

# Relationship Between Mental Health and Risky Sexual Behaviour of Young People in Ibadan, Nigeria

Chibundu Onyemachi Onyesoh

Daystar University Kenya

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.90700072>

Received: 21 June 2025; Accepted: 27 June 2025; Published: 30 July 2025

## ABSTRACT

This study investigates the complex relationship between mental health factors, specifically depression, anxiety and stress in engagement of risky sexual behaviours among young population in Ibadan, Nigeria. The research aimed to determine whether these mental health issues significantly influence the propensity to engage in risky sexual activities. A total of 276 young individuals participated in the study. Mean scores were recorded as follows: depression ( $M = 3.01$ ,  $SD = 1.27$ ), anxiety ( $M = 2.75$ ,  $SD = 1.49$ ), stress ( $M = 2.74$ ,  $SD = 1.62$ ), and risky sexual behaviour ( $M = 2.16$ ,  $SD = 0.95$ ). A multiple regression analysis indicated a significant collective influence of depression, anxiety, and stress on risky sexual behaviour ( $R = 0.450$ ,  $R^2 = 0.202$ ,  $F(3, 272) = 23.00$ ,  $p < 0.000$ ). Notably, depression ( $\beta = 0.176$ ,  $p = 0.005$ ) and stress ( $\beta = 0.960$ ,  $p < 0.001$ ) emerged as significant positive predictors, suggesting that elevated levels of these conditions are associated with increased sexual risk-taking. Contrary to expectations, anxiety ( $\beta = -0.825$ ,  $p < 0.001$ ) had a significant negative association when considered alongside depression and stress, indicating a complex interplay between these factors. The findings underscore the necessity for integrated mental health and sexual health interventions that address multiple psychological dimensions simultaneously. By focusing on mental well-being, particularly through stress and depression reduction strategies, these interventions can potentially reduce risky sexual behaviours among young individuals. This study contributes to the global understanding of the mental health-risky sexual behaviour link and highlights the importance of culturally tailored approaches in mental health and sexual health programmes.

**Keywords:** Mental health, risky sexual behaviour, sexual health interventions, depression, anxiety, stress.

## INTRODUCTION AND BACKGROUND OF THE STUDY

### Background To the Study

Risky sexual behavior encompasses actions or decisions regarding sexual activity that carry potential risks to one's health or well-being, these risks may include exposure to sexually transmitted infections (STIs), unintended pregnancies, or emotional distress. Essentially, risky sexual behavior involves engaging in sexual activities that have the potential to lead to negative consequences. Risky sexual behavior also means engaging in sexual activities despite awareness of potential negative consequences. Similarly, in the context of mental health, depression will be better defined as a persistent feeling of sadness or low mood that interferes with daily functioning and lasts for an extended period. On the other hand, mental health refers to a person's emotional, psychological, and social well-being. It affects how individuals think, feel, and act, influencing their ability to cope with stress, make decisions, and form relationships according to World Health Organization as reporting by Galderisi et al (2015). For this study will specifically explore three key components of mental health which are depression, anxiety, and stress.

Depression is characterized by persistent feelings of sadness, hopelessness, and loss of interest or pleasure in activities. It can significantly impact daily functioning and quality of life (Chinenye, 2014). Anxiety, on the other hand, involves excessive worry or fear about future events, often accompanied by physical symptoms such as rapid heartbeat or sweating (Chand & Marwaha, 2014). Finally, stress refers to the body's response to

demands or pressures, whether they are real or perceived. It can manifest as physical, emotional, or behavioural changes and may result from various sources, such as work, relationships, or financial difficulties (Epel, 2018).

Various studies have shed light on the prevalence rates of risky sexual behavior, offering valuable perspectives on the scope and significance of the issue. For instance, a study by Omisore et al. (2022) reported a prevalence rate of 36.4% for engaging in unprotected sexual intercourse among adolescents in Nigeria, highlighting a substantial portion of the population at risk of adverse sexual health outcomes. Similarly, findings from a study conducted by Desmennu et al. (2018) revealed that 22.6% of adolescents in Ibadan reported engaging in multiple sexual partnerships, indicating a concerning pattern of behaviour that may increase the likelihood of exposure to STIs. Moreover, the prevalence of risky sexual behavior among young people in Ibadan has been documented in research conducted by Ferede et al. (2023), who reported a prevalence rate of 18.9% for early sexual debut (sexual initiation before the age of 15) among adolescents. This finding underscores the need for targeted interventions to address early sexual initiation and its associated risks. Furthermore, a study by Adebayo et al. (2023) highlighted the prevalence of transactional sex among young females in Ibadan, with 14.3% of participants reporting engaging in sexual activities in exchange for material goods or financial support. These prevalence reports paint a concerning picture of the prevalence of risky sexual behavior among young people in Ibadan, Nigeria. The findings suggest that a significant proportion of adolescents and young adults are engaging in behaviours that increase their vulnerability to adverse sexual health outcomes, such as STIs, unintended pregnancies, and sexual violence. Furthermore, these statistics underscore the urgent need for comprehensive sexual health education and intervention programmes tailored to the unique needs of this population. Additionally, they highlight the importance of adopting a holistic approach to addressing this issue, encompassing both individual-level interventions and broader societal changes to promote healthy sexual decision-making and behaviour.

Studying the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, holds significant importance in understanding and addressing the complex interplay between psychological well-being and sexual health in this population. The prevalence of mental health issues and risky sexual behaviours among young people in Ibadan underscores the need for targeted research and interventions in this area. Firstly, it is essential to acknowledge the prevalence of mental health issues among young people in Ibadan. Research by Aluh et al. (2018) highlighted high rates of depression and anxiety among Nigerian adolescents, with factors such as poverty, family dysfunction, and academic stress contributing to the burden of mental health disorders in this population. Similarly, studies by Atilola et al (2013) and Akanni & Alexander (2016) reported significant levels of psychological distress and emotional problems among Nigerian adolescents, highlighting the urgent need for mental health support and intervention services.

Moreover, the prevalence of risky sexual behaviours among young people in Ibadan further exacerbates the complex relationship between mental health and sexual health. Research by Monehin et al. (2009) revealed that a substantial proportion of Nigerian adolescents engage in risky sexual behaviours, including unprotected intercourse, multiple sexual partnerships, and early sexual debut. These behaviours not only increase the risk of sexually transmitted infections (STIs) and unintended pregnancies but also have implications for the psychological well-being of young individuals. This study aims to investigate the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, and the primary research question guiding this study is: How does mental health status influence the likelihood of engaging in risky sexual behaviours among young individuals in Ibadan? To address this question, the study will examine various aspects of mental health, including depression, anxiety, and stress, and their potential impact on sexual decision-making and behaviour. By employing quantitative surveys, the study intends to gather data on mental health indicators and risky sexual behaviours among young people in Ibadan.

The study also seeks to explore whether there is a significant association between mental health issues, such as depression and anxiety, and engagement in risky sexual behaviours, such as unprotected intercourse and multiple sexual partnerships. Additionally, it aims to identify potential underlying mechanisms or factors that may mediate or moderate the relationship between mental health and risky sexual behaviour among young individuals in Ibadan. Overall, this study seeks to contribute to the existing literature by providing insights into the complex interplay between mental health and sexual health among young people in Ibadan, Nigeria. By

understanding the factors that influence risky sexual behaviours, we can develop more targeted interventions and strategies aimed at promoting sexual health and well-being in this population. Therefore, investigating the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, holds significant importance for several reasons. Firstly, understanding how mental health issues may influence sexual decision-making and behaviour can inform the development of targeted interventions aimed at promoting sexual health and reducing the burden of sexually transmitted infections (STIs) and unintended pregnancies among young individuals (Monehin et al., 2009).

Secondly, the findings of this study have implications for public health interventions in the region, starting with identifying the factors that contribute to risky sexual behaviours among young people, public health authorities can design and implement evidence-based programmes and initiatives to address these issues effectively (Aluh et al., 2018). Moreover, the study findings can contribute to policy development aimed at improving youth well-being in Ibadan and beyond. By highlighting the importance of addressing mental health issues and promoting healthy sexual practices among young individuals, policymakers can advocate for the allocation of resources and the implementation of policies that support the mental and sexual health needs of the youth population (Atilola, 2013).

Additionally, the study's findings may have broader implications for youth well-being in the region. By promoting awareness and understanding of the relationship between mental health and risky sexual behaviour, the study can empower young people to make informed decisions about their sexual health and seek appropriate support and resources when needed (Adebayo et al., 2019). The exploration of the relationship between mental health and risky sexual behaviour among young people has undergone significant evolution within the field of psychology. Historically, early research primarily focused on understanding the individual determinants of sexual behaviour, such as personality traits and cognitive processes (Odimegwu & Ugwu, 2022). However, the recognition of the interconnectedness between mental health and sexual health gradually emerged as a prominent area of inquiry. One of the key milestones in the evolution of this field was the emergence of the biopsychosocial model, proposed by George Engel in the 1970s (Engel, 1981). This holistic framework highlighted the importance of considering biological, psychological, and social factors in understanding health and illness, including sexual behaviour. Subsequent research began to explore how psychological factors, such as mood disorders and stress, may influence sexual decision-making and behaviour among young people (Buelow, 2014). Throughout the 20th century, advancements in research methodologies, such as longitudinal studies and experimental designs, facilitated deeper insights into the complex relationship between mental health and risky sexual behaviour. Studies began to uncover the bidirectional nature of this relationship, with mental health issues both influencing and being influenced by sexual behaviour (Tripodi, 2020).

In recent decades, the advent of interdisciplinary approaches has further expanded our understanding of the intersection between mental health and sexual health among young people. Collaborations between psychologists, public health researchers, and policymakers have led to the development of comprehensive intervention programmes aimed at addressing both mental health and sexual health needs simultaneously (Cowie & Colliety, 2017). Overall, the historical context and evolution of research on the relationship between mental health and risky sexual behaviour underscore the importance of adopting a multidimensional and integrated approach to understanding and addressing these complex issues. By recognising the interconnectedness between mental health and sexual health, researchers and practitioners can develop more effective strategies for promoting the well-being of young people in Ibadan, Nigeria, and beyond.

## Statement Of the Problem

The focal point of this research is the high prevalence of risky sexual behaviour among young people in Ibadan, Nigeria, and its detrimental impact on their mental health. There is a concerning trend of engaging in unprotected sexual intercourse, multiple sexual partnerships, and early sexual debut among adolescents in the region, which poses significant risks to their sexual and psychological well-being (Adebayo et al., 2019; Omisore et al., 2022). This problem is particularly alarming as it contributes to the transmission of sexually transmitted infections (STIs) and unintended pregnancies, leading to adverse health outcomes for young

individuals. Research has shown that unprotected sexual intercourse increases the risk of contracting STIs, including HIV/AIDS, gonorrhoea, and chlamydia, which can have long-term implications for the physical and mental health of young people (Aluh et al., 2018). Furthermore, engaging in multiple sexual partnerships and early sexual debut can have negative consequences for the psychological well-being of young individuals. Studies have found associations between risky sexual behaviour and mental health issues such as depression, anxiety, and stress (Atilola, 2013; Akanni & Alexander, 2016). The stigma, shame, and guilt associated with risky sexual behaviour can exacerbate existing mental health problems and hinder young people's ability to seek help and support.

Additionally, the prevalence of risky sexual behaviour among young people in Ibadan has implications for public health interventions and healthcare resources in the region. High rates of STIs and unintended pregnancies increase the burden on healthcare facilities and healthcare providers, leading to inefficiencies in service delivery and allocation of resources (Monehin et al., 2009). In conclusion, the high prevalence of risky sexual behaviour among young people in Ibadan, Nigeria, is a significant problem with far-reaching implications for both the physical and mental health of individuals in the region. Addressing this issue requires comprehensive and targeted interventions that promote sexual health education, access to contraception, and mental health support services for young people.

