

Effect of Social Influence and Peer Effects on Insurance Uptake Among Rural Communities in Zaria

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Abstract

Insurance uptake in rural communities remains persistently low despite the growing need for risk-mitigation mechanisms among vulnerable populations. Social structures in rural environments characterized by strong communal ties, shared norms, and interpersonal influence play an important role in shaping financial behaviours. This study examines the impact of social influence and peer effects on insurance uptake in rural communities. Guided by the Theory of Planned Behaviour and Social Learning Theory, the study investigates how community expectations, peer recommendations, and observed experiences influence individuals' willingness to adopt insurance. A quantitative cross-sectional survey design was employed, and data were collected from rural households selected through a multistage sampling procedure. Structured questionnaires were administered to measure social influence, peer effects, and actual insurance uptake. Data were analysed using descriptive statistics and regression techniques. The findings reveal that both social influence and peer effects significantly predict insurance uptake among rural dwellers, indicating that community norms and peer experiences substantially shape risk-management decisions. The study concludes that leveraging community networks, trusted influencers, and peer-driven sensitization programs can enhance insurance penetration in rural areas. It recommends that insurers and policymakers adopt community-based distribution models, trust-building strategies, and evidence-based outreach to strengthen adoption and improve financial resilience in rural populations.

1. Introduction

Insurance plays a critical role in enhancing financial protection and resilience against shocks in developing countries, yet uptake remains low, particularly in rural communities where households face higher vulnerability to risks such as crop failure, livestock loss, illness, and natural disasters. Research shows that rural populations often depend heavily on informal risk-sharing mechanisms, which are insufficient for managing large or systemic shocks (Takahashi, Barrett, & Ikegami, 2019). In many contexts, formal insurance uptake is shaped not only by economic factors but also by social dynamics embedded within rural communities. Rural communities are characterized by close social networks, communal interactions, and strong peer influence. Evidence from Ethiopia indicates that peer behaviour can influence insurance-related decisions: for example, randomly matched peers' insurance uptake positively affects individuals' willingness to engage in related financial behaviours (Takahashi et al., 2019). Social learning, trust, and community norms significantly shape how rural dwellers perceive and adopt financial innovations, including insurance. Furthermore, research on health insurance in rural settings indicates that behavioural and social factors such as community perceptions, peer experiences, and local norms strongly influence adoption (Munkombwe & Phiri, 2024). Social networks play a central role in information diffusion, trust-building, and collective attitudes toward insurance. When respected members of a rural community adopt insurance, others are more likely to follow due to trust, familiarity, and perceived safety of the product. Conversely, negative

experiences, rumours, or cultural scepticism can quickly spread through the same networks, reducing the likelihood of uptake. Additionally, studies on rural households in developing regions highlight that financial literacy, trust in providers, and social influences often determine whether insurance is adopted, especially when formal financial institutions are perceived as distant or unreliable (Apiag et al., 2025). The behavioural context in rural communities therefore presents a unique platform where social influence and peer effects can either accelerate or hinder insurance uptake. Given the reality that social networks substantially shape financial decisions in rural environments, understanding the influence of peer effects on insurance uptake becomes crucial. Despite the introduction of microinsurance and community-based insurance schemes, uptake remains low in many rural settings. While economic factors such as income constraints and poor access to credit play significant roles, behavioural and social determinants are equally critical. Previous studies show that lack of trust in insurers, inadequate information, and fear of insurer default significantly reduce demand for insurance among rural households (Liu & Myers, 2016). In rural communities where collective decision-making and group norms are strong, peer experiences can substantially shape individuals' views on insurance. Evidence suggests that peer uptake, shared experiences, and community discussions influence willingness to participate in both formal and informal risk-sharing mechanisms (Takahashi et al., 2019). Yet, in Nigeria and similar contexts, empirical studies exploring peer effects on insurance uptake are scarce, despite strong indications from related health insurance literature showing that social and cultural norms significantly affect enrolment decisions (Munkombwe & Phiri, 2024). Recent literature (2021–2025) clearly establishes that social influence and peer effects are critical determinants of insurance uptake, especially in rural and low-income contexts. While national-level studies exist for Nigeria, there remains a limited number of localized empirical studies focusing specifically on rural

communities in Northern Nigeria, including Zaria. This study therefore fills an important gap by examining how social influence and peer effects jointly impact insurance uptake in rural communities in Zaria, Kaduna State.

