Mediating Role of Boundary Setting the Relationship Between Sexual Risk Behaviours and Psychological Wellbeing of Youth in Selected Citam Assemblies, Nairobi County Kenya

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ABSTRACT

The third Sustainable Development Goal (SDG) of the United Nations seeks to promote universal mental health and wellbeing by the year 2030. Young people represents a key demographic group in this endeavor. However, the youth today are facing unique challenges that threaten their wellbeing. One significant issue is their exposure to sexual information at an early age, which can interfere with their normal development. This study investigated the mediating role of boundary setting on sexual risk behaviors and psychological wellbeing of youth in selected CITAM assemblies, Nairobi County, Kenya. The study was based on the Ecological Systems Theory by Urie Bronfenbrenner. The study employed a quantitative approach using a correlational research design. The target population comprised 3,995 youth from nine CITAM assemblies in Nairobi. A sample size of 365 youth were selected using stratified sampling technique. Data was collected using Psychological Wellbeing Scale, Sexual Boundary Setting Scale, and Sexual Risk Behaviors Scale. Data was analyzed using regression modeling in SPSS version 27. Results showed that boundary setting fully mediated the relationship between sexual risk behaviors and psychological wellbeing ($\beta = -.936$, $t = -2.073$, $p<.05$). It was concluded that sexual boundary setting served as an essential mechanism through which sexual risk behaviors influence psychological wellbeing, effectively offsetting the negative impact of risky sexual involvement. The study recommended that youths should intentionally practice setting and maintaining clear boundaries in relationships. Psycho-education and training in boundary setting among the youth serves to advance SDG goals on health while supporting Agenda 2063 and Kenya Vision 2030 aspirations for a productive, healthy, and socially stable population.

Keywords: Boundary Setting, Sexual Risk Behaviours, Psychological Wellbeing, Youth, Sustainable Development

INTRODUCTION

The third Sustainable Development Goal (SDG) of the United Nations seeks to promote universal mental health and wellbeing by the year 2030 (Goodwin & Zaman, 2023). Young people represents a key demographic group in this endeavor. However, the youth today are facing unique challenges that threaten their wellbeing (McGorry et al., 2025). One significant issue is their exposure to sexual information at an early age, which can interfere with their normal development. Risky sexual behavior is a pervasive global concern that is increasingly being amplified by technological advancements that provide youth with easy access to explicit sexual content through the internet and social media (Lin et al., 2020). At the same time, societal discourse has shifted from abstinence-only approaches to the promotion of safe sexual practices, generating debate about whether sex education aligns with or undermines traditional moral values (Cook & Wynn, 2021). Within this context, the church operates in the broader society and cannot remain insulated from prevailing sexual cultures. Consequently, church youth are exposed to competing value systems, including easily accessible online sexual information, which may challenge biblical teachings and influence their sexual decision-making (Burke & Haltom, 2020; Oliver, 2020).

Parallel to the rise in risky sexual behaviors is growing concern about the psychological wellbeing of young people globally. Youth today face multifaceted pressures linked to globalization, media expansion, and shifting social norms, which shape their identities and behaviors (Bentzen, 2021). Exposure to harmful values, including permissive sexual practices, has been shown to undermine self-esteem and contribute to psychological

challenges (Millanzi et al., 2023). Psychological wellbeing in this study is conceptualized through conduct problems, peer problems, emotional symptoms, and hyperactivity, dimensions identified as critical indicators of youth mental health (Speyer et al., 2020). These elements interact dynamically, with peer influence and behavioral deviations, including risky sexual conduct, significantly shaping young people's psychological outcomes (Guilamo et al., 2020).

Empirical evidence across regions demonstrates a worrying rise in youth mental health problems, often linked to risky sexual behaviors. In the United States, prevalence rates of mental health problems among children and youth have increased significantly (Yarrington et al., 2021). Similar upward trends are reported in Canada and Europe, with substantial proportions of youth experiencing psychological distress (Hawke et al., 2021). In Asia, studies from Japan, China, Thailand, and India further link risky sexual behaviors to psychological difficulties among youth (Jin et al., 2022; Chan, 2021; Mehra et al., 2022). These statistics underscore the global scale of the challenge and the need for targeted interventions.

