Carrey & Gordon, 2002). Studies (e.g. Hines, Snowden & Graves, 1998; Biglan, Metzler, Wirt, Ary, Noell, Ochs, French & Wood, 2004) have reported a strong relationship between frequency

of alcohol consumption and frequency of risky sexual intercourse. Another study, (Cooper, 2002), found that drinking was strongly related to the decision to have sex and indiscriminate forms of risky sex (e.g. having multiple or casual sex partners).

Fromme, Amico and Katz (1997) examined sexual risk perception and found that, compared with their sober placebo and control counterparts, intoxicated young men and women rated negative consequences as less likely to occur and as less influential on their decisions to have sexual intercourse with a new partner. In a second experiment by Fromme et al. (1999), participants watched a videotape depicting a risky sexual situation and then listed the potential consequences of having unprotected intercourse. Intoxicated participants listed fewer negative consequences than did placebo and no alcohol controls. MacDonald, Zanna and Fong (1996) also found that acute alcohol intoxication was associated with stronger intentions to have unprotected intercourse with a casual partner.

Against the background of the above findings, the current study seeks to examine how alcohol use and self-efficacy influence risky sexual decision making. This is because individuals who lack self-efficacy may be unable to exert an influence over condom use, through fear of rejection and stigmatization by partners. Besides, it is believed that intoxicated individuals may experience decreased cognitive capacity, which reduces their ability to process distant risk cues resulting in increased attention to proximal sexual arousal cues. In

addition to that, the study aimed to address how an individual's locus of control can interact with his/her self-efficacy and alcohol consumption to influence risky sexual decision making.

### Hypotheses

1. Locus of control and perceived self-efficacy will have independent and interaction effects on risky sexual decision making.
2. Gender and alcohol use will have independent and interaction effects on risky sexual decision making.

## METHODS

### Design and Participants

This study was a cross-sectional survey. Participants were 130 undergraduates, sampled from a public university in Nigeria. The sample comprised 67 males (51.5%) and 63 females (48.5%). Respondents between the age 18-25 years were 99 (76.5%), those between 26 – 45 years were 29 (22.5%), and those between 46 – 55 years were 2 (1.5%). In the case of marital status, 110 (84.6%) were single and 20 (15.4%) were married.

### Measures

*Locus of control* was measured using a 26-item scale adapted from Rotter's (1966) Locus of Control Scale. It was rated on a 5-point (Strongly agree = 5; Strongly disagree = 1). Sample items included: "People's misfortunes result from the mistakes they make" and "In

the long run, people get the respect they deserve in this world". The scale had reliability coefficient of .80 (Rotter, 1996). In the present sample, a reliability coefficient of .89 was obtained for the scale. For the purpose of this study, the scale yielded a reliability coefficient of .89. Scores that were up to or above the mean indicated internal locus of control while scores below the mean reflected external locus of control.

*Perceived self-efficacy* was measured with a 10-item adapted from Schwarzer and Jerusalem's (1995) Self-efficacy Scale. It was rated on a 4-point scale (1 = Not true; 4 = Exactly true). In this study, the scale showed a reliability coefficient of .76. High scores indicated that the individual had high level of perceived self-efficacy.

*Alcohol use* was measured with a 10-item scale adapted from John, Wanberg and Foster (1993) Alcohol Use Inventory. The inventory was rated on a 4-point scale (Never = 1; 4 or more times a week = 4). Sample items on the scale include "How often do you have a drink containing alcohol?", "How often do you have six or more alcoholic drinks on one occasion?" A reliability coefficient of .91 was established for the present study. Here, the higher the score, the higher the alcohol use by the individual.

*Risky sexual decision making* was measured with a 15-item Sexual Risk Behavior Scale developed by Afolabi (2007). The scale was rated on a 5-point scale (Strongly disagree = 1; Strongly agree = 5). The author

reported an alpha coefficient of .73. With the present sample, the scale had a coefficient alpha of .91 was obtained. On this scale, those who scored between 15 and 30 engaged in low risky sexual decision making while those who scored between 31 and 75 engaged in high risky sexual decision making.

### Procedure

Undergraduates in the selected public university were informed about the nature and purpose of the study. They were also assured that their response could not be traced to them.

Participation was voluntary. Out of the 145 questionnaires distributed, 135 were retrieved and only 130 were found usable. The data collection took about a month.

### Data Analysis

To test the two hypotheses, a 2 x 2 ANOVA was conducted.

## RESULTS

The results of descriptive and inter-variable correlations are presented in Table 1.

