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Research Article

Risk-Taking Behaviour, A Belief-Driven Engagement: Implication For Adult Mental Health In Semi Urban Nigeria

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Article Info

Received: March 25, 2026
Accepted: April 16, 2026
Published: April 20, 2026

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Citation: Haa N Terry, Makdet Dachalson EM, Karik H., (2026) "Risk-Taking Behaviour, A Belief-Driven Engagement: Implication For Adult Mental Health In Semi Urban Nigeria." International Journal of Medical Case Reports and Medical Research, 5(1); DOI: 10.61148/2994-6905/IJMCRMR/0179.

Abstract

Background:
Risk-taking behaviour is often conceptualized as impulsive or maladaptive; however, in low-resource settings, it may represent an adaptive response shaped by belief systems and structural constraints. Despite growing interest in global mental health, limited research has examined how culturally embedded beliefs influence risk engagement and its psychological consequences. This study investigated belief-driven risk-taking behaviour and its implications for adult mental health in a semi-urban Nigerian context.

Methods:
A convergent mixed-methods design was employed among 197 adults in Jos South Local Government Area, Nigeria. Quantitative data were collected using structured questionnaires assessing domain-specific risk-taking (economic, occupational, environmental, and substance-related), alongside psychological outcomes. Qualitative data were obtained through in-depth interviews and analysed using Interpretative Phenomenological Analysis (IPA) to explore how belief systems shape risk perception, justification, and emotional regulation. Quantitative analyses included descriptive and inferential statistics, while qualitative findings provided contextual interpretation.

Results:
Risk-taking behaviour was prevalent across multiple domains and was patterned by structural exposure rather than isolated impulsivity. Belief systems emerged as central mechanisms influencing engagement, functioning as motivational drivers, cognitive filters, and emotional regulators. Quantitative findings showed significant associations between higher risk engagement and adverse psychological outcomes, including distress and fear. Qualitative insights revealed dual psychological processes: protective mechanisms (e.g., faith, optimism, and normalization of loss) mitigated acute anxiety and supported resilience, whereas vulnerability mechanisms (e.g., chronic stress exposure, financial instability, and substance use) contributed to emotional distress, regret, and cognitive simplification. These findings indicate that risk-taking is both adaptive and psychologically burdensome.

Conclusions:
Belief-driven risk-taking reflects a complex interplay between cognitive, cultural, and structural factors in shaping mental health outcomes. While such behaviours may support survival and economic adaptation in resource-constrained environments, they also impose cumulative psychological strain. Interventions should integrate culturally grounded cognitive approaches with structural strategies addressing economic insecurity and occupational risks. These findings underscore the need for context-sensitive mental health frameworks in semi-urban African settings.

Keywords: Risk-taking behaviour; Belief systems; Mental health

Introduction

Risk-taking behaviour among adults remains a critical yet under-theorized determinant of mental health outcomes in low- and middle-income countries (LMICs) (Patel et al., 2018; Kessler et al., 2010). While risk engagement has often been conceptualized through economic vulnerability, substance exposure, or socio-demographic predictors, growing evidence suggests that belief systems serve as powerful cognitive drivers shaping how individuals interpret, justify, and engage in risky behaviours (Ajzen, 1991; De Ridder et al., 2012). In low-resource settings, where structural constraints coexist with cultural resilience narratives, beliefs may function not merely as passive attitudes but as active psychological frameworks that legitimize risk as a pathway to survival, status attainment, or emotional regulation (Singh et al., 2020; Ebigbo, 2015).

In semi-urban regions of Nigeria, socio-economic transitions, urbanization pressures, limited formal employment opportunities, and constrained access to mental health services create environments in which adults must navigate uncertainty daily (World Bank, 2021; Omigbodun & Olayinka, 2016). Within these contexts, risk-taking—whether financial, behavioural, relational, or substance-related—may be framed as adaptive, necessary, or even virtuous. Such belief-driven rationalizations can significantly influence patterns of alcohol consumption, coping strategies, and exposure to psychological distress (Adejumo et al., 2019; Obot & Room, 2005). However, despite the growing global prioritization of mental health within the Sustainable Development Goals (SDG 3) (United Nations, 2015), limited empirical attention has been paid to how culturally embedded belief systems shape risk engagement and, by extension, adult mental health in semi-urban African settings (Gureje et al., 2015).