The African context reflects similar, if not even more vulnerabilities. Despite having the largest youth population, Africa faces persistent socioeconomic challenges that exacerbate psychological distress among young people (World Bank, 2021). Risky sexual behavior is often adopted as a coping mechanism, further compounding psychological problems (Nguyen, 2023). High prevalence rates of psychological issues linked to sexual behavior have been reported in Nigeria, South Africa, and Zimbabwe (Adeyemi et al., 2022; Mokgadi, 2023; Chikanda & Mlambo, 2021). In Kenya, where a significant proportion of the population is youth, socioeconomic constraints and rising antisocial behaviors increase susceptibility to unsafe sexual practices and related psychological difficulties (Mutea et al., 2020). These realities justify investigating protective mechanisms, such as boundary setting, within the Kenyan context.

Sexual boundary setting emerges as a potential mediating factor between risky sexual behaviors and psychological wellbeing. Conceptualized through self-efficacy, attitudes toward sex, sexual intention, and societal norms (Mason et al., 2020; Lin et al., 2020), boundary setting equips youth with agency, confidence, and the capacity to navigate peer pressure and harmful environments (Baudouin et al., 2021). Clear sexual boundaries promote autonomy, respect, and emotional wellbeing, although young people often encounter challenges in maintaining them (Arsandaux et al., 2020; Humbert, 2020).

The church context, particularly in urban assemblies such as Christ Is the Answer Ministries (CITAM), provides a structured moral environment where religious teachings shape sexual values and behaviors (Allsop et al., 2021; Armstrong et al., 2021; Clarke, 2022). However, studies in Tanzania and Kenya indicate gaps in church-based strategies addressing youth sexuality (Teizazu et al., 2023; Millanzi et al., 2023; Njoraa, 2020; Rotich et al., 2024). Sexual boundary setting is an important skill that influences the way young people approach issues pertaining to their sexuality (Humbert, 2020).

Youth sexuality and its psychological consequences are not only significant concerns within the church but also within broader society (Rotich et al., 2024). As guardians of societal values, the church has taken proactive measures to promote Christian principles, including setting boundaries to guide youth in navigating risky sexual behaviors, primarily through preaching and other platforms (Memiah et al., 2022). For example, Nyaga et al. (2023) investigated the role of the church as a moral educator but did not examine the psychological effects of the programs on youth, nor did they explore whether these boundaries influenced sexual risk behavior. Similarly, Njoraa (2020) explored the connection between clergy and teenagers in establishing sexual boundaries, but overlooked the crucial link between these boundaries and their psychological repercussions. These studies highlight a significant gap in empirical studies, calling for further assessment of the psychological implications of the boundaries set by the church for youth regarding their sexual behavior. Understanding this aspect provides valuable insights into the efficacy of the church's initiatives in fostering holistic wellbeing among young individuals.

Ojiambo (2021) examined the effectiveness of the Catholic Church in instilling sexual values among youth in Kenya. The study purposefully selected 12 girls as participants, revealing that youth represent a vulnerable demographic. The success of imparting values to this group largely hinges on their perception of the church as a supportive ally in matters of sexuality. Furthermore, the research indicated that these young individuals often

display assertiveness and independence, which presents challenges for implementing programs designed to address sexual issues. Additionally, Ojiambo (2021) found that the church's teachings on sexuality frequently conflicted with deeply rooted African traditional values, particularly in rural areas of Kenya. These findings highlight the study's context in a rural setting where such values remain influential. Moreover, the limited number of participants and their specific experiences restrict the applicability of the findings.