2. Literature Review and Theoretical Framework

2.1 Concept of Insurance Uptake

Insurance uptake refers to the decision and willingness of individuals or households to purchase and maintain insurance policies as a means of risk protection. In rural communities, insurance uptake is often measured by enrolment rates in formal or informal insurance schemes, such as health insurance, agricultural insurance, or microinsurance products. Rural insurance uptake in developing countries remains low due to factors such as poverty, low financial literacy, limited access to insurance providers, distrust of institutions, and cultural beliefs. In Nigeria, especially in rural areas like Zaria, insurance is often perceived as unnecessary or incompatible with traditional risk-sharing mechanisms such as family support networks, cooperative societies, and religious associations. This perception influences individuals' attitudes towards insurance products and their eventual adoption.

2.2 Social Influence

Social influence refers to the process by which individuals' attitudes, beliefs, or behaviours are shaped by others within their social environment. It includes the effects of family members, community leaders, religious figures, friends, and opinion leaders on individual decision-making. Social influence can occur through social norms, persuasion, imitation, or information sharing. In rural communities, social influence is particularly strong due to close-knit social structures, shared cultural values, and frequent interpersonal interactions. Decisions such as whether to adopt new financial products, including insurance, are often influenced by community approval or disapproval.

2.3 Peer Effects

Peer effects are a specific form of social influence that arise from interactions between individuals and others with similar social or economic characteristics, such as friends, neighbours, colleagues, or members of the same age group or occupation. Peer effects operate through observation, learning, and social comparison. In the context of insurance uptake, individuals may be more likely to purchase insurance if their peers have done so, especially when they observe positive outcomes such as compensation after loss or illness. Conversely, negative peer experiences can discourage uptake and reinforce scepticism toward insurance schemes.

2.4 Relationship Between Social Influence, Peer Effects, and Insurance Uptake

Social influence and peer effects play a critical role in shaping risk perception and financial behaviour. In rural settings, individuals often rely on information and experiences from trusted community members rather than formal advertising or institutional communication. Therefore, positive peer experiences with insurance products can significantly increase awareness, trust, and adoption, while negative narratives can suppress demand.

Empirical Review

2.4.1 Social Influence and Insurance Uptake

Recent empirical studies continue to emphasize the central role of social influence in shaping insurance uptake in rural communities. A systematic review of insurance penetration in Sub-Saharan Africa by Malambo (2023) shows that social norms, community trust, and shared beliefs significantly influence households' willingness to adopt insurance products, especially where formal institutions are weak. The study finds that rural households often rely on advice and approval from community leaders and social networks rather than insurance providers themselves.

Similarly, Munkombwe and Phiri (2024) report that in rural communities across developing countries, social influence from family heads, religious leaders, and community elders strongly shapes health

insurance enrolment decisions. Their findings indicate that collective approval and community-level sensitization are more effective in driving participation than individual marketing approaches. This supports the argument that social pressure and communal norms are powerful drivers of insurance uptake in rural settings. In agricultural contexts, Otieno et al. (2023) note that behavioural and social factors, including community narratives and shared perceptions of risk, significantly affect insurance adoption among smallholder farmers in Africa. When insurance is socially accepted and publicly endorsed within a community, uptake tends to increase, whereas scepticism spreads rapidly through social interaction when trust is low.

2.4.2 Peer Effects and Financial Decision-Making

Recent studies provide strong empirical evidence of peer effects on insurance and other financial decisions. Bao et al. (2022), using survey data from 2021, demonstrate that farmers are significantly more likely to adopt agricultural insurance when their relatives, friends, or neighbours have already purchased similar policies. The study shows that peer learning, imitation, and trust transmission are major channels through which insurance adoption spreads. In Africa, Nshakira-Rukundo et al. (2021) identify behavioural and socio-cultural factors including peer influence as key determinants of agricultural insurance uptake. The authors argue that observing peers who benefit from insurance pay-outs after climate shocks reduces uncertainty and increases confidence in insurance schemes. Moreover, the International Labour Organization (ILO, 2025) systematic review of inclusive insurance from 2013–2024 finds that peer effects significantly increase insurance participation among low-income households. The review highlights that group-based enrolment and peer-to-peer information sharing improve trust and reduce perceived risks associated with insurance products.