Table 1: Mean, SD, and Inter-variable Correlations

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age	-	-	1								
2. Gender	-	-	-.02	1							
3. Marital status	-	-	.37**	.02	1						
4. Level of education	-	-	.31**	-.01	-.10	1					
5. Place of residence	-	-	.22*	-.03	-.13	-.07	1				
6. Locus of control	67.47	3.61	.31**	.30**	.08	-.18	.09	1			
7. Perceived self-efficacy	24.13	4.70	.12	-.04	.05	.30**	.11	.29*	1		
8. Alcohol use	28.33	2.41	.01	-.25*	-.22*	-.31**	.29**	.44**	.39**	1	
9. Risky sexual decision making	45.38	3.97	-.39**	-.29**	.32**	.14	.27*	-.03	.10	.06	1

Note: \*\*  $p < .01$ . \*  $p < .05$ .  $N = 130$ .

From the results in Table 1, age had a significant relationship with risky sexual decision making such that older undergraduates tended to engage less risky sexual decision making than younger undergraduates [ $r(128) = -.39, p < .01$ ]. Gender had a significant a negative relationship with risky sexual decision making [ $r(128) = -.29, p < .01$ ]. That is, male tended to engage in risky sexual decision making

than females. However, locus of control [ $r(128) = -.03, p > .05$ ], perceived self-efficacy [ $r(128) = .10, p > .05$ ], and alcohol use [ $r(128) = .06, p > .05$ ] had no relationships with risky sexual decision making among undergraduates.

The results of the 2 x 2 ANOVA on hypothesis 1 are presented in Table 2.

**Table 2: Summary 2 x 2 ANOVA of Locus of Control and Perceived Self-efficacy on Risky Sexual Decision Making**

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Locus of control	12741.77	1	303.38	1.75	> .05
Perceived self-efficacy	6106.19	1	277.55	1.60	> .05
Locus of control x perceived self-efficacy	21008.13	1	375.15	2.17	< .05
Error	1557.17	127	173.02		
Total	295519.00	130			

As shown in Table 2, locus of control [ $F(1, 27) = 1.75, p > .05$ ] and perceived self-efficacy [ $F(1, 27) = 1.60, p > .05$ ] did not exert significant independent effects on risky sexual decision making among undergraduates. However, the interaction effects of perceived self-efficacy and locus of control on risky sexual decision making was significant [ $F(1, 27) = 2.17, p < .05$ ]. Therefore, hypothesis 1,

which expected locus of control and perceived self-efficacy to exert independent and interaction effects on risky sexual decision making was partially supported.

Hypothesis 2, expected independent and interaction effects of gender and alcohol use on risky sexual decision making was tested by conducting another set of 2 x 2 ANOVA. The results are shown in Table 3.

**Table 3: Summary 2 x 2 ANOVA of Gender and Alcohol Use on Risky Sexual Decision Making**

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Gender	654.39	1	654.39	2.10	< .05
Alcohol use	554.14	1	554.14	1.78	> .05
Gender x Alcohol use	875.42	1	875.42	2.81	< .05
Error	39537.13	127	311.32		
Total	41621.08	130			

The results in Table 3 revealed that gender exerted a significant effect on risky sexual decision making such that male tended to exhibit higher risky decisions than females undergraduates [ $F(1, 27) = 2.10, p < .05$ ]. But there was a significant independent effect of alcohol use on risky sexual decision making among undergraduates [ $F(1, 27) = 1.78, p > .05$ ]. Lastly, gender and alcohol use had a significant interaction effect on risky sexual

decision making among undergraduates [ $F(1, 27) = 2.81, p < .05$ ].

## DISCUSSION

This study examined the influence of locus of control, perceived self-efficacy and alcohol use on risky sexual decisions making. Some aspects of the hypotheses were confirmed. The first hypothesis predicted that there would be a main and interaction effects

of locus of control and perceived self-efficacy on risky sexual decision making. The finding revealed that the hypothesis was partially confirmed by the result. The interaction effect of locus of control and perceived self-efficacy on risky sexual decision making was significant while the main effects of locus of control and self-efficacy on risky sexual decision making was not significant.

The interaction effect of the locus of control and self-efficacy on risky sexual decision making supported Ajzen and Fishbein's (1980) reason action theory which stated that people consider the implications of their actions before they decide to engage or not engage in certain behaviour. The finding was also in agreement with Afolabi and Adesina's (2011) and Cooper, Agocha and Sheldon's (2000) work on personality and motivational perspectives on risky behaviours. The study found a statistically significant difference in locus of control between those females who later became pregnant and those who did not, those who later became pregnant were more likely to have an external locus of control and also more likely to have a poorer sense of personal self-efficacy. Another study by Colon, Waitrek and Evans (2000) had submitted that sexual self-efficacy predicted perceived certainty of condom use.