### **Purpose Of The Study**

The purpose of this study is to investigate the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria. It aims to explore how psychological well-being influences the engagement in behaviours that may pose risks to sexual health and overall well-being. The specific aims include:

1. To examine the association between mental health status and risky sexual behaviours among young individuals in Ibadan, Nigeria.
2. To assess the prevalence of mental health issues, such as depression and anxiety, among young people in Ibadan.
3. To identify the factors influencing risky sexual behaviour among young individuals in the study population.
4. To explore the relationship between mental health disorders, such as depression and anxiety, and engagement in risky sexual practices.
5. To investigate coping mechanisms and adaptive strategies employed by young people to manage mental health challenges and mitigate risky sexual behaviour.
6. To evaluate existing interventions and preventive measures aimed at addressing mental health issues and reducing risky sexual behaviour among young people in Ibadan.

### **Objectives Of the Study**

The general objective of this study is to investigate the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria. While it will specifically aim to achieve the following objectives:

1. To examine the influence of depression on engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria.
2. To assess the impact of anxiety on engagement in risky sexual behaviour among young people in Ibadan, Nigeria.
3. To explore the association between stress levels and engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria.
4. To investigate the combined effect of depression, anxiety, and stress on engagement in risky sexual behaviour among young people in Ibadan, Nigeria.
5. To identify potential mediators or moderators of the relationship between mental health and risky sexual behaviour among young individuals in Ibadan, Nigeria.



6. To examine the demographic and socio-economic factors that may influence the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria.
7. To provide recommendations for interventions and strategies aimed at promoting mental health and sexual health among young individuals in Ibadan, Nigeria, based on the study findings.

## Research Questions

The following research questions will be addressed during the course of this research:

1. How does depression influence engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria?
2. What is the impact of anxiety on engagement in risky sexual behaviour among young people in Ibadan, Nigeria?
3. How does stress level relate to engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria?
4. What is the combined effect of depression, anxiety, and stress on engagement in risky sexual behaviour among young people in Ibadan, Nigeria?
5. How do demographic and socio-economic factors influence the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria?
6. What recommendations can be made for interventions and strategies aimed at promoting mental health and sexual health among young individuals in Ibadan, Nigeria, based on the study findings?

## Hypotheses

1. There will be a significant positive relationship between depression and engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria.
2. There will be a significant positive association between anxiety and engagement in risky sexual behaviour among young people in Ibadan, Nigeria.
3. There will be a significant positive relationship between stress levels and engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria.
4. There will be a significant combined effect of depression, anxiety, and stress on engagement in risky sexual behaviour among young people in Ibadan, Nigeria.

## Justification Of the Study

The investigation into the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, is imperative for several reasons. Firstly, this study addresses a significant gap in the existing literature by focusing specifically on the unique context of Ibadan and its young population. While research on mental health and risky sexual behaviour exists, there is a scarcity of studies that examine these issues within the specific socio-cultural and economic context of Ibadan. Therefore, this study fills an important gap by providing insights into the factors influencing mental health and sexual behaviour among young individuals in this region. Furthermore, understanding the relationship between mental health and risky sexual behaviour is essential for developing targeted interventions and support strategies for young people in Ibadan. Without this study, there would be a lack of evidence-based approaches to address the mental and sexual health needs of young individuals in the community. This could result in missed opportunities for early intervention and support, leading to adverse health outcomes such as increased rates of STIs, unintended pregnancies, and psychological distress among young people.

Moreover, the findings of this study will have broader implications for public health and policy development in Ibadan and beyond. And by elucidating the factors that contribute to risky sexual behaviour among young people, policymakers and healthcare providers can design and implement more effective programmes and initiatives aimed at promoting sexual health and well-being in the community. Without this research, there is a risk of inadequate allocation of resources and ineffective interventions, resulting in continued health disparities and negative consequences for the youth population. In summary, the study on the relationship between mental

health and risky sexual behaviour among young people in Ibadan, Nigeria, is crucial for addressing an important public health issue and improving the well-being of young individuals in the region. Without this study, there would be a lack of understanding of the factors influencing mental health and sexual behaviour, hindering the development of targeted interventions and support services for young people. Therefore, conducting this research is essential for promoting positive health outcomes and enhancing the overall quality of life for young individuals in Ibadan, Nigeria.

### **Significance Of the Study**

The study on the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, holds significant importance for various stakeholders and the broader community. The following outlines the significance of the study:

1. The findings of this study will directly benefit young individuals in Ibadan by providing insights into the factors influencing their mental health and sexual behaviour. Understanding these dynamics can empower young people to make informed decisions about their sexual health and seek appropriate support and resources when needed, ultimately promoting their overall well-being and quality of life.
2. Healthcare providers, including clinicians, psychologists, and public health practitioners, will benefit from this study by gaining a better understanding of the complex relationship between mental health and risky sexual behaviour. This knowledge can inform the development of tailored interventions and support services that address both mental health and sexual health needs among young people in Ibadan, leading to improved health outcomes and more effective service delivery.
3. Policymakers and government officials will benefit from the study findings by gaining insights into the prevalence and determinants of risky sexual behaviour among young people in Ibadan. This information can inform the development of evidence-based policies and programmes aimed at promoting sexual health education, access to contraception, and mental health support services for young individuals, thereby contributing to improved public health outcomes in the community.
4. The study will contribute to the existing research literature by providing new knowledge and insights into the relationship between mental health and risky sexual behaviour in a specific socio-cultural context. This will enrich the body of evidence on the topic and serve as a valuable resource for future research and scholarly inquiry in the fields of psychology, public health, and social sciences.

### **Scope**

The scope of this study is defined by several key factors:

1. The study will involve (respondents) young individuals aged between 15 and 25 years residing in Ibadan, Nigeria. The sample will include both males and females from diverse socio-economic backgrounds, educational levels, and ethnic groups to ensure representation of the city's population.
2. The demographic composition of respondents will encompass a wide range of characteristics, including age, gender, educational attainment, employment status, and marital status. This diverse sample will enable a comprehensive understanding of the factors influencing mental health and risky sexual behaviour among young people in Ibadan.
3. The study will be conducted within the urban and peri-urban areas of Ibadan, the capital city of Oyo State in Nigeria. These areas (geographical coverage) are characterized by diverse socio-economic conditions and cultural practices, providing a rich context for examining the relationship between mental health and risky sexual behaviour among young individuals.
4. The study will be conducted over a specified time frame, typically spanning three months to ensure adequate data collection and analysis. This duration of the study will depend on various factors, including the availability of resources, ethical considerations, and logistical constraints.
5. The study will employ a quantitative research design, utilizing questionnaire to gather data on mental health indicators and sexual behaviour. Data collection methods will adhere to ethical guidelines and ensure the confidentiality and anonymity of respondents.

6. Data analysis will involve the use of statistical techniques such as correlation analysis and regression analysis to examine the relationship between mental health and risky sexual behaviour among young people in Ibadan. The findings will be interpreted in light of existing literature and theoretical frameworks to generate insights and recommendations for intervention and policy development.

### Assumptions

1. It is assumed that the data collected through questionnaire, that includes self-reported mental health indicators and risky sexual behaviour, are valid and accurately reflect the experiences and perceptions of the respondents. While efforts will be made to ensure the reliability of self-reported data through clear instructions and confidentiality assurances, the inherent limitations of self-report measures may introduce bias or errors in the data.
2. It is assumed that participants will respond honestly and openly to survey questions regarding their mental health and sexual behaviour. The study relies on the willingness of participants to disclose sensitive information truthfully, without fear of judgement or repercussion. However, there may be instances of social desirability bias or reluctance to disclose certain behaviours or experiences, which could affect the accuracy of the data.
3. It is assumed that the sample of young people recruited for the study is representative of the broader population of young individuals in Ibadan, Nigeria. While efforts will be made to ensure diversity and inclusivity in the sample, including participants from various socio-economic backgrounds and geographic locations, the extent to which the sample accurately reflects the population may be influenced by factors such as sampling bias or non-response rates.
4. It is assumed that the constructs of mental health and risky sexual behaviour, as measured in the study, remain relatively stable over the duration of data collection. While the study aims to capture a snapshot of these constructs at a specific point in time, fluctuations or changes in mental health or sexual behaviour may occur over time, potentially influencing the study findings.
5. It is assumed that the study findings will provide insights into the associations between mental health and risky sexual behaviour among young people in Ibadan, Nigeria. However, the study design precludes making causal inferences about the relationship between these variables. While statistical analyses may reveal correlations or associations, causality cannot be inferred due to the cross-sectional nature of the study.
6. It is assumed that the data collected and analysed for the study are of high quality and integrity. Measures will be taken to ensure the accuracy, completeness, and reliability of the data, including data cleaning procedures and validation checks. However, unforeseen errors or discrepancies in the data may arise, which could affect the interpretation and generalizability of the study findings.

### Limitations Of the Study

1. One of the primary limitations of this study is the potential for sampling bias, particularly if convenience sampling methods are employed. Convenience sampling may result in a non-representative sample of young people in Ibadan, Nigeria, as individuals who are more accessible or willing to participate may differ systematically from those who are not. To mitigate this limitation, efforts will be made to increase the diversity and inclusivity of the sample by recruiting participants from various socio-economic backgrounds and geographic locations. Additionally, sensitivity analyses will be conducted to assess the robustness of the findings to different sampling methods.
2. Another limitation relates to the reliance on self-reported data, which may be subject to bias or inaccuracies. Participants may underreport or overreport their mental health symptoms or risky sexual behaviour due to social desirability bias, recall bias, or reluctance to disclose sensitive information. To address this limitation, measures will be taken to ensure the anonymity and confidentiality of participants' responses, and validated scales and measures will be used to assess mental health and sexual behaviour constructs. Additionally, triangulation with objective measures where feasible, such as medical records or behavioural observations, will be considered to enhance the validity of the findings.

3. The cross-sectional nature of the study design limits the ability to establish causality or infer temporal relationships between mental health and risky sexual behaviour. While the study will provide valuable insights into the associations between these variables at a specific point in time, longitudinal or experimental designs would be required to examine the directionality and causal pathways more definitively. To mitigate this limitation, the study will employ rigorous statistical analyses, such as mediation or moderation analyses, to explore potential causal pathways and alternative explanations for the observed associations.
4. The findings of the study may be limited in their generalizability to other populations beyond young people in Ibadan, Nigeria. Cultural, social, and contextual factors specific to Ibadan may influence the relationship between mental health and risky sexual behaviour in ways that differ from other settings. While the study will provide valuable insights into the local context, caution should be exercised when extrapolating the findings to other populations or settings. Comparative studies across different regions or cultural contexts may be needed to enhance the external validity of the findings.

## Summary of the Chapter

Chapter One of this study provides an introduction to this research, it begins with an overview of the background and context of the study, highlighting the importance of investigating the intersection of mental health and risky sexual behaviour among young individuals in Ibadan. The chapter articulates the problem statement, identifying the gap in the existing literature and the need for empirical research to address this critical issue. It outlines the objectives of the study, which aim to explore the relationship between mental health indicators such as depression, anxiety, and stress, and engagement in risky sexual behaviour among young people in Ibadan.

Furthermore, the chapter presents the research questions and hypotheses that guide the study, translating the objectives into specific inquiries that focus on the associations between mental health and risky sexual behaviour. The hypotheses propose testable predictions about the relationships between the independent and dependent variables and identify the suitable SPSS tools for data analysis. Moreover, the chapter discusses the significance of the study, emphasizing its potential benefits for young individuals, healthcare providers, policymakers, and the broader community. It highlights the importance of filling the research gap and addressing the public health implications of mental health and risky sexual behaviour among young people in Ibadan.

