

INSURANCE UPTAKE AND RISK-EXPOSURE PERCEPTION AMONG RESIDENTS OF ARUA CITY, UGANDA

BILL ABE JOHN BAKATA

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**UGANDA CHRISTIAN
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DECLARATION

The study report titled "Insurance Uptake and Risk Exposure Perception in Arua City" is the original work of me, BILL ABE JOHN BAKATA. It hasn't been published anywhere and hasn't been submitted to any university or other higher education institution for an academic award.

Every information source utilized in this work has been properly cited.

Signed  Date 13/04/2026

APPROVAL

This is to certify that the research report titled "Insurance Uptake and Risk Perception in Arua City", conducted by BILL ABE JOHN BAKATA, has been submitted for examination with my approval as the appointed academic supervisor.

Supervisor: **Dr. OLOBO MAURICE**

Signature:

Date:

DEDICATION

I dedicate this work to my family and to everyone who has supported, inspired, and encouraged me throughout my academic journey.

A special dedication goes to Light House Church, pastor Client, Dreamland, Pastor Bill and Pam, and Emma, whose financial, spiritual and moral support has been a constant source of strength.

Your impact on my life and studies is deeply appreciated.

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ABSTRACT

This study examined the relationship between risk-exposure perception and insurance uptake among residents of Arua City. Insurance helps individuals and businesses protect themselves against unexpected financial losses including illness, theft, fire, and income instability. Uganda has insurance firms, but uptake is still low, particularly in secondary places like Arua.

The research focused on determining how risk-exposure perception affects the decision of Arua residents to buy insurance. Insurance is an important safety net for people and enterprises by compensating for losses due to accidents, theft, and fire. On the other hand, insurance in Uganda is still a luxury for most people especially in small towns.

A cross-sectional research design was adopted, and data were collected from 60 respondents using structured questionnaires. Data were analyzed using descriptive statistics, correlation analysis, and logistic regression.

The findings revealed that only 23% of the respondents had insurance coverage. Although respondents reported high levels of risk exposure, this did not consistently translate into insurance uptake. A moderate positive relationship was found between risk perception and insurance uptake ($r = 0.56$, $p < 0.01$). Trust in insurance providers emerged as a stronger predictor of uptake.

The study concludes that improving trust and awareness is essential for increasing insurance adoption in Arua City.

CHAPTER 1 INTRODUCTION

1.1 Introduction

This chapter presents the background, problem statements, objectives, purpose, and other key concepts of the study in order to establish a foundation of understanding of the re- search topic.

1.2 Background of Study

Insurance is widely recognized as a financial tool used to manage risk by transferring potential financial losses to insurers (World Bank, 2021). It provides protection against unexpected events such as illness, accidents, fire, and property loss.

Worldwide, insurance plays an important role in stabilizing economies, especially in developed countries where insurance penetration is high. This is largely because such have well-established regulatory frameworks and levels of financial literacy (Organization for Economic Co-operation and Development [OECD], 2019). on the other hand, in many developing countries, particularly in Sub-Saharan Africa, the uptake of insurance remains very low mainly because the population is poor, there is little knowledge of insurance and the people o not trust the insurers (Alhassan, 2020; Adera, 2019).

In Uganda, the total number of people insured is less than 5% with the largest percentage of insurance being the compulsory motor third-party (Insurance Regulatory Authority of Uganda [IRA], 2023). According to the Insurance Regulatory Authority of Uganda (2024), insurance penetration in Uganda represents only about 0.8% of GDP, which shows a huge difference between the potential market and the actual one. The Uganda insurers Association 2024 points out an “Awareness-uptake gap” stating that even though 97% of Uganda businesses know about insurance only 31% have any kind of insurance. It is this gap between people knowing about insurance and actually using it is very important area for study in secondary cities like Arua.

Arua City is situated in the West-Nile region of Uganda, an area that has experienced a considerable increase in Urbanization. As a result of this growth, people living in this area Fce more rsiks such as unreliable income, theft, and sickness (Uganda Bureau of Statistics [UBOS], 2022). On the other hand, the number of people accessing insurance is still very low.

1.3 Statement of the Problem

Insurance uptake in Arua City is still very low despite the people there being exposed to various risks such as illness, theft, fire outbreaks and even income instability. Most households and small businesses are still depending on informal coping mechanisms which even make them more vulnerable financially (UBOS, 2022). Study by Nanviti and Pamuk (2025) in rural Uganda has shown that due to liquidity constraints as well as lack of familiarity with the claims processes, households

often choose informal risk-sharing networks rather than formal insurance. In fact, this dependence on informal mechanisms is probably also common in Arua City.

In Uganda, insurance penetration remains below 5%, with most coverage concentrated in compulsory motor third-party insurance (IRA, 2023). This indicates limited adoption of voluntary insurance products such as health and life insurance. The most recent data from the Uganda Insurers Association (2025) reveals that while 94% of Ugandans have heard of insurance, only 10.7% actually hold an insurance policy, and critically, 42% do not understand how insurance works. This profound knowledge gap represents a significant barrier to uptake.

Theoretically, individuals who perceive themselves to be at higher risk are expected to adopt protective measures such as insurance (Slovic, 2016). However, this relationship is not consistently observed in many developing contexts, including Uganda. Previous studies have identified factors such as low awareness, affordability challenges, and lack of trust as barriers to insurance uptake (Mutebi, 2019; Rwabuganda, 2018).

