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Impact of Institutional Trust on Financial Inclusion: Evidence from Gandaki Province, Nepal

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Abstract

Background: Financial inclusion is essential for economic development, yet many people in Nepal remain excluded from formal financial services. Institutional trust has been identified as a key factor influencing individuals' willingness to engage with financial systems. People who trust financial institutions are more likely to open accounts, take loans, and use other financial services. Trust can significantly impact these services' access, availability and usage in regions like Gandaki Province. This study investigates the role of institutional trust in promoting financial inclusion and aims to provide insights for policymakers and financial institutions.

Purpose: Institutional trust significantly influences individuals' willingness to use formal financial services. It directly influences their willingness to open accounts, take loans, and use other financial services. The study aims to evaluate the impact of institutional trust on financial inclusion in Gandaki province, Nepal.

Methods: This study employed descriptive as well as analytical research designs. A total of 600 households were selected using a multistage sampling technique. First, Gandaki province was purposively selected. In the second stage, three districts – Kaski, Syangja, and Parbat- were randomly chosen, and households from these districts were selected proportionately. Finally, one chief household decision-maker was conveniently chosen as the respondent. The data collection process involved face-to-face interviews using a researcher-developed survey schedule. For data analysis, percentage analysis, exploratory factor analysis (EFA), and structural equation modelling (SEM) were employed.

Finding: The results revealed that institutional trust positively and significantly influences financial inclusion. It also found that institutional trust positively and significantly affects the accessibility, availability, and usage dimensions of financial inclusion in Gandaki Province, Nepal.

Conclusion: This study concluded that individuals with a higher level of trust are more likely to access, avail, and utilise financial services, suggesting that fostering trust is crucial for promoting financial inclusion.

Keywords: Exploratory factor analysis, financial services, Nepal, structural equation modelling, trust in financial institutions

JEL Codes: C38, G21, C39

Introduction

Financial inclusion refers to the availability and accessibility of financial services to all individuals, including those traditionally underserved or unbanked. This includes access to savings and checking accounts, credit, insurance, and other financial products and services to help people manage their finances, build wealth, and participate fully in the economy. Financial inclusion aims to provide everyone with the financial tools they need to improve their lives, regardless of their income level, location, or other factors. It seeks to provide all people access to financial services, especially those traditionally excluded from the formal financial system, such as low-income households, rural communities, and women. Financial inclusion in developing countries like Nepal is crucial in promoting inclusive growth by enabling broader participation in economic activities. It supports poverty reduction (Koomson et al., 2020), the socio-economic well-being of people (Serrao et al., 2021), and the overall economic development of the country (Sethi & Sethy, 2019).

Understanding the factors influencing financial inclusion is vital for designing effective policies to improve access to financial services. Several researchers from around the world have identified various factors that are related to financial inclusion. Sharma and Jain (2021) state that demographic variables significantly influence financial inclusion. Mala and Vijayarangan (2019) showed that age, gender, marital status, education, occupation, income, family size, and area of residence influence financial inclusion. Bozkurt et al. (2018) found social factors such as unemployment, inequality, internet usage, government fiscal policy, trade freedom; banking factors such as bank interest rate, income & profitability, and adequate capital and political factors such as political stability and effectiveness of government are significantly related with the change in level of financial inclusion. The studies of Vishvesh and Venkatraman (2015), Verma and Oum Kumari (2016), and Grohmann et al. (2018) show the role of financial literacy in promoting financial inclusion.

Beyond economic and demographic variables, financial inclusion is also influenced by psychological/ behavioural factors, including institutional trust. Institutional trust refers to customers' trust in the financial institutions and their services. People usually look for trust in financial transactions. As a result, an individual's institutional trust may be a major predictor of financial inclusion. The institutional trust in the financial sector can significantly impact financial inclusion. Individuals lacking trust in the financial sector may be less likely to use formal financial services and products, such as bank accounts, loans, and insurance. Conversely, a high level of institutional trust in the financial sector can encourage greater use of financial services and products, promoting financial inclusion. When individuals trust financial institutions, they are more likely to use their services and products (Ali et al., 2023; Nagańska & Cichocki, 2022).