Globally, mental health discourse increasingly emphasizes social determinants, yet cognitive determinants—particularly culturally situated beliefs—remain insufficiently integrated into prevention models in LMICs (Patel et al., 2018; Lund et al., 2011). The dominant frameworks often derive from high-income contexts and may inadequately capture the lived realities of adults in semi-urban Nigeria, where communal norms, spiritual worldviews, gender expectations, and economic precarity intersect (Adewuya & Makanjuola, 2009). Understanding belief-driven risk engagement therefore provides a critical bridge between global mental health theory and localized psychosocial experience.

This study advances the field by examining how belief systems influence risk-taking behaviour among adults in a semi-urban Nigerian setting, and how such behaviours relate to broader mental health implications. By situating risk engagement within a culturally responsive and contextually grounded framework, the research contributes to three critical areas: (1) the cognitive determinants of risk in low-resource environments, (2) the intersection of belief systems and adult mental health, and (3) the development of culturally informed intervention strategies (Ajzen, 1991; Gureje et al., 2015).

Ultimately, investigating belief-driven risk engagement moves beyond deficit-based narratives of vulnerability. It foregrounds agency, meaning-making, and psychosocial adaptation while simultaneously interrogating how certain belief structures may exacerbate exposure to harm. This nuanced perspective is essential for designing mental health interventions that are not only evidence-based but culturally resonant and structurally realistic within semi-urban Nigerian contexts (Lund et al., 2011; Singh et al., 2020).

Despite growing recognition of risk-taking behaviour as a determinant of mental health, several critical gaps persist in the literature, particularly in low-resource, semi-urban settings in Nigeria. By addressing these gaps, this research aims to advance both theory and practice, providing nuanced insights into the cognitive, cultural, and psychosocial determinants of adult risk engagement in semi-urban Nigeria. Filling these gaps is critical for developing interventions that are contextually relevant, theoretically grounded, and effective in promoting adult mental health in low-resource settings.

Theoretical Framework

Theory of Planned Behaviour (TPB)

This study is anchored on the **Theory of Planned Behaviour (TPB)**, a widely applied socio-cognitive model for explaining and predicting human behaviour. The theory was originally developed by Ajzen (1991) and proposes that **behaviour is primarily determined by behavioural intention**, which in turn is influenced by three key constructs: **attitudes toward the behaviour, subjective norms, and perceived behavioural control**. These constructs collectively explain how individuals form intentions to engage in specific behaviours and how those intentions translate into actual actions. TPB has been widely applied in public health, psychology, and behavioural research to understand risky and health-related behaviours.

According to TPB, **attitude toward behaviour** refers to an individual's positive or negative evaluation of performing a particular action. Attitudes are formed by underlying beliefs about the consequences of behaviour and the value placed on those consequences. In the context of risk-taking behaviour, individuals may develop favourable attitudes toward risky activities when they perceive potential benefits such as economic gain, social recognition, or excitement. In semi-urban Nigerian contexts, such attitudes may be reinforced by cultural beliefs, economic hardship, or perceptions of resilience and personal invulnerability. When individuals perceive risk-taking behaviours as beneficial or culturally acceptable, they are more likely to form strong intentions to engage in them.

The second component, **subjective norms**, refers to the perceived social pressure from significant others—such as family members, peers, or community leaders—to perform or avoid a behaviour. Social expectations often influence behavioural decisions, particularly in collectivist or community-oriented societies. In many African contexts, social norms and cultural expectations can form individual behaviour. Individuals may engage in risk-taking activities because such behaviours are normalized within peer groups or communities. Subjective norms therefore play a crucial role in determining whether individuals perceive risk-taking behaviour as acceptable or socially endorsed.

The third construct, **perceived behavioural control**, reflects an individual's perception of their ability to perform a behaviour. This concept is closely related to self-efficacy and perceived access to resources or opportunities. When individuals believe they have control over a behaviour, they are more likely to intend to perform it. In the context of risk-taking behaviour, perceived behavioural

control may include beliefs about one's ability to manage potential negative consequences or confidence in avoiding harm despite engaging in risky activities. Studies applying TPB show that perceived behavioural control significantly predicts behavioural intentions and behavioural outcomes across various health-related behaviours.