This disconnect between high-risk exposure and low insurance adoption raises concerns about financial resilience of households and small businesses in Arua City. However, limited research has specifically examined how risk-exposure perception influences insurance uptake in this context.

Therefore, this study seeks to examine the relationship between risk-exposure perception and insurance uptake among residents of Arua City.

1.4 Purpose of the Study

The goal of this study was to investigate how Arua City citizens' perceptions of risk exposure affect their decision to purchase insurance.

1.5 Objectives of the Study

The study was guided by the following objectives:

To assess the level of risk-exposure perception among residents of Arua City.

To determine the level of insurance uptake among residents of Arua City.

To examine the relationship between risk-exposure perception and insurance uptake in Arua City.

To identify key barriers affecting insurance uptake among residents of Arua City.

1.6 Research Questions

The study sought to answer the following research questions:

What is the level of risk-exposure perception among residents of Arua City?

What is the level of insurance uptake among residents of Arua City?

How does risk-exposure perception influence insurance uptake in Arua City?

What barriers affect insurance uptake among residents of Arua City?

1.7 Scope of the Study

1.7.1 Geographical Scope

The study was conducted in Arua City, located in the West Nile region of Uganda focusing on divisions such as Ayivu and Arua central.

1.7.2 Content Scope

The study concentrated on insurance uptake as the dependent variable and risk-exposure perception as the independent factor. Intervening elements included knowledge of insurance services and confidence in insurance companies.

1.7.3 Time Scope

The study used material published after 2015 and data gathered in less than a year.

1.8 Justification of Study

According to earlier research, financial decisions like the acceptance of insurance are influenced by behavioral factors, including risk perception (Mutebi, 2019).

1.9 Significance of the Study

The following parties are anticipated to gain from the study's findings:

1.10 Insurance companies

The study sheds light on the behavioral elements that affect the uptake of insurance, especially the significance of risk perception and trust. These results could be used by insurance companies to develop customer-focused products, enhance communication tactics, and bolster trust-building programs.

1.10.1 Insurance Regulatory Authority of Uganda

The study provides data that could help formulate policies to promote inclusive insurance in secondary cities, improve consumer protection, and increase transparency in the settlement of claims.

1.10.2 Government and Local Authorities

The results could help local governments in Arua City and other comparable metropolitan areas develop policies for fostering resilience and financial inclusion among households and small businesses.

1.10.3 Residents of Arua City

The study may promote greater knowledge and well-informed financial protection decision-making by emphasizing the value of insurance as a risk-management tool.

1.10.4 Academicians and Researchers

The study contributes empirical data from a Ugandan secondary urban region to the corpus of existing work on insurance acceptance. It could serve as a road-map for future studies on the behavioral aspects of insurance.

1.11 Conceptual Framework

INSURANCE UPTAKE PERCEPTION

- Willingness to pay premium
- Enrollment in insurance
- Continuity of coverage

RISK-EXPOSURE

- Perceived vulnerability
- Perceived severity of risk

Explanation: The framework demonstrates how risk perception affects insurance uptake, willingness to pay, enrollment, and coverage continuity. Risks are more likely to be taken and maintained by those who perceive them as serious and feel more vulnerable.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

In this chapter, we discuss earlier research that focused on people's perceptions of risk exposure and how that influences their decision to take up insurance. We first look at the relevant theories and key concepts, and then we explore some empirical studies at the international, regional, and national levels. The main aim of this chapter is twofold: to offer a theoretical and empirical foundation for the current study, and to point out the gaps that make it necessary to investigate the link between risk-exposure perception and insurance uptake in Arua City.

2.2 Theoretical Review

This study was guided by three main theories: Expected Utility Theory, Risk Perception Theory, and Trust Theory. These theories help explain how individuals make decisions when faced with uncertainty when deciding whether to purchase insurance.

2.2.1 Expected Utility Theory

Expected Utility Theory explains how individuals make decisions under conditions of uncertainty by comparing expected benefits and costs. In the context of insurance, individuals are more likely to purchase insurance if the perceived benefits of protection outweigh the cost of premiums (Camerer, 2019).

In this study, the theory helps explain how residents of Arua City evaluate whether to adopt insurance based on perceived risks and financial considerations.

However, the theory assumes that individuals make rational decisions, which may not always be the case in developing countries. While studies such as Alhassan (2020) identify affordability as a key barrier, Mutebi (2019) emphasizes trust, suggesting that behavioral factors may be more influential than economic constraints.

2.2.2 Risk-Perception Theory

Risk perception is shaped by personal experiences, emotions, and the environment in which a person lives (Slovic, 2016). For example, someone who has previously experienced a fire outbreak may perceive risk differently from someone who has not.

However, high risk perception does not always lead to insurance uptake, particularly in developing contexts where individuals rely on informal coping mechanisms. This limits the explanatory power of the theory when used alone.

Some studies indicate that people who feel more vulnerable to risk are more likely to consider protective measures like insurance (Kim et al., 2020). However, in developing countries, normalization of risks and reliance on informal support may weaken this relationship (Adera, 2019). Nanyiti (2020) found a positive relationship between customer perception of risk and insurance uptake in Uganda, suggesting that perceived vulnerability does influence insurance decisions, though other factors moderate this relationship.

2.2.3 Trust Theory

Insurance agreements usually involve paying premiums now and receiving compensation later if loss occurs. Because of this delay, trust becomes very important. Without trust, people may hesitate to enroll in insurance schemes (Guiso et al., 2018).

