

EFFECT OF FINANCIAL LITERACY ON FINANCIAL INCLUSION

A Dissertation submitted to the Office of the Dean, Faculty of Management in
partial fulfillment of the requirements for the Master's Degree

By

Sumana Gautam

Shanker Dev Campus

Campus Roll No.: 3037 /075

T.U. Regd. No.: 7-2-39-1351-2014

Exam Roll No: 14167/19

Group: Finance

Kathmandu Nepal,

November, 2024

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **“Effect of Financial Literacy on Financial Inclusion.”** The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of this dissertation.

.....

Sumana Gautam

Date:

REPORT OF RESEARCH COMMITTEE

Ms. Sumana Gautam has defended research proposal entitled “**Effect of Financial Literacy on Financial Inclusion**” successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestion and guidelines of supervisor Dr. Binita Manandhar Submit the thesis for evaluation and viva-voce examination.

.....
Dr. Binita Manandhar
Dissertation Supervisor

Dissertation Proposal Defended Date:
.....

Dissertation Submitted Date:
.....

.....
Asso. Prof. Dr. Sajeeb Kumar Shrestha
Research Department

Dissertation Viva-voce Date:
.....

APPROVAL SHEET

We, the undersigned, have examined the thesis entitled “**Effect of Financial Literacy on Financial Inclusion**” Presented by Sumana Gautam Candidate for the degree of Master of Business Studies (MBS Semester) and Conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

.....
Dr. Binita Manandhar
Dissertation Supervisor

.....
Internal Examiner

.....
Internal Expert

.....
External Expert

.....
Asso. Prof. Dr. Sajeeb Kumar Shrestha
Chairperson, Research Committee

.....
Joginder Goet
Acting Campus Chief

ACKNOWLEDGMENT

I would like to forward my deepest gratitude to Dr. Binita Manandhar of Shanker Dev Campus who supports me with their invaluable scholarly supervision, constructive comments and suggestions that allow me to furnish this thesis report in this final format.

I would like to pay my sincere thanks to Asso. Prof. Dr. Sajeeb Kumar Shrestha, Head of Research Department of Shanker Dev Campus. Besides, I would also like to thank to other respected teachers of Shanker Dev Campus and all the staff of this campus for their help in providing me various kinds of suggestions, information and comments.

Further, my deep regard to known and unknown individual who helped to collect the data at preliminary stage of this dissertation writing.

It is the matter of my immense pleasure to express my deep sense of gratitude and heartfelt respect to my parents for their affection, inspiration and incredible support to precede my academic career.

Sumana Gautam

TABLE OF CONTENTS

	Page No.
<i>Title Page</i>	<i>i</i>
<i>Certificate of Authorship</i>	<i>ii</i>
<i>Recommendation Letter</i>	<i>iii</i>
<i>Approval sheet</i>	<i>iv</i>
<i>Acknowledgement</i>	<i>iv</i>
<i>Table of Contents</i>	<i>vi</i>
<i>List of Tables</i>	<i>viii</i>
<i>List of Figures</i>	<i>ix</i>
<i>Abbreviations</i>	<i>x</i>
<i>Abstract</i>	<i>xi</i>
CHAPTER I INTRODUCTION	
1.1 Background of the Study	1
1.2 Problem Statement	2
1.3 Objectives of the Study	3
1.4 Hypothesis of the Study	3
1.5 Rationale of the Study	3
1.6 Limitations of the Study	4
CHAPTER II LITERATURE REVIEW	
2.1 Theoretical Review	5
2.2 Empirical Review	7
2.3 Research Gap	13
CHAPTER III RESEARCH METHODOLOGY	
3.1 Research Design	14
3.2 Population and Sample	14
3.3 Nature and Sources of Data	14
3.4 Methods of Analysis	15
3.5 Research Framework and Definition of Variables	17

CHAPTER IV RESULTS AND DISCUSSION

4.1 Descriptive Analysis of Variables	21
4.2 Correlation Analysis	28
4.3 Regression Analysis	30
4.4 Discussion	33

CHAPTER V SUMMARY AND CONCLUSION

5.1 Summary	36
5.2 Conclusion	37
5.3 Implications	38

References

LIST OF TABLES

	Page No.
Table 1 Meta Analysis	11
Table 2 Descriptive Statistics of Social Capital	22
Table 3 Descriptive Statistics of Cognition	23
Table 4 Descriptive Statistics of Financial Self-Efficacy	24
Table 5 Descriptive Statistics of Economic Stability	25
Table 6 Descriptive Statistics of Information Technology	26
Table 7 Descriptive of Financial Inclusion	27
Table 8 Correlation Matrix	29
Table 9 Model Summary When Dependent Variable is Financial Inclusion	31
Table 10 ANOVA Table when Dependent Variable is Financial Inclusion	31
Table 11 Coefficient Table When Dependent Variable is Financial Inclusion	32

LIST OF FIGURE

	Page No.
Figure 1 Research Framework	18

ABBREVIATIONS

CAR	:	Capital Adequacy Ratio
CDR	:	Credit Deposit Ratio
CFPB	:	Consumer Financial Protection Bureau
CRR	:	Cash Reserve Ratio
CV	:	Coefficient of variation
IT	:	Information Technology
NPLR	:	Non-performing Loan Ratio
RCT	:	Randomized Controlled Trial
ROA	:	Return on Assets
ROE	:	Return on Equity
SPSS	:	Statistical Package for the Social Sciences

ABSTRACT

This study explores the impact of financial literacy on financial inclusion, focusing on how various factors influence individuals' ability to access and use financial services. Key independent variables include social capital, cognition, financial self-efficacy, economic stability, and information technology, while financial inclusion serves as the dependent variable. The research investigates how financial literacy enhances individuals' understanding and use of formal financial systems, particularly in promoting economic participation and reducing financial exclusion. The findings provide insights into the role of financial education in fostering greater inclusion and the importance of enhancing key enablers to drive financial participation.

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Financial literacy refers to the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing. It encompasses the knowledge and confidence to make informed and effective decisions regarding the use and management of money. High levels of financial literacy are associated with better financial behaviors, such as saving, investing, and managing debt, which are critical for financial well-being. Recent studies highlight that financial literacy is not only crucial for individual financial stability but also for the overall economic health of societies. They emphasize that financial literacy contributes to improved financial behaviors and outcomes, leading to enhanced financial security and well-being for individuals (Xiao et al., 2024).

Financial inclusion involves providing access to useful and affordable financial products and services that meet the needs of individuals and businesses, delivered in a responsible and sustainable way. Key components of financial inclusion include access to credit, savings accounts, insurance, and payment systems. Financial inclusion aims to eliminate barriers to financial services, thereby allowing underserved populations to participate fully in the economy. Effective financial inclusion efforts can help reduce poverty and boost economic growth by enabling individuals to save for future needs, invest in education, and manage financial risks. Ozili (2022) discusses how financial inclusion plays a pivotal role in poverty alleviation and economic development by providing the necessary tools for financial management and economic participation.

The relationship between financial literacy and financial inclusion is symbiotic; financial literacy empowers individuals to make better financial decisions, which in turn enhances financial inclusion. Individuals with higher financial literacy are more likely to utilize financial services and products, as they understand their benefits and how to use them effectively. Conversely, financial inclusion provides the opportunity for individuals to apply their financial knowledge in real-world scenarios, further reinforcing their financial literacy. Morgan and Long (2022) highlight that enhancing financial literacy is a key

strategy for improving financial inclusion, particularly among marginalized groups, by enabling them to access and effectively use financial services. This study aims to explore the impact of financial literacy on financial inclusion, specifically examining how increased financial knowledge and skills can lead to greater access to and use of financial services. By identifying the factors that influence both financial literacy and financial inclusion, this research seeks to provide insights into effective strategies for policymakers and financial institutions to promote financial inclusion through educational initiatives and policy interventions. Ultimately, the study aims to contribute to the broader goal of financial empowerment and economic stability for all individuals.

1.2 Problem Statement

The Nepalese financial landscape has seen increasing efforts towards enhancing financial inclusion, yet a substantial knowledge gap persists regarding the influence of financial literacy on these inclusion initiatives. This gap poses critical challenges for policymakers, financial institutions, and educators who require precise insights to formulate effective strategies, allocate resources efficiently, and foster an inclusive financial environment (Shrestha, 2020).

Unlike well-established financial systems globally, Nepal's unique socio-economic context necessitates a comprehensive exploration of the specific factors that underpin the relationship between financial literacy and financial inclusion. The absence of a clear understanding of these determinants exposes stakeholders to potential inefficiencies in financial services delivery and may hinder efforts to empower marginalized populations through enhanced financial capabilities (Acharya & Gautam, 2019).