Despite the significance of institutional trust in financial inclusion, limited research has explored the role of trust in financial inclusion. For example, Galiani et al. (2022) conducted a study in Peru and other regions of Latin America, focusing narrowly on the influence of trust on bank savings. Although the study highlights trust's role in encouraging formal savings, it leaves out how trust might influence other financial behaviours. Nagańska and Cichocki (2022) analysed data from the 2017 Global Findex Database, offering valuable insights into financial inclusion trends worldwide but relying solely on secondary data and lacking an in-depth, primary investigation of trust's influence on individual financial behaviours. Similarly, Baidoo and Akoto (2019) examined trust in the context of formal savings, primarily emphasising how trust affects individuals' willingness to use formal banking services for saving purposes, while providing limited insights on other financial activities. Moreover, Ampudia and Palligkinis (2018) investigated trust's role in determining individuals' likelihood to switch between banks, demonstrating that trust impacts loyalty to financial institutions. These previous studies focus on specific aspects of financial behaviour – savings or loyalty – without fully exploring the multifaceted impact of trust on financial inclusion as a whole, and no study has been conducted to measure the impact of institutional trust on financial inclusion in the Nepalese context. To address this gap, this study examines institutional trust's impact on financial inclusion in Gandaki province, Nepal.

Review of Literature

2.1 Concept of Financial Inclusion

Financial inclusion measures the extent to which different segments of society have access to formal banking services. Various authors have used a multidimensional approach to measure financial inclusion in different countries. Sarma (2008) developed a financial inclusion index that considered banking penetration/accessibility, availability, and utilisation of banking services. Other researchers like Yadav and Sharma (2016) and Hanivan and Nasrudin (2019) used similar dimensions to measure financial inclusion. Adil and Jalil (2020) focused on the supply side and measured financial inclusion through the access dimension, considering availability and accessibility. Similarly, Gupte et al. (2012) constructed a financial inclusion index in India using four dimensions: outreach, usage, ease of transactions, and cost. Nandru and Rentala (2020) used five dimensions for financial inclusion: physical proximity, availability, ease of access, affordability, and usage. In this study, financial inclusion is measured from the demand side using three dimensions: accessibility, availability, and usage.

2.2 Determinants of Financial Inclusion

Various research on the determinants of financial inclusion highlights a range of variables impacting individuals' access to financial services across different regions. Income and education consistently emerge as positive determinants of financial inclusion, as shown by studies in India (Dar and Ahmed, 2020), South Africa (Nyoka, 2019), and Tanzania (Lotto, 2018). Gender, however, poses a significant barrier in many regions, with women less likely to be financially included in India, Tanzania, and the Middle East (Dar and Ahmed, 2020; Shihadeh, 2018). Age influences financial inclusion, with younger or working-age adults more likely to be financially included, although inclusion rates may decline after a certain age (Lotto, 2018). Additionally, Mala and Vijayarangan (2019) showed that age, gender, marital status, education, occupation, income, family size, and area of residence influence the financial inclusion of Indian posts. Further, Bozkurt et al. (2018) found social factors such as unemployment, inequality, internet usage, government fiscal policy, trade freedom; banking factors such as bank interest rate, income & profitability, and adequate capital and political factors such as political stability and effectiveness of government are significantly related with the change in level of financial inclusion. Yadav and Sharma (2016) identified that the proportion of agriculture in a state's GDP, literacy rate, population size, and infrastructural development are important factors influencing financial inclusion. Ranabhat et al. (2022) identified 74 factors affecting digital financial inclusion in their review article, highlighting the major factors of usefulness, ease of use, social influence, and trust.

2.3 Trust and Financial Inclusion

Social Capital Theory highlights the significance of social networks, trust, and community relationships in advancing financial inclusion. It suggests that informal financial networks, trust, and social support can assist individuals in overcoming barriers to formal financial services, particularly in marginalised communities (Bagnasco, 2012). Trust in financial institutions is crucial in encouraging individuals to engage with formal financial services. When individuals trust banks, microfinance institutions, or other financial service providers, they are more likely to open accounts, save money, and seek credit from these institutions. Thus, financial inclusion initiatives should prioritise building trust by ensuring ethical behaviour, offering fair and transparent financial products, and providing accessible and responsive customer service (Ferrary, 2003).

Various studies have explored the relationship between trust and financial inclusion. Galiani et al. (2022) emphasise the importance of building trust in the financial system, as it can reduce transaction costs and increase returns, leading to higher savings among beneficiaries. Nagańska and Cichocki (2022) highlight the significant impact of trust on financial inclusion, stating that trust encourages people to use financial services that meet their needs. On the other hand, a lack of trust can discourage individuals from utilising financial services even if they could benefit from them. Trust is especially important among vulnerable

populations, and effective communication and language play a crucial role in building trust and promoting financial inclusion. Other studies emphasise the positive relationship between trust and financial behaviour. Xu (2020) found that social trust is a significant factor in determining financial inclusion, and higher levels of trust within a country are associated with greater use of formal banking services. Baidoo and Akoto (2019) found a positive relationship between trust in financial institutions and the likelihood of saving at these institutions. Ampudia and Palligkinis (2018) highlighted how a lack of trust in the banking industry can deter households from holding bank accounts. Trust is also crucial for women in accessing financial services, as Ogunleye (2017) found that women are more likely to utilise formal financial services when they have greater trust in financial institutions. Establishing and maintaining trust in financial institutions is important for consumer behaviour, as shown by Koivunen and Tuorila (2015) in the context of payment cards and banks. Overall, trust plays a significant role in facilitating financial inclusion.