In addition, self-esteem and sexual self-efficacy predicted intentions to use condoms. Also, a study by Waymant and Aronson (2002) on risky sexual behaviour, found women who have condom self-efficacy was related to greater condom use. Another study

by Kohler (1996) on the relationship between locus of control and sensation-seeking, critical thinking skills and risk taking among young adult, found a significant correlation between critical thinking and locus of control.

Hypothesis two, which stated that there would be a main and interaction effect of locus of control and alcohol use on risky sexual decision making, was confirmed. It was confirmed that gender has a significant influence on risky sexual decision making. From the mean scores it was found that males are involved in risky sexual behaviours than females. This supported the findings of Jadack, Hyde and Keller (1995) that men reported engaged in significantly more risky behaviors than women. More men reported that intercourse without a condom occurred in unplanned, spontaneous situations, while under the influence of alcohol or drugs, or with a person not well known.

More women reported that intercourse without a condom occurred in long-term relationships. Women were significantly more comfortable abstaining from sexual intercourse and asking partners about their sexual history while men were significantly more comfortable buying condoms. Puentes et al. (2011) found that 82.3% of boys and 63.0% of girls in their study were engaged in sexual risk behaviors. The prevalence of sexual relations and risk behaviors was generally higher in boys than in girls, independently of the variables analyzed. Boys had more sexual partners and used condoms as a contraceptive method less frequently than girls. They concluded that sexual risk behaviors

among young adults in their sample are higher in boys than in girls. Factor related to unsafe sexual activity in boys was alcohol consumption.

The influence of alcohol use on risky sexual decision making was also found to be significant. This finding is not surprising because alcohol has also been shown to have a psychological component, such that simply knowing that one is drinking may serve to uninhibit behaviour. Not only do individuals believe that they are more likely to engage in sex when drinking alcohol, they also report that they are more likely to engage in unsafe or risky sexual behaviours (e.g. Mcewan, McCallum, Bhopal and Madhok, 1992).

Besides this, alcohol intoxication can also increase an individual's intention to engage in risky sexual decisions (unprotected sex) (MacDonald et al., 2000) decrease perception of its negative consequences (Fromme, Amico and Katz, 1999) and impair verbal condom negotiation skills (Maisto, Carrey and Gordon, 2002). Survey studies that examine the global association between frequency of alcohol consumption and frequency of risky sexual intercourse, have found strong positive relationship between the two (Hines, Snowden and Graves, 1998; Santelli, Brener, Lowry, Bhath & Zabin, 1998).

## CONCLUSION

The study established significant interaction effects of locus of control and perceived self-efficacy on risky sexual decision making. Locus of

control and perceived self-efficacy individually had no significant effect on the decision making of the sample. The study also showed that there were significant main effects of gender and alcohol use on risky sexual decision making. There was also an interaction effect of gender and alcohol use on risky sexual decision making. Finally it was shown that males are more involved in risky sexual decision than females.

The findings of this study are relevant to psychologists, men and women in general, the society at large and future researchers. It contributes to the risky sex literature, by building our understanding of person variables, such as locus of control and self-efficacy. More so, the study bears on contemporary theoretical controversy regarding alcohol's involvement in sexual risk taking behaviour. It allows researchers to build more sophisticated hypotheses to further understand risky sex behaviour.

A major limitation of this study was the number of participants who complained of the length of the items on the scale, as it was lengthy in both detail and comprehension. Lastly, the possible biases in the responses of participants because locus of control, self-efficacy, and alcohol use are aspects of one's behaviour. Thus, human behaviour as we already know is unpredictable. This unpredictability of respondents' responses to the questionnaire items might be based on the attempt to falsify some responses or give positions that are really not true about their ratings with regards to their tendency to indulging risky sexual decision making.

Based on the findings of this study, the following recommendations can be offered for future research and intervention efforts: individual's can be counselled on how alcohol use, locus of control and perceived self-efficacy can affect their relationship appraisals early in a social interaction, which in turn can affect their cognition during a sexual encounter and ultimately leads to risky sexual decision making.

These results are highly amenable to the development and prevention skills training. Thus, government and non-governmental agencies should include the role alcohol use has to play on people's risky sexual decision making. Governments (at all levels) and parents should also intensify their campaign on the use of protection, abstinence and contraception to the entire public. Parents should also abstain from activities that would encourage youths to go into alcoholism so as to help to reduce the level of alcohol use and subsequent risky sexual decision making.

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