Examining the relationship between sexual boundary setting and psychological wellbeing addresses a critical, often-ignored, and sensitive aspect of youth development (Kågesten & van Reeuwijk, 2021). Thus, understanding how sexual boundary setting impacts psychological wellbeing can help in developing comprehensive sexual education programs that not only focus on knowledge and skills but also on promoting mental health. Therefore, examining the mediating role of boundary setting in selected CITAM assemblies in Nairobi County is both timely and necessary to better understand and address the interplay between sexual risk behaviors and psychological wellbeing among youth. The purpose of the study was to investigate the mediating role of boundary setting on sexual risk behaviors and psychological wellbeing of youth in selected CITAM assemblies, Nairobi County, Kenya.

LITERATURE REVIEW

Boundary settings refer to the social and cultural protections established to ensure individuals operate within societal norms (Kinsella, 2020). They can also be seen as a form of self-care, helping individuals create clear rules and limits regarding how they wish to be treated (Brennan, 2021). These boundaries are shaped by the community's understanding of right and wrong and encompass three dimensions: physical, affective, and social (Furman & Shaffer, 2020). In the context of young people and their sexuality, society serves as the first line of defense, guiding them through both formal and informal educational and mentorship relationships (Davis, 2022). This framework allows young individuals to either embrace these boundaries or choose to deviate from them, depending on how beneficial they perceive these limitations to be for their personal development and wellbeing (Hoffman et al., 2021). This objective was understood by examining constructs such as sex intention, attitude, social Norms, and self-efficacy.

Budde (2022) investigated sexual boundary setting in social media communication among secondary school students in Germany. This qualitative study found that sexting has contributed to the lowering of sexual boundaries among youth. Since sexting does not require the physical presence of another person, young people often view it as mere entertainment or a way to pass the time, without recognizing the potential risks of bullying and addiction. The study revealed that sending messages to girlfriends or boyfriends via social media is considered normal behavior among adolescents, with acceptance of these messages serving as a form of validation. However, this sometimes occurs without the recipient's consent, prompting them to block the sender to formally end the conversation. The study aimed to understand sexual boundary setting through sexting, highlighting a conceptual gap in the research.

Jennifer (2021) investigated sex education as a boundary-setting among secondary school youth in Ghana. The study involved 40 secondary school students. The research identified cultural inhibition as the greatest obstacle preventing young people from accessing the relevant information needed to navigate the dangers of irresponsible sexual escapades. The findings established that sex education played a crucial role in raising awareness and helping young people avoid engaging in irresponsible sexual behavior. The study's use of purposive sampling and in-depth interviews highlights a conceptual gap, suggesting the need for broader exploration and understanding of the topic.

DeLago et al. (2020) investigated sexual risk behavior among children and young people by analyzing 986 medical records from various healthcare facilities, covering data from 2002 to 2013. The study, which was conducted in the USA, found that many children were exposed to sexual content at a young age through the internet, and this exposure often influenced their peers, even those who had not directly accessed explicit material. Additionally, the study found that males were more frequently exposed to these behaviors than females. The findings suggest that by the time children reach adolescence, their perceptions of sexual behavior may be significantly influenced by early exposure, impairing their ability to set appropriate sexual boundaries. The study

focused on how social media use influenced sexual behavior, highlighting a conceptual gap, while its reliance on secondary data collected over a decade introduces a methodological limitation.

Hielscher et al. (2021) examined the impact of education on healthy sexual boundaries among adolescents. Conducted in Australia, the study systematically synthesized 27 relevant empirical studies to draw conclusions. The research found that targeted educational programs have a positive impact on adolescent development, underscoring the need to consider social, cultural, and environmental factors in promoting healthy behaviors. Despite the positive outcomes, the findings suggest that further efforts are required to design interventions that comprehensively address adolescent relationship beliefs and attitudes. This may involve combining longer-term initiatives, culturally sensitive approaches, and engagement with broader social influences. The qualitative nature of the study, focusing on education as a deterrent for unhealthy sexual boundary setting among youth, highlights a methodological and conceptual gap.