These three components—attitudes, subjective norms, and perceived behavioural control—jointly influence **behavioural intention**, which represents the motivational readiness to perform a behaviour. Behavioural intention is considered the most immediate predictor of actual behaviour. Empirical studies have shown that TPB constructs can explain substantial variance in behavioural intentions and behaviours, particularly in domains involving risk-related decision-making. For example, a meta-analysis examining risky driving behaviours found that TPB variables explained **30–51% of the variance in behavioural intention and up to 48% of behavioural outcomes**, demonstrating the model's strong predictive capacity for risk-related behaviours.

In relation to the present study, TPB provides a useful framework for understanding how **belief-driven cognitions influence risk-taking behaviour among adults in semi-urban Nigeria**. Beliefs embedded in religious, cultural, or social contexts may form attitudes toward risky behaviours, influence perceived social expectations, and affect perceptions of personal control over behavioural outcomes. These belief-driven processes may ultimately lead individuals to engage in behaviours that expose them to psychological stress, trauma, or substance-related harm. Over time, repeated engagement in such behaviours may contribute to adverse **mental health outcomes**, including anxiety, depression, and psychological distress.

Thus, the Theory of Planned Behaviour provides a structured explanation for how **belief systems translate into behavioural intentions and risk-taking actions**, which subsequently influence adult mental health. By integrating TPB into this study, the research seeks to examine how cognitive beliefs and social influences interact with behavioural decisions within semi-urban Nigerian communities.

Problem Statement

Adults in semi-urban Nigeria face multiple socio-economic and cultural pressures that shape their engagement in risk-taking behaviours (Omigbodun & Olayinka, 2016; World Bank, 2021). While these behaviours can be adaptive, they may also contribute to negative mental health outcomes (Patel et al., 2018; Lund et al., 2011). Existing research predominantly focuses on demographic or environmental predictors of risk, neglecting the role of belief as cognitive determinants (Ajzen, 1991; Singh et al., 2020). This gap limits our understanding of how culturally embedded beliefs influence risk engagement and its implications for adult mental health (Gureje et al., 2015; Adewuya & Makanjuola, 2009). Addressing this problem is essential for designing contextually relevant and theoretically grounded interventions in low-resource settings (United Nations, 2015; Ebigbo, 2015).

Aim and Objectives

The primary aim of this study is to investigate risk-taking behaviour as a belief-driven engagement in low-resource semi-urban settings and to examine its implications for adult mental health outcomes in Nigeria.

The following are the specific study objectives:

1. **Examine the relationship between belief and risk-taking behaviour** among adults in semi-urban Nigeria.
2. **investigate the prevalence and different patterns of risk-taking behaviour** in semi-urban communities.
3. **Would there will be a significant association between risk-taking behaviour and adult mental health outcomes**.

Hypothesis

1. There will be a significant relationship between belief and risk-taking behaviour among adults in semi-urban Nigeria.
2. **The prevalence and different patterns of risk-taking behaviour** will be significant among adults in semi-urban communities
3. **There will be an association between risk-taking behaviour and adult mental health outcomes**.

Method

This research adopts a qualitative research design. This method was utilized for the collection, analysis, interpretation, and integration of data. This research approach provides a deeper understanding of the research problem, addressing gaps that either approach alone might not fully capture.

Population and Sample

Population

Participants for this study were drawn from the general population within five districts—Du, Gyel, Vwang, Kuru, and Zawan—in Jos South Local Government Area, with a focus on adults aged 18 years and above. Participants were reached through research assistant who are familiar with the locations where the study is conducted.

Sample

Recruitment Process for interviews

The researcher used adults as participants for the structured interview, the data collection stopped at the point of saturation. The researcher establish rapport with some of the participants through the research assistant and suggest their interest in the one-on-one interview, the research collected their phone numbers and invite them at the appropriate date and time as earlier agreed. Participants that indicated interest responded to an open-ended question in a structured format for approximately 30 to 50 minutes. For the Focus Group Discussion (FGD), the researcher selected willing participants, then explain to them the aim and criterion for participation.

Sampling Technique

The researcher employed purposeful sampling techniques to select participants for the study, these participants provided more in-depth and insight into the problem being studied. In this study, Participants were recruited within Jos South Local Government Area. The purposeful sampling enables the researcher to obtain information from people who are knowledgeable about the phenomenon. Only available and willing participants expressed their experiences.

Criterion for Participation

Inclusion

Participants must be 18 years of age and above. They must willingly admit being residents of Jos South LGA as at the time of

research and have stayed for a minimum period of one year.

Exclusion

Those who are less than < 18 years were excluded. Participants who are not residing in Jos south during data collection were excluded.