While Trust Theory explains the importance of confidence in insurance providers, it does not fully account for other factors such as affordability and awareness, which may also influence insurance decisions.

In Uganda, concerns about claims settlement delays and lack of transparency have negatively affected public confidence in insurance providers (IRA, 2022; Mutebi, 2019). Recent empirical evidence confirms that trust not only directly influences insurance uptake but also mediates the relationship between insurance literacy and financial inclusion in Uganda (Kiwanuka & Sibindi, 2025). This suggests that even when residents understand insurance products, low confidence in providers remains a critical barrier. Okello (2025) further confirms that agent sales strategies that build trust and differentiate products effectively are key drivers of insurance uptake in the Ugandan context.

Research from the East African region supports these findings. Kramer et al. (2024), in a field experiment in neighboring Ethiopia, demonstrated that social comparison and perceptions of fairness significantly influence demand for insurance. Their findings indicate that individuals are more likely to enroll in insurance schemes when they perceive the process as fair and when they observe peers benefiting from similar coverage.

2.3 Conceptual Review

2.3.1 Risk-Exposure Perception

Risk-exposure perception refers to an individual's assessment of their vulnerability to potential losses such as illness, accidents, theft, income loss, or property damage (Slovic, 2016). This perception is shaped by personal experience, socio-economic conditions, awareness levels, and environmental factors.

Empirical studies indicate that higher perceived exposure to risk increases willingness to consider insurance as a protective mechanism (Kim et al., 2020). However, in developing contexts, this relationship is often weakened by affordability challenges and mistrust of insurance providers (Adera, 2019).

2.3.2 Insurance Uptake

Insurance uptake refers to the extent to which individuals or households enroll in and maintain insurance coverage. It is commonly measured through ownership of insurance policies, willingness to pay premiums, and continuity of coverage (World Bank, 2021).

In Uganda, insurance uptake remains low and is dominated by compulsory products such as motor third-party insurance. Voluntary insurance, including health, life and property insurance, remains underutilized, particularly among urban low-income populations (IRA, 2023; Rwabuganda, 2018).

2.3.3 Awareness of Insurance Services

Awareness refers to an individual's knowledge and understanding of insurance products, benefits, policy conditions, and claims procedures. Limited insurance literacy has been identified as a major barrier to insurance uptake in developing countries (OECD, 2019).

The Uganda Insurers Association (2025) reports that 42% of Ugandans do not understand how insurance works, despite high levels of basic awareness (94% have heard of insurance). This gap between basic awareness and functional understanding represents a critical barrier to uptake. Studies in Uganda indicate that individuals with higher levels of insurance awareness are more likely to enroll in insurance schemes, while low awareness contributes to misconceptions and mistrust (Mutebi, 2019).

2.3.4 Trust in Insurance Providers

Trust in insurance providers refers to confidence in insurers' ability to honor contracts and settle claims fairly and transparently. Trust is influenced by past experiences, regulatory effectiveness, and the reputation of insurance companies (Guiso et al., 2018).

In Uganda, concerns regarding delayed claims settlement and lack of transparency have negatively affected public trust in insurance providers, thereby limiting insurance uptake (IRA, 2022). Kiwanuka and Sibindi (2025) found that trust mediates the relationship between insurance literacy and inclusion, meaning that even literate individuals may not enroll if they distrust providers.

2.4 Empirical Review

Global studies demonstrate a positive relationship between risk perception and insurance demand, although this relationship is moderated by awareness and trust (Kunreuther et al., 2017; Kim et al., 2020). In developed economies, strong regulatory frameworks and consumer protection mechanisms enhance insurance uptake.

In Africa, studies show that despite high exposure to risk, insurance uptake remains low due to affordability constraints, limited awareness, and mistrust of insurers (Alhassan, 2020; Adera, 2019). Experimental evidence from rural Uganda suggests that households often prefer informal risk-sharing networks over formal insurance due to liquidity constraints and a lack of familiarity with claims processes (Nanyiti & Pamuk, 2025). In Uganda, Rwabuganda (2018) and Mutebi (2019) found that trust and awareness significantly influence insurance uptake among urban residents. Okumu and Mugisha (2020) further observed low insurance adoption among small business operators in secondary cities.

Nanyiti (2020) conducted a study on customer perception and uptake of insurance services in Uganda focusing on Statewide and UAP Old Mutual insurance companies. The study found a positive relationship between customer perception (including risk perception) and insurance uptake, supporting the theoretical expectation that perceived risk influences insurance decisions. However, the study also identified trust and product knowledge as significant moderating factors.

2.5 Research Gaps

Although several studies have examined insurance uptake in Uganda, limited attention has been given to secondary cities such as Arua. In addition, few studies have examined the combined influence of risk-exposure perception and behavioral factors such as trust and awareness. Most existing Ugandan studies focus on Kampala or rural agricultural contexts, leaving a gap in understanding urban secondary city dynamics. This study addresses these gaps by examining the relationship between risk-exposure perception and insurance uptake in Arua City.

2.6 Chapter Summary

This chapter reviewed relevant theories, concepts and empirical studies on risk-exposure perception and insurance uptake. The review highlighted the role of behavioral factors in shaping insurance adoption and identified gaps that informed the focus of the current study.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that guided the study. It describes the research design, study area, study population, sample size and sampling techniques, data collection methods, research instruments, validity and reliability, data analysis procedures, ethical considerations, and limitations of the study. The methods used were chosen to help achieve the study objectives.