Too (2020) explored sexual information as a deterrence to early sexual activity among high school students in Kenya through a mixed-method study involving 264 participants, which included 24 guidance and counseling teachers and the remainder being students. The study established that creating sexual awareness helps in shaping adolescents' sexual attitudes. Additionally, it found that premarital sex was prevalent in secondary schools, and guidance and counseling teachers often focused on discussing safe sex practices rather than promoting abstinence. While the study demonstrated that sexual education effectively influences students' understanding and management of sexual development, it may not significantly alter attitudes toward unconventional sexual practices. Furthermore, as the study was conducted in a school setting, it introduces a contextual gap that may limit the generalizability of the findings. The present study was done in a church context, which may attract students out of school.

The study was grounded on Ecological Systems Theory, which describes how various environmental influences collectively shape an individual's development and behavior (Guy-Evans, 2020). Developed by Urie Bronfenbrenner (1979), this theory outlines multiple layers of environmental systems that interact to impact personal growth (El Zaatari & Maalouf, 2022). The theory is built on three premises: contextual development, the interconnectedness of systems, and the dynamic role of the environment. Contextual context holds that individuals grow and develop within specific contexts, which may be informed by social, cultural, and historical factors, collectively shaping their experiences and development (O'Keefe et al., 2022). Interconnectedness refers to how systems communicate; a change in one system may have ripple effects across others (Preiser et al., 2021). The last system, the environment, shows that development is not static but continuously shaped by interactions between the individual and their surroundings over time (O'Keefe et al., 2022).

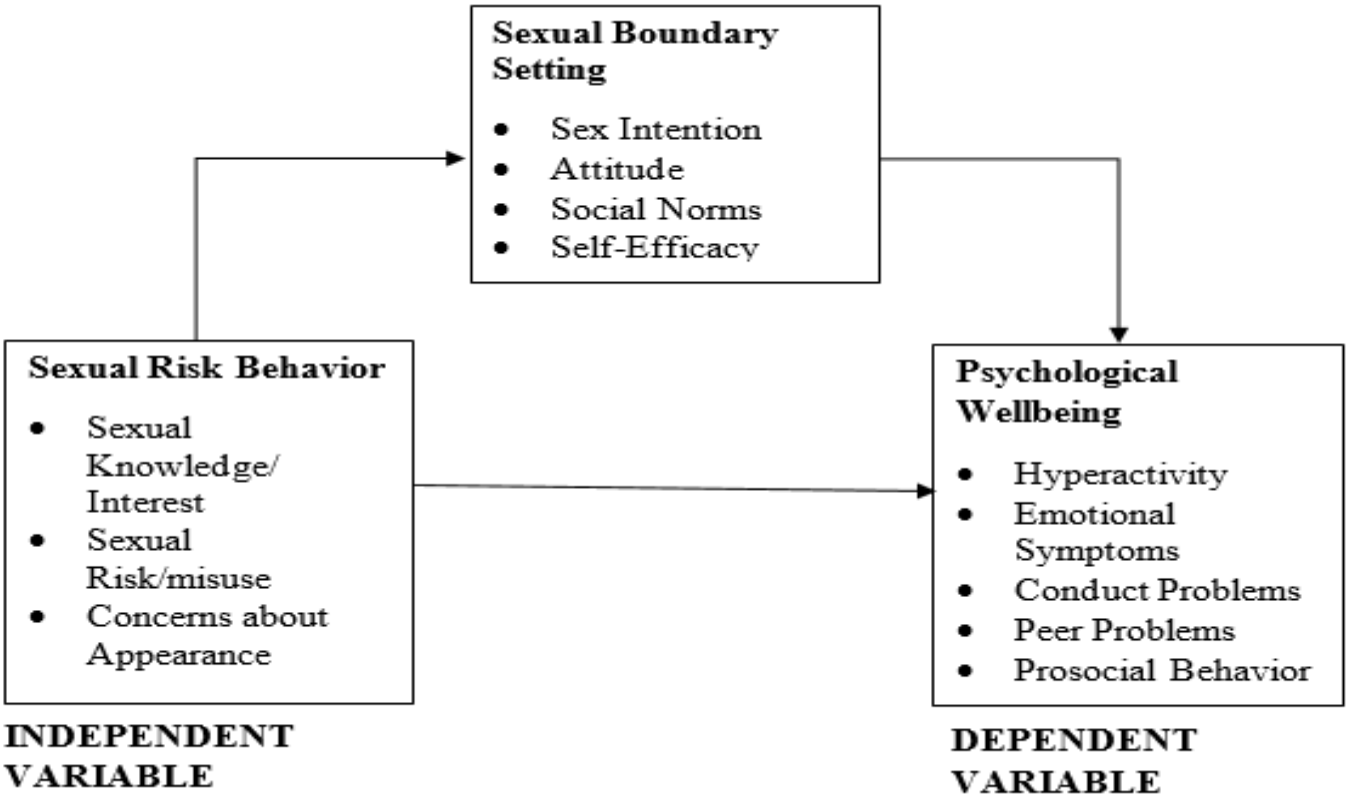
A study by Agajie et al. (2020) in Ethiopia applied Bronfenbrenner's Ecological Systems theory to examine how various environmental factors influence adolescents' sexual risk behaviors and psychological wellbeing. Findings revealed that each dimension of the ecological model plays a unique role. Within the microsystems, family support and peer relationships were critical; open family communication tended to reduce risk behaviors, while peer influence sometimes increased them. The mesosystems, which link school and family contexts, also had a significant effect: students with strong family-school connections reported receiving better guidance and engaged in fewer risky behaviors. In exosystems, economic conditions, such as family income and access to health services, indirectly shape adolescents' behaviors by influencing parental involvement and the availability of youth-friendly resources. On a broader level, the macrosystems of societal and cultural norms around gender and sexuality affected adolescents' perceptions, with restrictive cultural expectations sometimes leading to higher risk behaviors due to limited open communication. This research underscores the importance of a multidimensional approach to designing interventions that promote safer sexual practices and enhance wellbeing among youth, emphasizing that addressing environmental factors across multiple levels is essential for creating effective, context-sensitive programs (Agajie et al., 2020).