Instrument for Data Collection

In the qualitative study utilized the following items:

1. An audio recorder
2. Dairy and pencil (writing materials) for noting non-verbal cues during interviews
3. A printed copy of interview guide.

The interview guide covered all the variables under research.

The researcher employed a semi-structured interview method. A total of 19 participants (male and female) were recruited across five districts. Focus Group Discussions (FGDs) were also conducted to explore how beliefs relate to risk-taking behaviour. This approach strengthened the internal reliability of the findings obtained from one-on-one interviews. Seven participants volunteered to provide information during the FGDs regarding beliefs about risk-taking behaviour. Each discussion session lasted approximately 50 minutes. Discourse Analysis (DA) was applied to examine naturally occurring accounts of participants experiences. Two participants were selected from each district to participate in the FGDs. An audio recorder was used during the discussions. The same interview guide employed for the one-on-one interviews was used in the FGDs. To enhance precision, writing materials were used to record nonverbal cues such as nodding, gestures, and side comments.

Procedures

Volunteers for the interview had a five-minute pre-session interview to appreciate and review the aim of the study and establish rapport. An interview guide was developed using open-ended questions, a recording device was used to ensure that information received are accurate. Participants were allowed to listen to the recorded interview to ensure it is theirs and consent to the use in the study. Then the data were transcribed for use: noting initially, emergent themes and thematic connection identified. These themes were presented in the result section.

The four criteria for data analysis process were met: *rigor, relevance, resonance,* and *reflexivity*. These criteria guided the analysis process and helped the researcher gain insight into participants' experiences concerning beliefs and risk-taking. The research process also provided participants with psychological first aid, counselling, and psychoeducation. Interview data were transcribed and reviewed for accuracy to ensure that participants' experiences were represented.

Ethical Consideration and Emergency Plan

All ethical guidelines for research involving human participants were observed, including informed consent and assurances for confidentiality. Participants were informed that their information would be used solely for research purposes and were provided with copies of the consent form detailing the nature and duration of the interviews. All interviews were audio-recorded and saved in a Google Drive. Although no participant exhibited signs of distress during data collection, provisions were made for psychological first aid and referrals to healthcare institutions if necessary.

Data Analysis

The **Interpretative Phenomenological Analysis (IPA)** was selected as the analytical framework. The researcher inductively analyse and contextualize participants' lived experiences. Some of the relevant responses are presented **verbatim** in the Results section. Furthermore, the three step analysis was adopted **(von Haeften et al.'s, 2001)** to explore the interaction between beliefs and risk-taking. All relevant themes were coded from IPA and included to explain belief and risk-taking interaction effect. **Moderation analysis** was conducted to determine how beliefs were associated with risk-taking behaviour. Subsequently, only those beliefs demonstrating significant relationships with the predictor variables were retained and discussed in relation to the dependent variables.

Results

This study employed **Interpretative Phenomenological Analysis (IPA)** to explore how adults in Jos South make sense of their risk-taking behaviour within a context of insecurity, economic uncertainty, and strong religious-cultural belief systems. IPA is appropriate because it prioritizes lived experience, meaning-making, and subjective interpretations of risk.

Step 1: Initial Inductive Coding (Meaning Units)

Table 1: Sample Initial Codes

Extract	Initial Code
"If I don't take risk I won't make it in life"	Success requires risk
"God will see me through"	Divine protection belief
"Even if I lose I can rise again"	Loss normalization
"I don't sleep in women house"	Moral-religious boundary
"Better they see my dead body"	Fatalistic survival logic
"If my mind tells me I just do it"	Intuitive impulsivity
"You either lose or gain"	Binary outcome cognition
"I was not bothered even after loss"	Emotional buffering
"Sometimes if I drink I enter the well"	Substance-facilitated risk

Note: From repeated readings of transcripts, experiential statements were coded line-by-line.

Step 2: Development of Emergent IPA Themes

Table 2: Superordinate themes

Emergent Themes	Sub-themes	Illustrative Quote
Risk as a Moral and Existential Obligation	Provider identity pressure Masculinity and duty Economic resilience ideology	"Particularly a man like me… I can travel without knowing where I am going because I need something to cater for my family."
Faith-Based Cognitive Shielding	Divine invincibility Spiritual rationalisation Prayer as psychological insurance	"God will help me." "I believe God will see me through."
Calculative but Optimistic Risk Framing	Risk as investment Gain-over-loss cognition Adaptive persistence after failure	"Even when I ran at loss I was not bothered… another way will work for me."
Fatalistic Binary Outcome Belief	"You either escape or collapse" Existential acceptance Emotional detachment	"Maybe you take risk and escape or you collapse. But me I believe I will succeed."
Impulsivity and Substance-Mediated Risk	Alcohol-facilitated courage Reduced threat perception Environmental vulnerability	"Sometimes if I drink I just enter the well."