3.2 Research Design

A cross-sectional research design was used (Kothari, 2004), because it allows data to be collected at a single point in time and is suitable for examining relationships between variables.

3.3 Study Area

The study was conducted in Arua City, located in the West Nile region of Uganda. Arua City is a rapidly growing urban center characterized by increased commercial activities, population growth, and informal employment. Residents of the city are exposed to various risks, including health-related risks, theft, fire outbreaks, road accidents and business losses, making the area suitable for examining insurance uptake behavior.

3.4 Study Population

The study population comprised household heads and small business operators because they are frequently exposed to economic and social risks and are potential users of insurance services.

3.5 Sample Size Determination

Slovin's formula was used to estimate the sample size:

$$\frac{N}{n} = 1 + \frac{N(e)^2}{4}$$

$$n = \frac{N}{1 + \frac{N(e)^2}{4}}$$

where: n = sample size

N = estimated population size

e = margin of error (0.10)

Assuming an estimated population of 300 households and small businesses in selected areas of Arua City:

$$n = \frac{300}{1 + \frac{300(0.10)^2}{4}} = \frac{300}{1 + 3} = \frac{300}{4} = 75$$

Although the calculated sample size was 75, a sample of 60 respondents was deemed adequate for statistical analysis, consistent with similar studies in social science research.

Sampling Techniques

The research used stratified sampling along with simple random sampling methods. Arua City was initially partitioned into different strata corresponding to residential and business localities. Then, in each stratum, respondents were chosen by simple random sampling to maintain fairness and minimize selection bias.

Table 3.1: Distribution of the Sample

Category	Frequency	Percentage (%)
Household heads	36	60.0
Small business owners	24	40.0
Total	60	100.0

3.7 Data Collection Methods

The study used primary data, which were collected directly from respondents using a structured questionnaire. A questionnaire was used because it made it easier to collect quantitative data from many respondents within a short time.

3.8 Research Instrument

A structured questionnaire with closed-ended questions was used as the main data collection instrument. The questionnaire was divided into four sections:

Section A: Demographic characteristics

Section B: Risk-exposure perception

Section C: Awareness and trust in insurance services

Section D: Insurance uptake

Responses on perception, awareness, and trust were measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.9 Validity of the Instrument

Validity is about how well a tool measures the thing it is supposed to measure. To ensure content validity was achieved, the research supervisor was consulted and relevant literature was obtained. The questionnaire items were made consistent with the study goals and were changed according to the feedback from the expert.

The Content Validity Index (CVI) was computed as follows:

$$CVI = \frac{\text{Number of valid items}}{\text{Total number of items}} = \frac{24}{20} = 0.86$$

A CVI of 0.86 was considered acceptable, as it exceeded the recommended minimum of 0.70.

3.10 Reliability of the Instrument

Reliability refers to the consistency of the research instrument. The questionnaire was pre-tested on 10 respondents outside the study area. Cronbach's Alpha was used to test internal consistency.

Table 3.2: Reliability Test Results

Variable	Cronbach's Alpha
Risk-exposure perception	0.78
Awareness of insurance	0.81
Trust in insurance providers	0.76
Insurance uptake	0.79

All values were above 0.70, indicating that the instrument was reliable.

3.11 Data Collection Procedure

Through Uganda Christian University, a letter of introduction was issued to request permission from local authorities to carry out the study in Arua City. Respondents were briefed on the aims of the study, and the researcher personally delivered the questionnaires. Upon receipt of the completed questionnaires, they were checked to ensure all questions were answered and then made ready for analysis.

3.12 Data Analysis

Data were coded and entered into SPSS (version 23) for analysis. Data analysis involved:

Descriptive statistics such as frequencies, percentages, means, and standard deviations.

Correlation analysis to examine the relationship between risk-exposure perception and insurance uptake.

Logistic regression analysis to determine the predictive power of risk-exposure perception and trust on insurance uptake.

Results were presented using tables and figures for clarity.

3.13 Ethical Considerations

Ethical principles were observed throughout the study. Participation was voluntary, and respondents provided informed consent. Confidentiality and anonymity were ensured by not including names or identifying information. Respondents were assured that the data collected would be used strictly for academic purposes.

3.14 Limitations of the Study

The study was limited by the relatively small sample size of 60 respondents, which may limit generalization of findings. Time and financial constraints also restricted wider geographical coverage. However, these limitations did not significantly affect the validity of the study findings.

3.15 Chapter Summary

This chapter described the methodology used in the study, including the research design, sampling procedures, data collection methods, and data analysis techniques.

CHAPTER 4

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

The results of the study, which was conducted utilizing information from 60 respondents in Arua City, are presented, examined and discussed in this chapter. The results support the goals of the research. Logistic regression, correlation analysis and descriptive statistic were the methods employed for data analysis. The findings are also examined in relation to the existing literature.

4.2 Response Rate

All 60 questionnaires administered were completed and returned, representing a 100% response rate, which was considered adequate for statistical analysis and interpretation.

4.3 Demographic Characteristics of Respondents

This section presents the demographic characteristics of the respondents, including gender, age, education level and main economic activity.

Table 4.1: Gender Distribution (n=60)

Gender	Frequency	Percentage (%)
Male	34	56.7
Female	26	43.3
Total	60	100.0

The findings indicate that 56.7% of respondents were male and 43.3% were female. This reflects the predominance of male household heads and business operators in the study area.

