A Mediation Analysis of Sex Motives in the Locus of Control-Risky Sexual Behaviour Nexus among Students in Ugandan Universities

[1]*WINFRED BIRIBONWA KYOSABA,
[2]DAVID KANI OLEMA, [3]ALOYSIUS RUKUNDO
[1]*Department of Educational Foundations and Psychology, Faculty of Science, Mbarara University of Science and Technology, https://orcid.org/0000-0002-6518-4360;*
[2]*Department of Education, Faculty of Science and Education, Busitema University – Nagongera Campus, https://orcid.org/0000-0003-4929-2684;*
[3]*Students' Affairs and Welfare Department, Kyambogo University,*
**Corresponding author email: ekyowinnie@gmail.com;*
Orchid: https://orcid.org/0000-0002-9694-9047;
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Abstract

This study investigates the psychological and behavioural dynamics influencing risky sexual behaviours (RSBs) among young adults in Ugandan universities during their critical transition to adulthood. A quantitative research design was employed using a self-administered questionnaire to examine the interplay between locus of control (LOC), sex motives (SMs), and risky sexual behaviours (RSBs) among 527 randomly selected students (250 males, 277 females) from four universities in Uganda. Results indicated that 78.2% of participants exhibited a strong external LOC, correlating with heightened RSB engagement (65.7%), including unprotected sex (38.3%), multiple partners (26.4%), early sexual debut (12.1%), and homosexual practices (7.8%). While sexual motives were generally moderate (e.g., intimacy, coping), peer approval emerged as notably low (M = 9.08, SD = 4.26). Mediation analysis revealed that SMs – particularly self-affirmation and partner approval – significantly mediated the LOC-RSB relationship (R^2 = 20%, p <

0.02), suggesting that students with external LOC often engage in RSBs to fulfil psychological needs. These findings align with the Theory of Planned Behaviour (TPB), emphasising how perceived behavioural control and intrinsic motivations shape sexual decision-making. The study highlights the need for targeted interventions, including (1) empowerment programmes to cultivate internal LOC and self-efficacy, (2) peer-led education addressing normative beliefs about sex motives, and (3) youth-friendly health services to improve access to contraceptives and counselling. By integrating psychological and social determinants, universities can mitigate RSB risks and promote sexual health.

Keywords: *Risky sexual behaviours; Locus of control; Sex motives; Young adults; Interventions.*

Introduction

Young adults (18-25 years) represent a stage of life when a person transitions from late adolescence into full adulthood (WHO). It is a critical stage marked by identity development, autonomy, and relationship formation, during which individuals face complex decisions about sexual behaviour (McLean et al., 2024).

Globally, young adults are increasingly recognised as occupying a distinct developmental stage marked by delayed marriage, prolonged education, and greater autonomy in decision-making. These shifts have extended the transition to adulthood and created more opportunities for exploration in relationships, including increased sexual experimentation (McLean et al., 2024). Studies across diverse contexts show that rising educational aspirations and changing social norms contribute to later marriage and more varied romantic and sexual experiences among young people (Lindstrom et al., 2022; Paul et al., 2023). Within this extended period of exploration, individual psychological factors – such as locus of control – play an important role in shaping how young adults navigate sexual relationships and associated risks. As a result, understanding young adulthood as a unique life stage provides a useful framework for examining the motivations and behaviours that influence risky sexual practices.

In Uganda, where HIV/AIDS remains a public health concern, risky sexual behaviours (RSBs) such as unprotected sex, multiple partners, and early sexual debut persist among university students despite widespread awareness campaigns. Universities in Uganda, particularly urban ones, reflect broader societal influences, including peer pressure, economic disparities, and gender power imbalances that shape sexual decision-making (Mehra et al., 2014). Psychological factors such as locus of control (LOC) and sex motives (SMs) further influence these behaviours, with LOC reflecting individuals' perceived control over outcomes and SMs capturing the underlying motivations for sexual engagement (Rotter, 1966).

On the other hand, the sociohistorical context of HIV/AIDS prevalence since the 1980s has intensified scrutiny of RSBs among youth (UNAIDS, 2020). Risky sexual behaviours (RSBs) remain common, with many initiating sex before age 15 and using condoms inconsistently despite long-standing public health efforts (Nghaamwa, 2013). These behaviours persist, indicating that traditional awareness campaigns may fail to address deeper psychological and social factors.