Based on the existing literature, it is evident that several studies have explored the different determinants of financial inclusion and the importance of trust concerning financial decision-making and financial inclusion. However, Gandaki Province, located in Nepal, presents a unique socio-economic and cultural context that may influence individuals' trust in financial institutions. Examining these factors in relation to financial inclusion in Gandaki Province would provide valuable insights into the role of institutional trust in promoting or hindering financial inclusion in a specific regional context. Figure 1 conceptualises institutional trust as a predictor of financial inclusion, aligning with findings of Xu (2020), Ampudia and Palligkinis (2018), and Ogunleye (2017), while contextualising it within the Gandaki Province of Nepal.

Figure 1 : **Model of the Study**

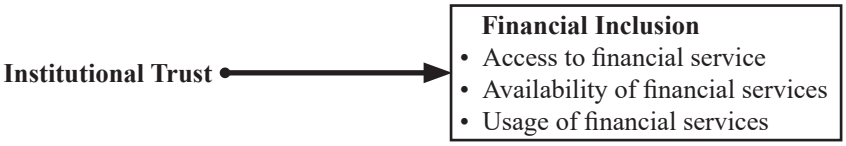

Figure 1 illustrates the relationship between institutional trust and financial inclusion. In this study, financial inclusion is considered a higher-order construct, measured by three lower-order constructs: access, availability and usage of financial services (Sarma, 2008; Hanivan & Nasrudin, 2019). Four different hypotheses were formulated and tested. H1 examines the relationship between institutional trust and overall financial inclusion, while the remaining hypotheses explore the relationships between institutional trust and each dimension of financial inclusion.

The following hypotheses were generated and tested in this study.

H1: Institutional trust significantly determines overall financial inclusion

H2: Institutional trust determines the accessibility dimension of financial inclusion

H3: Institutional trust determines the availability dimension of financial inclusion

H4: Institutional trust determines the usage dimension of financial inclusion

Methodology

This study employs both descriptive and an analytical research design. It was held in Nepal's Gandaki province using a multistage sampling technique. At first, Gandaki province was selected purposively as this province has the highest level of financial inclusion compared to other provinces. In the second stage, three districts were chosen randomly from the eleven districts in this province: Kaski, Syangja, and Parbat. The population units are the total households in Gandaki Province. The total population is 579,942 (CBS Nepal, 2022), and 600 houses were selected proportionately for data collection in the third stage. Finally, one chief household decision-maker was chosen conveniently as the respondent for this study. A researcher-administered survey schedule was developed for data collection, which included socio-demographic parameters and a measurement scale to assess psychological variables (institutional

trust) and financial inclusion. The researcher personally visited the respondents and conducted face-to-face interviews for data collection. For data analysis, the researchers used IBM SPSS Amos. This study employed percentage analysis, exploratory factor analysis (EFA), and structural equation modelling (SEM). The respondents' characteristics were studied using descriptive statistics such as frequency distribution, and the effect of institutional trust on financial inclusion was measured using SEM.

In this study, the researchers have used different constructs such as institutional trust and financial inclusion. Here, financial inclusion is a higher-order construct measured by three lower-order constructs, namely accessibility, availability, and usage (Sarma, 2008; Hanivan & Nasrudin, 2019). Using various indicators from past studies, the researcher used 5-point Likert scales to measure respondents' perceptions of institutional trust and financial inclusion (see Table 1). In this case, EFA was run as a precursor to confirmatory factor analysis to find the scale related to the construct and exclude unrelated ones. Following the EFA, the structural Equation Modelling (SEM) tests the relationship between independent and dependent variables. The measurement model in SEM is used to assess the model fit, as well as the reliability and validity of the constructs. Model fitness was assessed using CMIN/DF (chi-square divided by degree of freedom), GFI (goodness of fit index), NFI (Normed fit index), CFI (comparative fit index), and RMSEA (root mean square error of approximation). Table 2 presents the criteria for model fitness.

Similarly, Cronbach's alpha and composite reliability were used for reliability of constructs, average Variance extracted (AVE) for convergent validity, and Fornell and Larcker's Criteria for discriminant validity. The structural model was used to examine the link between institutional trust and financial inclusion after reliability, validity, and goodness of model fit were confirmed. The structural model's fitness was also evaluated using CMIN/DF, GFI, NFI, CFI, and RMSEA, as shown in Table 2.