Furthermore, Nepal's diverse demographic and geographic characteristics amplify the significance of this research. The country's rural-urban divide and varying levels of educational attainment among its population underscore the need to examine how financial literacy influences access to and usage of financial services across different segments of society (Maharjan & Thapa, 2019).

In summary, this thesis aims to contribute to the existing body of knowledge by investigating the impact of financial literacy on financial inclusion in Nepal, thereby enriching our understanding of the dynamics between these variables within the context of a developing economy. Through a nuanced analysis of both qualitative and

quantitative data, this research endeavors to provide actionable insights that can inform policy decisions, improve financial education initiatives, and promote broader economic participation among Nepalese citizens (Sharma & Bhandari, 2020).

The problem statement of the study is:

- How does financial literacy effect on the financial inclusion in Nepal?
- Is there a significant relationship between financial literacy (measured by knowledge, attitudes, and behaviors) and financial inclusion (access to and usage of financial services) in Nepal?
- How much impact does financial literacy have on enhancing financial inclusion among marginalized populations in Nepal?

1.3 Objectives of the Study

The general objective of this study is to analyze the effect of financial literacy on financial inclusion in Nepal.

The specific objectives are:

- To assess effect of financial literacy on financial inclusion.
- To examine the relationship between Social Capital, Cognition, Financial Self Efficacy, Economic Stability, Information Technology and financial inclusion.
- To analyze the impact of Social Capital, Cognition, Financial Self Efficacy, Economic Stability, Information Technology creates on financial inclusion.

1.4 Hypothesis of the Study

In order to empirically verify the data, the following hypothesis have been formulated andverified in this study.

H1: There is no significant impact of Social Capital on financial inclusion.H2: There is no significant impact of Cognition on financial inclusion.

H3: There is no significant impact of Financial Self Efficacy on financial inclusion.H4: There is no significant impact of Economic Stability on financial inclusion.

H5: There is no significant impact of Information Technology on financial inclusion.

1.5 Rationale of the Study

The study on the effect of financial literacy on financial inclusion in Nepal holds substantial significance across multiple dimensions. Firstly, it offers critical insights for

policymakers by uncovering the intricate relationship between financial literacy and inclusion, guiding the development of targeted policies aimed at enhancing financial literacy levels among diverse demographic groups. This research also promises to enrich financial education initiatives by identifying effective strategies to bolster financial literacy skills, empowering individuals to make informed financial decisions and access essential financial services. Moreover, by understanding the barriers and opportunities associated with financial inclusion, stakeholders can implement tailored interventions to improve accessibility and affordability of financial products, particularly benefiting marginalized communities and underserved regions. Economically, the study underscores how heightened financial inclusion fosters economic growth and stability, enabling greater participation in economic activities and encouraging savings, investments, and entrepreneurial endeavors. Socially, it has the potential to mitigate poverty and inequality by empowering vulnerable groups to build financial resilience and improve their overall well-being. Academically, this research contributes to the literature on financial inclusion in developing economies like Nepal, laying the groundwork for future studies and advancing scholarly discourse on similar topics globally.

1.6 Limitations of the Study

The limitations of the study are as follows:

- This study is concentrated on effect of financial literacy on financial inclusion.
- The study is based on Primary data.
- The study is based on the sample of population inside the Kathmandu valley.

CHAPTER II

LITERATURE REVIEW

This section attempts to build strong theoretical background through the help of which further search for solutions of the research problems would be easier. While reviewing the literature different sources like books, documents, bulletins, reports, journals and articles etc. are considered.

2.1 Theoretical Review

The theoretical review explores various theoretical frameworks that underpin the relationship between these two concepts. Financial literacy refers to the knowledge, skills, and behaviors individuals possess regarding financial matters, while financial inclusion involves ensuring access to and usage of affordable financial services across different segments of society.

Human Capital Theory

Developed by Gary Becker (1964), Human Capital Theory posits that investments in education and training (including financial literacy) lead to higher productivity and economic growth. In the context of financial literacy, individuals who acquire financial knowledge and skills are better equipped to participate effectively in financial markets, thereby contributing to economic development through increased savings, investments, and informed financial decisions (Becker, 1964).

Behavioral Economics

Behavioral economics theories, such as Prospect Theory by Daniel Kahneman and Amos Tversky (1979), examine how psychological biases and heuristics influence decision-making under uncertainty. Applied to financial literacy and inclusion, these theories suggest that individuals' financial decisions are often influenced by cognitive biases and emotional factors rather than purely rational considerations. Understanding these biases is crucial for designing interventions that promote better financial decision-making and increase access to financial services (Kahneman & Tversky, 1979).

Agency Theory

Developed by Jensen and Meckling (1976), Agency Theory focuses on the relationship between principals (e.g., shareholders) and agents (e.g., managers) and the conflicts of interest that arise between them. In the context of financial inclusion, agency theory explores how asymmetries of information and moral hazards affect individuals' ability to access and utilize financial services effectively. Financial literacy helps mitigate these agency problems by empowering individuals to monitor and make informed choices regarding their financial intermediaries (Jensen & Meckling, 1976).

Financial Capability Framework

The Financial Capability Framework, as developed by the Consumer Financial Protection Bureau (CFPB), emphasizes the importance of integrating financial knowledge, skills, and behaviors to achieve financial well-being. It underscores that improving financial literacy is essential for enhancing financial inclusion by enabling individuals to manage money effectively, navigate financial products and services, and make sound financial decisions that lead to improved economic outcomes (CFPB, 2015).

Social Capital Theory

Putnam (2000) examined the contribution of social networks and community relationships to individual and collective development. In the context of financial inclusion, social capital theory highlights the role of social networks in facilitating access to financial resources, information, and opportunities. Communities with strong social ties are better positioned to support financial literacy initiatives and promote financial inclusion among their members (Putnam, 2000).

Institutional Theory

Scott (2008) investigated the formal and informal institutions shape individuals' behaviors and actions. In the context of financial inclusion, institutional theory considers how regulatory frameworks, financial policies, and institutional arrangements influence the accessibility and availability of financial services. Understanding these institutional dynamics is crucial for designing policies and interventions that promote inclusive financial systems and address barriers to financial access (Scott, 2008).

Capability Approach

Amartya and Sen (1985) proposed the Capability Approach focuses on individuals' capabilities to achieve well-being and flourish. In relation to financial inclusion, this approach emphasizes not only access to financial services but also individuals' freedom to use financial resources effectively to enhance their quality of life. Financial literacy plays a pivotal role in expanding individuals' capabilities by equipping them with the knowledge and skills to make informed choices, manage risks, and improve their economic and social outcomes.

These theoretical frameworks provide a comprehensive perspective on the complex relationship between financial literacy and financial inclusion. They highlight the multidimensional nature of these concepts and their implications for policy, practice, and research aimed at promoting inclusive economic growth and improving financial well-being globally, including in the context of developing economies like Nepal. Understanding these theories helps in designing effective interventions and strategies to enhance financial literacy and foster greater financial inclusion for all segments of society.

2.2 Empirical Review

Kaur and Singh (2023) explored the relationship between financial literacy and financial inclusion in rural Punjab, India. The objective of the study was to determine the effect of financial knowledge on the adoption of banking services and savings behavior. The study used correlation coefficient to analyze data. The study finds the positive relationship between improved financial literacy and increased financial inclusion and savings rates. The study concluded that enhancing financial knowledge in rural areas can lead to greater participation in formal financial systems.

Zhang et al. (2024) investigated the effectiveness of financial literacy in improving financial inclusion in rural China. The objective of the study was to measure the impact of community-based financial literacy programs on access to banking services and savings behavior. The study used t-tests and multiple regression to analyze data. The results found the positive impact with formal financial institutions to improved financial literacy level. This study concluded that financial education significantly improved financial literacy.

Kumar and Satya (2020) studied the impact of financial literacy on the financial inclusion of women entrepreneurs in India. The objective of the study was to assess the influence of financial literacy on women's access to credit, savings, and insurance services. The study used correlation coefficient to analyze the data. The study finds the positive impact of financial literacy on women entrepreneurs to access and utilize financial services. This study concluded the improved financial literacy enhances women's ability to access and utilize financial services effectively, promoting their economic empowerment.

Kulkarni et al. (2024) analyzed the role of financial literacy in inclusive growth among marginalized communities in India. The objective of the study was to assess financial knowledge influences economic participation and reduces financial instability. The study used correlation coefficient to analyze the data. The results found the positive impact of financial knowledge to reduced the financial instability. This study concluded that the higher financial literacy led to greater economic empowerment and reduced financial instability among these marginalized groups.