CONCEPTUAL FRAMEWORK

Conceptual framework visually illustrates the relationship between sexual risk behavior and psychological wellbeing, with sexual boundary setting acting as a mediating factor. Figure 1 depicts sexual risk behavior as the independent variable, sexual boundary setting as the mediating variable, and psychological wellbeing as the

dependent variable. The indicators of sexual risk behaviors include: sexual knowledge/ interest, sexual risk/misuses and concerns about appearance. Sexual boundary setting was indicated by sex intention, attitude, social norms, and self-efficacy. The indicators of psychological wellbeing were: hyperactivity, emotional symptoms, conduct problems, peer problems, and prosocial behavior. The arrows show the direction of the relationship between the study variables.

Mediating Variable



RESEARCH METHODOLOGY

A correlational research design was employed to explore the associations among the key variables without manipulating them. This design enabled the researcher to examine the strength and direction of relationships between sexual risk behaviors, boundary setting, and psychological wellbeing among youth in selected CITAM assemblies in Nairobi County, Kenya. The target population consisted of 3,995 youth across the assemblies, from which a sample of 365 participants was drawn. Stratified random sampling was used to select churches, simple random sampling ensured proportional representation of youth by gender and assembly, and purposive sampling included individuals knowledgeable about youth issues within the church context.

Data were collected using a standardized questionnaire structured into four sections. The first section captured demographic information such as age, gender, education level, employment status, and living arrangements. The use of a standardized instrument ensured uniformity in responses and facilitated systematic data analysis. Quality assurance measures, including regular data reviews, were implemented to enhance reliability and minimize inconsistencies during data collection. Psychological wellbeing was measured using Goodman's (1997) validated scale, which assesses hyperactivity, emotional symptoms, conduct problems, and peer problems. Sexual boundary setting was assessed using a validated instrument comprising four domains: sexual intention, attitudes toward sex, social norms, and self-efficacy. Sexual risk behaviors were measured using a standardized tool adapted from Wherry et al. (2009), covering sexual knowledge/interest, sexual risk/misuse, and concerns about appearance. All instruments demonstrated acceptable validity and reliability indices, ensuring credible measurement of the constructs under investigation.