Table 1: List of Items and Their Sources

Item code	Items	Sources
LT1	Trustworthy financial services	(Xu, 2019), (Harris & Goode, 2004), (Zhu & Chen, 2012)
LT2	The bank keeps promises.	
LT3	Security of personal information in a bank	
LT4	Trust in the information provided by the bank	
LT5	Trust in the bank's locker	
LT6	Trust in remittance services	
LT7	The bank account is safe.	
ACC1	Convenient location	(Nandru & Rentala, 2020), (Hanivan & Nasrudin, 2019), (Sarma, 2008), (Gupte et al., 2012), (Okello Candiya Bongomin et al., 2020)
ACC2	Easy access for employees	
ACC3	Closeness of the ATM	
ACC4	Convenient transaction timing	
ACC5	Easy access to information	
ACC6	Many branches nearby	
ACC7	Reasonable account opening fee	
AVA1	Attractive savings plans	(Nandru & Rentala, 2020), (Hanivan & Nasrudin, 2019), (Sarma, 2008)
AVA2	Attractive loan plans	
AVA3	Availability of ATM	
AVA4	Availability of a locker	
AVA5	Availability of a Zero balance account	
AVA6	Availability of internet/mobile banking	
AVA7	Issue of a cheque book on time	
AVA8	Assistance of bank staff	

USE1	Frequency of deposit	(Nandru & Rentala, 2020), (Hanivan & Nasrudin, 2019), (Sarma, 2008), (Gupte et al., 2012), (Okello Candiya Bongomin et al., 2020)
USE2	Frequency of withdrawal	
USE3	Frequency of bank visits for saving and loan information	
USE4	Frequency of use of bank loans	
USE5	Use of a bank for utility payments	
USE6	Use of a bank for stock trading	
USE7	Use of locker facility	

Table 2: Model Fit Indices

Indices	Criteria	Sources
CMIN/DF	≤ 3 = acceptable fit	Marsh and Hocevar (1985); Hair et al. (2019)
	≤ 5 = reasonable	
GFI	≥ 0.95 = excellent fit	Bentler and Hu (1998); Hair et al. (2019)
	≥ 0.90 = acceptable fit	
NFI	≥ 0.95 = excellent fit	West et al. (2012); Fan et al. (2009); Hair et al. (2019)
	≥ 0.90 = acceptable fit	
CFI	≥ 0.95 = excellent fit	West et al. (2012); Fan et al. (2009); Hair et al. (2019)
	≥ 0.90 = acceptable fit	
RMSEA	≤ 0.05 or 0.08 = acceptable fit	MacCallum et al. (1996); Hair et al. (2019)

Results and Discussion

4.1 Socio-Demographic Profile of the Respondents

The socio-demographic information of the respondents in this study – including location, gender, age group, marital status, family type, ethnicity, education level, and household monthly income – is presented in Table 3.

Table 3 : Socio-Demographic Characteristic

Variables	Categories	**Frequency**	**Percent**
District	Kaski	334	55.67
	Syangja	174	29.00
	Parbat	92	15.33
Gender	Male	392	65.33
	Female	208	34.67

Age structure	30 years or less	57	9.50
	31 to 40 years	160	26.67
	41 to 50 years	226	37.67
	51 to 60 years	120	20.00
	Above 60 years	37	6.17
Marital Status	Married	583	97.17
	Divorced/Single	3	0.50
	Widow	14	2.33
Family type	Nuclear family	412	68.67
	Joint family	188	31.33
Ethnicity	Brahmin	331	55.17
	Chhetri	145	24.17
	Others	124	20.70
Education Status	Illiterate	14	2.33
	Literate but no formal education	32	5.33
	Primary education (up to 5)	34	5.67
	Lower secondary education (6 to 8)	74	12.33
	Secondary Education (9 to 12)	267	44.50
	Higher education (Bachelor's and above)	179	29.83
Monthly income of the household	Rs. 10,000 or less	44	7.33
	Rs. 10,001 to Rs. 40,000	310	51.67
	Rs. 40,001 to Rs. 125,000	207	34.50
	More than Rs. 125,000	39	6.50

The study was conducted in the Gandaki province of Nepal, where three districts- Kaski, Syangja, and Parbat were selected randomly, and 600 sample households were taken proportionately from each district. More than half of the households are from Kaski district, which comprises around 56 per cent of the households, followed by Syangja district (29%), and Parbat district (15.33%). The proportion of male respondents is 65.33 per cent, and the female respondents are only 34.67 per cent, indicating that most households' primary decision makers are male.

In terms of age, the majority of the respondents are 41 to 50 years old (37.67%). It is followed by 31 to 40 years old (26.67%), 51 to 60 years old (20%), 30 years and less (9.50%), and above 60 years old (6.17%). Similarly, 97.17 per cent of respondents are married, 2.33 per cent are widows, and only 0.50% are divorced/single. Regarding the family types, most live in a nuclear family (68.67%), and only 31.33% live in a joint family. In terms of ethnicity, more than half of the respondents are Brahmin (55.17%). It is followed by Chhetri (24.17%) and others (20.70%).