Ugandan universities serve as microcosms of broader societal dynamics, where young adults experience newfound independence amidst limited parental oversight (Aluzimbi et al., 2013). Urban institutions of higher education, particularly in Kampala City, report elevated RSBs linked to transactional sex, peer influence, and economic disparities (Renzaho et al., 2017). Recent data indicates that 70% of university students in Uganda are sexually active, with 38% engaging in unprotected sex and 26% maintaining multiple partners (Choudhry et al., 2022). These trends are compounded by gender disparities, as female students often face higher vulnerability due to power imbalances in relationships (Ochako et al., 2015).

Emerging evidence demonstrates that young adults in Ugandan universities exhibit risk patterns that warrant closer scrutiny. Although 59% report consistent condom use (Choudhry et al., 2022), this figure simultaneously reveals that a substantial proportion remains unprotected during sexual activity, amplifying vulnerability to HIV and other STIs. The 26.4% prevalence of concurrent partnerships – one of the most potent

behavioural drivers of HIV transmission in sub-Saharan Africa – further underscores the heightened risk environment on university campuses. Moreover, early sexual debut (12.1% before age 15) and engagement in same-sex relationships (7.8%), while often underexplored in mainstream sexual-health discourse, signal the presence of structurally marginalised behaviours that carry elevated health risks within Uganda's sociocultural and policy landscape (Kyosaba, 2025; Kaggwa et al., 2022). Collectively, these patterns point to a complex and layered risk profile that cannot be understood through prevalence rates alone but requires deeper examination of underlying psychosocial drivers.

Locus of control (LOC) refers to individuals' beliefs about control over life events, categorised as internal (ILOC) or external (ELOC) (Rotter, 1966). ILOC individuals perceive outcomes as contingent on personal actions, while ELOC individuals attribute outcomes to external forces like luck or fate (Sujadi, 2020). Sex motives (SMs) encompass reasons for engaging in sexual behaviour, including intimacy, self-affirmation, partner approval, coping, and peer approval, among others (Cooper et al., 1998). These motives are shaped by social exchange dynamics (Hatfield et al., 2011). Risky sexual behaviours (RSBs) are actions that increase the risk of adverse outcomes like STIs or unintended pregnancy (CDC, 2023). Common RSBs among Ugandan students include early debut, multiple partners, and inconsistent condom use, among others (Azwihangwisi, 2016).

Anchored in the Theory of Planned Behaviour (TPB), the study posits that behaviour is driven by attitudes, subjective norms, and perceived behavioural control. LOC aligns with perceived control, while SMs represent behavioural intentions. The study applied TPB **(Ajzen, 1991)** by examining how LOC influences perceived behavioural control and, in turn, RSBs. An external locus of control reduces self-efficacy, increasing the likelihood of such behaviours (Afolabi & Obuseh, 2013). Sex motives like coping or seeking approval mediate the link between control beliefs and behaviour (Cooper et al., 1998), while Social Learning Theory explains the reinforcing role of peer influence **(Bandura, 1977)**. These frameworks show how control beliefs and social factors shape sexual decision-making among young adults in Ugandan universities.

They also guide the design of interventions that enhance self-efficacy and promote positive peer influence. Such interventions aim to strengthen perceived behavioural control and reduce risky sexual behaviours. Overall, the study operationalised TPB by exploring how beliefs about control (LOC) and socially learnt motives (SMs) interact to predict sexual decision-making among young adults in Ugandan universities.

Statement of the Problem

Young adults enrolled in Ugandan universities ideally should have the knowledge and resources to make informed sexual health decisions, yet 40% of new HIV infections occur among young adults (Annual Joint AIDS Review Report, 2023/2024), with 70% of students sexually active and only 59% consistently using condoms among young people in Ugandan universities (Choudhry et al., 2022). Existing interventions focus mainly on awareness, HIV testing, and condom distribution, overlooking psychological factors such as locus of control and sex motives that influence risky sexual behaviours (Kaggwa et al., 2022 & Slap et al., 2003). This gap contributes to persistent challenges, including HIV, STIs, unintended pregnancies, and academic disruptions (UBOS, 2024), which, in turn, strain university and national health systems, reduce productivity, and affect institutional reputations (Nalukwago et al., 2019). Addressing these issues requires interventions that consider cognitive-emotional factors. This study examined how SMs mediate the relationship between LOC and RSBs, providing insights for more targeted and effective university-based sexual health programmes.