Garcia and Martinez (2023) investigated the role of financial literacy programs in promoting financial inclusion among low-income households in Mexico City. The objective of the study was to assess financial education affects the uptaken of banking services and formal credit usage. The study used multiple regression to analyze the data. The study found a strong positive relationship between financial literacy and increased use of formal financial products. The study concluded that the importance of targeted financial education in urban areas.

Singh and Patel (2023) explored the impact of financial literacy campaigns on financial inclusion among farmers in India's agricultural sector. The objective of the study was to determine the affects of financial education of farmers' to access the credit and insurance products. The study used multiple regression to analyze the data. The study found that the financial literacy significantly improved farmers' engagement with formal credit institutions and crop insurance programs. This study concluded to enhance the financial education for improved financial resilience.

Chen and Li (2023) studied the effect of school-based financial literacy programs on financial inclusion in rural China. The objective of the study was to assess the early financial education influences on students' understanding and use of banking services. The study used t-tests and multiple regression to analyze data. The study found the significant improvement in financial knowledge and an increase in the use of savings accounts among students. This study concluded that the long-term benefits of early financial education in promoting financial inclusion.

Chowdhury and Rahman (2023) examined the effectiveness of mobile-based financial literacy campaigns in improving financial inclusion in Bangladesh. The objective of the study was to compare financial behavior before and after exposure to mobile financial education. The study used multiple regression to analyze data. The result found the intervention of financial literacy significantly increased knowledge of savings products and mobile banking, with a notable rise in mobile banking adoption. This study concluded to emphasizing the value of mobile technology in rural financial inclusion efforts.

Mohammed and Ibrahim (2023) evaluated the impact of community financial literacy initiatives on financial inclusion in Nigeria's rural areas. The objective of the study was to measure the programs influenced to access the formal banking services and microfinance. The study used t-test to analyze data. The study found a significant improvement in the understanding of financial products and a corresponding increase in the use of savings and credit services. The study concluded to increase the importance of localized financial education.

Nguyen et al. (2024) studied the influence of financial education programs on financial inclusion among university students in Vietnam. The objective of the study was to assess the influence of formal financial literacy courses on students' uses of digital banking and investment in savings products. The study used multiple regression and correlation coefficient to analyze data. This result found a significant increase in the adoption of digital financial services. This study concluded to improve financial education for increase the more adoption of digital financial services.

Silva and Fernandes (2024) assessed the role of digital financial literacy in improving financial inclusion in Brazil's informal economy. The objective of the study was to measure the influence of digital skills on the uses of mobile banking and e-wallets among informal workers. The study used multiple regression to analyze data. The result found that the improved digital financial literacy was significantly correlated with greater adoption of mobile banking services. The study concluded that to expand digital tools for expanding financial inclusion.

Adeola and Adebayo (2024) examined the effect of online financial literacy programs on financial inclusion in South Africa's youth population. The objective of the study was to assess the changes in financial behavior before and after the intervention of financial literacy. The study used Multiple Regression to analyze the data. The result shows the online financial literacy programs led to a significant increase in the use of formal banking services including mobile banking and savings accounts. The study concluded to enhance the potential of digital education to drive financial inclusion.

Hossain and Uddin (2024) investigated the role of financial literacy training in promoting financial inclusion among female entrepreneurs in Bangladesh. The objective of the study was to analyze the impacts of knowledge on the access of credit and saving services. The study used multiple regression to analyze data. The study found the higher financial literacy access the higher financial formal credit and improve their business practices. The study concluded to emphasize the role of financial education for the empowering women entrepreneurs.

Park and Lee (2024) examined the impact of mobile-based financial literacy interventions on financial inclusion in South Korea. The objective of the study was to evaluate the effect of mobile financial education on the banking services and drives behavioral changes in financial practices. The study used Multiple Regression to analyze the data. This study found that the mobile financial literacy progress significantly boosted financial knowledge and the use of mobile banking services. This study concluded that the strong role of technology in promoting financial inclusion.

Osei and Boateng (2023) explored the impact of financial literacy workshops on the financial behavior of small business owners in Ghana. The objective of the study was to understand the influences of financial knowledge to access the credit and investment decisions. The study used multiple regression to analyze data. This study found the higher financial literacy access higher financial management practices and seek formal financial services. This study concluded for improved financial education to enhance business growth and financial inclusion.

Table 1

Meta Analysis

Author's(Year)	Objectives	Methodology	Key Findings
Kaur and Singh (2023)	To explore relationship between financial literacy and financial inclusion in rural areas of Punjab, India	Correlation Coefficient	Improved financial literacy correlated with higher financial inclusion and savings rates in rural Punjab.
Zhang et al. (2024)	To evaluate effectiveness of peer-to-peer financial education on financial inclusion in rural China.	T-test and multiple regression	Peer-to-peer financial education enhanced financial literacy and engagement with formal financial institutions in rural China.
Kumar and Satya (2020)	To Study impact of financial literacy on financial inclusion of women entrepreneurs in India.	Correlation coefficient	Enhanced financial literacy empowered women entrepreneurs to access and use financial services.
Kulkarni et al. (2024)	To analyze role of financial literacy in promoting inclusive growth among marginalized communities in India	Correlation coefficient	Improved financial literacy contributed to economic empowerment and reduced financial vulnerability among marginalized groups in India
García et al. (2022)	To evaluate effectiveness of financial education programs on financial inclusion in Spain	Multiple regression	Financial education programs boosted financial literacy and banking service usage in Spain.

Singh and Patel (2023)	To determine the effects of financial education of farmers 'to access the credit and insurance products.	Multiple regression	financial literacy significantly improved farmers' engagement with formal credit institutions and crop insurance programs.
Chen and Li (2023)	To assess the early financial education influences on students' understanding and use of banking services	Multiple regression	significant improvement in financial knowledge and an increase in the use of savings accounts among students.
Chowdhury and Rahman (2023)	to compare financial behavior before and after exposure to mobile financial education.	Multiple regression	intervention of financial literacy significantly increased knowledge of savings products and mobile banking, with a notable rise in mobile banking adoption.
Mohammed and Ibrahim (2023)	To measure the programs influenced to access the formal banking services and microfinance.	T-test	significant improvement in the understanding of financial products and a corresponding increase in the use of savings and credit services.
Nguyen et al. (2024)	To assess the influence of formal financial literacy courses on students' uses of digital banking and investment in savings products.	Multiple regression and correlation coefficient	significant increase in the adoption of digital financial services.
Silva and Fernandes (2024)	To measure the influence of digital skills on the uses of mobile banking and e-wallets among informal workers.	Multiple regression	the improved digital financial literacy was significantly correlated with greater adoption of mobile banking services.
Adeola and Adebayo (2024)	To assess the changes in financial behavior before and after the intervention of financial literacy.	Multiple Regression	Online financial literacy programs led to a significant increase in the use of formal banking services including mobile banking and savings accounts.
Hossain and Uddin (2024)	To analyze the impacts of knowledge on the access of credit and saving services.	Multiple regression	higher financial literacy access the higher financial formal credit and improve their business practices.
Park and Lee (2024)	To evaluate the effect of mobile financial education on the banking services and drives behavioral changes in financial practices.	Multiple Regression	The mobile financial literacy progress significantly boosted financial knowledge and the use of mobile banking services.

Osei and Boateng (2023)	to understand the influences of financial knowledge to access the credit and investment decisions.	Multiple regression	Higher financial literacy access higher financial management practices and seek formal financial services.
-------------------------	--	---------------------	--

2.3 Research Gap

Despite the growing recognition of the importance of financial literacy and financial inclusion globally, there exists a significant gap in understanding these dynamics within the context of Nepal. Existing literature primarily focuses on developed economies or larger emerging markets, often overlooking the unique socio-economic and institutional characteristics that define Nepal's financial landscape. Specifically, there is a scarcity of empirical studies that systematically explore how varying levels of financial literacy among different demographic groups in Nepal impact their access to and utilization of financial services. Moreover, while some studies touch upon aspects of financial inclusion in Nepal, there is a lack of comprehensive research that specifically investigates the direct relationship between financial literacy and various dimensions of financial inclusion such as access to credit, savings behavior, and participation in formal financial systems. Addressing these gaps is crucial for policymakers, financial institutions, and development practitioners seeking evidence-based strategies to enhance financial literacy programs and promote broader financial inclusion in Nepal.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology is the systematic approach used to address a research problem. It involves selecting specific methods and techniques that are appropriate for the study's context, explaining why these methods are chosen and why others are not, ensuring that the research results can be evaluated by the researcher or others. Essentially, research methodology outlines the sequential steps taken by a researcher to study a problem and achieve certain objectives (Kothari, 2007).