In terms of education status, around three-fourths of respondents (74.33%) have secondary and higher secondary education. It is followed by lower secondary education (12.33%), primary education (5.67%), literate but no formal education (5.33%), and illiterate (2.33%). Concerning monthly income, more than half of the respondents (51.67%) have a monthly household income of Rs. 10,001 to Rs. 40,000. It is followed by Rs. 40,001 to Rs. 125,000 (34.50%), Rs. 10,000 and less (7.33%), and more than Rs. 125,000

(6.50%).

4.2 Exploratory Factor Analysis (EFA)

The researcher started with 29 items related to institutional trust and financial inclusion from the previous study (see Table 1). The appropriateness of factor analysis is assessed with KMO and Bartlett's test, factor loadings (communalities). The KMO value is more than 0.60, a significant Bartlett's test at the 1 per cent significance level, and the communalities value of 0.50 or more is considered. Items having communalities less than 0.50 and cross-loading on multiple factors were eliminated. The final factor solution was achieved with 16 items only. The value of communalities of these 16 items ranges from 0.581 to 0.788. All the values are 0.50 or more. So, they are all considered for factor analysis. The result of factor analysis is presented below.

Table 4 : Result of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.850
Bartlett's Test of Sphericity	Approx. Chi-Square	4843.794
	Df	120
	Sig.	0.000

The result of KMO and Bartlett's test is presented in Table 4. The value of KMO is 0.850, which indicates that the sample is adequate for factor analysis. Likewise, the significant p-value at the 1 per cent significance level of Bartlett's sphericity test indicates a high correlation among the items.

Table 5 : Result of EFA

Factor	Items	Loadings	% of variance	Cumulative %	Cronbach's Alpha
Accessibility	ACC1	.865	19.723	19.723	0.894
	ACC2	.825			
	ACC3	.856			
	ACC6	.849			
Institutional trust	LT1	.809	18.231	37.953	0.871
	LT2	.860			
	LT3	.786			
	LT4	.822			
Availability	AVA3	.671	17.495	55.448	0.848
	AVA6	.825			
	AVA7	.802			
	AVA8	.822			
Usage	USE1	.712	14.146	69.594	0.736
	USE2	.698			
	USE3	.751			
	USE4	.759			

The result of the EFA is presented in Table 5. The factor solution is based on the eigenvalues of more than one factor using varimax rotation. Four factors with eigenvalues greater than one are extracted here, explaining 69.594% of the total variance. The first factor is accessibility, which consists of four items (ACC1, ACC2, ACC3, and ACC6) and accounts for 19.723% of the variance. The second factor is institutional trust, which consists of four items (LT1 to LT4) and accounts for 18.231% of the variance. The third factor is availability, which consists of four items (AVA3, AVA6, AVA7, and AVA8), accounts for

17.485% of the variance, and the fourth factor is usage, which consists of four items (USE1, USE2, USE3, and USE4), explains 14.146% of the variance. The Cronbach's alpha value for all four factors ranges from 0.736 to 0.894, more than the minimum acceptable limit of 0.70. It indicates that measurement scales are highly reliable

4.3 Structural Equation Modelling (SEM)

4.3.1 Measurement Model

The measurement model of institutional trust and financial inclusion (access, availability, and usage) is presented in Figure 2, and the result of model fit indices is presented in Table 6. All the calculated values of absolute fit measures (CMIN/DF, GFI, and RMSEA) and incremental fit measures (NFI, CFI) satisfy the minimum criteria. This is compelling evidence that model fitness is high. As a result, it is acceptable to establish a link between institutional trust and financial inclusion (access, availability, and usage).

Figure 2 : Measurement Model

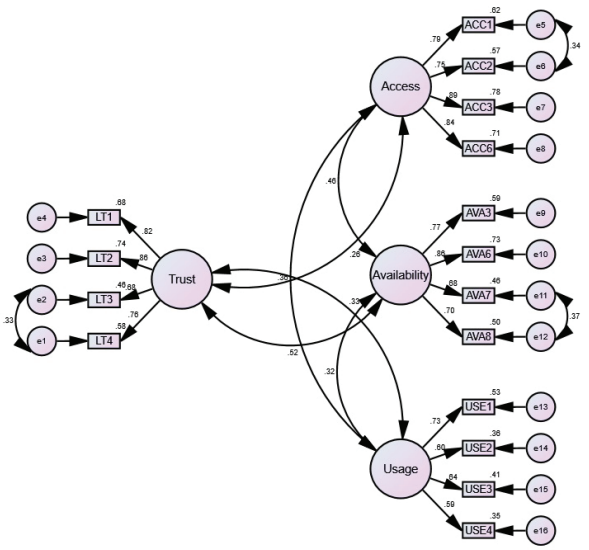

Table 6: Model Fit Indices of Measurement Model

Indices	Criteria	Calculated Value	Comments
Absolute fit measures			
CMIN/DF	<5	3.455	Min. criteria is satisfied
GFI	> 0.9	0.935	Min. criteria is satisfied
RMSEA	< 0.08	0.064	Min. criteria is satisfied
Incremental fit measures			
NFI	> 0.9	0.933	Min. criteria is satisfied
CFI	> 0.9	0.951	Min. criteria is satisfied