Review of Related Literature

Recent empirical evidence reveals persistent and concerning patterns of risky sexual behaviour (RSB) among Ugandan university students. Studies report that 53.8% of students are sexually active, with substantial proportions engaging in inconsistent condom use and multiple sexual partnerships. These prevalence rates exceed those documented in comparable East African university contexts. In Kenya, for example, inconsistent condom use remains widespread, while in Tanzania nearly 30% of students report multiple partners and more than two-thirds

fail to use condoms consistently with new partners (Belihu et al., 2024; Rweyemamu, 2014; Kaggwa et al., 2022). These regional disparities suggest the presence of contextual and psychosocial factors uniquely shaping sexual decision-making within Ugandan universities.

One such factor is **locus of control (LOC)**. Research consistently demonstrates that students with an internal locus of control (ILOC) engage in safer sexual practices than their external LOC (ELOC) counterparts (Slap et al., 2003). Ugandan studies further show that ILOC students exhibit 40% higher condom use and are three times more likely to refuse unprotected sex (Nalukwago et al., 2019), aligning with Rotter's (1966) classic LOC framework. However, existing studies generally examine LOC in isolation, providing limited insight into how psychological orientation interacts with sociocultural pressures, peer norms, or structural conditions within universities.

Closely related are sexual motives (SMs), which function as key psychological drivers of RSB. Peer-approval motives explain up to 30% of the variance in RSB among Ugandan students (Wesche et al., 2019), a pattern likely reinforced by the country's highly communal social fabric. Coping motives similarly elevate the likelihood of unprotected sex by a factor of 2.5 (Cooper et al., 1998). Importantly, students with an external LOC and strong peer-approval motives exhibit the highest levels of RSB (Kyosaba, 2025). While these findings highlight complex LOC-motive interactions, the literature remains conceptually fragmented, with few studies integrating psychological, interpersonal, and sociocultural dimensions within a single explanatory framework.

Gender differences further shape sexual behaviour patterns. Male students typically report significantly more sexual partners ($M = 3.2$) compared to females ($M = 1.8$) (Kaggwa et al., 2022). Meanwhile, female students are disproportionately affected by adverse consequences such as unintended pregnancy, coercion, and intimate partner pressure (Nalukwago et al., 2019). These patterns reflect entrenched gender norms and power inequalities that constrain female sexual agency (Ochako et al., 2015). Yet, most research remains descriptive, with limited exploration of how gender norms interact with psychological constructs such as LOC and SMs.

Environmental and structural factors also contribute to heightened RSB among university students. Hostel residency is associated with a 35% higher likelihood of engaging in risky behaviour compared to living with family (Aluzimbi et al., 2013). Reduced supervision, increased access to alcohol, and peer networks that normalise risk-taking further amplify vulnerability (Renzaho et al., 2017). This heightened risk coincides with emerging adulthood, a developmental stage marked by experimentation and identity formation (Arnett, 2000). Despite this, few studies adopt multi-level approaches that consider how psychological, social, and environmental influences interact.

Religiosity presents a more nuanced pattern. While regular religious attendance is associated with lower RSB overall (Kyosaba, 2025), denominational differences complicate the relationship. Seventh-Day Adventist students, for example, exhibit both high abstinence rates and elevated risk among those who are sexually active – suggesting an "all-or-nothing" behavioural pattern (Kaggwa et al., 2022). This indicates that internalisation of religious norms may be more influential than affiliation alone, a proposition yet to be empirically tested across institutions.

Economic vulnerability further reinforces RSB patterns. Approximately 18.6% of female students engage in transactional sex to meet financial needs (Choudhry et al., 2022). Such relationships often involve older partners who are significantly less likely to use condoms than age-matched peers (Nalukwago et al., 2019). With rising university costs and limited scholarship access (UBOS, 2024), economic hardship creates structural pathways to sexual risk-taking – yet few studies explore how these economic pressures interact with psychosocial variables.

Technological and digital influences are an emerging domain of concern. Increased use of social media for sexual communication and exposure to sexually explicit content have been linked to a 25% rise in RSB (Kyosaba, 2025), echoing global trends (Anderson et al., 2020). Although such findings are timely, causal mechanisms remain under-theorised, and research on psychological mediators – such as motives, norms, or impulsivity – remains scarce.

The COVID-19 pandemic adds further complexity. While early lockdown periods saw reductions in sexual activity, post-lockdown

rebounds featured increases in partner numbers and reductions in condom use, indicating compensatory behaviour (Kaggwa et al., 2022). Although peer education interventions yield short-term improvements (e.g., 30% higher condom use; HEAIDS, 2010), their effects typically fade within six months, underscoring the limits of stand-alone behavioural interventions.