2.4.3 Rural Insurance Uptake in Nigeria

Recent Nigerian studies confirm that insurance uptake remains low in rural areas, but social influence and peer dynamics play an important moderating role. Adekunle and Vincent (2024) find that despite the introduction of the National Health Insurance Authority (NHIA) Act, health insurance uptake in Nigeria remains limited, particularly in rural communities. Their study reveals that informal social networks and community support systems continue to influence enrolment decisions more strongly than formal policy enforcement. The Lancet Global Health (Awosusi, 2022) reports that cultural beliefs, mistrust of institutions, and reliance on informal risk-sharing mechanisms reduce insurance uptake in Nigeria. However, the study notes that community-based and socially embedded insurance schemes show better acceptance, largely due to peer endorsement and social learning. Furthermore, Bai et al. (2024) demonstrate that awareness campaigns and peer interaction significantly influence agricultural insurance adoption among smallholder farmers in North-Central Nigeria. Farmers who learned about insurance through fellow farmers or cooperative members were more likely to enrol than those exposed through formal channels alone.

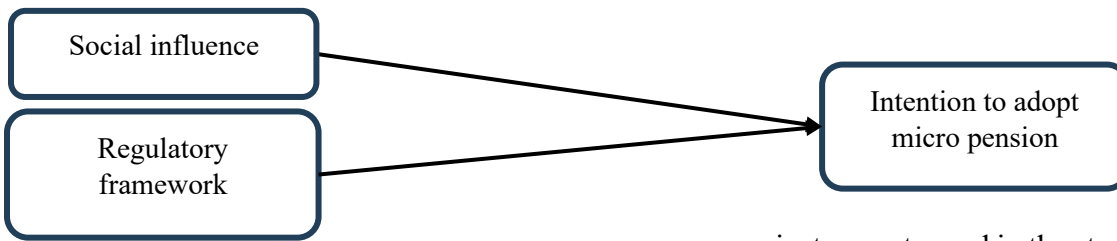
Evidence from literature also indicates that word-of-mouth communication and peer experiences are more influential than advertising in shaping insurance decisions in rural Nigeria. These findings are particularly relevant to rural communities in Zaria, where social cohesion and peer interaction remain strong.

Theory Explaining the Model: Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB), proposed by Ajzen (1991), provides a strong theoretical explanation for the model examining the effect of social influence and peer effects on insurance uptake in rural communities. The theory posits that an individual's behaviour is primarily determined by behavioural intention, which in turn is influenced by three key factors: attitude toward the behaviour, subjective norms, and perceived behavioural control. In the context of this study, subjective norms are

particularly relevant, as they reflect the perceived social pressure to perform or not perform a behaviour. Social influence from family members, religious leaders, and community elders directly aligns with subjective norms, as rural residents may feel encouraged or obligated to conform to the expectations of significant others when deciding whether to take insurance. When influential members of the community approve of insurance participation, individuals are more likely to form positive intentions toward insurance uptake. Similarly, peer effects can be explained within the TPB framework as a powerful component of subjective norms and social reinforcement. Observing friends, neighbours, or cooperative members enrolling in insurance or benefitting from insurance claims strengthens the perception that insurance is socially accepted and desirable. This social approval reduces uncertainty and reinforces individuals' intentions to adopt insurance products. Furthermore, peer interactions can also enhance perceived behavioural control by increasing knowledge and confidence. When peers share information about premium costs, claim procedures, or successful pay-outs, individuals perceive insurance as more manageable and less risky, thereby increasing the likelihood of actual uptake. This explains why peer effects were found to exert a stronger influence on insurance uptake than general social influence in the study. Overall, the Theory of Planned Behaviour effectively explains the research model by showing how social influence and peer effects shape intentions and behaviours through social norms, learning, and perceived control. In rural communities such as Zaria, where social relationships are strong and communal living is prevalent, TPB provides a robust framework for understanding why insurance uptake is largely socially driven rather than purely individualistic.