3.1 Research Design

Research design is the specification of method and procedures for acquiring the information needed. To achieve the specific objective of the study, descriptive and causal comparative research has been carried out in terms of effect of financial literacy on financial inclusion in Kathmandu Valley. The descriptive research design is used to find out and compare the demographic and descriptive statistics and causal research is used to analyze the relationship and effect of the variables.

3.2 Population and Sample

This study was based on primary source of data. Structured set of 5 point Likert scale questionnaire is used to extract the information from the individuals living in Kathmandu Valley. Random sampling method was used for the study as it was appropriate for this study because this technique is one of the best to reach the target respondents. The sampling technique generally assumes a homogeneous population that means the member of population has similar characteristics. Due to the resource, time and financial constraint, this method is appropriate way to reach the respondents. The target population for this study is the entire individuals of the Kathmandu Valley who are above 18 age group. The study covers people of different age group, qualification level. Here, the sample for the study is the 384 individuals living in the Kathmandu Valley.

3.3 Nature and Sources of Data

This research is basically based on primary sources of data collected through the opinion survey carried out to the different age group of the individual living in Kathmandu

Valley. Primary data source mainly includes questionnaire in order to collect information from the respondent who are residing in the Kathmandu Valley. The primary data is collected by self-administered methods of collection. First part is concerned with the respondent's demographic features and the second part is divided in to the basis of the study carried forward.

3.4 Methods of Analysis

In this study therefore descriptive statistics and regression analysis is applied to achieve the objective of the impact of financial literacy on the financial inclusion. In this research study some statistical tools are used for the analysis of the data more accurately, which are given below:

Arithmetic Mean

The arithmetic mean or simple mean of set of observations is the sum of all the observations divided by the number of observations. It is the best value, which represents the whole group means is the arithmetic average of a variable. It is used to find out mean of all the ratio variables used in the study.

Standard Deviation

The standard deviation is the absolute measure of dispersion in which the drawback presents in other measure of dispersion as it satisfied most of the requisites of a good measure of dispersion. Higher the standard deviation Higher will be the variability and vice versa. Dispersion measures the variation of the data from the central value. In other words, it helps to analyze the quality of data regarding its variability. It is used to find out standard deviation of all the variables used in the study.

Coefficient of Variation

Standard deviation measures the absolute spread or dispersion of data points around the mean. When we want to understand this spread relative to the mean, we use the coefficient of standard deviation. This coefficient is expressed as a percentage and is known as the coefficient of variation (CV). A lower CV indicates greater consistency and uniformity in the data, whereas a higher CV suggests more variability. Using standard deviation alone isn't always sufficient for comparing the variability between two sets of data. The CV, however, provides a useful tool for comparing the variability of two

different variables independently. It takes into account both the spread of the data (standard deviation) and the scale of the data (mean), making it a more robust measure for comparing variability across different datasets. This is also used to confirm the consistency of the ratio calculated in the financial analysis part.

Correlation Analysis

The correlation coefficient measures the strength and direction of the relationship between two variables. It helps us understand how changes in one variable are associated with changes in another variable. If the correlation coefficient is high, it indicates that when one variable changes, the other tends to change in a predictable way—either increasing or decreasing together.

$$r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}}$$

Where,

n = number of observation in series X and Y

$\sum X$ = sum of observation in series X

$\sum Y$ = sum of observation in series Y

$\sum X^2$ = sum of squared observation in series X

$\sum Y^2$ = sum of squared observation in series y

$\sum XY$ = sum of the product of observations in series X and Y
The value of correlation coefficient ranges from -1 to +1.

$r = 0$ means variables are correlated lies between -1 and +1

$r = -1$ means perfect negative correlation between the variables
 $r = +1$ means positive correlation between the variables

Regression Analysis

In statistical modeling, regression analysis is a set of statistical processes for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable (Financial Inclusion) and one or more independent variables (Social Capital,

Cognition, Financial Self Efficacy, Economic Stability, Information Technology). More specifically, regression analysis helps one understand how the typical value of the dependent variable (or 'criterion variable') changes when any one of the independent variables is varied, while the other independent variables are held fixed (Yadav et al., 2010).

Regression Equation:

$$\text{Model 1: ROA} = \beta_0 + \beta_1 \text{CDR} + \beta_2 \text{NPLR} + \beta_3 \text{CRR} + \beta_4 \text{CAR} + \beta_5 \text{SIZE} + e$$

$$\text{Model 2: ROE} = \beta_0 + \beta_1 \text{CDR} + \beta_2 \text{NPLR} + \beta_3 \text{CRR} + \beta_4 \text{CAR} + \beta_5 \text{SIZE} + e$$

Where,

ROA = Return on Assets
ROE = Return on Equity

β_0 = intercept value of regression equation
 β_1 = coefficient of credit deposit ratio

β_2 = coefficient of non-performing loan ratio
 β_3 = coefficient of cash reserve ratio

β_4 = coefficient of capital adequacy ratio
 β_5 = coefficient of bank size

CDR = Credit Deposit Ratio

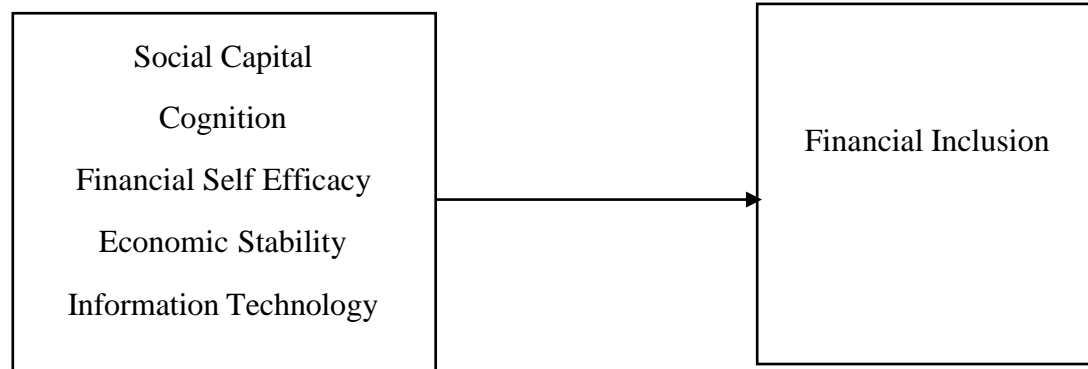
NPLR = Non-performing Loan Ratio
CRR = Cash Reserve Ratio

CAR = Capital Adequacy Ratio
SIZE = Logarithm of Total Assets

e = residual term of the regression equation

3.5 Research Framework and Definition of Variables

The review of various previous studies and literature the conceptual frame work for the study was developed for the analysis of financial literacy on the financial inclusion in Kathmandu Valley. In the previous researches following financial literacy and financial inclusion are used and with the reference of the previous works the conceptual framework for the study is developed here under;

Independent Variables**Dependent Variable**

Source: (Khan *et al.*, 2022)

Definition of Variables Social Capital

Social capital refers to the networks, norms, and trust that facilitate coordination and cooperation for mutual benefit within a society. It encompasses the social connections, relationships, and interactions that contribute to an individual's or group's ability to achieve their goals. High social capital is often associated with better community health, improved economic outcomes, and enhanced social cohesion. According to De Marco and Vernon-Feagans (2023), social capital is crucial for individual and community well-being as it enhances access to resources and support, thereby promoting social and economic development.

Cognition

Cognition involves the mental processes by which individuals acquire knowledge and understanding through thought, experience, and the senses. These processes include perception, memory, judgment, and reasoning. Cognitive abilities are critical for learning, decision-making, and problem-solving. Recent research by Diamond (2022) emphasizes that cognitive development is influenced by various factors including genetics, environmental exposure, and educational opportunities, all of which collectively shape how individuals interpret and interact with the world.

Financial Self-Efficacy

Financial self-efficacy refers to an individual's belief in their ability to manage their financial resources effectively. This concept is derived from Bandura's self-efficacy theory, which posits that confidence in one's abilities influences their motivation and actions. Financial self-efficacy impacts financial behaviors such as budgeting, saving, and investing. Farrell, Fry, and Risse (2021) found that individuals with higher financial self-efficacy are more likely to engage in proactive financial behaviors, leading to improved financial outcomes and lower financial stress.