Note: Participants frequently invoked divine protection to cognitively neutralize perceived danger. Participants distinguished between reckless and "calculative" risk, yet optimism bias was evident. Some participants linked alcohol consumption with diminished inhibition.

Step 3: von Haeften et al.'s (2001) Three-Step Interaction Model Applied

Following von Haeften et al.'s (2001) three-step analytic framework, the analysis explored:

1. **Belief Articulation** – What beliefs do participants hold?
2. **Cognitive Framing of Risk** – How are risks justified or interpreted?
3. **Behavioural Enactment and Consequence Meaning** – How beliefs translate into risk-taking and how outcomes are interpreted.

Table 3: Interaction Model

Step	Observed Pattern	Evidence
1. Belief System Formation	Risk = pathway to success, divine protection, masculine duty	"You must take risk to make it"
2. Cognitive Risk Justification	Downplaying danger via faith and optimism	"God will help me"
3. Behavioural Enactment	Engagement despite insecurity or prior losses	Mining wells, night travel, financial over-investment

Note: This confirms that beliefs do not merely accompany risk-taking — they *actively structure* risk cognition and emotional response.

Interaction Effect: Belief × Risk-Taking Behaviour

IPA revealed that: Strong success-oriented beliefs **amplify risk tolerance,** Religious beliefs **reduce perceived vulnerability,** Loss-normalization beliefs **buffer emotional consequences and** Substance use **moderates cognitive control mechanisms.** Thus, belief systems function as **cognitive moderators of perceived risk severity**, influencing behavioural thresholds.

Key Theoretical Interpretation

Within this semi-urban Nigerian context: Risk-taking is not deviance; it is *adaptive survival behaviour,* Faith operates as a psychological resilience mechanism, Optimism bias sustains persistence after loss, and Masculine provider identity intensifies exposure to danger. Beliefs therefore function as: Motivational drivers, Cognitive risk filters, Emotional stabilizers and Moral justifiers

Table 4: Observed Risk-Taking Patterns

Risk Pattern	Description
Economic/Entrepreneurial Risk	Buying failing vehicles, lending money, over-investment
Environmental/Physical Risk	Traveling during crisis, crossing rivers at night
Occupational Risk	Mining wells, late trading amid insecurity
Substance-Linked Risk	Alcohol-facilitated hazardous decisions
Moral/Identity-Based Risk	Refusing safer alternatives due to moral beliefs

The IPA revealed multiple distinct risk domains

Discussion

This IPA demonstrates that risk-taking among adults is not impulsive irrationality but a meaning-laden behavioural strategy formed by existential survival beliefs, faith-based cognitive shielding, and entrepreneurial optimism. Beliefs moderate both the perception and emotional interpretation of risk outcomes, thereby sustaining behavioural persistence even after significant loss. Substance use further amplifies this interaction by lowering inhibitory control, strengthening the belief-behaviour pathway.

This study examined how beliefs form risk-taking behaviour and its psychological implications among adults in semi-urban Nigeria. The findings demonstrate that risk engagement in this context cannot be adequately explained through traditional models that frame risk-taking primarily as impulsivity, sensation seeking, or individual pathology. Instead, the results suggest that risk-taking is a **meaning-laden behavioural strategy embedded within cultural belief, structural constraints, and identity expectations**. Participants consistently framed risk not as irrational behaviour but as an existential necessity linked to economic survival, social responsibility, and future mobility. Across participants, beliefs functioned as: Motivational triggers, Cognitive risk filters and Emotional stabilizers. The findings strongly support Hypothesis 1. Risk-taking behaviour was not independent of belief; rather, beliefs structured risk perception, justification, and persistence.

The responses from participants suggest how they perceived risk as **existential necessity; they framed risk-taking as mandatory for survival and economic mobility. Some Participants siad:**

"If you don't take risk, you will never make it in life."
"As a man, I must take risk to cater for my family."