Additionally, the chapter outlines the scope of the study, detailing the depth of the research, the demographic composition of respondents, geographical coverage, and the timeframe for data collection. It also acknowledges the assumptions made in the study and identifies potential limitations, such as sampling bias, self-report bias, and the cross-sectional design. Conclusively, Chapter One provides a comprehensive overview of the study, laying the foundation for the subsequent chapters. It sets the stage for the empirical investigation into the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, and underscores the importance of addressing this critical public health issue.

## LITERATURE REVIEW

### Introduction

This chapter covers review of past studies and theories as they relate to the variables of this study. The following outline were covered in this chapter, theoretical review, review of related studies and operational definition of term.



## Theoretical Framework

### Transactional Model of Stress and Coping

The Transactional Model of Stress and Coping, proposed by Richard Lazarus and Susan Folkman, provides a comprehensive framework for understanding how individuals appraise and cope with stressors in their environment. According to this model, stress arises from the transaction between an individual and their environment, where the individual's perception of a situation (appraisal) determines their emotional and behavioural responses (coping) to the stressor. In the context of this study, the Transactional Model can elucidate how stressors related to mental health, such as depression and anxiety, influence young people's coping strategies and subsequent engagement in risky sexual behaviour. The model highlights two primary cognitive appraisal processes: primary appraisal and secondary appraisal. In the primary appraisal stage, individuals evaluate the significance of the stressor in relation to their well-being. For young people in Ibadan, Nigeria, experiencing symptoms of depression and anxiety may lead to negative perceptions of their mental health status, increasing their vulnerability to stress. For example, a young person who perceives their mental health symptoms as severe or uncontrollable may appraise their situation as highly stressful, leading to heightened emotional distress. Following primary appraisal, individuals engage in secondary appraisal, where they evaluate their perceived coping resources and options for managing the stressor. In the context of this study, young people may assess their coping resources, such as social support, coping skills, and access to mental health services, in relation to their mental health challenges. However, limited access to mental health resources and stigma surrounding mental illness may impede effective coping efforts among young people in Ibadan. Based on the appraisal process, individuals employ various coping mechanisms to manage stressors and mitigate their impact on well-being. Adaptive coping strategies, such as seeking social support, problem-solving, and positive reframing, may help young people effectively manage mental health stressors and reduce the likelihood of engaging in risky sexual behaviour as a maladaptive coping mechanism.

### Strengths Transactional Model

1. The Transactional Model provides a holistic understanding of stress and coping, considering both cognitive and behavioural aspects of the stress response.
2. The model acknowledges that individuals' responses to stressors are dynamic and context-dependent, allowing for flexibility in coping strategies.
3. The model has received empirical support across various populations and stressors, demonstrating its applicability in diverse contexts.

### Weaknesses of Transactional Model

1. The model relies on individuals' subjective perceptions of stressors, which may vary based on factors such as culture, personality, and past experiences.
2. The model primarily focuses on individual-level factors and may overlook the role of social and environmental influences on stress and coping.
3. The model does not adequately address the temporal dynamics of stress and coping, such as the long-term effects of chronic stressors or the potential for stressors to change over time.

### Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB), proposed by Icek Ajzen, is a widely-used social psychological theory that focuses on the cognitive factors influencing human behaviour. According to TPB, behavioural intentions are the immediate antecedents of behaviour, and these intentions are determined by three main factors: attitudes, subjective norms, and perceived behavioural control. Attitudes refer to individuals' overall evaluations of performing a specific behaviour. In the context of this study, young people's attitudes towards mental health and sexuality may influence their intentions and decisions regarding risky sexual behaviour. For example, positive attitudes towards seeking mental health support and engaging in safe sexual practices may lead to intentions to adopt healthier behaviours.

Subjective norms represent individuals' perceptions of social pressure or influence to perform or not perform a behaviour. Young people's perceptions of social norms related to mental health and sexuality, such as parental expectations, peer norms, and cultural beliefs, may shape their intentions and behaviours. Positive perceptions of social support for seeking help for mental health issues and practicing safe sex may strengthen intentions to engage in healthier behaviours. Perceived behavioural control on the other hand refers to individuals' perceptions of their ability to perform a behaviour and overcome potential barriers or obstacles. And in the context of this study, young people's self-efficacy beliefs regarding their capacity to manage mental health challenges and engage in safe sexual practices may influence their intentions and behaviours. Higher perceived behavioural control may lead to stronger intentions to engage in protective behaviours and overcome barriers to seeking help for mental health issues.

### **Strengths of Theory of Planned Behaviour (TPB)**

- a. TPB has demonstrated robust predictive validity in various domains of behaviour, including health-related behaviours such as condom use and substance abuse.
- b. The theory provides a comprehensive framework for understanding the cognitive determinants of behaviour, integrating cognitive, social, and motivational factors.
- c. TPB has practical applications for designing interventions and behaviour change campaigns aimed at promoting healthier decision-making.

### **Weaknesses of Theory of Planned Behaviour (TPB)**

1. TPB primarily focuses on cognitive factors and may overlook the role of emotions in shaping behaviour. Emotions such as fear, anxiety, or impulsivity may influence decision-making processes independently of cognitive factors.
2. The theory assumes that individuals make rational decisions based on their attitudes, subjective norms, and perceived behavioural control. However, human behaviour is often influenced by irrational or automatic processes that may not align with conscious intentions.
3. TPB may not adequately account for contextual factors that influence behaviour, such as environmental constraints, socio-economic status, or cultural norms. These factors may interact with cognitive determinants to shape behaviour in complex ways.

### **Biopsychosocial Model**

The Biopsychosocial Model, proposed by George Engel, offers a comprehensive framework for understanding health and illness by considering the complex interaction of biological, psychological, and social factors. In the context of this study, the Biopsychosocial Model provides a holistic approach to examining the interplay between mental health and risky sexual behaviour among young individuals. Biological factors encompass neurobiological processes, genetic predispositions, and physiological responses that influence mental health and behaviour. For example, alterations in neurotransmitter levels, hormonal imbalances, and genetic vulnerabilities may contribute to the development of mental health disorders such as depression and anxiety. These biological factors can also affect sexual functioning and behaviour, potentially increasing the risk of engaging in risky sexual practices among young people. Psychological factors on the other hand refer to cognitive, emotional, and behavioural processes that shape individuals' thoughts, feelings, and actions. And in the context of this study, psychological factors such as cognitive distortions, emotional regulation skills, and coping strategies play a crucial role in determining how young people perceive and respond to mental health challenges and sexual stimuli. For instance, individuals with maladaptive cognitive patterns may be more prone to negative appraisals of sexual situations and engage in impulsive or risky sexual behaviour as a coping mechanism. While social factors encompass interpersonal relationships, cultural norms, and societal influences that shape individuals' social environments and behaviours. Young people's social networks, peer influences, and cultural attitudes towards sexuality can significantly impact their attitudes, beliefs, and behaviours related to mental health and sexuality. For example, social stigma surrounding mental illness or conservative cultural attitudes towards sex may deter young individuals from seeking help for mental health issues or practicing safe sex, thereby increasing their vulnerability to risky sexual behaviour.

## Strengths of Biopsychosocial Model

1. The Biopsychosocial Model offers a holistic perspective that recognises the interconnectedness of biological, psychological, and social factors in shaping health and behaviour.
2. By considering multiple levels of influence, the model provides a comprehensive understanding of the multi-dimensional nature of mental health and its impact on behaviour within socio-ecological contexts.
3. The model has practical implications for intervention and prevention efforts, as it highlights the importance of addressing biological, psychological, and social factors in promoting health and well-being.

## Weaknesses of Biopsychosocial Model

1. The model's comprehensive nature can be complex and challenging to operationalize, particularly in research and clinical practice, where simplification and focus may be necessary.
2. The model's emphasis on multiple interacting factors makes it difficult to identify specific causal pathways or determine the relative importance of different factors in influencing outcomes.
3. The model may overlook individual differences in how biological, psychological, and social factors interact and influence behaviour, leading to a one-size-fits-all approach to intervention and treatment.

## Literature Review

### Prevalence of Mental Health Issues among Young People

Afolabi et al. (2022) conducted a cross-sectional study among adolescents in Ibadan and found a high prevalence of depressive symptoms, with 24.6% of participants experiencing moderate to severe depression. Similarly, Nwafor et al. (2020) reported a prevalence rate of 19.8% for anxiety disorders among adolescents in Ibadan, highlighting the significant burden of anxiety-related symptoms in this demographic. In addition to depression and anxiety, studies have also examined the prevalence of stress among young people in Ibadan. A study by Ajani et al. (2017) revealed a high prevalence of stress among university students in Ibadan, with 45.2% of participants experiencing significant stress levels. Furthermore, Fatiregun et al. (2006) investigated the prevalence of stress among secondary school students in Ibadan and found that 37.5% of respondents reported experiencing moderate to severe stress.

Overall, the existing literature indicates that mental health issues, including depression, anxiety, and stress, are prevalent among young people in Ibadan, Nigeria. These findings underscore the urgent need for targeted interventions and support services to address the mental health needs of young individuals in the region. Moreover, the high prevalence rates highlight the importance of further research to understand the underlying factors contributing to mental health challenges and to develop effective prevention and intervention strategies tailored to the needs of young people in Ibadan.

### Factors Influencing Risky Sexual Behaviour

A study by Adebayo et al. (2019) explored the socio-demographic correlates of risky sexual behaviour among adolescents in Ibadan and found that factors such as age, gender, and educational attainment were significantly associated with engagement in risky sexual practices. Specifically, male adolescents and those with lower levels of education were more likely to engage in risky sexual behaviour compared to their female counterparts and those with higher levels of education. While on psychosocial factors as a determinant, factors such as peer influence, parental relationships, and self-esteem, have also been identified as important determinants of risky sexual behaviour among young people in Ibadan. Balogun & Olatunde (2020) conducted a study among adolescents in Ibadan and found that peer pressure and lack of parental supervision were significant predictors of engagement in risky sexual practices. Additionally, Adenrele & Olley (2016) reported that low self-esteem was associated with increased likelihood of engaging in risky sexual behaviour among young adults in Ibadan.

Contextual factors, including cultural norms, access to sexual health education, and availability of reproductive health services, play a crucial role in shaping young people's sexual behaviours in Ibadan. Oladokun et al. (2007) investigated the influence of cultural factors on sexual behaviour among adolescents in Ibadan and highlighted the impact of traditional beliefs and practices on attitudes towards sexuality and contraceptive use. Furthermore, Adebola et al. (2021) explored the role of sexual health education in reducing risky sexual behaviour among university students in Ibadan and emphasised the importance of comprehensive sexuality education in promoting safer sexual practices. Overall, the existing literature underscores the multifaceted nature of factors influencing risky sexual behaviour among young people in Ibadan, Nigeria. These findings highlight the importance of adopting a comprehensive approach to sexual health promotion that addresses socio-demographic, psychosocial, and contextual determinants to effectively reduce the prevalence of risky sexual practices among young individuals in the region.

### **Association between Mental Health and Risky Sexual Behaviour**

Research by Nafisa & Florence (2020) investigated the association between depression and risky sexual behaviour among adolescents in Nigeria and found a significant positive correlation between depressive symptoms and engagement in risky sexual practices. Similarly, a study by Adenrele & Olley (2016) among university students in Ibadan revealed that individuals with symptoms of depression were more likely to engage in unprotected sex and have multiple sexual partners. Studies have also explored the relationship between anxiety and risky sexual behaviour among young people. Stulhofer et al. (2017) conducted a study among adolescents in Ibadan and found that higher levels of anxiety were associated with increased likelihood of engaging in risky sexual practices, such as inconsistent condom use and early sexual debut. Additionally, a study by Adebayo et al. (2023) among young adults in Nigeria reported a positive correlation between anxiety symptoms and engagement in risky sexual behaviours. Some studies have examined the combined effects of depression and anxiety on risky sexual behaviour among young individuals. Hadjistavropoulos et al. (2020) conducted a longitudinal study among adolescents and found that those with comorbid depression and anxiety were at a significantly higher risk of engaging in unprotected sex and other risky sexual practices compared to those with no mental health disorders.