2.6 Conceptual framework



3. Research Methodology

The present study is a quantitative research and survey research design is employed. Population of this study consist of all members of communities in Zaria Metropolis. This study considered the population to be infinite as there is no formal and verifiable statistics to determine the actual number. The study, using Krejcie and Morgan (1977) sample size table at 5% confident interval, arrived at 384 as sample size. 30% was added to this sample size to cater for possible un-return questionnaires and incorrectly filled surveys and this brings the total to 499. Instruments from past studies were adapted to measure the constructs of the study. For uptake of insurance, 6 items were adapted from Kaczmarek et al. (2015)'s behavioural intention scale. To measure social influence, a four-item scale developed by Schwarzer, Schmitz & Daytner, (1999) was adapted. The reported reliability was 0.76 schwarzer et'al (1999), for peer effect, a three-item scale was adapted from Bao et al. (2022). The study utilized the partial least square structural equation modelling through Smart PLS 4 to analyse the data collected from the field. In using PLS_SEM, two basic models are necessary. They include the measurement model to ascertain the reliability and validity of the

instruments used in the study and Structural model to test the hypotheses and predictive relevance of the model.

4. Results and Discussions

In this study, a total of 484 questionnaires were distributed and 393 were returned correctly filled. Data collected from the field were subjected to preliminary cleaning such as missing values, outliers, and normality test. In the course of the cleaning, few values were missing and were replaced using serial mean, no cases of outliers were detected and the response rate stood at 81.9%. The study subjected the cleaned data to major analysis using PLS-SEM. The responses generated was subjected to preliminary analysis such as missing value, outliers and normality test. Missing values noted were replaced using serial mean. However, In the course of data screening, 4 outliers were noted and deleted from the data set there by bringing the number of usable responses to 389 usable for further analysis.

4.1 Outer (measurement) model

Loadings of items, reliabilities and validity of the instrument were assessed under the outer model. For convergent validity, average variance extracted (AVE) was employed, discriminant validity, fornel and larker criteria were employed and for the internal consistency, composite reliability was used. The table below disclosed that the construct reliability and validity were satisfied. The measures loaded well above 0.5 which is the minimum bench mark recommended by Hair, Black, Babin, Anderson and Tatham (2013). Those loading below were removed.