Risk-taking behaviour was not incidental; it was belief-driven and identity-based.

For other participants who perceive risk as faith-based cognitive shielding, they frequently invoked divine protection when engaging in dangerous situations. According to these participants:

"God will see me through."
"Maybe God will help me."

Faith reduced perceived vulnerability, directly influencing behavioural thresholds.

From interview, some participants perceived risk as Loss normalisation and optimistic persistence. They said:

"You either gain or lose."
"Even when I lost money, I was not bothered."

Beliefs re-framed loss as temporary and survivable, encouraging repeated engagement in risk, this is consistent with cognitive theory (Beck, 1976), participants' internal schemas formed appraisal processes, recalibrating perceived threat and opportunity. Beliefs about masculinity, faith, and economic survival operated as interpretive filters that structured behavioural thresholds. In line with Social Cognitive Theory (Bandura, 1986), efficacy beliefs sustained repeated engagement despite prior loss, reinforcing behavioural persistence under uncertainty. These findings contribute to a growing body of global mental health literature emphasizing the importance of contextualizing behavioural decision-making within socio-cultural and structural environments.

Consistent with the **Theory of Planned Behaviour** (Ajzen, 1991), belief systems played a central role in developing behavioural intentions and subsequent actions. Participants' narratives indicated that beliefs influenced all three TPB components: attitudes toward risk, perceived social expectations, and perceived behavioural control. For example, success-oriented beliefs framed risk-taking as a desirable pathway to economic advancement, while masculine provide norms that reinforced subjective expectations that men should undertake risky ventures to support their families. At the same time, faith-based beliefs appeared to enhance perceived behavioural control by fostering confidence that negative outcomes could be managed or mitigated through divine protection or perseverance. These findings extend TPB by demonstrating that **culturally embedded beliefs operate as cognitive mechanisms that structure behavioural intentions in contexts characterized by structural insecurity and limited economic opportunity**.

A central contribution of the study lies in identifying belief systems as **cognitive moderators of risk perception and behavioural persistence**. Participants frequently invoked faith, optimism, and loss normalization to reinterpret uncertainty and reduce perceived vulnerability. Such cognitive reframing aligns with cognitive theory, which posits that internal schemas shape threat appraisal and decision-making processes (Beck, 1976). In the present context, beliefs about divine protection, personal resilience, and economic opportunity appeared to lower perceived risk severity and sustain behavioural engagement even after adverse outcomes. Similar patterns have been observed in research on optimism bias and resilience in uncertain environments, where individuals maintain behavioural persistence despite repeated losses or structural adversity (Sharot, 2011; Seligman, 1991). However, the present findings extend this literature by demonstrating how these cognitive processes are **embedded within cultural and religious meaning systems** rather than operating solely as individual psychological traits.

Another important finding concerns the **dual psychological consequences of belief-driven risk engagement that s**upport hypothesis 2. Participants described belief as providing emotional

buffering against distress, particularly through faith-based coping and optimistic interpretations of loss. Spiritual beliefs allowed individuals to reinterpret adverse events as temporary setbacks or divinely guided experiences, thereby reducing rumination and emotional collapse. As expressed by participants:

"There was crisis… but I followed the road."
"I stayed in my shop despite insecurity."

Financial and Business Risk was expressed in the following words:

"I bought a bus that was not working."
"I gave people money not knowing if they will pay."

These observations are consistent with research on religious coping, which shows that spiritual belief systems can facilitate meaning-making and emotional regulation during stressful life events (Pargament, 1997; Park, 2013). More recent evidence similarly indicates that spirituality is associated with improved psychological resilience and reduced symptoms of depression and anxiety across diverse populations (Aggarwal et al., 2023; Pankowski & Wytrychiewicz-Pankowska, 2023).

Despite these protective effects, belief-driven risk engagement also generated **psychological vulnerability**. Participants reported fear, regret, and emotional distress following financial losses or exposure to dangerous environments. Chronic engagement in hazardous activities—such as traveling through insecure routes, operating in unstable economic markets, or engaging in alcohol-facilitated risk—appeared to increase cumulative psychological strain. These findings align with research on the social determinants of mental health, which demonstrates that structural adversity and economic precarity contribute to psychological distress in low- and middle-income countries (Lund et al., 2011; Patel et al., 2018). Importantly, the present study suggests that belief systems may simultaneously mitigate and amplify these effects. While beliefs provide cognitive frameworks that reduce emotional collapse, they may also normalize repeated exposure to hazardous conditions, thereby increasing long-term psychological burden.