Collectively, this body of work reveals several critical gaps. First, longitudinal research capturing changes across students' university trajectories is largely absent. Second, the literature disproportionately focuses on HIV-related risks, overlooking other outcomes such as unintended pregnancy and sexual violence. Third, studies rarely integrate psychological and contextual factors within multi-level models. Fourth, mental health remains underexamined despite growing recognition of its role in influencing RSB. Finally, digital influences – now central to student life – remain insufficiently conceptualised.

Taken together, these gaps highlight the need for integrative analyses that capture the psychological processes underlying students' sexual decision-making. Accordingly, the present study examines the interaction between locus of control (LOC) and sexual motives (SMs) in predicting risky sexual behaviours among young adults enrolled in Ugandan universities. Based on this, the study hypothesises that:

H1: Locus of control is positively associated with risky sexual behaviours among young adults in Ugandan universities.

H2: Sex motives mediate the relationship between locus of control and risky sexual behaviours among young adults in Ugandan universities.

The assumptions were: i) *SMs mediate the relationship between LOC and RSB*; ii) *Partner approval mediates the relationship between LOC and RSBs*; iii) *Self- affirmation mediates the relationship between LOC and RSBs*.

Regression models using PROCESS macro for SPSS version 4.2 (Hayes) were used to analyse the hypotheses.

Methodology

Quantitative research was employed to measure, compare, and predict phenomena using numerical data. The aims included establishing patterns and prevalence to determine how common certain behaviours, attitudes, or outcomes are among young adults. The relationship between variables was examined by assessing how they predict others. The use of a quantitative research design in this study was grounded in the positivist philosophical tradition, which assumes that social phenomena can be observed, measured, and analysed objectively. This approach aligned with the research questions, which sought to measure the prevalence of risky sexual behaviours and examine the statistical relationships between locus of control, sex motives, and sexual risk outcomes among young adults enrolled in Ugandan universities. By employing structured instruments and numerical data, the study exploited the strengths of quantitative method that provided generalisable, replicable, and evidence-based insights into behavioural patterns within this population. Respondents included 527 students (250 male, 277 female) from four universities in Kampala, selected via stratified random sampling. The choice of the universities was based on their being in an urban setting that is characterised by a high level of information, many recreational centres, and all lifestyles associated with the city that lure many into possible risky sexual behaviours.

The participants were students pursuing bachelor's programmes across all academic years of study between 18-25 years of age. Data was gathered through a self-administered questionnaire consisting of four sections with items on demographics (12), LOC (20), SMs (35), and RSBs (13). SMs were rated on a 1 to 5 Likert scale (where 1 means 'never', 2 'hardly ever', 3 'sometimes', 4 'often' and 5 'always'), while LOC and RSB were rated on a dichotomous scale (true/false). The respondents were selected using proportionate random sampling. Participants' information was grouped, and demographic characteristics were analysed using frequencies and percentages. Major variables were analysed using means, percentages, and standard deviations. Additionally, multiple linear regression analysis was conducted to establish the interaction between the variables of the study.

Structural Equation Modelling (SEM) was employed to test the hypothesised relationships among locus of control (LOC), sex motives (SMs), and risky sexual behaviours (RSBs). The analysis followed the two-step approach recommended by Anderson and Gerbing (1988), beginning with the measurement model to assess the validity and reliability of the latent constructs through confirmatory factor analysis. Indicators with factor loadings below 0.50 were removed to improve model fit. The structural model was then specified to test the direct and indirect paths among LOC, SMs, and RSBs. The mediation analysis was conducted within the SEM framework to determine whether sex motives mediated the relationship between locus of control and risky sexual behaviours. The indirect effects were tested using the bootstrapping method with 5,000 resamples, following Hayes (2018), to establish the significance of the mediating paths.

Ethical Considerations

The present study received formal ethical approval from the Research Ethics Committee of Mbarara University of Science and Technology. Permission to conduct the study was sought from the National Council for Science and Technology (NCST) as well as deans of students in the selected universities. Participants were briefed about the purpose of the study and informed of the best practices and practices to avoid. They signed informed consent forms that detailed their rights and benefits. Participation in the study was voluntary, and confidentiality principles like informed consent, anonymity and de-identification were strictly adhered to. The potential risk of loss of confidentiality was minimised by using codes and pseudonyms and removing personal identifiers during data entry, analysis, and write-up. Information from participants remained anonymous and confidential, accessible only to the researcher and supervisors. All participants were adults who provided their written informed consent to participate in the study; these were automatically granted entry to the study survey. The researcher appointed, trained and paid four research assistants in the field of psychology with experience in data collection to help the principal investigator for a period of four weeks.

Results

Pearson correlation was, therefore, run to establish relationships between the variables.