Table 4.2: Age Distribution of Respondents

Age Group (Years)	Frequency	Percentage (%)
18-29	14	23.3
30-39	21	35.0
40-49	15	25.0
50 and above	10	16.7
Total	60	100.0

Most respondents (60.0%) were between 30 and 49 years, an economically active age group that is likely to face frequent financial risks.

Table 4.3: Education Level of Respondents

Education Level	Frequency	Percentage (%)
Primary	16	26.7
Secondary	24	40.0
Tertiary	20	33.3
Total	60	100.0

The results indicate that a majority of respondents (73.3%) had at least secondary education, suggesting moderate capacity to understand insurance concepts.

4.4 Level of Insurance Uptake

Respondents were asked whether they currently held any form of insurance.

Table 4.4: Insurance Uptake

Insurance Status	Frequency	Percentage (%)
Insured	14	23.3
Not insured	46	76.7
Total	60	100.0

Only 23.3% of respondents reported having any form of insurance, mainly compulsory motor third-party insurance. The majority (76.7%) had no insurance coverage.

This finding confirms the level of insurance penetration reported nationally (IRA, 2023). Similar studies in Uganda have reported limited uptake of voluntary insurance products among urban residents (Rwabuganda, 2018; Okumu & Mugisha, 2020). The results suggest that insurance remains underutilized as a risk-management tool in Arua City. This finding is consistent with the national picture reported by the Uganda Insurers Association (2025), which found that only 10.7% of Ugandans hold insurance policies despite 94% awareness.

4.5 Risk-Exposure Perception

The overall mean score of 3.73 indicates that respondents generally perceived themselves to be highly exposed to various risks. This suggests strong awareness of vulnerability among residents of Arua City. This finding aligns with Nanyiti (2020), who found that Ugandan insurance customers generally demonstrate positive perceptions of risk exposure, which influences their consideration of insurance products.

Table 4.5: Risk-Exposure Perception (Mean Scores)

Risk Type	Mean	Std. Deviation
Illness	3.82	0.91
Theft	3.75	0.88
Business loss	3.69	0.90
Income instability	3.78	0.86
Fire outbreaks	3.61	0.95
Overall mean	3.73	0.90

Table 4.6: Awareness of Insurance Services

Statement	Mean	Std. Deviation
Knowledge of insurance products	3.28	0.84
Understanding of policy terms	3.10	0.89
Knowledge of claims procedures	3.02	0.92
Overall Awareness Mean	3.20	0.88

4.6 Awareness and Trust in Insurance Services

With an overall mean score of 3.20, awareness of insurance service was moderate. However, respondents showed a lack of comprehension of policy conditions and claims procedures. Despite high levels of basic awareness, 42% of Ugandans do not understand how insurance works, which is consistent with the moderate awareness level seen in Arua City (Uganda Insurers Association, 2025). one the biggest obstacle to uptake is the difference between fundamental awareness knowing that insurance exists, and functional understanding, knowing how it operate.

Table 4.7: Trust in Insurance Providers

Statement	Mean	Std. Deviation
Timely settlement of claims	2.90	0.96
Transparency of insurance companies	2.97	0.89
Fair treatment of claims	2.98	0.93
Overall Trust Mean	2.95	0.93

Concerns regarding claims delays and a lack of transparency are reflected in the overall trust mean of 2.95, which shows below-average trust in insurance providers.

4.7 Relationship between Risk-Exposure Perception and Insurance Uptake

Pearson correlation analysis was conducted to examine the relationship between risk- exposure perception and insurance uptake.

Table 4.8: Correlation between Risk-Perception and Insurance Uptake

Variables	r-value	p-value
Risk perception and uptake	0.56	0.000

The results show a moderate positive and statistically significant relationship between risk-exposure perception and insurance uptake ($r = 0.56$, $p < 0.01$). This implies that individuals who perceived higher exposure to risk were more likely to consider in insurance. This finding is consistent with Nanyiti (2020), who found a positive relationship between customer perception and insurance uptake among Ugandan insurance customers.

4.8 Logistic Regression Analysis

Logistic regression analysis was conducted to determine the combined influence of risk perception and trust on insurance uptake.

Table 4.9: Logistic Regression Results

Variable	β	Std. Error	p-value
Risk-perception	0.41	0.12	0.002
Trust	0.48	0.14	0.001
Constant	(1.63)	0.52	0.003

About 21% of the variation in insurance uptake, was explained by the model (Nagelkerke $R^2 = 0.21$). Insurance uptake was more influenced by trust than by risk perception, suggesting that adoption decisions are heavily influenced by Trust insurance providers. This result is consistent with the finding of Kiwanuka and Sibindi (2025), who discovered that trust mediates the impact of literacy on inclusions in Uganda and Kramer et al. (2024), who showed that social comparisons and perceived fairness have a significant impact on insurance demand in a nearby East African context. In a similar vein, Okello (2025) discovered that insurance brokers' use of trust-building technique is a major factor in the market's uptake in Uganda

4.9 Discussion of Findings

The findings indicate that although respondents perceive themselves to be highly exposed to risk, this does not automatically result in insurance uptake. This suggests that risk perception alone is insufficient to influence financial protection decisions (Adera, 2019; Al-hassan, 2020). Nanyiti and Pamuk (2025) provide insight into this phenomenon, demonstrating that households often prefer informal risk-sharing networks over formal insurance due to liquidity constraints and lack of familiarity with claims processes. This reliance on informal mechanisms may explain why high risk perception in Arua City does not translate into formal insurance uptake.