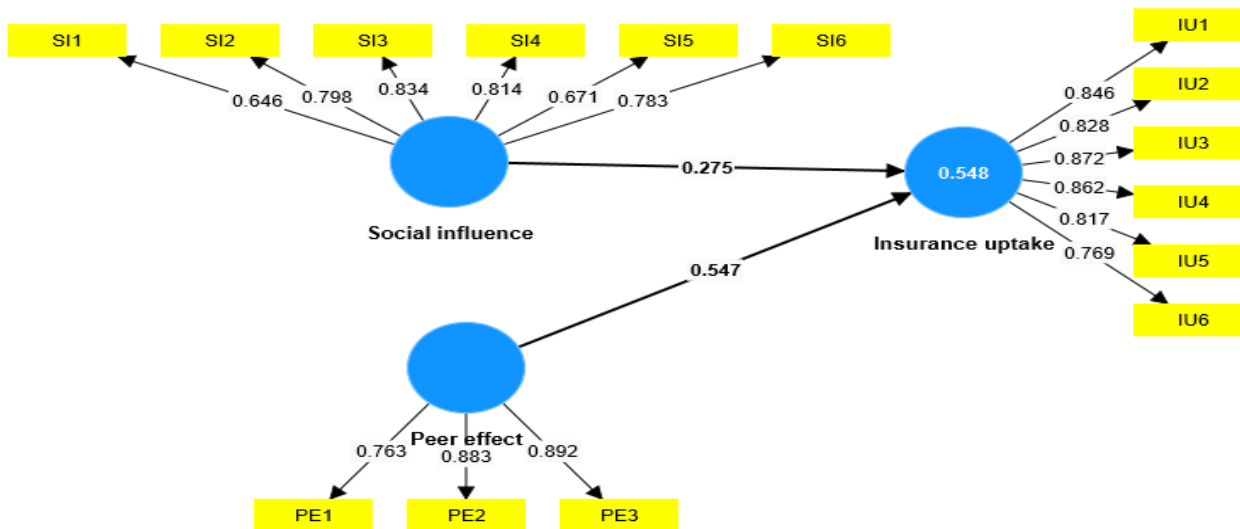


Figure 4.1: Measurement model

Table 4.1: Loadings, construct reliability and convergent validity

Construct	Item	loadings	AVE	CR	CA
Insurance uptake	IU1	0.846	0.694	0.931	0.912
	IU2	0.828			
	IU3	0.872			
	IU4	0.862			
	IU5	0.817			
	IU6	0.769			
Peer effect	PE1	0.763	0.719	0.884	0.805
	PE2	0.883			
	PE3	0.892			
Social influence	SI1	0.646	0.579	0.891	0.863
	SI2	0.798			
	SI3	0.834			
	SI4	0.814			
	SI5	0.671			
	SI6	0.783			

Note: CR=Composite reliability, AVE=Average variance extracted, CA= Cronbach Alpha

From the table 4.1, loadings of items measuring individual construct were greater than .5 which is a minimum recommended value as contained in Hair et'al (2013). All the constructs in the study met the

loadings, composite reliability benchmark of 0.7 and average variance extracted of .5

Also, for discriminant validity the study employed the Fornel and larker (1981) condition which recommended that the square root of AVE be more than inter construct correlation with other variables in the study. This is as presented in table 4.2 below

Table 4.2: Discriminant validity

Construct	Insurance uptake	Peer effect	Social influence
Insurance uptake	0.833		
Peer effect	0.706	0.848	
Social influence	0.59	0.576	0.761

Square root of AVE is presented in bolded font on the transverse and it can be observed that the values are greater than the correlations among the constructs, thus this criterion is satisfied.

On this section, the study tested for all the hypotheses and table 4.3 presented the results of the structural model with the beta value of the relationships, t-statistic and p-value.

4.2.1 Test of Hypotheses

Table 4.3: Path coefficients

Hyp	Relationship	Beta	Std err	T stat	P values	Decision
H ₁	Social influence -> insurance uptake	0.275	0.034	8.203	0.000	Rejected
H ₂	Peer effect -> insurance uptake	0.547	0.040	13.683	0.000	Rejected

Source: SmartPLS 4 output, 2026

Table 4.3 presents the results of the path analysis examining the effect of social influence and peer effects on insurance uptake in rural communities. The path coefficient (β) for social influence is 0.275, with a t-statistic of 8.203 and a p-value of 0.000. Since the p-value is less than the 0.05 significance level, social influence has a positive and statistically significant effect on insurance uptake. This implies that increases in social influence such as encouragement from family members, religious leaders, or community heads lead to increased insurance uptake among rural residents. However, the study rejected the null hypothesis (H₁), indicating sufficient evidence to conclude that social influence significantly affects insurance uptake in the study area. The result for peer effects shows a path coefficient (β) of 0.547, a t-statistic of 13.683, and a p-value of 0.000. This suggests a strong, positive, and statistically significant relationship between peer effects and insurance uptake. The relatively high beta coefficient indicates that peer

effects exert a stronger influence on insurance uptake compared to social influence. Consequently, the null hypothesis (H₂) is rejected, confirming that peer effects significantly determine insurance uptake among rural dwellers. The findings indicate that social influence has a positive and significant effect on insurance uptake in rural communities. This suggests that individuals are more likely to adopt insurance products when key figures within their social environment such as family members, religious leaders, traditional rulers, or community elders support or endorse insurance participation. This finding is consistent with the Theory of Planned Behaviour, which emphasizes the role of subjective norms in shaping individual behaviour. Empirically, the result is in line with Giné and Yang (2009), who found that social pressure and community expectations significantly influenced participation in insurance schemes in rural areas. Similarly, Cole et al. (2013) reported that community endorsement and collective decision-making increased insurance enrolment by reducing scepticism and enhancing trust. In Sub-Saharan Africa, Mobarak and