LOC was tested as fixed and, therefore, correlation was run for LOC on intimacy, peer pressure, pattern approval, coping, enhancement, self-affirmation and RSBs. The results are presented in Table 1.

Table 1: *Correlation results for LOC on intimacy, peer pressure, pattern approval, coping, enhancement, self-affirmation and RSBs*

	1	2	3	4	5	6	7	8	9
1. Intimacy	1								
2. Peer pressure	.280**	1							
3. Partner approval	.425**	.659**	1						
4. Coping	.467**	.482**	.488**	1					
5. Enhancement	.742**	.404**	.528**	.595**	1				
6. Self-affirmation	.556**	.515**	.597**	.628**	.703**	1			
7. Sex motives	.757**	.665**	.764**	.757**	.880**	.865**	1		
8. Locus of control	.073	.016	.096*	.066	.066	.120**	.096*	1	
9. Risky sexual behaviours	.331**	.238**	.272**	.324**	.449**	.369**	.433**	.136**	1

The results in Table 1 show that there are significant relationships between LOC and intimacy, peer pressure, pattern approval, coping, enhancement, self-affirmation and risky sexual behaviours. The results show that SMs significantly relate with all variables and are, therefore, included in mediation analysis. The last condition for significant mediation to hold was that the bootstrap confidence interval must not contain a zero. Mediation analysis was tested with Hayes PROCESS version 4.2. This was chosen because the bootstrapping technique is less susceptible to outliers and non-normality of the data. In 95% of samples, the 95% confidence intervals contain the true value of the parameter. As

a result, it is presumed that the sample, which was used to estimate the population value of an effect, is not one of the 5% that does not represent the true value.

Since b = 0 would indicate that there is no effect, the fact that the confidence interval does not include zero indicates that there is probably a real indirect effect. Thus, the interval between BootLLCI and BootULCI should not contain zero.

Table 2: *Mediation effect of sex motives on the interaction between locus of control and risky sexual behaviours*

Model	Outcome variable	Independent variable	β	t	P	R	R2	F	SE	Bootstrap LLCI	ULCI
1	Sex motives	Locus of control	0.42	2.20	.03	0.10	.01	4.83	.19	0.04	0.80
2	Risky sexual behaviours	Locus of control	0.04	2.43	.02	.44	.20	63.97	0.02	0.01	0.08
		Sex motives	0.04	10.76	< .01				0.00	0.04	0.05
3	Risky sexual behaviours	Locus of control	0.06	3.15	< .01	.14	.02	9.91	.02	0.02	0.10
4	a*b		0.04							0.01	0.08

Source: Survey data (2018)

In Table 2, Model 1 indicates that LOC positively (+β) and significantly predicts SMs (a path), β = 0.42, t=2.20, p =0. 03. The R^2 indicates that LOC explains 1% of the variance in SMs. Model 2 shows the results of the regression of RSBs predicted from both LOC and SMs. LOC significantly predicts RSBs with reduced effect with SMs in the model (Paths c'), β= 0.04, t=2.43, $p = 0.02$, and SMs significantly predict RSBs (b path), β= 0.04, $t = 10.76$, $p < 0.01$. The R^2 value indicates that the model explains 20% of the variance in RSBs. Model 3 shows the total effect of LOC on RSBs when SMs is not present in the model. When SMs is not in the model, growth LOC significantly predicts RSBs, β =0.06, t =3.15, p <0.01. The R^2 value indicates that LOC explains 2% of the variance in RSB. So, when

SMs is added in the model, the effect of the LOC on RSBs increases from 2% to 20%. The indirect effect (a*b) is significant because the bootstrap confidence interval does not contain a zero BootLLCI and BootULCI of 0.01-0.08. Therefore, SMs mediates LOC and RSBs. Therefore, the hypothesis that there is no significant mediation effect of SMs on the interaction between LOC and RSBs among young adults in Ugandan universities is nullified. Figure 1 shows paths a, b, c and c' and their effect sizes.