Result of CFA, Reliability, and Validity Tests of Constructs

The outcomes of CFA, Cronbach's alpha, composite reliability, and AVE of risk attitude, risk behaviour, institutional trust, and financial inclusion are presented in Table 7.

Table 7: Result of CFA, Reliability, and Validity Test

Construct	Result of CFA					CR	AVE
	Item loaded	Standardised factor loadings	**Critical Ratio**	**Sig.**	**Cronbach's Alpha**		
Access	ACC1	0.788	0	0	0.894	0.890	0.669
	ACC2	0.753	23.78	***			
	ACC3	0.885	22.488	***			
	ACC6	0.84	21.643	***			
Avail	AVA3	0.77	0	0	0.848	0.840	0.570
	AVA6	0.857	19.368	***			
	AVA7	0.675	15.772	***			
	AVA8	0.704	16.516	***			
Use	USE1	0.727	0	0	0.736	0.738	0.414
	USE2	0.602	11.681	***			
	USE3	0.643	12.209	***			
	USE4	0.594	11.566	***			
Institutional trust	LT1	0.825	19.517	***	0.871	0.863	0.614
	LT2	0.857	19.953	***			
	LT3	0.681	19.85	***			
	LT4	0.759	0	0			

Table 7 reveals that the factor loading of accessibility ranges from 0.753 to 0.885, availability ranges from 0.675 to 0.857, usage ranges from 0.594 to 0.727, and institutional trust ranges from 0.681 to 0.857. All items have loadings greater than 0.50 and are significant at the 1% level. Similarly, the Cronbach alpha value for accessibility is 0.894, availability is 0.848, usage is 0.736, and institutional trust is 0.871, which are more than 0.70 for all constructs. As a result, the proposed model is consistent internally. Likewise, the value of CR for accessibility is 0.890, availability is 0.840, usage is 0.738, and institutional trust is 0.863, which are more than 0.70 for all constructs. As a result, composite reliability exists in the model. Similarly, accessibility has an AVE of 0.669, availability has an AVE of 0.570, usage has an AVE of 0.414, and institutional trust has an AVE of 0.614. All these AVE values exceed the required value of 0.50, except that the usage has an AVE of 0.414. According to Hair et al. (2019), convergent validity is not a concern if the CR is greater than 0.70 and the AVE is greater than 0.40. As a result, the model contains convergent validity.

Table 8: Result of Fornell and Lacker's Criteria

	Access	Avail	Use	Institutional trust
Access	**0.818**			
Avail	0.460	**0.755**		
Use	0.360	0.318	**0.643**	
Institutional trust	0.264	0.519	0.328	**0.784**

The results of Fornell and Lacker's criteria of institutional trust and financial inclusion (accessibility, availability, and usage) are given in Table 8. The square root of AVE is represented by the diagonal (bold)

value, and the other values show the correlation value between the constructs (Henseler et al., 2015). Here the correlation values between access and other constructs are less than the square root AVE of access (0.818), correlation values between availability and other constructs are less than square root AVE of availability (0.755), correlation values between usage and other constructs are less than square root of usage (0.643), and correlation values between institutional trust and other constructs are less than square root of institutional trust (0.784). As a result, discriminant validity exists between the constructs.

4.3.2 Structural Model

The structural model established the relationship between institutional trust and financial inclusion. Figure 3 shows the effect of institutional trust on overall financial inclusion, and Figure 4 shows the effect of institutional trust on the dimensions of financial inclusion. The structural model's fitness is also evaluated using CMIN/DF, GFI, NFI, CFI, and RMSEA. The value of CMIN/DF in the first structural model (institutional trust and financial inclusion) is 3.574, GFI is 0.933, NFI is 0.929, CFI is 0.949, and RMSEA is 0.066. All the fit indices meet the required minimal criterion. Similarly, the value of CMIN/DF in the second structural model (risk attitude, risk behaviour, institutional trust, and dimensions of financial inclusion) is 4.346, GFI is 0.921, NFI is 0.913, CFI is 0.931, and RMSEA is 0.075. All the fit indices meet the required minimal criterion. This is compelling evidence that the data fits the provided structural model. The result of hypothesis testing is presented in Table 9.