Rosenzweig (2013) observed that rural households heavily rely on advice from respected community members when adopting new financial products. This aligns with the present study, as rural residents in Zaria operate within close-knit social systems where opinions of trusted individuals carry substantial weight. The finding also corroborates Nigerian studies such as Ajemunigbohun et al. (2020), who reported that community influence and participation in social groups significantly improved insurance uptake among rural households. Thus, the result confirms that social influence remains a critical determinant of insurance behavior in rural Nigeria. The study further reveals that peer effects have a stronger and more significant influence on insurance uptake than social influence. This implies that individuals' insurance decisions are highly shaped by the behavior and experiences of peers such as friends, neighbors, colleagues, and cooperative members. This finding strongly supports Social Learning Theory, which posits that individuals adopt behaviors by observing others' actions and outcomes. The result is consistent with Cai et al. (2015), who demonstrated that peer learning and experience-sharing significantly increased insurance uptake by reducing information asymmetry and perceived risk. Similarly, Karlan et al. (2014) found that farmers were more likely to purchase

agricultural insurance when peers within their social networks had already enrolled, especially after witnessing insurance pay-outs. More recent evidence from Bao et al. (2022) also revealed that peer adoption significantly influenced insurance purchase decisions through imitation and trust transmission. In African rural settings, Dercon et al. (2014) found that informal peer networks play a critical role in shaping insurance demand, with positive peer experiences encouraging uptake and negative experiences discouraging participation. The strong peer effects observed in this study reflect the reliance on word-of-mouth communication and peer validation in rural communities like Zaria. The larger beta coefficient for peer effects ($\beta = 0.547$) compared to social influence ($\beta = 0.275$) suggests that horizontal influence (peer-to-peer interaction) is more powerful than vertical influence (leaders or authority figures) in driving insurance uptake. This finding aligns with Banerjee et al. (2013), who argued that peer diffusion within social networks is crucial for the adoption of financial products in developing economies. The implication is that everyday interactions among peers such as neighbors discussing insurance experiences carry more persuasive power than formal advice or institutional messaging in rural contexts.

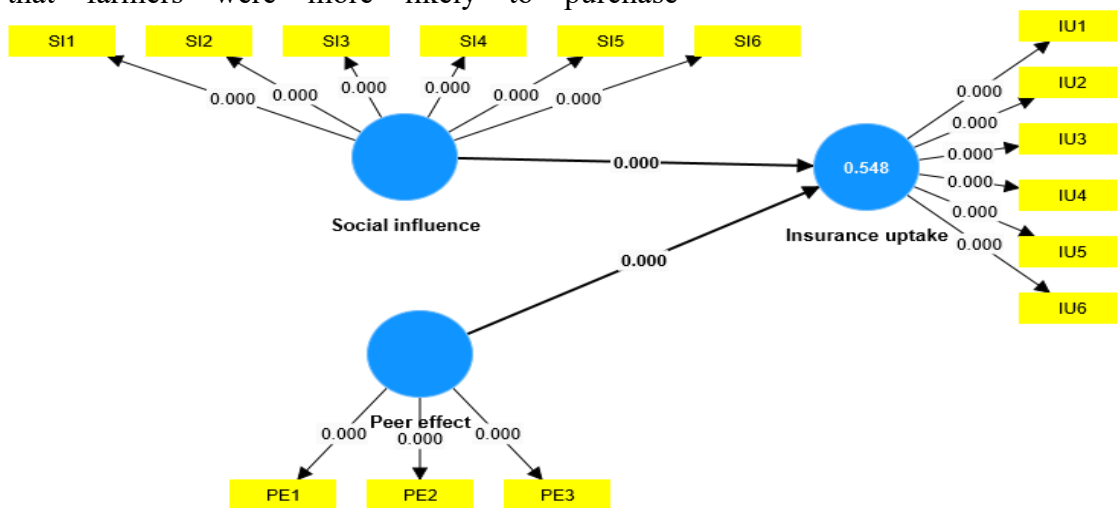


Figure 1: structural model

4.2. Effect size and Predictive relevance

The effect size of the model is presented in the table 4.4. Effect size of the exogenous variable was

ascertained. The study assessed the effect size of the exogenous variables (financial literacy and trust) on dependent variable using the F^2 . Cohen (1988) recommended that f^2 values of 0.02, 0.15, and 0.35, to represents small, medium, and large effects

respectively. The study also utilized Q^2 to assess the predictive relevance of the exogenous variables on the endogenous variable. Q^2 shows how well the data collected empirically can be reconstructed with the help of model and the PLS parameters.