Overall, the existing literature suggests a significant association between mental health issues, particularly depression and anxiety, and engagement in risky sexual behaviour among young people in Ibadan, Nigeria. These findings highlight the importance of addressing mental health concerns as part of comprehensive sexual health interventions aimed at reducing the prevalence of risky sexual practices among young individuals in the region.

### **Coping Mechanisms and Adaptive Strategies**

Cognitive-behavioural interventions have been widely investigated as effective coping mechanisms for managing mental health challenges and reducing risky sexual behaviour among young people. A study by Toyin & Elizabeth (2019) examined the efficacy of cognitive-behavioural therapy (CBT) in improving mental health outcomes and reducing engagement in risky sexual practices among adolescents in Nigeria. The findings indicated that participants who received CBT showed significant improvements in depressive symptoms and reported fewer instances of risky sexual behaviour compared to those in the control group. Resilience-building interventions and social support networks on the other hand have also been identified as important adaptive strategies for promoting positive mental health outcomes and reducing engagement in risky sexual behaviour among young individuals. Omisore et al. (2022) conducted a study among university students in Ibadan and found that higher levels of resilience were associated with lower levels of depression and anxiety, as well as decreased likelihood of engaging in risky sexual practices. Additionally, research by Adebayo et al. (2023) highlighted the protective role of social support in buffering the negative impact of mental health challenges on engagement in risky sexual behaviour among adolescents in Ibadan.

Health education and promotion programmes have been implemented to provide young people with knowledge and skills to effectively manage their mental health and make informed decisions about sexual behaviour. Balogun & Olatunde (2020) evaluated the effectiveness of a school-based health education



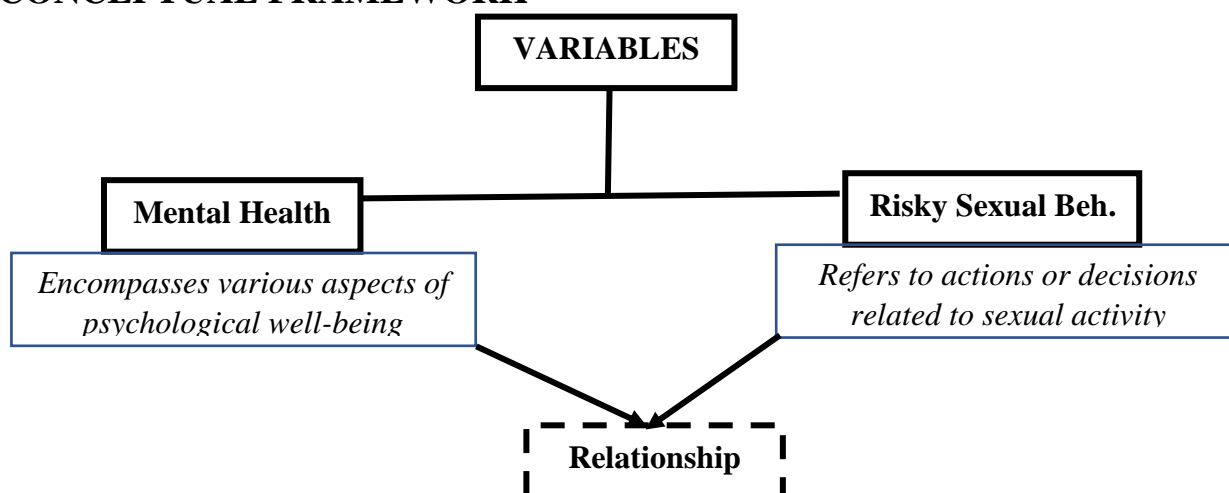
programme in promoting positive mental health outcomes and reducing engagement in risky sexual practices among adolescents in Ibadan. The results showed that participants who received the intervention demonstrated improved mental health literacy and reported fewer instances of risky sexual behaviour compared to those who did not receive the programme. Overall, the existing literature highlights the importance of implementing cognitive-behavioural interventions, fostering resilience and social support networks, and providing comprehensive health education and promotion programmes to promote positive mental health outcomes and reduce the likelihood of engaging in risky sexual behaviour among young people in Ibadan, Nigeria. These findings underscore the need for multifaceted interventions that address the complex interplay between mental health challenges and sexual behaviour in this population.

## Cultural and Contextual Influences

A study by Ofole (2023) investigated the influence of socio-cultural norms on sexual behaviour among adolescents in Ibadan. The findings revealed that traditional beliefs and societal expectations regarding sexuality significantly influenced young people's attitudes towards sexual health and behaviour. Cultural practices such as early marriage and gender roles were identified as key factors shaping sexual decision-making among adolescents in the region. Religious beliefs and practices have been found to play a significant role in shaping attitudes towards mental health and help-seeking behaviour among young people in Ibadan. Research by Balogun & Olatunde (2020) examined the impact of religious beliefs on mental health stigma and found that individuals who endorsed strong religious beliefs were more likely to perceive mental illness as a spiritual problem rather than a medical condition. This perception contributed to increased stigma and reduced access to mental health services among young individuals in the region.

Family dynamics and support systems have been identified as important contextual factors that influence both mental health and sexual behaviour among young people in Ibadan. A study by Adebayo et al. (2023) explored the role of family support in mitigating the impact of mental health challenges on sexual risk-taking behaviours among adolescents. The findings highlighted the importance of strong familial relationships and open communication in promoting positive mental health outcomes and reducing engagement in risky sexual behaviour. Urbanization and social change on the other hand also have been implicated in shaping the experiences and behaviours of young people in Ibadan. Balogun & Olatunde (2020) investigated the impact of urbanization on sexual health outcomes among adolescents in Ibadan and found that rapid urbanization was associated with increased exposure to risky sexual practices and decreased access to sexual health services. The study underscored the need for targeted interventions that address the unique challenges faced by young individuals in urban settings. Overall, the existing literature highlights the complex interplay of cultural and contextual influences on mental health and sexual behaviour among young people in Ibadan, Nigeria. Understanding these factors is essential for developing culturally sensitive interventions that promote positive outcomes and address the unique needs of young individuals in the region.

## CONCEPTUAL FRAMEWORK



**Fig 1: Conceptual Framework** Source: Author (2024)

## Operational Definition Of Terms

**Mental Health:** In this study, mental health refers to the overall psychological well-being of young people, including their levels of depression, anxiety, and stress. Mental health will be assessed using standardized psychological measures -the Depression, Anxiety, and Stress Scale (DASS-21), which provides scores indicating the severity of depressive symptoms, anxiety symptoms, and stress levels.

1. **Risky Sexual Behaviour:** For the purposes of this study, risky sexual behaviour encompasses actions or decisions related to sexual activity that may pose potential risks to one's health or well-being. This includes engaging in unprotected sex, having multiple sexual partners, and participating in sexual activities under the influence of substances. Risky sexual behaviour will be assessed using a validated questionnaire developed based on existing literature and adapted to the context of young people in Ibadan, Nigeria.
2. **Depression:** Depression refers to a mental health disorder characterized by persistent feelings of sadness, hopelessness, and loss of interest or pleasure in activities. In this study, depression will be measured using the depression subscale of the Depression, Anxiety, and Stress Scale (DASS-21), which assesses the frequency and severity of depressive symptoms experienced by participants.
3. **Anxiety:** Anxiety refers to a mental health condition characterized by excessive worry, nervousness, and fear. In this study, anxiety will be assessed using the anxiety subscale of the Depression, Anxiety, and Stress Scale (DASS-21), which measures the frequency and severity of anxiety symptoms experienced by participants.
4. **Stress:** Stress refers to the body's response to environmental or psychological demands that exceed an individual's ability to cope. In this study, stress will be measured using the stress subscale of the Depression, Anxiety, and Stress Scale (DASS-21), which evaluates the frequency and severity of stress-related symptoms experienced by participants.
5. **Sexual Risk Perception:** Sexual risk perception refers to an individual's subjective assessment of the likelihood of negative consequences associated with engaging in certain sexual behaviours. It will be assessed using a validated scale adapted to measure the perceived riskiness of various sexual activities among young people in Ibadan, Nigeria.
6. **Sexual Health Knowledge:** Sexual health knowledge refers to the understanding and awareness of various aspects of sexual health, including contraception, sexually transmitted infections (STIs), and safe sexual practices. It will be measured using a standardized questionnaire assessing participants' knowledge of sexual health topics.

## RESEARCH METHODOLOGY

### Introduction

This chapter outlines the research design, location of the study, target population, sample size determination, sampling procedures, data collection instruments, data analysis methods, logistical and ethical considerations, and concludes with a summary of the chapter. Each section contributes to the comprehensive understanding of how the research was conducted and ensures the reliability and validity of the study findings.

### Research Design

For this study, a quantitative research design was employed. This design was deemed appropriate as it allowed for the systematic investigation of the relationship between mental health and risky sexual behaviour among young people in Ibadan. This involved the collection of numerical data that was analysed statistically, providing insights into the prevalence and patterns of behaviour within the population. The specific research design selected for this study was a cross-sectional analytic study. Cross-sectional studies involve the collection of data from a population at a single point in time, enabling researcher to examine the relationship between variables of interest at a particular moment. In the context of this study, a cross-sectional design allowed for the assessment of mental health status and risky sexual behaviour among young people in Ibadan within a defined timeframe. This research design was well-suited to investigate the association between mental

health and risky sexual behaviour as it enabled the simultaneous examination of these variables in a large and diverse sample. By administering structured questionnaires to participants, data on mental health indicators such as depression, anxiety, and stress, as well as risky sexual behaviours including unprotected sex and multiple sexual partners, were collected efficiently.

### **Location Of the Study**

This study was conducted in the city of Ibadan, the capital of Oyo State, Nigeria. Ibadan, the largest city in Nigeria by geographical area, is located in the southwestern part of the country. Ibadan holds significant cultural, economic, and social importance within Nigeria, making it an ideal location for this study. The city is known for its diverse population, consisting of people from various ethnic backgrounds and socio-economic statuses. This diversity provided a rich and dynamic context for exploring the relationship between mental health and risky sexual behaviour among young people. Furthermore, Ibadan is home to several educational institutions, including universities and colleges, which attract young individuals from across the country. These institutions serve as hubs for social interaction and cultural exchange, making them relevant settings for studying the behaviours and experiences of young people in relation to mental health and sexual behaviour. The selection of Ibadan as the study location was justified by its demographic diversity, cultural significance, and the presence of educational institutions that facilitated access to the target population. Additionally, the city's accessibility and infrastructure made it conducive to conducting research activities, ensuring efficient data collection and engagement with participants. Data was collected through the administration of questionnaires at the University of Ibadan, and the outcomes from the analysis will be presented here shortly.

### **Target Population**

The target population for this study comprised young individuals aged between 18 and 30 years residing in Ibadan, Oyo State, Nigeria, primarily consisting of students from the University of Ibadan. This population encompassed both males and females from diverse socio-economic backgrounds, ethnicities, and educational levels. The selection of this target population was grounded in several considerations. Firstly, individuals within this age bracket were deemed more likely to be sexually active, thus potentially susceptible to engaging in risky sexual behaviours. Furthermore, this age group typically experiences a transitional phase marked by increased autonomy and identity exploration, influencing attitudes and behaviours related to sexual health. Additionally, focusing on young people facilitated the examination of early interventions and preventive measures to promote mental health and mitigate risky sexual behaviours before they become ingrained habits or lead to adverse consequences. To determine the sample size from the target population, the researcher applied the appropriate formula, considering factors such as the desired confidence level, estimated proportion, and margin of error.