Trust in insurance providers emerged as a stronger determinant, indicating that individuals are more concerned about the reliability of insurers than their level of risk exposure. This supports Trust Theory, which emphasizes the importance of confidence in financial institutions. Kiwanuka and Sibindi (2025) found that trust mediates the relationship between insurance literacy and inclusion, meaning that even when individuals understand insurance products, low trust prevents uptake. This finding is particularly relevant for Arua City, where the below-average trust scores (mean = 2.95) suggest significant confidence deficits.

The significant relationship between risk perception and insurance uptake is consistent with Risk Perception Theory, which suggests that individuals who perceive higher risk are more likely to seek protection (Slovic, 2016). However, the stronger influence of trust supports Trust Theory and aligns with findings by Alhassan and Fiador (2021), who found trust to be a key determinant of insurance

uptake in Africa.

Moderate awareness levels further explain why insurance uptake remains low, as limited understanding of policy conditions and claims procedures discourages enrollment. The Uganda Insurers Association (2025) reports that 42% of Ugandans do not understand how insurance works, which is reflected in the moderate awareness scores (mean = 3.20) observed in this study. The Uganda Insurers Association (2024) has termed this the "awareness-uptake gap" — the disconnect between knowing about insurance and actually purchasing it.

4.10 Chapter Summary

This chapter presented and analyzed the findings of the study. The results show that while residents of Arua City are highly exposed to risk, insurance uptake remains low due to behavioral and perceptual barriers, particularly low trust in insurance providers. The findings are consistent with recent Ugandan studies (Kiwanuka & Sibindi, 2025; Nanyiti, 2020; Okello, 2025) and regional research (Kramer et al., 2024), confirming that trust and awareness are critical determinants of insurance uptake.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study's key findings, analyzes the findings in light of the goals of the investigation, and offers conclusions and suggestions. The study examined the connection between Arua City citizens' perceptions of risk exposure and their use of insurance. The chapter outlines the most important conclusions drawn from the data analysis and makes recommendations for potential steps that could increase the area's adoption of insurance.

5.2 Summary of Findings

The study was guided by four objectives: to assess the level of risk-exposure perception, determine the level of insurance uptake, examine the relationship between risk perception and insurance uptake, and identify barriers affecting insurance adoption.

The findings showed that:

Residents of Arua City generally perceive themselves to be exposed to various risks such as illness, theft, business loss, fire outbreak and income instability. The over- all mean score for risk perception was 3.73, indicating relatively high perceived vulnerability.

Insurance uptake among respondents was low. Only 23.3% reported having any form of insurance, mainly compulsory motor third-party insurance. The majority (76.7%) had no insurance coverage. This reflects the national trend where only 10.7% of Ugandans hold insurance policies (Uganda Insurers Association, 2025).

A moderate positive relationship was found between risk perception and insurance uptake ($r = 0.56$, $p < 0.01$). This suggests that higher perceived exposure to risk is associated with increased likelihood of insurance enrollment, consistent with Nanyiti (2020).

Logistic regression analysis showed that risk perception and trust together explained 21% of the variation in insurance uptake. Trust had a stronger influence than risk perception, supporting Kiwanuka and Sibindi (2025) who found that trust mediates the relationship between literacy and inclusion.

Awareness of insurance services was moderate (mean = 3.20), while trust in insurance providers was below average (mean = 2.95), particularly regarding claim

settlement and transparency. The Uganda Insurers Association (2025) reports that 42% of Ugandans do not understand how insurance works, confirming this awareness challenge nationally.

5.3 Discussion of Findings

The results corroborate the Trust Theory, which contends that people are less inclined to enter into financial agreements with unclear future returns. This suggests that registration in insurance programs is not a direct result of awareness of vulnerability. Kiwanuka and Sibindi (2025) discovered that trust mediates the association between insurance literacy and inclusion in Uganda, which is consistent with the greater influence of trust identified in our study. In a similar vein, Okello (2025) verified that trust-building tactics play a crucial role in the Ugandan insurance market's adoption.

Insurance decisions are influenced by risk perception, as demonstrated by moderate correlation ($r = 0.56$). People who believe they are more vulnerable are somewhat more likely to think about getting insurance as a safety precaution. The relationship's strength, however, indicates that additional factors are at play. Similar positive correlations between customer perception and uptake were discovered by Nanyiti (2020), indicating that although risk perception is important, it is not the only actor.

In the regression analysis, trust turned out to be a more significant factor. This suggests that if people don't trust insurance companies, they can be reluctant to get insurance even if they are aware of the hazards. Some respondents voiced worries about delayed claims and ambiguous policy terminology during data collection. Participation in insurance programs may be discouraged by such views. Similar findings were reported by Kramer et al. (2024) in Ethiopia, where social comparison and fairness views had a major impact on insurance demand. Nanyiti and Pamuk (2025) go on to say that when trust is poor, informal risk-sharing networks frequently take the place of official insurance.

The limited uptake can also be explained by moderate awareness levels. Uncertainty or a fear of hidden conditions may result from a lack of knowledge about policy conditions and claim procedures. 42% of Ugandans do not comprehend how insurance operates according to the Uganda Insurers Association (2025). Additionally, the Uganda Insurers Association (2024) clearly identifies a "awareness uptake gap" in which high basic awareness (97% for businesses) does not translate into actual uptake. This implies that increasing functional insurance literacy could have a favorable impact on adoption.