Table 4.4: Effect size (f^2) and Predictive relevance

Construct	F square
Social influence	0.112
Peer effect	0.443
Insurance uptake (Q^2)	0.542

Source: SmartPLS 4 output, 2026

From table 4.4, social influence has a small effect with f^2 value of 0.028 and peer effect had large effect with f^2 of 0.674. This means that peer effect exalts more influence on the desire of the participants in the insurance. For predictive relevance, the study discovered a Q^2 value of 0.542 which means the variables are relevant in predicting the uptake of insurance in the communities.

5. Conclusion and Recommendations

Overall, the findings confirm that insurance uptake in rural communities is socially driven, shaped strongly by social influence and even more so by peer effects. The results are consistent with a wide body of empirical literature from Nigeria, Sub-Saharan Africa, and other developing regions. The study contributes to existing knowledge by providing localized evidence from rural communities in Zaria, Kaduna State, highlighting the need for insurance strategies that leverage social networks, peer ambassadors, and community-based approaches. This study examined the effect of social influence and peer effects on insurance uptake in rural communities in Zaria, Kaduna State. Using a quantitative research approach, data were collected from rural residents and analysed through path coefficient analysis to test the formulated hypotheses. Social influence and peer effects were

examined as key explanatory variables affecting insurance uptake decisions. The findings revealed that both social influence and peer effects have a positive and statistically significant relationship with insurance uptake among rural dwellers. However, peer effects were found to exert a stronger influence than social influence, indicating that interactions among friends, neighbours, and group members play a more dominant role in shaping insurance decisions. The study contributes empirical evidence from rural Northern Nigeria, an area where insurance penetration remains low despite growing risks and vulnerabilities. Based on the findings of the study, it is concluded that insurance uptake in rural communities in Zaria is largely driven by social interactions rather than individual decision-making alone. Social influence from family members, religious leaders, and community heads significantly encourages individuals to adopt insurance, as these figures serve as trusted sources of guidance and legitimacy. More importantly, peer effects were found to have a stronger impact, suggesting that individuals are highly influenced by the experiences, behaviours, and opinions of their peers. Observing peers who have enrolled in insurance or benefited from insurance claims increases trust and reduces uncertainty associated with insurance products. The rejection of both null hypotheses confirms that social and peer dynamics are critical determinants of

insurance uptake in rural settings. Therefore, insurance uptake in rural Zaria is best understood as a socially embedded process shaped by communal norms, peer learning, and shared experiences. In view of the findings and conclusions of this study, it is recommended that insurance providers adopt community-based marketing strategies that leverage existing social networks in rural communities. Insurance companies should collaborate with community leaders, religious institutions, and traditional authorities to increase awareness and build trust in insurance products. Such leaders can serve as advocates who legitimize insurance participation within the community. Additionally, insurance providers and policymakers should deliberately utilize peer effects by promoting group-based insurance schemes through cooperatives, farmers' associations, and social groups. Insured individuals who have had positive experiences should be encouraged to act as peer ambassadors to share real-life benefits of insurance, thereby influencing others through word-of-mouth communication. Government agencies and regulators should integrate insurance awareness campaigns into rural development programs, emphasizing community engagement rather than relying solely on mass media or policy enforcement. Training programs that improve financial and insurance literacy within peer groups can further strengthen informed decision-making. Finally, future research should explore other social and behavioural factors influencing insurance uptake, such as cultural beliefs, religious perceptions, and trust in institutions, using mixed-method approaches to gain deeper contextual insights. This will help in designing more inclusive and effective insurance models for rural communities.

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