The findings also highlight the role of **gendered identity expectations** in association to risk-taking behaviour in line with Hypothesis 3. Many participants framed risk engagement as a moral obligation associated with masculine provider roles. Risk-taking was therefore not merely an economic decision but an identity-driven practice embedded within social norms surrounding responsibility and success. There are thematic evidence although participants rarely used clinical language, several indicators of mental health impact emerged: participants expressed risk-taking saying:

"There was crisis… but I followed the road."
"I stayed in my shop despite insecurity."

Financial and Business Risk was expressed in the following words:

"I bought a bus that was not working."
"I gave people money not knowing if they will pay."

Similar patterns have been documented in studies of masculinity and economic behaviour, where men often engage in high-risk activities to meet socially constructed expectations of provision, dominance, and status (Messerschmidt, 2018). In structurally constrained environments such as semi-urban Nigeria, these identity pressures may intensify exposure to economic and physical hazards while simultaneously legitimizing such behaviour within community norms.

Beyond individual cognition, the results underscore the importance of **structural context** in behavioural risk patterns. Participants described recurring exposure to economic uncertainty, environmental insecurity, and limited employment opportunities. These conditions appeared to blur the boundary between adaptive survival strategies and hazardous behaviour. In settings where formal safety nets are weak or absent, individuals may rely on informal economic ventures and risky mobility patterns to sustain livelihoods. Consequently, the prevalence of risk-taking behaviours observed in this study should not be interpreted solely as individual predispositions but as responses to broader structural pressures. This perspective aligns with ecological models of health behaviour, which emphasize that health-related actions arise from the interaction between individual cognition, social norms, community environments, and structural determinants (Dadaczynski et al., 2022; Hawkins et al., 2021; Naidoo et al., 2023).

Taken together, the findings suggest that risk-taking behaviour of adults in semi-urban Nigerian contexts operates through a **belief–cognition–behaviour pathway**. Beliefs structures how individuals interpret uncertainty, evaluate potential gains and losses, and regulate emotional responses to risk outcomes. These cognitive processes interact with social expectations and structural constraints to produce behavioural patterns that are simultaneously adaptive and psychologically demanding. By illuminating these mechanisms, the study contributes to research by integrating cognitive, cultural, and structural perspectives on risk behaviour.

Limitation

The study offers contextualized insight into belief-mediated risk engagement under structural constraint; however, causal direction, population generalizability, and diagnostic precision remain areas for further investigation.

Recommendation

Risk reduction strategies must engage belief systems rather than dismiss them. There is need for Faith-based mental health collaborations that may be effective. Furthermore economic empowerment will reduces existential risk pressure. In addition substance use interventions must consider occupational contexts and masculinity-informed programming is critical.

Conclusion

This study demonstrates that risk-taking behaviour among adults in semi-urban Nigeria is not merely a product of impulsive decision-making but a complex behavioural response cause by cultural beliefs, gendered social expectations, and structural economic pressures. Beliefs serve both protective and risk-amplifying functions, simultaneously sustaining resilience and increasing exposure to psychological strain. Recognizing this dual role is essential for developing culturally responsive mental health interventions and behavioural models that reflect the lived realities of populations in low-resource environments.

Declaration

Ethics approval and consent to participate:

All procedures were conducted in accordance with the Declaration of Helsinki and relevant institutional and national regulations. Written informed consent was obtained from all participants prior to enrolment. For participants who were unable to provide consent independently, consent was obtained from a legally authorized representative, and assent was sought from the participant when appropriate. Participants were informed about the study purpose, procedures, potential risks and benefits, confidentiality measures,

and their right to withdraw at any time without any consequences. To ensure data privacy, identifiable information was handled with strict confidentiality and stored separately from study data. Only study personnel directly involved in the conduct and analysis of the research had access to de-identified datasets. Withdrawal from the study did not affect clinical care or access to any services. After withdrawal, previously collected data were retained only to the extent required for ethical and legal compliance; participants were informed of this prior to enrolment.

Consent for publication:
Not applicable.

Availability of data and materials:
Available from corresponding author on request.

Competing interests:
None declared.

Funding:
No external funding.

Authors' contributions:
Haa Nevin Terry led the study; Edward M.M.Dachalson supervised; Haruna Karik reviewed.

Acknowledgements:
We thank all participants.

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