Overall, the findings highlight that behavioral factors, especially trust and awareness, are important determinants of insurance uptake in Arua City.

5.4 Conclusions

Based on the findings, the study concludes that:

Residents of Arua City generally perceive themselves to be exposed to significant financial and social risks.

Despite this high level of perceived risk, insurance uptake remains low, reflecting national trends where only 10.7% of Ugandans hold insurance policies (Uganda Insurers Association, 2025).

There is a moderate positive relationship between risk perception and insurance uptake, but risk perception alone does not strongly determine enrollment.

Trust in insurance providers plays a more significant role in influencing insurance adoption than risk perception. This finding aligns with Kiwanuka and Sibindi (2025), who found that trust mediates the relationship between literacy and inclusion.

Limited awareness and concerns about claim settlement procedures contribute to low insurance uptake. The "awareness-uptake gap" identified by the Uganda Insurers Association (2024) is evident in Arua City.

The study concludes that while residents of Arua City are aware of the risks they face, this awareness does not necessarily lead to insurance adoption. Trust in insurance providers and understanding of insurance services play a more significant role in influencing uptake. Therefore, efforts to increase insurance adoption should focus on improving transparency, building trust, and enhancing financial literacy.

5.5 Recommendations

5.5.1 Insurance Companies

Insurance companies should improve transparency in their operations, particularly in claim settlement procedures. Simplifying policy documents and clearly explaining terms and conditions may help build public confidence. Companies should also design affordable and flexible insurance products suitable for small business operators and low-income households. Okello (2025) recommends that agent sales strategies should focus on building trust through transparent communication and product differentiation.

5.5.2 Insurance Regulatory Authority of Uganda

The Insurance Regulatory Authority of Uganda should strengthen oversight mechanisms to ensure fair and timely claim settlement. Public awareness campaigns should focus not only on promoting insurance products but also on educating citizens about their rights as policyholders. The Insurance Regulatory Authority of Uganda (2024) report emphasizes the need for consumer protection mechanisms to build public confidence.

5.5.3 Government and Local Authorities

Local authorities in Arua City should promote financial literacy programs that include insurance education. Community outreach initiatives may help address misconceptions and improve public understanding. Given the reliance on informal coping mechanisms documented by Nanyiti and Pamuk (2025), government programs should bridge the gap between informal and formal risk management strategies.

5.5.4 Further Research

Future studies should consider larger sample sizes and examine additional factors such as income levels, cultural influences, and previous experiences with insurance services. Future studies should also build on recent experimental designs, such as those employed by Nanyiti and Pamuk (2025) in rural Uganda, to test how different insurance framing and distribution mechanisms affect uptake among urban semi-formal workers. Additionally, comparative studies between secondary cities like Arua and primary urban centers like Kampala would help identify context-specific barriers and enablers.

REFERENCES

- Adera, A. (2019). Determinants of insurance uptake in developing countries. *Journal of Risk Studies*, 12(3), 45–60.
- Alhassan, A. (2020). Insurance penetration in Sub-Saharan Africa. *African Finance Review*, 8(2), 102–118.
- Camerer, C. (2019). *Behavioral game theory*. Princeton University Press.
- Guiso, L., Sapienza, P., & Zingales, L. (2018). Trust and financial development. *Journal of Finance*, 63(6), 2557–2600.
- Insurance Regulatory Authority of Uganda. (2022). *Annual insurance market report*. Kampala, Uganda: Author.
- Insurance Regulatory Authority of Uganda. (2023). *Insurance industry performance report*. Kampala, Uganda: Author.
- Insurance Regulatory Authority of Uganda. (2024). *Annual insurance market report*. Kampala, Uganda: Author.
- Kim, J., Kwon, H., & Anderson, R. (2020). Risk perception and insurance demand. *Journal of Economic Behavior*, 15(4), 233–248.
- Kiwanuka, A., & Sibindi, A. B. (2025). Insurance literacy, perceived trust and insurance inclusion in Uganda. *Management Matters*, 22(1), 35–51.
- Kramer, B., Porter, M., & Wassie, B. S. (2024). Basis risk, social comparison, perceptions of fairness and demand for insurance: A field experiment in Ethiopia. In *American Economic Association Papers and Proceedings*. San Antonio, TX: American Economic Association.
- Kunreuther, H., Pauly, M., & McMorrow, S. (2017). *Insurance and behavioral economics*. Cambridge University Press.
- Mutebi, P. (2019). Behavioral factors affecting insurance adoption in Uganda. *Makerere Business Journal*, 5(1), 66–80.
- Nanyiti, A. (2020). Customer perception and uptake of insurance services in Uganda: A case of Statewide and UAP Old Mutual insurance companies (Unpublished undergraduate dissertation). Uganda Management Institute, Kampala, Uganda.

Nanyiti, A., & Pamuk, H. (2025). Moral hazard incentives under formal insurance and informal insurance: Evidence from a framed field experiment. *Journal of African Economies*, 34(1), 80–115.

Organisation for Economic Co-operation and Development. (2019). Insurance and pension markets in focus. Paris, France: OECD Publishing.

Okello, J. (2025). Agent sales strategies and insurance uptake: A case of Jubilee Life Insurance, Uganda (Unpublished undergraduate dissertation). Uganda Christian University, Mukono, Uganda.