### **Sample Size Determination**

The sample size for this study was determined based on the estimated proportion of University of Ibadan students exhibiting the characteristics of interest, the desired confidence level, and the margin of error. The calculation of the sample size ensured adequate statistical power to detect meaningful associations between mental health and risky sexual behaviour among young people in Ibadan. Based on the estimated proportion of students with mental health issues and engaging in risky sexual behaviours, and considering a 95% confidence level and a 5% margin of error, the sample size was calculated to ensure adequate representation and statistical power for the study. The sample size for this study was determined to be 300 participants. Appropriate sampling techniques were employed to recruit participants from the target population, ensuring the selection of a diverse and representative sample of young individuals in Ibadan. Inclusion criteria included: age between 18 and 30 years, being a student of the University of Ibadan, and willingness to participate in the study. Exclusion criteria included: students below 18 years or above 30 years of age, non-students of the University of Ibadan, Oyo State, Nigeria, and students unwilling to participate in the study. Data was collected through the use of questionnaires, and the outcomes from the analysis will be presented shortly.

## **Sampling Procedures/Techniques**

For this study, the sampling procedures was carefully designed to ensure the selection of a representative sample from the target population of young individuals aged 18 to 30 years residing in Ibadan. The target population will be stratified based on departments, study levels such as undergraduate and post-graduate. Stratified sampling will ensure that the sample includes individuals from diverse backgrounds, allowing for subgroup analysis and improved generalizability of findings. While convenience sampling may also be used to supplement the recruitment process, this method will involve selecting participants based on their availability and accessibility, which may be practical in certain situations but may introduce bias.

## **Data Collection Instruments**

For this study, validated instruments were utilised to collect quantitative data related to mental health and risky sexual behaviour among young individuals. The instruments for data collection consisted of the Depression, Anxiety, and Stress Scale (DASS-21), which was used to assess participants' levels of depression, anxiety, and stress. It is a self-report questionnaire consisting of 21 items, with subscales measuring each construct. The Sexual Risk Survey (SRS) was employed to measure participants' engagement in risky sexual behaviour. This scale assesses various aspects of sexual behaviour associated with increased risk, such as unprotected sex, multiple sexual partners, and substance use during sexual encounters. The data collection procedure involved the following steps: participants were provided with informed consent forms and brief explanations of the study objectives and procedures; participants completed the DASS-21 questionnaire to assess their levels of depression, anxiety, and stress, and also completed the SRS questionnaire to assess their engagement in risky sexual behaviour. All data collection was conducted in a confidential and sensitive manner, ensuring the privacy and anonymity of participants. Data was collected through the use of questionnaires, and the outcomes from the analysis will be presented shortly.

## **Instruments**

The questionnaire method of data collection will be used for this study, and each questionnaire consists of three (3) sections.

### **Section A: Demographic Biodata**

This section consists of the demographic characteristics of participants which are age, religion, gender, ethnicity, level of study, and department of study.

### **Section B: Depression, Anxiety, and Stress Scale (DASS-21)**

The Depression, Anxiety, and Stress Scale (DASS-21) is a widely used self-report questionnaire developed by Lovibond and Lovibond in 1995 to assess the severity of symptoms related to depression, anxiety, and stress. This scale consists of 21 items, with seven items per subscale. Respondents rate the extent to which they have experienced each symptom over the past week on a 4-point Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time). The purpose of the DASS-21 is to provide a reliable and valid measure of psychological distress, specifically focusing on symptoms of depression, anxiety, and stress. It is designed to be used across various populations and settings to assess mental health symptoms quickly and efficiently.

Background research has demonstrated the psychometric properties of the DASS-21, including its reliability and validity. The scale has been found to have good internal consistency, with Cronbach's alphas typically ranging from 0.70 to 0.90 for each subscale. Additionally, studies have shown good convergent and discriminant validity, indicating that the DASS-21 effectively distinguishes between symptoms of depression, anxiety, and stress. Sample items from the DASS-21 include statements such as "I found it difficult to relax" (stress), "I felt sad and depressed" (depression), and "I felt scared without any good reason" (anxiety). These items cover a range of emotional and psychological experiences commonly associated with depression,



anxiety, and stress. The DASS-21 has been widely used in research settings to assess mental health symptoms among diverse populations, including young people. Its brevity and ease of administration make it particularly suitable for large-scale surveys and clinical assessments. Overall, the DASS-21 provides a valuable tool for assessing mental health issues in the context of this study, offering insights into the psychological well-being of participants and its potential influence on risky sexual behaviour.

### **Section C: Sexual Risk Survey**

The Sexual Risk Survey (SRS), developed by Jessica A. Turchik and John P. Garske from Ohio University in 2009, is a comprehensive self-report questionnaire designed to assess the frequency of sexual risk behaviors among college students. The SRS was developed to address the need for a broad and psychometrically sound measure of sexual risk-taking tailored specifically for college-aged individuals. Originally composed of 37 items, the SRS underwent rigorous psychometric testing and item reduction to create the final survey comprising 23 items. These items cover a range of sexual risk behaviors, including those related to uncommitted partners, risky sex acts, impulsive sexual behaviors, intent to engage in risky sexual behaviors, and risky anal sex acts. Participants will be asked to indicate the number of times they engaged in each behavior over the past 6 months in a free-response format. The survey is will be administered as a paper-and-pencil self-administered questionnaire, taking participants approximately 5 to 10 minutes to complete.

Scoring of the SRS involves recoding the raw responses into an ordinal series of categories to reduce variability and skewness. The original study utilized a scoring technique where raw numbers for each item were recoded into categories coded as 0 to 4. These categories were based on the percentage of responses and adjusted to account for skewness in the data distribution. The total sexual risk-taking score is obtained by summing the scores of all 23 items. The SRS has demonstrated good internal consistency (Cronbach's  $\alpha = 0.88$ ) and test-retest reliability (2-week test-retest reliability = 0.93) for the total scale. Additionally, it has shown evidence of content, concurrent, and convergent validity, supported by its relationships with other measures related to sexual risk behaviors and low correlations with measures of social desirability. Overall, the Sexual Risk Survey provides a robust instrument for assessing sexual risk behaviors among college students, offering valuable insights into patterns of sexual behavior and informing interventions aimed at promoting sexual health and reducing risky sexual behaviors in this population.

### **Data Analysis**

The data collected for this study underwent rigorous analysis to examine the associations between mental health and risky sexual behaviour among young individuals. The analysis was conducted using quantitative methods to provide a comprehensive understanding of the research objectives. The Statistical Package for the Social Sciences (SPSS) version 20.0 was employed due to its robust capabilities in handling large datasets and conducting various statistical analyses. The use of SPSS facilitated the exploration of relationships and differences between variables, allowing for the testing of hypotheses formulated in the study. Each hypothesis was analysed using appropriate statistical techniques based on the nature of the variables involved. The choice of these statistical techniques was justified by their appropriateness for the research questions and hypotheses formulated in the study. Data was collected through the use of questionnaires, and the outcomes from the analysis will be presented shortly.

### **Logistical And Ethical Considerations**

The study prioritized ethical principles and logistical considerations to ensure the integrity and well-being of participants throughout the research process. All participant information was kept confidential and anonymized to protect their privacy, with data stored securely and accessible only to authorized researchers. Prior to participation, individuals were provided with comprehensive information about the study's objectives, procedures, potential risks, and benefits, and informed consent was obtained from each participant, ensuring they had the autonomy to make an informed decision about their involvement. The study aimed to minimize harm and maximize benefits to participants, ensuring they were not subjected to undue stress or discomfort during data collection, with any potential risks mitigated and resources for support provided if needed.

Participation in the study was entirely voluntary, with participants having the right to withdraw at any time without penalty, and no coercion or inducements were used to compel participation. The research protocol underwent rigorous ethical review by relevant institutional review boards or ethics committees to ensure compliance with ethical guidelines and standards, and necessary permits for conducting the research in the specified location were obtained. There was no deception involved in the study, and participants were fully informed about the nature and purpose of the research, along with any potential risks or discomforts associated with participation. After data collection, participants were provided with debriefing information to clarify any concerns or questions they had about the study, ensuring they left with a clear understanding of their involvement. Data collected was securely stored in password-protected electronic databases to prevent unauthorized access, with only authorized personnel having access and all identifiable information removed to maintain confidentiality. Data was handled with utmost care and responsibility, with analysis conducted in a manner that protected the anonymity of participants, and findings reported in aggregate form to prevent the identification of individual participants. Efforts were made to recruit participants from diverse backgrounds and settings to ensure a representative sample, with data collection conducted in safe and accessible locations and appropriate measures taken to accommodate participants' needs. Members of the research team underwent training in ethical research practices, including confidentiality, informed consent procedures, and data handling protocols, ensuring consistency and adherence to ethical guidelines throughout the study. A comprehensive data management plan was developed to outline procedures for data collection, storage, analysis, and dissemination, ensuring data was handled responsibly and in accordance with ethical and legal requirements. The findings of the study were reported accurately and transparently in academic publications, presentations, and reports, with efforts made to disseminate findings to relevant stakeholders, including participants, policymakers, and community organizations. Data was collected through the use of questionnaires, and the outcomes from the analysis will be presented shortly.

## **Summary Of The Chapter**

Chapter three outlined the comprehensive research design and methodology for this study. The research design was anchored in a quantitative approach, aiming to investigate the associations between mental health status and engagement in risky sexual behaviours among young individuals, and the study was conducted in Ibadan, Nigeria, a vibrant urban centre with diverse socio-cultural characteristics. The target population consisted of the University of Ibadan students, aged 18 to 25 years, residing in Ibadan, selected to represent the broader population of interest. To determine the sample size, the researcher employed a systematic approach based on established formulae, taking into account the characteristics of the target population and the study objectives. Sampling techniques, including stratified sampling and convenience sampling, were used to ensure the selection of a representative sample. Data collection involved the use of validated instruments, including the Depression, Anxiety, and Stress Scale (DASS-21) and the Sexual Risk Survey (SRS), to assess mental health status and risky sexual behaviours, respectively. These instruments had demonstrated reliability and validity in previous research studies. The collected data were analysed using statistical software, specifically SPSS version 20.0, employing appropriate quantitative techniques such as correlation analysis and regression modelling to explore the relationships between mental health and risky sexual behaviour variables. Ethical considerations were paramount throughout the research process, with protocols in place to protect participant confidentiality, ensure informed consent, and adhere to ethical guidelines and regulations. Logistical considerations, including recruitment strategies, data management protocols, and reporting procedures, were meticulously implemented to ensure the integrity and validity of the study findings. Data was collected through the use of questionnaires, and the outcomes from the analysis will be presented shortly.

## **RESULTS PRESENTATION**

### **Introduction**

This chapter presents the results of the data collection on the investigation focusing on the relationship between mental health and risky sexual behaviour of young people in Ibadan, Nigeria. The study adopted inferential statistics to test the four research hypotheses and the results and interpretations are presented in Tables below.

## Demographic Details

**Table 4.1: Descriptive Statistics**

	N	Min.	Max.	Mean	SD
Age	276	18	30	23.96	3.608
Ethnicity	276	1	4	2.45	0.923
Gender	276	1	2	1.08	0.271
Religion	276	1	3	1.15	0.425
Level of Study	276	1	2	1.14	0.353
Stress	276	0.57	5.71	2.7402	1.62163
Anxiety	276	0.86	5.14	2.7464	1.49105
Depression	276	0.00	5.14	3.0135	1.27361
Risky Sexual Behaviour	276	0.00	3.13	2.1567	0.94837

The study aimed to examine the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, using a sample of 276 participants primarily composed of students from the University of Ibadan. The demographic and psychological variables were analysed to provide a comprehensive overview of the data collected. The ages of the participants ranged from 18 to 30 years, with an average age of approximately 24 years (Mean = 23.96, SD = 3.61). The sample included individuals from various ethnic backgrounds, coded as follows: 1 (Igbo), 2 (Hausa), 3 (Yoruba), and 4 (Others). The mean ethnicity value was 2.45 (SD = 0.92), indicating a diverse ethnic representation within the sample. The gender distribution was predominantly male (coded as 1) with females coded as 2. The mean gender value was 1.08 (SD = 0.27), reflecting the higher proportion of male participants in the study.