Figure 3 : Impact of Institutional Trust on Overall Financial Inclusion

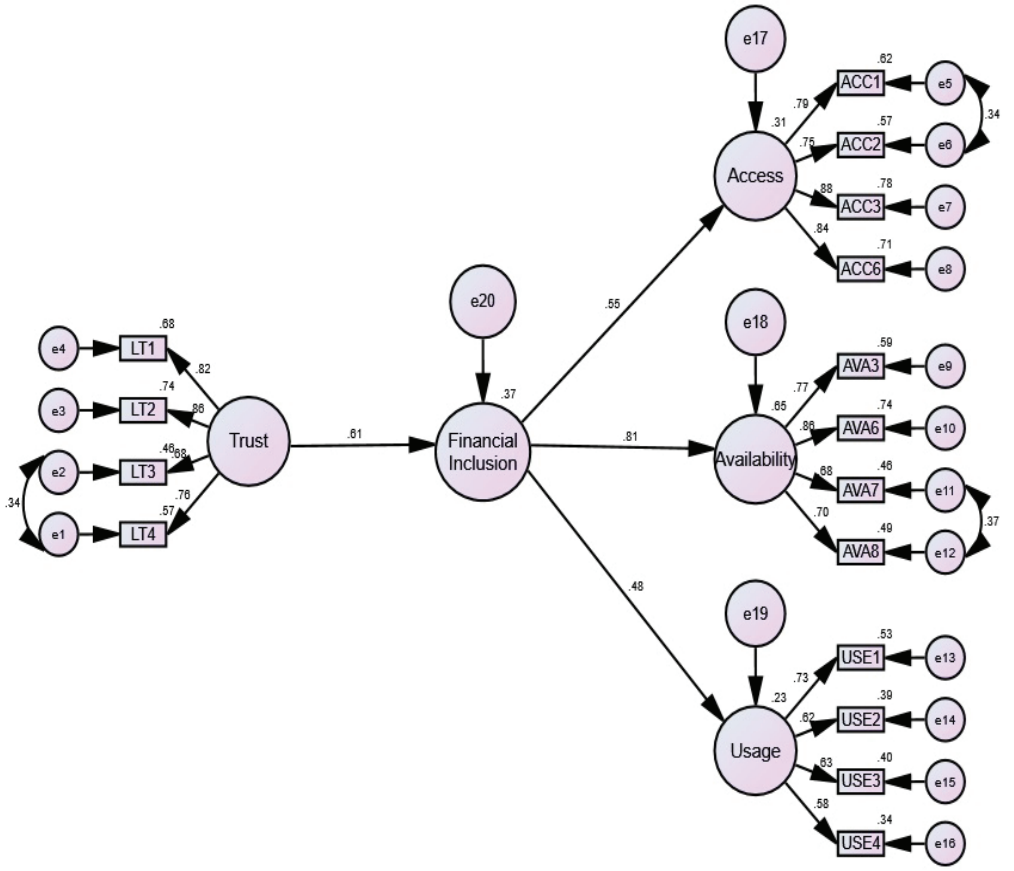

Figure 4: Impact of Institutional Trust on Dimensions of Financial Inclusion

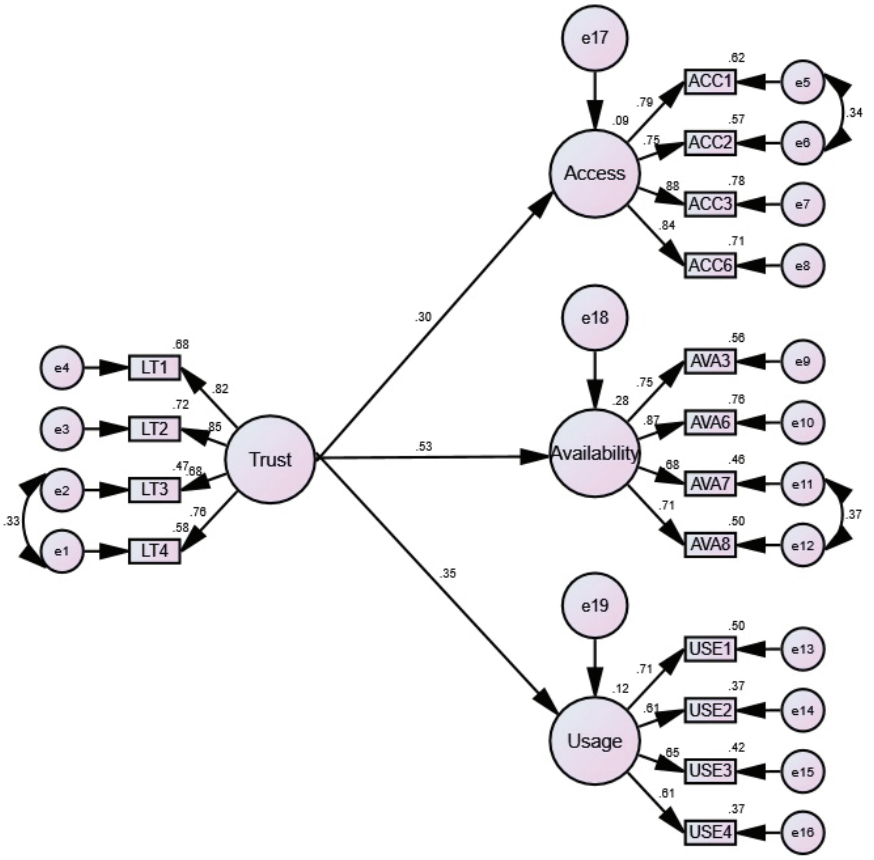

Table 9: Result of Path Coefficients Between Institutional Trust and Financial Inclusion

Hypothesised relationship	Standardised Regression Weight (ß)	Standard Error (S.E.)	Critical Ratio	P-value	Decision on Hypothesis
Trust → FinInc	0.612	0.054	7.817	***	Null hypothesis rejected
Trust → Access	0.303	0.058	6.442	***	Null hypothesis rejected
Trust → Avail	0.533	0.056	10.522	***	Null hypothesis rejected
Trust → Usage	0.351	0.048	6.66	***	Null hypothesis rejected

The effect of psychological variables on financial inclusion and its dimensions is given in Table 9. It reveals that institutional trust positively and significantly determines the financial inclusion ($\beta = 0.612$, t-value = 7.817, $p < 0.001$).

Similarly, the results of impact psychological variables on dimensions of financial inclusion indicate that institutional trust positively and significantly determines the accessibility dimension ($\beta = 0.303$, t-value = 6.442, $p < 0.001$), availability dimension ($\beta = 0.533$, t-value = 10.522, $p<0.001$), and usage dimension ($\beta = 0.351$, t-value = 6.66, $p<0.001$).

4.4 Discussion

The findings of this study provide valuable insights into the influence of psychological variables, especially institutional trust, on financial inclusion in Nepal's Gandaki province. The results reveal that institutional

trust significantly affects financial inclusion and its dimensions. The study highlights the significant role it plays in promoting financial inclusion. The findings indicate that individuals with a higher institutional trust are more likely to experience greater financial inclusion, particularly regarding accessibility, availability, and usage dimensions. These results are consistent with the findings of Galiani et al. (2022), who emphasise the importance of building trust in the financial system, leading to higher savings among beneficiaries, and lack of trust, on the other hand, can discourage individuals from utilising financial services, even if they could benefit from them. Similar to findings by Nagańska and Cichocki (2022), who highlight the importance of effective communication and language in fostering trust among vulnerable groups, this study reveals that trust