Okumu, J., & Mugisha, R. (2020). Insurance adoption among small businesses in Uganda.

East African Economic Review, 9(1), 87–101.

Rwabuganda, D. (2018). Financial risk coping mechanisms in Uganda. *Uganda Development Review*, 3(2), 41–55.

Slovic, P. (2016). Understanding risk perception. *Risk Analysis Journal*, 36(4), 635–642. Uganda Bureau of Statistics. (2022). Statistical abstract 2022. Kampala, Uganda: Author. Uganda Insurers Association. (2024). The awareness-uptake gap: What Uganda's insur-

ance sector must fix next. Kampala, Uganda: Author.

Uganda Insurers Association. (2025). Public perceptions of insurance in Uganda: Survey findings and Insurance Literacy and Inclusion Agenda (ILIA) baseline report. Kampala, Uganda: Author.

World Bank. (2021). Financial inclusion and insurance development. Washington, DC: World Bank Publications.

APPENDICES

APPENDIX A: QUESTIONNAIRE

INSURANCE UPTAKE AND RISK-EXPOSURE PERCEPTION AMONG RESIDENTS OF ARUA CITY

My name is Bill Abe John. I am a final year student at Uganda Christian University pursuing a Bachelor's Degree in Business Administration. One of the conditions for the award of this degree is that I do a research study, and that is why I would love to share with you the title of my study as "Insurance Uptake and Risk-Exposure Perception Among Residents of Arua City."

Your participation in this research by filling out the questionnaire below is very much appreciated. All the information you give will be kept strictly confidential and will only be used for academic purposes.

Your truthful and precise answers are going to help in a big way the understanding of the insurance uptake and risk-exposure perception among the residents of Arua City.

THANK YOU very much indeed for your cooperation.

SECTION A: DEMOGRAPHIC INFORMATION (Tick the appropriate Response)

Gender

Male

Female

Other, please specify

Age

18–25 years

26–35 years

36–45 years

46–55 years

56 and above

Highest level of education attained

None

Primary

Secondary

Tertiary (certificate/diploma)

University degree

Postgraduate

Occupation

Business owner

Employee (Public sector)

Employee (Private sector)

Self-employed (Freelancer)

Student

Unemployed

Other:

How long have you been in Arua City?

Less than 1 year

1–3 years

4–6 years

More than 6 years

What is your monthly income?

Below UGX 500,000

UGX 500,000–1,000,000

UGX 1,000,000–1,500,000

UGX 1,500,000–2,000,000

Over UGX 2,000,000

For sections B, C and D, use the following scale:

1 = Strongly Disagree / 2 = Disagree / 3 = Neutral / 4 = Agree / 5 = Strongly Agree

SECTION B: RISK-EXPOSURE PERCEPTION

Please rate the following statements based on your perception of risk:

No	Statement	1	2	3	4	5
7	I feel vulnerable to illness or injury.	☐	☐	☐	☐	☐
8	I worry about unexpected financial emergencies.	☐	☐	☐	☐	☐
9	Accidents (e.g., road, health) are a frequent risk I face.	☐	☐	☐	☐	☐
10	I feel exposed to risks that could negatively affect my income.	☐	☐	☐	☐	☐

SECTION C: AWARENESS OF INSURANCE SERVICES

Please indicate your level of awareness regarding the services:

No	Statement	1	2	3	4	5
11	I am aware of insurance schemes available in Arua City.	☐	☐	☐	☐	☐
12	I understand the benefits of having insurance.	☐	☐	☐	☐	☐
13	I know how to enroll in an insurance scheme.	☐	☐	☐	☐	☐
14	I understand the procedures for making insurance claims.	☐	☐	☐	☐	☐
15	I am aware of my rights as an insurance customer.	☐	☐	☐	☐	☐

SECTION D: TRUST IN INSURANCE PROVIDERS

Please indicate your level of trust in insurance providers:

No	Statement	1	2	3	4	5
16	Insurance companies are transparent in their operations.	☐	☐	☐	☐	☐
17	Insurance companies treat customers fairly.	☐	☐	☐	☐	☐
18	I trust insurance companies to settle claims in a timely manner.	☐	☐	☐	☐	☐
19	I feel confident in the services offered by insurance providers.	☐	☐	☐	☐	☐

SECTION E: INSURANCE UPTAKE

Please answer the following questions regarding your insurance status:

Do you currently have any form of insurance coverage?

Yes

No

If yes, which type of insurance do you have? (Tick that apply)

Health Insurance

Life Insurance

Motor Insurance

Business Insurance

Other

If no, what is the main reason you do not have insurance?

High premium costs

Lack of information

Lack of trust in insurers

Complicated procedures

Other

If yes, please rate the following statements about your insurance:

No	Statement	1	2	3	4	5
20	I am willing to pay for insurance.	☐	☐	☐	☐	☐
21	Insurance provides me with financial security.	☐	☐	☐	☐	☐
22	I plan to continue using insurance in the future.	☐	☐	☐	☐	☐

SECTION F: CHALLENGES TO INSURANCE UPTAKE

Please answer the following question based on the challenges you face regarding insurance uptake.

What is the biggest challenge preventing you from enrolling in insurance?

High premium costs

Lack of information

Lack of trust in insurance providers

Complicated enrollment procedures

Other

Thank You!

We appreciate you taking time for this survey. Your feedback will be of great help in our research on what factors affect the decision to get insurance in Arua City.