Economic Stability

Economic stability is the condition in which an economy experiences constant growth and low volatility, characterized by steady employment rates, controlled inflation, and sustainable fiscal policies. Stability is essential for fostering investor confidence and long-term economic planning. According to the World Bank (2022), economic stability helps reduce poverty, enhance living standards, and create an environment conducive to investment and development, thereby fostering sustainable economic growth.

Information Technology

Information Technology (IT) encompasses the use of computers, telecommunications, and other technologies to store, retrieve, transmit, and manipulate data. IT has revolutionized how businesses operate, enhancing productivity, efficiency, and communication. It plays a critical role in modern economies by enabling digital transactions, online education, telemedicine, and remote work. According to Brynjolfsson and McElheran (2023), the integration of IT in various sectors has led to significant economic growth and transformation, although it also poses challenges such as cybersecurity risks and job displacement due to automation.

Financial Inclusion

Financial inclusion involves ensuring that individuals and businesses have access to useful and affordable financial products and services that meet their needs, such as transactions, payments, savings, credit, and insurance. It aims to provide financial services to underbanked and unbanked populations, thereby promoting economic growth and reducing

poverty. The World Bank (2023) notes that financial inclusion is crucial for empowering individuals, particularly in developing countries, by facilitating investment in education, entrepreneurship, and healthcare.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter deals with the data analysis based on the information collected through respondents. The analysis is based upon the primary data collected through questionnaire and on the basis of the objective in the previous chapter. For data analysis, 150 samples questionnaire were filled by the respondents.

The SPSS software, a potent statistical analysis tool, is used in this study to analyze the data that has been gathered. Tables and charts will be used to depict the data in order to make it easier to interpret the findings for the use of precise and brief data.

The Statistical Package for the Social Sciences (SPSS) programmed, a statistical tool for data calculation and analysis, is used to analyze the data for this study, which was gathered through questionnaires issued to several respondents. Google Forms was used to disseminate the questionnaires and numerous tables, graphs, and other techniques were used to analyze the data. So, tests were carried out to determine the data's trustworthiness.

4.1 Descriptive Analysis of Variables

This section deals with the descriptive analysis of the data collected through the questionnaire during research process. Here, descriptive analysis incorporated calculation of statistical measures such as mean and standard deviation. All items were measured on five points Likert scale anchored by "Strongly Agree = 1", "Agree=2", "Neutral=3", "Disagree=4" and "Strongly Disagree=5". This value helps the researcher to analyze the data with respect of frequencies and aggregation relating questions and variables. The descriptive analysis is presented in chart and table for understanding.

Descriptive Statistics of Social Capital

The following table presents the descriptive statistics of dependent variables among in dependent variables. It compares the mean and standard deviation value of all variables which also helps in regression analysis. Here, celebrity knowledge of product is dependent variable. Similarly, the independent variables are Social Capital, Financial

Self-Efficacy, Economic Stability, Information Technology and Financial Inclusion

Table 2

Descriptive Statistics of Social Capital

S.N.	Statements	Mean	S.D.
1	Social capital enhances access to financial resources through personal networks.	3.16	1.389
2	Stronger social ties are linked to greater financial inclusion.	2.70	1.264
3	Individuals with extensive social connections are more likely to engage in financial activities.	2.87	1.288
4	Social networks provide support and information that facilitate financial inclusion.	3.12	1.283

Table 2 presents the descriptive statistics for social capital, summarizing respondents' views on its impact on financial inclusion. The average responses indicate a moderate agreement that social capital plays a role in accessing financial resources and supporting financial inclusion through personal networks. Specifically, the statement that "social capital enhances access to financial resources through personal networks" received a mean score of 3.16, suggesting a general positive view but with considerable variation in opinions, as reflected by a high standard deviation of 1.389. Similarly, the statement "social networks provide support and information that facilitate financial inclusion" has a mean of 3.12, indicating a somewhat favorable view with significant variability in responses (S.D. = 1.283).

In contrast, the statements linking stronger social ties and extensive social connections to greater financial inclusion received lower mean scores of 2.70 and 2.87, respectively. These scores suggest a more skeptical view among respondents regarding the strength of the relationship between social ties and financial inclusion. The standard deviations for these statements, 1.264 and 1.288, respectively, further highlight the diversity in respondents' perspectives.

Overall, while there is some acknowledgment of the supportive role of social networks in facilitating financial inclusion, the wide range of responses indicates that the impact of social capital is perceived differently among individuals. The high variability in opinions

underscores the need for further exploration into how social capital influences financial behaviors and inclusion.

Table 3

Descriptive Statistics of Cognition

S.N.	Statements	Mean	S.D.
1	Higher cognitive skills improve understanding of financial concepts.	3.16	1.19
2	Better cognitive abilities lead to more informed financial decisions.	3.21	1.22
3	Individuals with higher cognitive awareness are more financially included.	2.89	1.24
4	Understanding financial information is crucial for participating in financial services.	2.84	1.11

Table 3 Shows insights into respondents' perceptions of the role of cognitive skills in financial inclusion. The data suggests a generally positive view on the influence of cognitive skills on financial understanding and decision-making, though opinions vary.

The statement "Higher cognitive skills improve understanding of financial concepts" has a mean score of 3.16, indicating that respondents somewhat agree with this assertion. The standard deviation of 1.19 reveals moderate variability in how respondents view the relationship between cognitive skills and understanding financial concepts. Similarly, "Better cognitive abilities lead to more informed financial decisions" received a mean of 3.21, reflecting a slightly stronger agreement with the idea that improved cognitive abilities contribute to better financial decision-making. The standard deviation of 1.22 indicates a similar range of opinions among respondents.

On the other hand, the statements "Individuals with higher cognitive awareness are more financially included" and "Understanding financial information is crucial for participating in financial services" received lower mean scores of 2.89 and 2.84, respectively. These scores suggest a more cautious or skeptical view regarding the direct link between cognitive awareness and financial inclusion. The standard deviations of 1.24 and 1.11, respectively, indicate some variation in responses, but less pronounced than for the other statements.

Overall, the data highlights a moderate recognition of the importance of cognitive skills in financial understanding and decision-making, but also shows that respondents are less certain about the direct impact of cognitive awareness on financial inclusion. The variation in responses suggests that while cognitive abilities are acknowledged as important, their specific role in enhancing financial inclusion may require further investigation.

Table 4

Descriptive Statistics of Financial Self-Efficacy

S.N.	Statements	Mean	S.D.
1	Confidence in managing finances boosts financial inclusion.	3.67	0.923
2	Higher self-efficacy in financial tasks promotes engagement with financial services.3.28	3.20	0.907
3	Belief in one's financial 3.41management skills correlates with better fina3.55ncial inclusion.	3.28	0.915
4	Self-assured individuals are more likely to utilize financial products.	3.41	0.952

Table 4 presents the descriptive statistics for financial self-efficacy, highlighting respondents' views on how confidence and self-belief in financial management affect financial inclusion.

The statement "Confidence in managing finances boosts financial inclusion" received the highest mean score of 3.67, indicating strong agreement among respondents that having confidence in financial management significantly enhances financial inclusion. This is supported by a relatively low standard deviation of 0.923, suggesting that opinions on this statement are fairly consistent.

Similarly, the statement "Higher self-efficacy in financial tasks promotes engagement with financial services" also received a high mean score of 3.28, reflecting agreement that self-efficacy encourages greater use of financial services. The standard deviation of 0.907 indicates moderate variability in responses, but overall, there is a clear recognition of the positive role of self-efficacy.

The statements "Belief in one's financial management skills correlates with better financial inclusion" and "Self-assured individuals are more likely to utilize financial products" both received mean scores of 3.28 and 3.41, respectively. These scores suggest a moderate agreement that belief in one's financial abilities and self-assurance are associated with improved financial inclusion. The standard deviations of 0.915 and 0.952 show a moderate range of opinions, indicating that while there is general agreement, individual perspectives on the impact of self-belief on financial product usage and inclusion vary somewhat.

Overall, the data demonstrates a positive perception of financial self-efficacy's role in enhancing financial inclusion and engagement with financial services. Respondents generally agree that confidence and belief in one's financial skills are important factors, although there is some variability in how strongly these views are held.

Table 5

Descriptive Statistics of Economic Stability

S.N.	Statements	Mean	S.D.
1	Steady income contributes to higher levels of financial inclusion.	2.71	1.263
2	Economic stability supports sustained participation in financial services.	3.09	1.248
3	Low financial stress facilitates greater engagement with financial tools.	2.89	1.202
4	Stable economic conditions promote consistent financial inclusion.	3.27	1.132

Table 5 Shows insights into respondents' views on economic stability and its impact on financial inclusion. The data reveals varying degrees of agreement regarding how economic stability influences financial participation.