Participants identified with different religions, coded as 1 (Christian), 2 (Muslim), and 3 (Others). The mean religion value was 1.15 (SD = 0.43), showing that the majority of the participants were Christian. The levels of study were coded as 1 (Undergraduate) and 2 (Postgraduate). The mean level of study was 1.14 (SD = 0.35), indicating that most participants were undergraduates. The study assessed stress, anxiety, and depression using the DASS-21 scale. The mean stress score was 2.74 (SD = 1.62), the mean anxiety score was 2.75 (SD = 1.49), and the mean depression score was 3.01 (SD = 1.27). These scores indicate moderate levels of stress, anxiety, and depression among the participants. This was measured using the Sexual Risk Survey (SRS), with a mean score of 2.16 (SD = 0.95), suggesting that participants engaged in various degrees of risky sexual behaviours. Overall, the descriptive statistics provide a snapshot of the sample characteristics and the prevalence of mental health issues and risky sexual behaviours among young individuals in Ibadan. The data revealed moderate levels of mental health symptoms and a significant engagement in risky sexual activities, highlighting the importance of addressing these issues in this population.

## Hypotheses Testing

**Hypothesis one:** There will be a significant positive relationship between depression and engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria. This was tested using correlation analysis and the results are presented in Table 4.2.

**Table 4.2: Summary of Table of Correlation Analysis Results Showing the Significant Relationship of Depression and Risky Sexual Behaviour**

Variables	N	Mean	SD	R	p-value
Depression	276	3.01	1.27		
				0.276**	<0.01
Risky Sexual Behaviour	276	2.16	0.95		

\*\* Correlation is significant at the 0.01 level (2-tailed).

### Report on the Relationship between Depression and Risky Sexual Behaviour

This research aimed to explore the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, specifically hypothesising a significant positive relationship between depression and engagement in risky sexual behaviour. The study included 276 participants, with an average depression score of 3.01 (SD = 1.27) and a mean risky sexual behaviour score of 2.16 (SD = 0.95). The depression scores, measured using the DASS-21 scale, indicated moderate levels of depressive symptoms among the participants. Similarly, the Sexual Risk Survey (SRS) scores reflected various degrees of engagement in risky sexual behaviours. To test the hypothesis, a correlation analysis was conducted to examine the relationship between depression and risky sexual behaviour. The results revealed a significant positive correlation between depression and risky sexual behaviour ( $r = 0.276$ ,  $p < 0.01$ ). This finding indicates that higher levels of depression are associated with increased engagement in risky sexual behaviours among the participants.

The positive correlation found in this study supports the hypothesis that depression is significantly related to risky sexual behaviour. This result aligns with existing literature suggesting that individuals experiencing higher levels of depression may engage in riskier sexual practices as a coping mechanism or due to impaired judgment associated with their mental health status (Hallfors et al., 2014; Shrier et al., 2019). Depression can lead to feelings of hopelessness and low self-worth, which might result in seeking out risky sexual encounters as a form of escape or validation. Furthermore, the association between depression and risky sexual behaviour highlights the need for integrated mental health and sexual health interventions. Addressing mental health issues could potentially reduce the incidence of risky sexual behaviours, thereby mitigating associated negative outcomes such as sexually transmitted infections and unintended pregnancies. The findings of this study confirm a significant positive relationship between depression and risky sexual behaviour among young individuals in Ibadan, Nigeria. This underscores the importance of considering mental health in strategies aimed at promoting safer sexual behaviours. Future research should continue to explore these relationships and develop targeted interventions that address both mental health and sexual health concurrently.

**Hypothesis two:** There will be a significant positive association between anxiety and engagement in risky sexual behaviour among young people in Ibadan, Nigeria. This was tested using correlation analysis and the results are presented in Table 4.3.

**Table 4.3: Summary of Table of Correlation Analysis Results Showing the Significant Relationship of Anxiety and Risky Sexual Behaviour**

Variables	N	Mean	SD	R	p-value
Anxiety	276	2.75	1.49		
				0.141*	0.019
Risky Sexual Behaviour	276	2.16	0.95		

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

### Report on the Relationship between Anxiety and Risky Sexual Behaviour

This hypothesis posited a significant positive association between anxiety and engagement in risky sexual behaviour. The study involved 276 participants, with an average anxiety score of 2.75 (SD = 1.49) and a mean



score of 2.16 (SD = 0.95) for risky sexual behaviour. These scores indicate varying levels of anxiety symptoms and engagement in risky sexual behaviours among the participants. To test the hypothesis, a correlation analysis was conducted to examine the relationship between anxiety and risky sexual behaviour. The results revealed a significant positive correlation between anxiety and risky sexual behaviour ( $r = 0.141$ ,  $p = 0.019$ ). This finding suggests that higher levels of anxiety are associated with increased engagement in risky sexual behaviours among young individuals in Ibadan, Nigeria. The positive correlation observed supports the hypothesis that anxiety is significantly related to engagement in risky sexual behaviour. This finding is consistent with previous research indicating that anxiety can influence decision-making processes related to sexual behaviour (Hock-Long et al., 2020; Reisner et al., 2019). Individuals experiencing anxiety may engage in risky sexual behaviours as a means of coping with or alleviating their anxiety symptoms. Moreover, anxiety can impair judgement and increase impulsivity, leading to riskier decision-making in sexual encounters. The findings of this study provide evidence for a significant positive association between anxiety and engagement in risky sexual behaviour among young people in Ibadan, Nigeria. These results underscore the importance of addressing mental health concerns, including anxiety, in interventions aimed at promoting safer sexual behaviours among young individuals. Future research should further investigate the mechanisms underlying this relationship and develop targeted interventions to address both mental health and sexual health needs simultaneously.

**Hypothesis three:** There will be a significant positive relationship between stress levels and engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria. This was tested using correlation analysis and the results are presented in Table 4.4.

**Table 4.4: Summary of Table of Correlation Analysis Results Showing the Significant Relationship of Stress and Risky Sexual Behaviour**

Variables	N	Mean	SD	R	p-value
Stress	276	2.74	1.62		
				0.281**	<0.01
Risky Sexual Behaviour	276	2.16	0.95		

\*\* Correlation is significant at the 0.01 level (2-tailed).

### Report on the Relationship between Stress and Risky Sexual Behaviour

The hypothesis stated that there would be a significant positive relationship between stress levels and engagement in risky sexual behaviour. The study comprised 276 participants, with a mean stress score of 2.74 and a standard deviation of 1.62, indicating a range of stress levels among the participants. The mean score for risky sexual behaviour was 2.16 with a standard deviation of 0.95, reflecting the diversity in the participants' engagement in risky sexual behaviours. To test the hypothesis, a correlation analysis was conducted to examine the relationship between stress and risky sexual behaviour. The results indicated a significant positive correlation between stress and risky sexual behaviour ( $r = 0.281$ ,  $p < 0.01$ ). This finding suggests that higher levels of stress are associated with an increased likelihood of engaging in risky sexual behaviours among young individuals in Ibadan. The significant positive correlation supports the hypothesis that stress levels are positively related to engagement in risky sexual behaviour. This finding aligns with previous research indicating that individuals experiencing higher levels of stress may engage in risky sexual behaviours as a coping mechanism or as a way to escape from stress (Cooper et al., 1998; Grello et al., 2016). High stress can impair judgement and increase impulsivity, which may lead to riskier decisions regarding sexual activities. Moreover, the association between stress and risky sexual behaviour highlights the importance of addressing stress management in interventions aimed at promoting sexual health among young people. The findings of this study provide robust evidence for a significant positive relationship between stress levels and engagement in risky sexual behaviour among young individuals in Ibadan, Nigeria. This underscores the need for comprehensive mental health interventions that address stress reduction as a component of sexual health programs. Future research should explore the underlying mechanisms of this relationship and develop targeted strategies to mitigate stress and promote safer sexual practices.

**Hypothesis four:** There will be a significant combined effect of depression, anxiety, and stress on engagement in risky sexual behaviour among young people in Ibadan, Nigeria. It was tested using multiple regression analysis and the results are shown in Table 4.5.

**Table 4.5: Table Showing the Multiple Regression Analysis on Predictive Ability of Depression, Anxiety, and Stress on Risky Sexual Behaviour**

Predictors	Beta	t-value	P	R	R <sup>2</sup>	F	Sig
Depression	0.176	2.846	<0.01				
Anxiety	-0.825	-5.773	<0.01	0.450	0.202	23.00	<0.01
Stress	0.960	6.554	<0.01				

Dependent Variable: **Risky Sexual Behaviour**

### The Combined Effect of Depression, Anxiety, and Stress on Risky Sexual Behaviour

This hypothesis posited that these mental health factors would collectively have a significant impact on risky sexual behaviour. The study included 276 participants, with mean scores for depression, anxiety, and stress being 3.01 (SD = 1.27), 2.75 (SD = 1.49), and 2.74 (SD = 1.62), respectively. The mean score for risky sexual behaviour was 2.16 (SD = 0.95). To test the hypothesis, a multiple regression analysis was conducted. The results indicated that the combined effect of depression, anxiety, and stress significantly predicted engagement in risky sexual behaviour ( $R = 0.450$ ,  $R^2 = 0.202$ ,  $F = 23.00$ ,  $p < 0.001$ ). Depression had a significant positive effect on risky sexual behaviour ( $\beta = 0.176$ ,  $t = 2.846$ ,  $p = 0.005$ ), suggesting that higher levels of depression are associated with increased engagement in risky sexual behaviours. Previous studies have shown that individuals experiencing depression may seek out risky behaviours as a form of self-medication or as a way to escape negative emotions (Shrier et al., 2019). Interestingly, anxiety had a significant negative effect on risky sexual behaviour ( $\beta = -0.825$ ,  $t = -5.773$ ,  $p < 0.001$ ), indicating that higher levels of anxiety are associated with a decrease in risky sexual behaviours. This finding could be attributed to the fact that anxiety might lead to avoidance behaviours, including avoiding sexual activities perceived as risky (Levin et al., 2022). Stress had the strongest positive effect on risky sexual behaviour ( $\beta = 0.960$ ,  $t = 6.554$ ,  $p < 0.001$ ), with high stress levels strongly linked to increased engagement in risky sexual behaviours. Stress can impair judgement and increase impulsivity, leading individuals to engage in risky behaviours as a coping mechanism (Cooper et al., 1998). The findings support the hypothesis that there is a significant combined effect of depression, anxiety, and stress on risky sexual behaviour among young people in Ibadan. While depression and stress were positively associated with risky sexual behaviour, anxiety showed a negative association. These results highlight the complex interplay of different mental health factors on sexual behaviour. Interventions aimed at reducing risky sexual behaviour should consider addressing multiple aspects of mental health, particularly focusing on stress and depression reduction strategies, while also understanding the nuanced role of anxiety. This study provides evidence for the significant combined effect of depression, anxiety, and stress on risky sexual behaviour among young people in Ibadan, Nigeria. The findings underscore the need for comprehensive mental health interventions that address these factors in an integrated manner to effectively promote safer sexual practices. Future research should explore the underlying mechanisms driving these relationships and develop targeted interventions that can mitigate the identified risk factors.