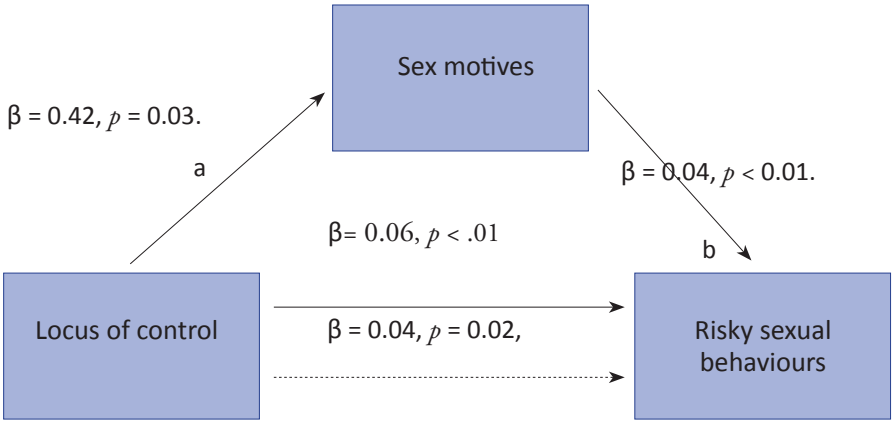

Figure 1: **Mediation effect of sex motives on the interaction between locus of control and risky sexual behaviours**

Source: Survey data (2018)

The results in Figure 1 indicate that "a" and "b" paths coefficients are both statistically significant. Using bias-corrected bootstrapping, the indirect effect BootLLCI and BootULCI are 0.01 and 0.08. Since they do not contain zero, there is a statistically significant mediation. The indirect effect being statistically significant implies partial mediation. Therefore, SMs partially mediates the interaction between LOC and RSBs. This implies that LOC and SMs together play an important role in influencing RSBs among young adults in Ugandan universities.

Table 3: *Mediation effect of partner approval on the interaction between locus of control and risky sexual behaviours*

Model	Outcome variable	Inde-pendent variable	β	T	P	R	R2	F	SE	Bootstrap LLCI	ULCI
1	PAT	Locus of control	0.08	2.22	.03	0.10	.01	4.93	.04	0.01	0.15
2	Risky sexual behaviours	Locus of control	0.05	2.64	0.01	.30	0.09	24.72	0.02	0.01	0.09
		PAT	0.14	6.23	< .01				0.02	0.10	0.19
3	Risky sexual behaviours	Locus of control	0.06	3.15	< .01	.14	.02	9.91	.02	0.02	0.10
4	a*b		0.01							0.002	0.02

In Table 3, Model 1 indicates that LOC positively (+β) and significantly predicts PAT (a path), β = 0.08, t=2.22, p =0. 03. The R^2 indicates that LOC explains 1% of the variance in PAT. Model 2 shows the results of the regression of RSBs predicted from both LOC and PAT. LOC significantly predicts RSBs with reduced effect with PAT in the model (Paths c'), β= 0.05, t=2.64, p = 0.01, and PAT significantly predicts RSBs (b path), β= 0.14, t = 6.23, p < .01. The R^2 value indicates that the model explains 90% of the variance in RSBs. Model 3 shows the total effect of LOC on RSBs when PAT is not present in the model. When PAT is not in the model, LOC significantly predicts RSBs, β =0.06, t =3.15, p <0.01. The R^2 value indicates that LOC explains 20% of the variance in RSB.

So, when PAT is added in the model, the effect of the LOC on RSBs increases from 20% to 90%. The indirect effect (a*b) is significant because the bootstrap confidence interval does not contain a zero BootLLCI and BootULCI of 0.002-0.02. Therefore, PAT mediates LOC and RSBs. Therefore, the hypothesis is retained. Figure 2 shows paths a, b, c and c' and their effect sizes.

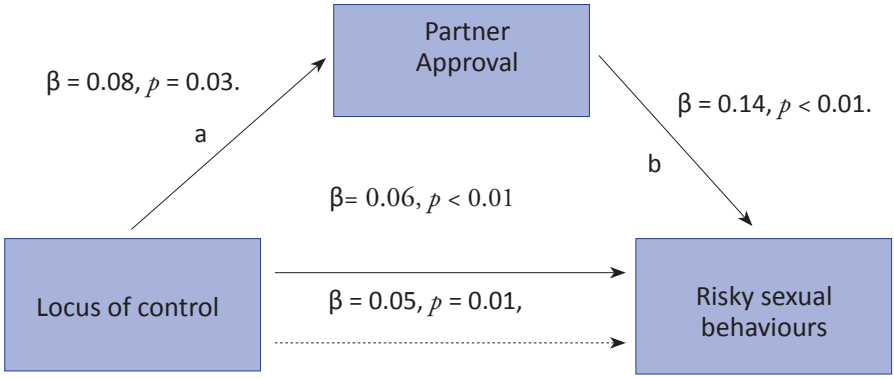

Figure 2: **Mediation effect of partner approval on the interaction between locus of control and risky sexual behaviours**

Source: Survey data (2018)

The results in Figure 2 indicate that "a" and "b" paths coefficients are both statistically significant. Using bias-corrected bootstrapping, the indirect effect BootLLCI and BootULCI are 0.002 and 0.02. Since they do not contain zero, there is a statistically significant mediation. The indirect effect being statistically significant implies partial mediation. Therefore, partner approval partially mediates the relationship between LOC and RSBs. This implies that LOC and partner approval together play an important role in influencing RSBs among young adults in Ugandan universities.