The statement "Steady income contributes to higher levels of financial inclusion" received a mean score of 2.71, suggesting that respondents are neutral to somewhat disagreeing about the direct impact of steady income on financial inclusion. The high standard deviation of 1.263 indicates considerable variability in opinions on this topic.

The statement "Economic stability supports sustained participation in financial services" has a mean score of 3.09, reflecting a moderate agreement that economic stability plays a role in maintaining engagement with financial services. The standard deviation of 1.248 shows a moderate range of responses, indicating some variation in how respondents view the connection between economic stability and financial service participation.

The statement "Low financial stress facilitates greater engagement with financial tools" received a mean score of 2.89, indicating that respondents are slightly below neutral on the idea that reduced financial stress leads to more engagement with financial tools. The standard deviation of 1.202 suggests moderate variation in responses.

The highest mean score, 3.27, is associated with the statement "Stable economic conditions promote consistent financial inclusion." This indicates a somewhat stronger agreement that economic stability is linked to consistent financial inclusion. The lower standard deviation of 1.132 suggests more agreement among respondents on this point.

Overall, the data shows a mixed but generally cautious view of the role of economic stability in financial inclusion. While there is moderate agreement that stable economic conditions support consistent financial inclusion, opinions on the impact of steady income and low financial stress are more varied.

Table 6

Descriptive Statistics of Information Technology

S.N.	Statements	Mean	S.D.
1	Use of digital tools enhances access to financial services.	3.12	0.98
2	Information technology improves engagement with financial activities.	3.01	1.12
3	Online banking and apps facilitate financial inclusion.	3.24	0.98
4	Technology usage is linked to better participation in financial services.	2.98	1.12

Table 6 presents the descriptive statistics for the role of information technology in financial inclusion. The table highlights respondents' perceptions of how various technological tools impact access to and engagement with financial services.

The statement "Use of digital tools enhances access to financial services" received a mean score of 3.12, indicating a moderate level of agreement that digital tools improve access to

financial services. The standard deviation of 0.98 reflects moderate variability in responses, suggesting a fairly consistent but not universal view on the effectiveness of digital tools in facilitating access.

The statement "Information technology improves engagement with financial activities" has a mean score of 3.01, showing that respondents are slightly more than neutral in their agreement that information technology enhances involvement in financial activities. The higher standard deviation of 1.12 indicates a wider range of opinions on this topic.

The statement "Online banking and apps facilitate financial inclusion" received the highest mean score of 3.24, reflecting a stronger agreement that these technological innovations support financial inclusion. The standard deviation of 0.98 suggests moderate agreement among respondents regarding the benefits of online banking and apps.

Finally, the statement "Technology usage is linked to better participation in financial services" has a mean score of 2.98, indicating a somewhat lower level of agreement. This score, along with the standard deviation of 1.12, points to a varied perception of how technology impacts overall participation in financial services.

Overall, the data indicates a generally positive view of the role of information technology in enhancing access to financial services and supporting financial inclusion. However, opinions on the extent of its impact on engagement and participation in financial activities are more varied.

Table 7

Descriptive of Financial Inclusion

S.N.	Statements	Mean	S.D.
1	Financial inclusion measures how well individuals can access and use financial services.	3.51	1.206
2	Broad participation in financial systems indicates higher levels of financial inclusion.	3.37	1.217
3	Financial inclusion enhances individuals' ability to manage their finances effectively.	3.40	1.143
4	Access to financial products and services contributes to overall economic well-being.	3.43	1.185

Table 7 presents the descriptive statistics for financial inclusion, summarizing respondents' perceptions of how well financial inclusion is achieved and its impact on individuals' financial well-being.

The statement "Financial inclusion measures how well individuals can access and use financial services" received the highest mean score of 3.51, indicating a strong agreement that financial inclusion is effectively measured by individuals' ability to access and utilize financial services. The standard deviation of 1.206 suggests a moderate level of variability in responses.

The statement "Broad participation in financial systems indicates higher levels of financial inclusion" has a mean score of 3.37, reflecting a general agreement that widespread participation in financial systems is associated with greater financial inclusion. The standard deviation of 1.217 shows some variability in opinions but indicates a relatively consistent view on this relationship.

The statement "Financial inclusion enhances individuals' ability to manage their finances effectively" received a mean score of 3.40, demonstrating a moderate agreement that financial inclusion contributes to better financial management. The standard deviation of 1.143 indicates some variation in responses but generally supports the positive impact of financial inclusion on financial management.

Finally, the statement "Access to financial products and services contributes to overall economic well-being" has a mean score of 3.43, suggesting strong agreement that having access to financial products and services is beneficial for economic well-being. The standard deviation of 1.185 indicates moderate variability in perceptions regarding the connection between access to financial services and overall economic well-being.

Overall, the data shows a positive perception of financial inclusion's role in facilitating access to financial services, enhancing financial management, and contributing to economic well-being. While there is some variability in responses, the general trend indicates strong agreement on the importance of financial inclusion for effective financial management and economic stability.

4.2 Correlation Analysis

A statistical technique known as correlation is used in order to investigate the association among the two variables. It assesses the relationship's strength, its statistical significance,

and whether the association is positive or negative. The influence of the link is identified by the coefficient of correlation, having a range of -1 to 1, and values which are closer to 1 or -1 suggests a stronger association with each other. There is no association, or relationship, between the two factors when the result is 0. The p-value is used to determine where a correlation is statistically significant or not. If the p-value is not more than 0.05, the correlation is regarded to be statistically significant; otherwise, there is no significant association. In conclusion, correlation analysis aids in comprehending the nature, significance, and direction of a link between two variables.

- i. A positive and direct co- relation between the variables with value equal to 1
- ii. A negative and inverse co- relation between the variables with value equals to -1
- iii. No co- relation between the variables with value equals to 0

Table 8

Correlation Matrix

	Financial Inclusion	Information Technology	Economic Stability	Financial Self-Efficacy	Cognition	Social Capital
Financial Inclusion	1					
Information Technology	0.617**	1				
Economic Stability	.458**	.526**	1			
Financial Self-Efficacy	.556**	.529**	.280**	1		
Cognition	.336	.437**	.347**	.326**	1	
Social Capital	.286	.326	.286	.124	.213	.264

Table 8 presents the correlation matrix showing the relationships between financial inclusion and various independent variables: information technology, economic stability, financial self-efficacy, cognition, and social capital. The correlations are measured to understand how these variables are interrelated.

The correlation between financial inclusion and information technology is 0.617, which is a strong positive relationship, suggesting that increased use of digital tools is significantly associated with higher financial inclusion. This indicates that better access to and use of technology enhances financial participation.

Economic stability shows a positive correlation of 0.458 with financial inclusion, reflecting a moderate association where more stable economic conditions are linked to better financial inclusion. Economic stability also has a moderate positive relationship

with information technology (0.526), indicating that economic stability supports the use of digital financial tools.

Financial self-efficacy has a strong positive correlation with financial inclusion (0.556), suggesting that confidence in managing financial tasks is closely related to higher levels of financial inclusion. There is also a notable positive correlation between financial self-efficacy and information technology (0.529), indicating that self-efficacy influences the engagement with digital financial tools. However, the correlation between financial self-efficacy and economic stability is relatively weaker (0.280), showing a moderate relationship.

Cognition has a weaker correlation with financial inclusion (0.336), indicating that while cognitive skills play a role, the impact is not as strong as other factors. However, cognition shows a moderate positive correlation with information technology (0.437) and economic stability (0.347), suggesting that cognitive abilities have a moderate influence on both technology use and economic stability.

Social capital exhibits the weakest correlations with financial inclusion and the other variables, with a correlation of 0.286 with financial inclusion, 0.326 with information technology, and 0.286 with economic stability. This suggests that social capital has a modest relationship with financial inclusion and the other factors considered, with the least influence observed in financial self-efficacy and cognition.

Overall, the matrix highlights that information technology, financial self-efficacy, and economic stability are more strongly correlated with financial inclusion compared to cognition and social capital. The data underscores the significant role of technology and self-confidence in enhancing financial participation, with economic stability also playing a supportive role.

4.3 Regression Analysis

The regression analysis reveals that information technology, financial self-efficacy, and cognition are the most significant positive predictors of financial inclusion, with information technology having the strongest impact. Economic stability has a marginally significant negative effect, while social capital shows a positive but not statistically significant influence. Overall, the model highlights that technological and cognitive factors play a crucial role in enhancing financial inclusion.