Data were analyzed using SPSS version 27. Descriptive statistics, including means, standard deviations, and frequencies, summarized participants' psychological wellbeing. Regression-based mediation analysis was

performed to test whether boundary setting mediated the relationship between sexual risk behaviors and psychological wellbeing, thereby clarifying the underlying mechanisms influencing youth outcomes within the selected CITAM assemblies. All ethical protocols were followed throughout the study cycle. This included obtaining institutional clearances, authorizations, and research permits.

RESULTS

Out of 365 administered questionnaires, 278 were successfully completed and returned, yielding a response rate of 76.2%, while 87 (23.8%) were unreturned. Gender distribution was relatively balanced, with females comprising 55% of the sample and males 45%. The mean age of respondents was 21.53 years (SD = 2.69), with ages ranging from 15 to 30 years, and the majority falling within the 18–25 age bracket. In terms of education, majority (81.6%) of the respondents were at the undergraduate level.

In order to test the mediating role of boundary setting on the relationship between sexual risk behaviors and psychological wellbeing of youth, Baron and Kenny (1986) used a regression analysis process as follows:

Firstly, psychological wellbeing was first regressed on sexual risk behaviors to establish whether there was a significant effect using the following simple linear regression equation:

Psychological Wellbeing=$\beta_0+\beta_1$*(Sexual Risk Behaviors) +ε

Table 1 presents the findings:

Table 1 Regression of Psychological Wellbeing on Sexual Risk Behaviors

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.182[a]	.033	.030	5.44471		
a. Predictors: (Constant), Sexual Risk Behavior						
ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	277.458	1	277.458	9.359	.002[b]
	Residual	8122.701	274	29.645		
	Total	8400.159	275			
a. Dependent Variable: Psychological Wellbeing						
b. Predictors: (Constant), Sexual Risk Behavior						

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.846	1.426		25.142	.000
	Sexual Risk Behavior	-1.956	.639	-.182	-3.059	.002
a. Dependent Variable: Psychological Wellbeing						

The model summary in table 2 indicates that sexual risk-behaviors significantly explained 3.3% of the variability in psychological wellbeing of the youth; F (1) = 9.359, R^2=.033, p<.01. An examination of the coefficients reveal that there was a statistically significant negative association between sexual risk behavior and psychological wellbeing (β=-1.956, t=-3.059, p<.01). The final equation is as shown below:

Psychological Wellbeing=35.846-1.956*(Sexual Risk Behaviors) +ε

Secondly, the mediator variable – sexual boundary setting – was also regressed on sexual risk behaviors to test whether there was a significant effect. The following regression formula was used:

Boundary Setting=$\beta_0+\beta_1$*(Sexual Risk Behaviors) +ε

The output is presented in 2.

Table 2 Regression of Sexual Boundary Setting on Sexual Risk Behaviors

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.461[a]	.213	.210	.72869

a. Predictors: (Constant), Sexual Risk Behavior

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.009	1	39.009	73.465	.000[b]
	Residual	144.428	272	.531		
	Total	183.437	273			

a. Dependent Variable: Sexual Boundary Setting

b. Predictors: (Constant), Sexual Risk Behavior

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.030	.191		5.389	.000
	Sexual Risk Behavior	.735	.086	.461	8.571	.000

a. Dependent Variable: Sexual Boundary Setting

The findings in Table 2 show that sexual risk-behaviors significantly explained 21.3% of the variability in psychological wellbeing of the youth; $F(1) = 73.465$, $R^2=.213$, $p<.01$. Sexual risk behavior was positively and significantly associated with sexual boundary setting ($\beta=.735$ $t=8.571$, $p<.01$). The final equation is as follows:

Boundary Setting=1.030+.735*(Sexual Risk Behaviors) +ε

Thirdly, psychological wellbeing was regressed on both sexual risk behaviors and sexual boundary setting to test whether there was a statistically significant effect after accounting for sexual risk behaviors. Table 3 displays the output.