Table 4: *Mediation effect of self-affirmation on the interaction between locus of control and risky sexual behaviours*

Model	Outcome variable	Independent variable	β	T	P	R	R2	F	SE	Bootstrap LLCI	ULCI
1	SAF	Locus of control	0.12	2.76	0.01	0.12	.01	7.62	.05	0.04	0.23
2	Risky sexual behaviours	Locus of control	0.04	2.29	0.02	.38	0.14	44.26	0.02	0.01	0.08
		SAF	0.15	6.79	< .01				0.12	0.12	0.18

3	Risky sexual behaviours	Locus of control	0.06	3.15	< .01	.14	.02	9.91	.02	0.02	0.10
4	a*b		0.02							0.004	0.03

In Table 4, Model 1 indicates that LOC positively (+β) and significantly predicts SAF (a path), β = 0. 12, t=2.76, p =0. 03. The R^2 indicates that LOC explains 1% of the variance in SAF. Model 2 shows the results of the regression of RSBs predicted from both LOC and SAF. LOC significantly predicts RSBs with reduced effect with SAF in the model (Paths c'), β= 0.04, t=2.29, p =0.02, and SAF significantly predicts RSBs (b path), β= 0.15, t = 6.79, p < 0.01. The R^2 value indicates that the model explains 14% of the variance in RSBs. Model 3 shows the total effect of LOC on RSBs when SAF is not present in the model. When SAF is not in the model, LOC significantly predicts RSBs, β =0.06, t =3.15, p <0.01. The R^2 value indicates that LOC explains 2% of the variance in RSB. So when SAF is added in the model, the effect of the LOC on RSBs increases from 2% to 14%. The indirect effect (a*b) is significant because the bootstrap confidence interval does not contain a zero BootLLCI and BootULCI of 0.004-0.03. Therefore, SAF mediates LOC and RSBs. Therefore, the hypothesis is retained.

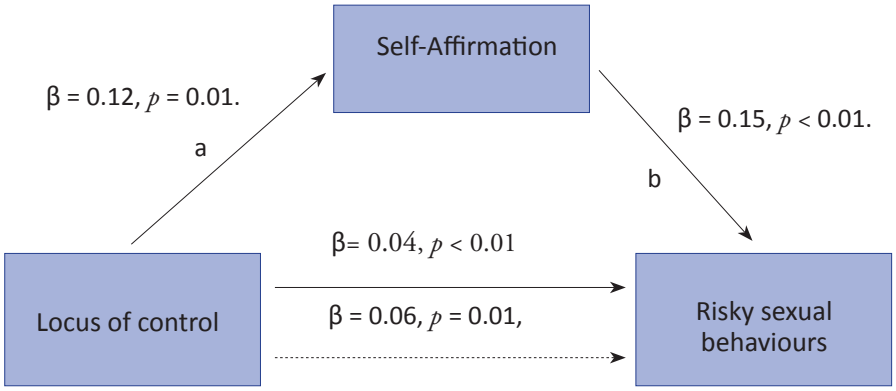

Figure 3: **Mediation effect of self- affirmation on the interaction between locus of control and risky sexual behaviours**

Source: Survey data (2018)

The results in Figure 3 indicate that "a" and "b" paths coefficients are both statistically significant. Using bias-corrected bootstrapping, the indirect effect BootLLCI and BootULCI are 0.004 and 0.03. Since they do not contain zero, there is a statistically significant mediation. The indirect effect being statistically significant implies partial mediation. Therefore, SAF partially mediates the relationship between LOC and RSBs. This implies that LOC and SAF together play an important role in influencing RSBs among young adults in Ugandan universities.

Discussion

The findings of this study provide compelling evidence that both locus of control (LOC) and sex motives (SMs) serve as significant determinants of risky sexual behaviours (RSBs) among young adults in Ugandan universities. The results demonstrate that students exhibiting an external locus of control (ELOC) are particularly vulnerable to engaging in RSBs, as they are more likely to utilise sexual activity as a means of fulfilling psychological needs such as self-affirmation and partner approval. This finding aligns with the theoretical framework of the Theory of Planned Behaviour (TPB; Ajzen, 1991), which posits that behavioural intentions are shaped by attitudes, subjective norms, and perceived behavioural control (PBC). In this context, ELOC individuals' diminished sense of personal agency (reflecting lower PBC) and their tendency to prioritise external validation (subjective norms) create a psychological profile particularly susceptible to RSBs.