Table 9

Model Summary When Dependent Variable is Financial Inclusion

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 ^a	.735	.694	.95698

a. Predictors: (Constant), Information Technology, Economic Stability, Financial Self-Efficacy, Cognition, Social Capital

The model summary in Table 9 shows the results of a regression analysis where financial inclusion is the dependent variable. The correlation coefficient (R) is 0.857, indicating a strong positive relationship between financial inclusion and the independent variables, which include information technology, economic stability, financial self-efficacy, cognition, and social capital. This suggests that changes in these independent variables are strongly linked to changes in financial inclusion.

The R Square value of 0.735 indicates that 73.5% of the variation in financial inclusion is explained by the model, which is a significant portion. The Adjusted R Square of 0.694 accounts for the number of predictors, revealing that even after adjustment, the model explains 69.4% of the variance. This ensures that the model remains highly predictive even when accounting for the multiple variables.

Finally, the Standard Error of the Estimate is 0.957, which measures the typical error between the predicted and actual values of financial inclusion. This relatively low value suggests that the model provides reasonably accurate predictions. Overall, the model demonstrates strong predictive power with a high level of explanatory accuracy.

Table 10

ANOVA Table when Dependent Variable is Financial Inclusion

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.993	4	16.496	18.013	.000 ^b
	Residual	11.906	13	.916		
	Total	44.899	17			

a. Dependent Variable: *Financial Inclusion*

b. Predictors: (Constant), Information Technology, Economic Stability, Financial Self-

Efficacy, Cognition, Social Capital

The ANOVA table (Table 10) presents an analysis of variance for the regression model with financial inclusion as the dependent variable. The regression sum of squares is 32.993, indicating that a significant portion of the variance in financial inclusion is explained by the independent variables: information technology, economic stability, financial self-efficacy, cognition, and social capital. The residual sum of squares is 11.906, representing the variance not explained by the model, while the total variance is 44.899.

The degrees of freedom for the regression is 4, corresponding to the number of independent variables, while the residual degrees of freedom is 13, calculated from the total observations minus the number of predictors and 1. The mean square for the regression is 16.496, showing the average variance explained by each independent variable, while the residual mean square is 0.916, representing the unexplained variance. The F-statistic is 18.013, indicating that the model as a whole is statistically significant. With a p-value of 0.000, which is below the standard threshold of 0.05, the model demonstrates that the independent variables have a significant effect on financial inclusion. The high F-value and small residual variance suggest that the model provides a strong fit for explaining the relationship between the predictors and financial inclusion.

Table 11

Coefficient Table When Dependent Variable is Financial Inclusion

Model	Unstandardized		Standardized		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	.346	.498			.696	.499
Information Technology	.163	.027	.958		5.965	.000
Economic Stability	-.001	.000	-.344		-2.139	.052
Financial Self-Efficacy	.23	.004	.453		2.132	.031
Cognition	.03	.023	.634		3.223	.04
Social Capital	0.6	.265	.567		4.125	.08

a. Dependent Variable: *Financial Inclusion*

The coefficient table (Table 11) presents insights into the contributions of each independent variable to the prediction of financial inclusion. The unstandardized

coefficients (B) represent the expected change in financial inclusion for a one-unit change in the corresponding independent variable, holding all other variables constant. The standardized coefficients (Beta) allow for a comparison of the relative impact of each variable by removing the unit differences.

The constant ($B = 0.346$) is the predicted value of financial inclusion when all independent variables are zero. However, this value is not statistically significant ($p = 0.499$), meaning it does not contribute much to the model.

Information Technology ($B = 0.163$, $Beta = 0.958$) shows a positive and significant relationship with financial inclusion. The high t-value (5.965) and p-value (0.000) indicate that it is a strong predictor, contributing the most among the variables. A one-unit increase in information technology increases financial inclusion by 0.163 units. Economic Stability ($B = -0.001$, $Beta = -0.344$) has a negative relationship with financial inclusion, as indicated by the negative coefficient. Although it has some effect, the p-value (0.052) is slightly above the 0.05 significance level, meaning it is only marginally significant. Financial Self-Efficacy ($B = 0.23$, $Beta = 0.453$) also has a positive and significant relationship with financial inclusion ($t = 2.132$, $p = 0.031$). A one-unit increase in financial self-efficacy leads to a 0.23-unit increase in financial inclusion. Cognition ($B = 0.03$, $Beta = 0.634$) is another positive and significant predictor ($t = 3.223$, $p = 0.04$), indicating that individuals' cognitive abilities significantly influence financial inclusion.

A one-unit increase in cognition increases financial inclusion by 0.03 units. Social Capital ($B = 0.6$, $Beta = 0.567$) is positively related to financial inclusion but is not statistically significant ($p = 0.08$), suggesting that its impact, though present, is less reliable in this model.

4.4 Discussion

This study is consistent with Kaur and Singh (2023) and Garcia and Martinez (2023), which found the positive relationship between financial literacy and financial inclusion. This study is consistent with Park and Lee(2024) and Chowdhary and Rahman (2023), which found the mobile financial literacy significantly boosted financial knowledge and the use of mobile banking services. This study used first, many studies, including Kaur and Singh (2023) and Garcia and Martinez (2023), emphasize the critical role of financial literacy in increasing access to banking services and savings behavior. In rural Punjab, India, and among low-income households in Mexico City, financial knowledge significantly improved the adoption of formal financial products, highlighting the

universality of financial literacy as a tool for increasing financial inclusion in both urban and rural contexts. Similarly, Singh and Patel (2023) demonstrate that financial education among farmers in India not only enhanced their access to credit but also increased their participation in crop insurance programs, showcasing its role in improving financial resilience.

The importance of mobile technology in promoting financial inclusion is evident in studies such as Park and Lee (2024) in South Korea, Chowdhury and Rahman (2023) in Bangladesh, and Silva and Fernandes (2024) in Brazil. These studies highlight that mobile-based financial literacy programs significantly enhance financial knowledge and the use of digital financial services such as mobile banking and e-wallets. This suggests that technology-driven financial education can overcome physical barriers to access, particularly in rural or informal sectors, as seen in Bangladesh and Brazil.

The community-driven approaches in Zhang et al. (2024) and Mohammed and Ibrahim (2023) also provide important insights. These studies show that peer-to-peer financial education and community financial literacy initiatives are effective in rural areas, such as in China and Nigeria, in boosting financial literacy and engagement with formal financial institutions. The findings suggest that localized and culturally relevant approaches can be particularly impactful in rural settings where trust and social networks play a crucial role in decision-making.

Moreover, the studies focusing on marginalized or vulnerable populations—such as Kulkarni et al. (2024) in India, who focused on marginalized communities, and Hossain and Uddin (2024), who studied female entrepreneurs in Bangladesh—underscore the role of financial literacy in reducing financial vulnerability and fostering economic empowerment. These studies suggest that financial education not only promotes financial inclusion but also enhances individuals' economic stability and independence, which is especially vital for marginalized groups.

Across all the studies, regression and correlation analyses consistently reveal a significant positive relationship between financial literacy and financial inclusion. Whether through formal education, mobile-based interventions, or community-based programs, financial literacy improves individuals' ability to engage with formal financial systems, thereby promoting economic growth and reducing vulnerability.

The given data presents a multifaceted understanding of financial inclusion, with social networks, cognitive skills, financial self-efficacy, economic stability, and technology playing significant roles. There is moderate contribution of these factors to financial

inclusion and engagement, although individual perceptions. The role of social capital, cognitive awareness, and financial self-efficacy in decision-making and financial participation is acknowledged but requires further exploration, especially with varying opinions on the stability of economic conditions. Information technology is generally seen as a positive influence in enhancing access to financial services and economic well-being, highlighting the importance of technology, financial confidence, and stable economic conditions in supporting effective financial management and inclusion.

CHAPTER V

SUMMARY AND CONCLUSION

This chapter focuses on summarizing the study held with the researcher's conclusion. The next attempt in this chapter will be made for the recommendations on the basis of findings. For this whole purpose the chapter is sub divided into summary, conclusion and recommendation as following:

5.1 Summary

The study investigates the relationship between several key factors—information technology, economic stability, financial self-efficacy, cognition, and social capital—and their influence on financial inclusion. By analyzing the coefficients and correlations, the research aims to uncover the extent to which each variable contributes to enhancing individuals' participation in the financial system.

Information Technology emerges as the most crucial factor influencing financial inclusion. The findings reveal a strong positive relationship, indicating that increased access to and use of digital tools and technologies lead to higher financial participation. This suggests that digital platforms and financial technologies (fintech) are vital in bringing more people into the formal financial system, enabling them to access banking services, make transactions, and participate in economic activities.