Table 3 Regression of Psychological Wellbeing on Sexual Risk Behaviors and Sexual Boundary Setting

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.220[a]	.048	.041	5.42607

a. Predictors: (Constant), Sexual Boundary Setting, Sexual Risk Behavior

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	403.883	2	201.941	6.859	.001[b]
	Residual	7978.851	271	29.442		
	Total	8382.734	273			

a. Dependent Variable: Psychological Wellbeing

b. Predictors: (Constant), Sexual Boundary Setting, Sexual Risk Behavior

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	36.794	1.497		24.580	.000
	Sexual Risk Behavior	-1.271	.719	-.118	-1.768	.078

	Sexual Boundary Setting	-.936	.452	-.138	-2.073	.039
a. Dependent Variable: Psychological Wellbeing						

The findings in table 3 show that the regression model significantly explained 4.8% of the variability in psychological wellbeing of the youth; F (2) = 6.859, R^2=.048, p<.01. However, only sexual boundary setting was significantly associated with psychological wellbeing (-.936, t=-2.073, p<.05) while the effect of sexual risk behavior on psychological wellbeing was no longer significant (β=-1.271, t=-1.768, p>.05). This means that sexual boundary setting fully mediated the relationship between sexual risk behaviors and psychological wellbeing.

The final equation is as follows:

Psychological Wellbeing=36.794-1.271*(Sexual Risk Behaviors)

-.936*(Boundary Setting) + ε

DISCUSSION AND CONCLUSION

Psycho-education and training in boundary setting among the youth serves to advance SDG goals on health while supporting Agenda 2063 and Kenya Vision 2030 aspirations for a productive, healthy, and socially stable population. The full mediation effect of sexual boundary setting between sexual risk behaviors and psychological wellbeing is consistent with prior research by Eyiah-Bediako (2020), who conducted a study in Ghana, whose findings revealed that the discipline of sexual boundary setting significantly reduced sexual intentions and encouraged cautious attitudes toward sex among adolescents. It means that sexual boundary setting becomes the primary mechanism through which sexual risk behaviors have implications on the youth's psychological wellbeing.

Sexual boundary setting served as an essential mechanism through which sexual risk behaviors influence psychological wellbeing, effectively offsetting the negative impact of risky sexual involvement when boundaries are maintained. Boundary setting thus emerged as a key protective factor for psychological wellbeing among youth. Thus, the main contribution of this study to the knowledge base is the elucidation of the complex interplay between sexual risk behaviors, boundary-setting, and psychological wellbeing among youth in a faith-based context, which has received limited empirical attention. The identification of sexual boundary setting as a full mediator between sexual risk behaviors and psychological wellbeing offers novel insight into the mechanisms through which youth can maintain psychological health despite peer pressures or exposure to risky sexual contexts.

Given that sexual boundary setting fully mediated the relationship between sexual risk behaviors and psychological wellbeing, psychosocial interventions should include boundary-setting skills such as assertiveness training, decision-making, impulse control, and values clarification. Church leaders should emphasize biblical and practical teachings on sexual boundaries, self-control, and personal agency, reinforcing the strong sexual self-efficacy already evident among the youth. The youth should intentionally practice setting and maintaining clear boundaries in relationships, including resisting negative peer pressure. Instead, given the influence of peer norms on sexual attitudes, youths should intentionally align themselves with peer groups that reinforce positive values, healthy behaviors, and emotional growth.

A conceptual limitation of the study was its focus on psychological wellbeing, sexual risk behaviors, and boundary setting without incorporating other potentially influential factors such as family dynamics, socio-economic status, or exposure to media. While the study established important relationships among the selected variables, it did not account for broader ecological or systemic influences that could affect youth behavior and wellbeing. Future research should adopt a more comprehensive conceptual framework that integrates individual, family, peer, and community-level determinants to better understand sexual behavior as a phenomenon.

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