is particularly crucial for those populations that may be hesitant to engage with financial services. This aspect also aligns with Ogunleye's (2017) study, which points out that women are more inclined to use formal financial services when they trust financial institutions. Nevertheless, this study expands upon Ogunleye's findings by suggesting that trust influences women's use of financial services and inclusion across other demographics in Gandaki province.

Further comparison with Xu (2020), who finds that trust positively correlates with formal banking usage, shows alignment, as this study also confirms a positive relationship between institutional trust and the likelihood of financial inclusion. Additionally, Baidoo and Akoto (2019) associate institutional trust with an increased likelihood of saving at financial institutions, and Ampudia and Palligkinis (2018) suggest that a lack of trust can deter households from holding bank accounts. This study reinforces these observations by demonstrating that trust significantly boosts accessibility and usage of financial services, though it highlights regional differences in Nepal. While previous research has consistently shown trust as a pivotal factor in financial behaviour, this study focuses on its multidimensional impact on financial inclusion within Nepal.

5. Conclusion

This study investigated the impact of psychological variables, especially institutional trust, on financial inclusion and its dimensions. Overall, the findings suggest that institutional trust has a significant positive impact on financial inclusion. Higher levels of trust are associated with greater financial inclusion in these dimensions. This study concludes that individuals with higher levels of trust are more likely to access, avail, and utilise financial services, suggesting that fostering trust is crucial for promoting financial inclusion.

This article provides valuable insights into the impact of psychological variables, specifically institutional trust, on financial inclusion and its dimensions. The findings highlight the importance of building trust in financial institutions to enhance financial inclusion efforts. Policymakers and stakeholders can utilise these insights to develop targeted strategies and interventions to foster trust, promote financial inclusion, and improve individuals' access to and usage of financial services.

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