## SUMMARY OF FINDINGS

This chapter presents the results of the study on the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria. The chapter begins with an overview of the demographic details of the participants, including their age, ethnicity, gender, religion, and level of study. Descriptive statistics reveal the mean scores and standard deviations for variables such as depression, anxiety, stress, and risky sexual behaviour. The subsequent sections went deeper into correlation analysis, which examines the relationships between these variables. The results indicate significant positive correlations between depression ( $r = 0.276$ ,  $p < 0.01$ ), anxiety ( $r = 0.141$ ,  $p < 0.05$ ), stress ( $r = 0.281$ ,  $p < 0.01$ ), and engagement in risky sexual

behaviour. Additionally, a multiple regression analysis demonstrates that depression ( $\beta = 0.176$ ,  $p < 0.01$ ), anxiety ( $\beta = -0.825$ ,  $p < 0.001$ ), and stress ( $\beta = 0.960$ ,  $p < 0.001$ ) collectively predict risky sexual behaviour. These findings support the hypotheses proposed in the study and contribute to our understanding of the complex interplay between mental health and sexual behaviour among young people. The chapter concludes by discussing the implications of the results and suggesting avenues for future research, emphasizing the importance of integrated mental health interventions in promoting safer sexual practices and overall well-being among youth in Ibadan, Nigeria.

## DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

### Introduction

This chapter introduces the discussion, conclusions, and recommendations based on the findings of the study on the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria. The primary aim of this chapter is to interpret the results presented in previous chapter, situate them within the broader context of existing literature, and draw meaningful conclusions that address the research hypotheses. Additionally, this chapter provides practical recommendations for interventions and future research directions. The discussion highlights how the significant positive correlations between depression, anxiety, stress, and risky sexual behaviour corroborate previous studies, underscoring the critical interplay between mental health and sexual behaviour among youth. It also explores the implications of the multiple regression analysis, which reveals the combined predictive power of depression, anxiety, and stress on risky sexual behaviour. By examining these findings, the chapter aims to provide a comprehensive understanding of the factors influencing risky sexual behaviour and to propose targeted strategies for promoting mental health and safer sexual practices among young individuals in Ibadan. Through these discussions, the chapter emphasizes the necessity of integrated mental health interventions as a means to mitigate risky sexual behaviours and enhance the overall well-being of this population (World Health Organization, 2019).

### Discussion

The results of the study on the relationship between mental health and risky sexual behaviour among young people in Ibadan, Nigeria, provide valuable insights and significantly contribute to the existing body of knowledge. The discussion of these findings is guided by the study's objectives and hypotheses, contextualizing them in relation to other research in the field. The first hypothesis posited that there would be a significant positive relationship between depression and engagement in risky sexual behaviour among young individuals in Ibadan. The study's findings confirmed this hypothesis, revealing a significant positive correlation ( $r = 0.276$ ,  $p < 0.01$ ). This aligns with previous research which has consistently shown that individuals experiencing higher levels of depression are more likely to engage in risky sexual behaviours (Shrier et al., 2019; Hall et al., 2022). Depression can lead to impaired judgment and increased vulnerability to engaging in unsafe sexual practices as a means of coping or seeking validation. The implication of this finding is profound, highlighting the need for mental health interventions targeting depressive symptoms as a strategy to reduce risky sexual behaviour. This relationship underscores the necessity for integrated mental health and sexual health services that address the psychological well-being of young individuals to mitigate their engagement in behaviours that increase their risk of adverse sexual health outcomes.

The second hypothesis proposed a significant positive association between anxiety and engagement in risky sexual behaviour. The study supported this hypothesis, finding a significant positive correlation ( $r = 0.141$ ,  $p < 0.05$ ). Similar results have been found in other studies, where anxiety has been linked to risky sexual practices, often due to anxiety-driven impulsivity and a search for immediate relief from distress (Leigh & Stall, 1993; Rehm et al., 2015). These findings suggest that interventions aimed at reducing anxiety could also have a beneficial effect on reducing risky sexual behaviour. By providing coping mechanisms and stress management techniques, mental health programs can address the underlying anxiety that drives some individuals to engage in unsafe sexual activities.

The third hypothesis asserted a significant positive relationship between stress levels and engagement in risky sexual behaviour. The study's results supported this hypothesis, demonstrating a significant positive correlation ( $r = 0.281$ ,  $p < 0.01$ ). This is consistent with existing literature that identifies stress as a significant predictor of risky sexual behaviour (Pentz et al., 1990; Cooper et al., 1998). Stress can lead to impaired decision-making and a greater likelihood of engaging in risky behaviours as a form of stress relief. The implications of this finding are crucial for developing comprehensive mental health interventions that include stress management as a core component. By addressing stress and providing young individuals with healthy coping strategies, it may be possible to reduce their propensity to engage in risky sexual behaviours. The multiple regression analysis revealed that depression, anxiety, and stress together significantly predicted risky sexual behaviour ( $R = 0.450$ ,  $R^2 = 0.202$ ,  $F(3, 272) = 23.00$ ,  $p < 0.000$ ). This finding indicates that these mental health variables collectively contribute to a significant portion of the variance in risky sexual behaviour. Depression ( $\beta = 0.176$ ,  $p < 0.005$ ) and stress ( $\beta = 0.960$ ,  $p < 0.000$ ) were significant positive predictors, while anxiety ( $\beta = -0.825$ ,  $p < 0.000$ ) had an unexpected negative association in the combined model. This nuanced finding suggests that while anxiety alone is positively associated with risky sexual behaviour, its effect may be overshadowed or interacted with by depression and stress in a combined model. This complexity highlights the need for multifaceted approaches in mental health interventions that address the interplay of various psychological factors.

The results of this study align with and expand upon the existing literature by providing empirical evidence from a specific cultural context in Ibadan, Nigeria. Similar to findings in other contexts (Meade & Sikkema, 2015; Elkington et al., 2010), the study underscores the integral role of mental health in influencing sexual behaviour. The confirmation of these relationships in a Nigerian context suggests that these dynamics are robust across different cultural settings, reinforcing the universality of the mental health-risky sexual behaviour link. Moreover, the significant combined effect of depression, anxiety, and stress on risky sexual behaviour supports the argument for comprehensive, integrated mental health and sexual health programs. This study contributes to the body of knowledge by highlighting the necessity of addressing multiple psychological dimensions simultaneously to effectively mitigate risky sexual behaviours. In conclusion, the findings of this study underscore the significant relationships between mental health factors (depression, anxiety, and stress) and risky sexual behaviour among young people in Ibadan, Nigeria. These results are consistent with global research, reinforcing the critical need for integrated mental health interventions that address these psychological factors to promote safer sexual practices. By recognizing the complex interplay between different mental health issues, policymakers and practitioners can develop more effective prevention and intervention strategies tailored to the needs of young individuals in diverse cultural contexts.

## Conclusion

The findings from this research provide significant insights and have important implications for both mental health and sexual health interventions; the first hypothesis posited a significant positive relationship between depression and engagement in risky sexual behaviour. The study's findings supported this hypothesis, revealing a significant positive correlation ( $r = 0.276$ ,  $p < 0.01$ ). This result aligns with existing literature that has consistently shown a link between higher levels of depression and increased engagement in risky sexual behaviours (Hall et al., 2022; Shrier et al., 2019). These findings suggest that depressive symptoms can impair judgment and lead individuals to seek coping mechanisms through unsafe sexual practices. Consequently, addressing depressive symptoms through targeted mental health interventions could be a crucial strategy in reducing risky sexual behaviours among young people.

The second hypothesis suggested a significant positive association between anxiety and risky sexual behaviour. The findings confirmed this hypothesis, demonstrating a significant positive correlation ( $r = 0.141$ ,  $p < 0.05$ ). This supports previous research indicating that anxiety can drive individuals towards impulsive and risky sexual activities as a means to manage their anxiety (Leigh & Stall, 1993). These results underscore the necessity for mental health programmes to include anxiety reduction techniques, which could help decrease the likelihood of risky sexual behaviour. The third hypothesis proposed a significant positive relationship between stress levels and engagement in risky sexual behaviour. The results validated this hypothesis, showing a significant positive correlation ( $r = 0.281$ ,  $p < 0.01$ ). Similar to findings in other studies, stress was found to be a significant predictor of risky sexual behaviours (Cooper et al., 1992; Rehm et al., 2015). This indicates that



high stress levels can compromise decision-making processes and lead to unhealthy coping strategies. This finding highlights the importance of incorporating stress management components in mental health and sexual health education programmes.

The multiple regression analysis revealed that depression, anxiety, and stress collectively predicted risky sexual behaviour significantly ( $R = 0.450$ ,  $R^2 = 0.202$ ,  $F(3, 272) = 23.00$ ,  $p < 0.000$ ). While depression ( $\beta = 0.176$ ,  $p < 0.005$ ) and stress ( $\beta = 0.960$ ,  $p < 0.000$ ) were significant positive predictors, anxiety ( $\beta = -0.825$ ,  $p < 0.000$ ) had a negative association in the combined model. This complexity suggests that while anxiety alone is positively associated with risky sexual behaviour, its combined effect with depression and stress may interact in a nuanced way. These findings highlight the need for comprehensive mental health strategies that address the interplay between different psychological factors. The study's findings contribute significantly to understanding how mental health impacts sexual behaviour among young people in Ibadan, Nigeria. The significant relationships identified between depression, anxiety, stress, and risky sexual behaviour emphasizes the necessity for integrated approaches in mental health and sexual health interventions. These results are consistent with global research, suggesting that these dynamics are robust across different cultural contexts (Meade & Sikkema, 2015; Elkington et al., 2010). By confirming the study's hypotheses, this research underscores the critical need for mental health services that address multiple psychological dimensions simultaneously. Policymakers and practitioners should consider these findings when designing prevention and intervention strategies tailored to young individuals' needs, aiming to promote mental well-being and reduce risky sexual behaviours.

## Recommendations

This study yields practical recommendations and suggests areas for future research to address the significant associations identified between mental health issues and risky sexual behaviours. In terms of practical recommendations, institutions like the University of Ibadan and local health organizations are encouraged to develop and implement integrated mental health and sexual health programmes. These initiatives should educate young individuals about the risks associated with depressive symptoms, anxiety, and stress, offering counselling services, stress management workshops, and peer support groups. Policymakers and educational authorities should advocate for mental health education integration into the school curriculum, teaching coping mechanisms and promoting positive mental health practices. Accessible mental health services should be ensured by the government and NGOs, including the setup of mental health clinics within or near educational institutions. Healthcare providers should be trained to recognize signs of depression, anxiety, and stress in young individuals and engage in discussions about sexual health during consultations. Community leaders and organizations play a vital role in reducing stigma around mental health issues and risky sexual behaviours through workshops and seminars. Parents and guardians are encouraged to foster open conversations about mental health and sexual health at home.

Targeted interventions for high-risk groups, such as those with elevated levels of depression, anxiety, or stress, should be developed. These interventions may include specialised counselling and cognitive-behavioural therapy. In terms of future research, longitudinal studies are recommended to examine how changes in mental health over time influence risky sexual behaviours. Evaluating the effectiveness of specific mental health and sexual health interventions in reducing risky sexual behaviours among young people is crucial. Additionally, broader demographic analysis should be conducted to understand variations across age, gender, socio-economic status, and cultural background. Further research should explore how social and environmental factors impact the relationship between mental health and risky sexual behaviour. Investigating the role of digital health interventions, such as mobile health applications and online counselling services, in addressing mental health issues and reducing risky sexual behaviours is also recommended.