The present findings corroborate earlier work by Ahmad et al. (2023), confirming locus of control (LOC) as a strong predictor of both sex motives (SMs) and risky sexual behaviours (RSBs). This study advances prior research by showing that specific SMs – particularly self-affirmation and partner approval – mediate the LOC-RSB relationship within the Ugandan university context. The mediation supports the Theory of Planned Behaviour (TPB) by highlighting the cognitive mechanisms guiding sexual decisions. Notably, the strong link between external LOC and coping-motivated sexual behaviour ($\beta = 0.42$, $p < .01$) underscores how low personal control fosters maladaptive coping through risky sexual activity.

In contrast to some prior studies, this research did not find peer approval to be a significant sex motive (SM) influencing risky sexual behaviours (RSBs), differing from Wesche et al. (2019), who identified peer influence as a key driver of sexual risk-taking among young adults. This divergence may stem from contextual or methodological differences, particularly the influence of mentorship in some universities. Such mentorship structures may buffer peer pressure, reducing its effect on students' sexual behaviour.

The protective role of mentorship emerging from our data has important implications for TPB's conceptualisation of subjective norms. While the theory typically emphasises peer and societal influences, our findings suggest that institutional support systems (like mentorship programmes) may create countervailing normative influences that offset peer pressure. This nuanced understanding of normative influences warrants further theoretical development, particularly in collectivist cultural contexts where multiple sources of social influence coexist.

From a policy standpoint, the findings call for multi-level interventions targeting both psychological and environmental drivers of risky sexual behaviours. Individually, sexual health empowerment workshops could build internal locus of control and perceived behavioural control. Institutionally, formalised mentorship programmes should be expanded to address coping strategies and self-affirmation, given their protective role and mediating influence in the LOC-RSB link.

The study's rejection of the hypothesis regarding the role of peer approval in RSBs carries particular significance for practice. While many existing interventions focus on resisting peer pressure, our findings suggest that resources might be more effectively directed towards strengthening internal control beliefs and providing alternative coping mechanisms. This aligns with recent calls for "positive sexuality" approaches that emphasise agency and self-efficacy rather than solely risk avoidance (Hogarth & Ingham, 2009).

Several limitations should inform future research directions. The cross-sectional design precludes causal inferences about the relationships between LOC, SMs, and RSBs. Longitudinal studies tracking these constructs throughout students' university careers would provide

stronger evidence of developmental trajectories and causal pathways. Additionally, the measurement of peer influence in this study focused specifically on approval motives; alternative conceptualisations of peer effects (e.g., descriptive norms or social networks) might yield different results.

The theoretical implications of these findings extend beyond TPB. The significant mediation effects observed suggest that constructs from coping theories (Lazarus & Folkman, 1984) and self-determination theory (Deci & Ryan, 2000) could be productively integrated with TPB to better understand RSBs. Future research should explore these integrative models, particularly in contexts where sexual behaviour serves multiple psychological functions beyond physical pleasure or reproduction.

Conclusion and Recommendations

The study established that locus of control (LOC) and sex motives (SMs) jointly influence risky sexual behaviours (RSBs) among young adults enrolled in Ugandan universities. An external LOC was associated with greater engagement in RSBs, confirming that perceived lack of personal control heightens vulnerability to sexual risk-taking. Sex motives significantly mediated this relationship, with self-affirmation and partner approval emerging as the strongest indirect pathways. These findings indicate that students with an external LOC tend to engage in sexual behaviour to meet emotional and relational needs, thereby increasing their susceptibility to RSBs. The mediation was partial, suggesting that while sex motives play a crucial role, locus of control independently contributes to risky behaviour. The model underscores the psychological and motivational underpinnings of sexual risk among young adults and highlights the need for university-based interventions that strengthen internal control, promote self-worth, and address relational motives in sexual health programming.

Based on the findings, universities should strengthen sexual and reproductive health policies that integrate psychological determinants such as locus of control and sex motives. Counselling and peer education programmes need to address emotional and relational motives –

particularly self-affirmation and partner approval – to reduce risky sexual behaviours . Empowerment and life-skills training should be emphasised to build students' self-efficacy and internal control in sexual decision-making. Future research should adopt longitudinal designs and explore gender and contextual variations in these relationships to inform tailored, evidence-based interventions for promoting safer sexual practices among university students.

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