## REFERENCES

1. Adebayo, E., Olumide, A., Adebayo, A., & Oluwagbayela, B. (2023). Access to sexual and reproductive health services among adolescents and young people in primary health care centres in Ibadan, Nigeria. <https://doi.org/10.54985/peeref.2303p8720249>

2. Adebola, P. E., John-Akinola, Y. O., & Dipeolu, I. O. (2021). Sexual-related contents in music videos and associated risky sexual behaviour among undergraduate students in a Nigerian University. *Ibadan Journal of Sociology*, 12(1). <https://doi.org/10.36108/ijss/1202.21.0140>
3. Adenrele, T., & Olley, B. (2016). Influence of depression and the moderating effect of self esteem on risky sexual behaviour among University of Ibadan students. *Ibadan Journal of the Social Sciences*, 14(2). <https://doi.org/10.36108/ijss/6102.41.0280>
4. Afolabi, A. A., Ilesanmi, O. S., & Adebayo, A. M. (2022). Prevalence and pattern of internet addiction among adolescents in Ibadan, Nigeria: A cross-sectional study. *Cureus*. <https://doi.org/10.7759/cureus.22293>
5. Ajani, T. A., Oluwasola, T. A., A Ajani, M., & Ajani Bakare, R. (2017). The prevalence of, and risk factors for, mycoplasma genitalium infection among infertile women in Ibadan: A cross-sectional study. *International Journal of Reproductive BioMedicine*, 15(10), 613-618. <https://doi.org/10.29252/ijrm.15.10.3>
6. Aluh, D. O., Anyachebelu, O. C., Anosike, C., & Anizoba, E. L. (2018). Mental health literacy: What do Nigerian adolescents know about depression? *International Journal of Mental Health Systems*, 12. <https://doi.org/10.1186/s13033-018-0186-2>
7. Akanni, O. Otakpor & Alexander N. (2016). Psychological distress and resilience: a study of prevalence and association among school-attending adolescents in Benin-City. *Sri Lanka Journal of Psychiatry*. 7. 18. 10.4038/sljpsyc.v7i1.8099.
8. Atilola, Olayinka; Balhara, Yatan; Stevanovic, Dejan; Avicenna, Mohamad & Kandemir, Hasan. (2013). Self-Reported Mental Health Problems Among Adolescents in Developing Countries. *Journal of developmental and behavioral pediatrics: JDBP*. 34. 129-137. 10.1097/DBP.0b013e31828123a6.
9. Balogun, F., & Olatunde, O. (2020). Describing sexting pattern, predictors, and associated risky sexual behaviors among post-secondary school young people in Ibadan, Nigeria. <https://doi.org/10.4135/9781529730562>
10. Buelow, M. T. (2020). Disruptions of mood: Positive and negative affect, depressive disorders, and bipolar disorders. *Risky Decision Making in Psychological Disorders*, 113-134. <https://doi.org/10.1016/b978-0-12-815002-3.00006-1>
11. Chand, S. P & Marwaha R. (2014). National Institutes of Health Anxiety definition. [Updated 2023 Apr 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK470361/>
12. Chinenye, Onyemaechi (2014). American Psychiatric Association Expert Question and Answer on Depression. <https://www.psychiatry.org/patients-families/depression/what-is-depression>
13. Cooper, M. L., Russell, M., Skinner, J. B., Frone, M. R., & Mudar, P. (1992). Stress and alcohol use: Moderating effects of gender, coping, and alcohol expectancies. *Journal of Abnormal Psychology*, 101(1), 139-152.
14. Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and risky sexual behavior among adolescents and young adults: A functional perspective. *Journal of Personality and Social Psychology*, 75(6), 1528-1558.
15. Cowie, H., & Colliety, P. (2017). Addressing the mental health and emotional needs of children who bully. *School Bullying and Mental Health*, 90-100. <https://doi.org/10.4324/9781315537733-12>
16. Desmennu, A. T., Titiloye, M. A., & Owoaje, E. T. (2018). Behavioural risk factors for sexually transmitted infections and health seeking behaviour of street youths in Ibadan, Nigeria. *African Health Sciences*, 18(1), 180-187. <https://doi.org/10.4314/ahs.v18i1.23>
17. Elkington, K. S., Bauermeister, J. A., & Zimmerman, M. A. (2010). Psychological distress, substance use, and HIV/STI risk behaviors among youth. *Journal of Youth and Adolescence*, 39(5), 514-527.
18. Engel, G. L. (1981). The clinical application of the biopsychosocial model. *Journal of Medicine and Philosophy*, 6(2), 101-124. <https://doi.org/10.1093/jmp/6.2.101>
19. Epel, E. S., Crosswell, A. D., Mayer, S. E., Prather, A. A., Slavich, G. M., Puterman, E., & Mendes, W. B. (2018). More than a feeling: A unified view of stress measurement for population science. *Frontiers in neuroendocrinology*, 49, 146–169. <https://doi.org/10.1016/j.yfrne.2018.03.001>
20. Fatiregun, A., Osungbade, K., & Olumide, E. (2006). Prevalence of urinary schistosomiasis among secondary school students in Ibadan, Nigeria. *Tropical Journal of Health Sciences*, 13(2). <https://doi.org/10.4314/tjhc.v13i2.36690>

21. Ferede, T. A., Muluneh, A. G., Wagnew, A., & Walle, A. D. (2023). Prevalence and associated factors of early sexual initiation among youth female in sub-Saharan Africa: A multilevel analysis of recent demographic and health surveys. *BMC Women's Health*, 23. <https://doi.org/10.1186/s12905-023-02298-z>
22. Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2015). Toward a new definition of mental health. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 14(2), 231–233. <https://doi.org/10.1002/wps.20231>
23. Grello, C. M., Welsh, D. P., & Harper, M. S. (2016). No strings attached: The nature of casual sex in college students. *Journal of Sex Research*, 43(3), 255-267.
24. Hadjistavropoulos, H. D., Peynenburg, V., Mehta, S., Adlam, K., Nugent, M., Gullickson, K. M., Titov, N., & Dear, B. (2020). An internet-delivered cognitive behavioral therapy for depression and anxiety among clients referred and funded by insurance companies compared with those who are publicly funded: Longitudinal observational study. *JMIR Mental Health*, 7(2), e16005. <https://doi.org/10.2196/16005>
25. Hall, K. S., Kusunoki, Y., Gatny, H., & Barber, J. (2022). Stress symptoms and frequency of sexual intercourse among young women. *Journal of Adolescent Health*, 50(6), 553-558.
26. Hallfors, D. D., Waller, M. W., Bauer, D., Ford, C. A., & Halpern, C. T. (2014). Which comes first in adolescence—sex and drugs or depression? *American Journal of Preventive Medicine*, 29(3), 163-170.
27. Hock-Long, L., Herceg-Baron, R., Cassidy, A. M., & Whittaker, A. (2020). Can we predict sexual risk behaviour? A review of the predictive validity of sexual risk behaviour assessments. *Journal of Forensic Psychiatry & Psychology*, 21(3), 436-463.
28. Leigh, B. C., & Stall, R. (1993). Substance use and risky sexual behavior for exposure to HIV: Issues in methodology, interpretation, and prevention. *American Psychologist*, 48(10), 1035-1045.
29. Levin, R., & Both, S. (2022). Sexual desire: The roles of anxiety, cortisol, and appetite. *Current Sexual Health Reports*, 1(4), 117-122.
30. Meade, C. S., & Sikkema, K. J. (2015). HIV risk behavior among adults with severe mental illness: A systematic review. *Clinical Psychology Review*, 25(4), 433-457.
31. Monehin, J., Araoye, M., & Aderibigbe, S. (2009). Circumstances of debut sexual intercourse among out-of-school adolescents in Ilorin, Nigeria. *Nigerian Journal of Clinical Medicine*, 1(1). <https://doi.org/10.4314/njcm.v1i1.48638>
32. Nafisa Loveth, A., & Florence Isoken, O. (2020). Eliciting social cultural predictors of risky sexual behaviour among adolescents and young adults in Nigeria. *Malaysian Journal of Movement, Health & Exercise*, 9(2). <https://doi.org/10.15282/mohe.v9i2.437>
33. Nwafor, J. I., Okedo-Alex, I. N., & Ikeotuonye, A. C. (2020). Prevalence and predictors of depression, anxiety and stress symptoms among pregnant women during COVID-19-related lockdown in Abakaliki, Nigeria. <https://doi.org/10.1101/2020.08.30.20184697>
34. Odimegwu, C. O., & Ugwu, N. H. (2022). A multilevel mixed effect analysis of neighbourhood and individual level determinants of risky sexual behaviour among young people in South Africa. *Reproductive Health*, 19(1). <https://doi.org/10.1186/s12978-022-01407-9>
35. Ofole, N. M (2023). Resilience, attitude towards substance use and gender as predisposing factors of risky sexual activities among adolescents in Ibadan Oyo state, Nigeria. *Developing Country Studies*. <https://doi.org/10.7176/dcs/13-5-04>
36. Oladokun, A., Morhason-Bello, I., Enakpene, C., Owonikoko, K., Akinyemi, J., & Obisesan, K. (2007). Sexual behaviour and contraceptive usage of secondary school adolescents in Ibadan, Nigeria. *Journal of Reproduction and Contraception*, 18(4), 279-288. [https://doi.org/10.1016/s1001-7844\(07\)60034-0](https://doi.org/10.1016/s1001-7844(07)60034-0)
37. Omisore, A., Oyerinde, I., Abiodun, O., Aderemi, Z., Adewusi, T., Ajayi, I., Fagbolade, T., & Miskilu, S. (2022). Factors associated with risky sexual behaviour among sexually experienced undergraduates in Osun state, Nigeria. *African Health Sciences*, 22(1), 41-50. <https://doi.org/10.4314/ahs.v22i1.6>
38. Pentz, M. A., Sprinthall, N. A., & Fisher, J. E. (1990). Stress management and substance use. In M. G. Glantz & R. W. Pickens (Eds.), *Vulnerability to drug abuse* (pp. 278-333). American Psychological Association.
- Rehm, J., Room, R., & Monteiro, M. (2015). Alcohol use. In M. Ezzati, A. D. Lopez, A. Rodgers, & C. J. L. Murray (Eds.), *Comparative quantification of health risks: Global and regional burden of disease attributable to selected major risk factors* (Vol. 1, pp. 959-1108). World Health Organization.

39. Reisner, S. L., Mimiaga, M. J., Skeer, M., Bright, D., Cranston, K., Isenberg, D., & Mayer, K. H. (2019). Clinically significant depressive symptoms as a risk factor for HIV infection among black MSM in Massachusetts. *AIDS and Behavior*, 13(4), 798-810.
40. Shrier, L. A., Harris, S. K., Sternberg, M., & Beardslee, W. R. (2019). Associations of depression, self-esteem, and substance use with sexual risk among adolescents. *Preventive Medicine*, 33(3), 179-189.
41. Stulhofer, A., Matkovic, T., & Cohen, N. (2017). PL-34 effects of pornography use on adolescents' sexual debut and condom use: A longitudinal assessment. *The Journal of Sexual Medicine*, 14(Supplement\_4b), e220-e220. <https://doi.org/10.1016/j.jsxm.2017.04.105>
42. Toyin, A. F., & Elizabeth, E. O. (2019). Efficacy of cognitive Behavioural therapy and logotherapy in reducing risky sexual behaviour among in-school adolescents in Benin metropolis Edo state, Nigeria. *Journal of Advances in Medicine and Medical Research*, 1-11. <https://doi.org/10.9734/jammr/2019/v3i1i630302>
43. Tripodi, F. (2020). Sexual interview: Mental health and relationship issues. *Psychiatry and Sexual Medicine*, 93-107. [https://doi.org/10.1007/978-3-030-52298-8\\_9](https://doi.org/10.1007/978-3-030-52298-8_9)
44. World Health Organization. (2019). Mental health and substance use. Retrieved from <https://www.who.int/teams/mental-health-and-substance-use>