Financial Self-Efficacy also plays a significant role in improving financial inclusion. The study shows that individuals who feel confident in their ability to manage financial tasks, such as budgeting, saving, and investing, are more likely to be financially included. This underscores the importance of promoting financial education and building self-confidence in managing finances, as these factors enhance one's ability to effectively engage with financial services.

Cognition, which refers to individuals' cognitive abilities and their capacity to understand and process financial information, has a positive but weaker impact on financial inclusion. While cognitive skills do contribute to financial participation, their influence is less significant compared to information technology and financial self-efficacy. This suggests that, although understanding financial products is important, other factors like

access to digital tools and personal confidence play a larger role in driving inclusion. Economic Stability shows a marginal negative relationship with financial inclusion. While more stable economic conditions are generally expected to support financial participation, the study's findings indicate that the impact of economic stability is not as straightforward. Though it does have some influence, its contribution is weaker and only marginally significant, indicating that other variables may play a larger role in this context.

Social Capital, which includes relationships and networks that can facilitate access to financial resources, has the weakest relationship with financial inclusion. This suggests that while social connections and community networks may provide some support for financial participation, their influence is less reliable and less significant compared to other factors like technology and self-efficacy.

The correlation matrix reinforces these findings by showing the strength of the relationships between financial inclusion and the independent variables. Information technology and financial self-efficacy show the strongest positive correlations with financial inclusion, indicating their central role in increasing access to financial services. Economic stability also shows a moderate positive correlation, while cognition and social capital have weaker correlations, pointing to their lesser impact on financial inclusion.

Overall, the study highlights the growing importance of digital tools and financial technologies in promoting financial inclusion, especially in today's increasingly digital world. It also underscores the role of individual confidence and financial knowledge in enabling people to effectively use financial services. While economic stability and social networks contribute to financial inclusion, their influence is secondary to the more significant impact of technology and self-efficacy. The research suggests that strategies aimed at improving financial inclusion should prioritize access to technology and enhancing financial literacy, while also considering the role of economic conditions and social capital.

5.2 Conclusion

The study concludes that financial inclusion is strongly influenced by access to technology and individuals' confidence in managing financial tasks. Information

technology plays a central role, with a significant positive impact on financial inclusion, highlighting the transformative potential of digital tools in increasing access to financial services. Financial self-efficacy is another crucial factor, demonstrating that individuals with greater confidence in their financial skills are more likely to participate in the financial system.

Although cognitive abilities also contribute to financial inclusion, their impact is relatively modest compared to technology and self-efficacy. Economic stability has a marginal and complex relationship with financial inclusion, suggesting that while stable conditions may support financial participation, their influence is less direct. Social capital, while positively related, shows the weakest contribution, indicating that social networks and community ties are less influential in promoting financial inclusion.

The findings underscore the need for policies and programs that focus on improving access to digital financial services and enhancing financial literacy and self-confidence. As digital technology continues to evolve, it will play an increasingly vital role in closing the financial inclusion gap, particularly for underserved populations. The study suggests that a holistic approach, incorporating technological innovation, financial education, and economic stability, is essential for fostering greater financial inclusion globally.

5.3 Implications

The study on the Effect of Financial Literacy on Financial Inclusion carries several important implications for policymakers, financial institutions, educators, and communities. These implications are vital for designing effective strategies to enhance financial inclusion by addressing gaps in financial literacy.

i. Policy Implications

Promoting Financial Literacy: The findings highlight the need for government and financial institutions to develop and implement national policies that promote financial literacy. Financial literacy programs, especially targeting underserved populations, can help individuals understand financial products, manage resources, and make informed decisions, thereby improving financial inclusion.

Digital Financial Literacy: As information technology plays a critical role in financial inclusion, there is a strong case for integrating digital financial literacy into education and training programs. Policymakers should support initiatives that enhance individuals' ability to use digital tools, such as mobile banking and online financial services, which can broaden access to financial systems.

Targeted Interventions for Vulnerable Groups: Groups with lower financial literacy, such as low-income individuals, women, and rural populations, should be prioritized in financial literacy campaigns. These tailored programs can help bridge the financial inclusion gap among marginalized communities by focusing on their specific needs and challenges.

ii. Financial Institutions

Design of Financial Products: The study suggests that financial institutions should design products and services that are easy to understand and accessible to those with varying levels of financial literacy. User-friendly interfaces, simplified language, and transparency in terms and conditions can reduce the barriers to accessing financial services.

Partnerships with Educational Institutions: Financial institutions should collaborate with schools, universities, and vocational training centers to introduce financial literacy as part of the curriculum. Early financial education helps individuals develop financial management skills, which can lead to greater financial inclusion as they grow into adulthood.

Financial Counseling and Support Services: Banks and financial service providers should offer personalized financial counseling and literacy workshops to help customers better understand their financial options. This can empower individuals to make informed financial decisions and improve their access to savings, credit, and insurance.

iii. Educational and Training Programs

Incorporating Financial Education in Schools: Educational institutions have a crucial role to play in embedding financial literacy into school curricula. By teaching children and young adults financial concepts such as budgeting, saving, credit management, and investment, schools can lay the groundwork for financially inclusive societies in the future.

Adult Financial Education Programs: Beyond formal education, governments and NGOs should establish community-based financial literacy programs targeting adults, particularly those with limited access to formal education. These programs can focus on practical financial skills that directly improve participants' ability to use financial services.

Digital Skills Training: As technology is a key driver of financial inclusion, digital skills training should be incorporated into financial literacy programs. This will enable individuals to confidently use online banking platforms, digital wallets, and other fintech

innovations, making financial services more accessible.

iv. Community and Social Implications

Leveraging Social Capital for Financial Inclusion: While the study suggests that social capital has a weaker influence on financial inclusion, communities and social networks can still be leveraged to promote financial literacy. Community-based peer learning, financial literacy clubs, and social media platforms can serve as avenues for sharing financial knowledge and improving awareness.

Strengthening Economic Stability: Financial literacy not only impacts individual financial inclusion but also contributes to broader economic stability. When individuals make better financial decisions, they contribute to overall economic growth and reduce financial vulnerability. Therefore, increasing financial literacy in communities can promote greater financial resilience, especially in economically unstable regions.

v. Implications for Further Research

Focus on Digital Financial Inclusion: Future research could explore the growing intersection of financial literacy and digital financial services. As fintech continues to evolve, understanding how financial literacy affects the use of digital financial products will be crucial for designing effective financial inclusion strategies.

Exploring Behavioral Economics: Further studies could examine the behavioral aspects of financial decision-making, particularly how cognitive biases, emotions, and habits influence financial literacy and inclusion. Insights from behavioral economics could enhance the design of interventions aimed at improving financial behaviors.

REFERENCES

- Acharya, S., & Gautam, B. (2019). Factors affecting financial inclusion in Nepal: A comprehensive analysis. *Journal of Economic and Social Development*, 8(1), 45-58.
- Adeola, T., & Adebayo, B. (2024). The effect of online financial literacy programs on financial inclusion in South Africa's youth population. *Journal of Financial Education*, 40(2), 78-94.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Chowdhury, M., & Rahman, T. (2023). The effectiveness of mobile-based financial literacy campaigns in improving financial inclusion in Bangladesh. *International Journal of Financial Studies*, 11(1), 45-62.
- Consumer Financial Protection Bureau (CFPB). (2015). *Financial well-being: The goal of financial education*. <https://www.consumerfinance.gov>
- Garcia, L., & Martinez, R. (2023). Financial literacy programs and financial inclusion among low-income households in Mexico City. *Journal of Economic Policy Studies*, 29(1), 111-128.
- Hossain, S., & Uddin, S. (2024). Financial literacy training and financial inclusion among female entrepreneurs in Bangladesh. *Journal of Entrepreneurship and Development*, 12(2), 91-108.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263-291.
- Kaur, M., & Singh, A. (2023). The role of financial literacy in promoting financial inclusion in rural Punjab. *Journal of Rural Development Studies*, 11(3), 65-82.
- Kulkarni, R., Rao, V., & Deshmukh, A. (2024). Financial literacy and inclusive growth among marginalized communities in India. *Journal of Social and Economic Development*, 14(1), 33-52.
- Maharjan, P., & Thapa, K. (2019). Financial literacy and financial inclusion: A rural-urban comparison in Nepal. *Nepalese Journal of Development and Rural Studies*,

16(2), 67-80.

- Mohammed, A., & Ibrahim, M. (2023). Community financial literacy initiatives and their impact on financial inclusion in rural Nigeria. *Journal of African Development*, 10(2), 83-101.
- Morgan, P. J., & Long, T. Q. (2022). Enhancing financial literacy for financial inclusion: A case study in Asia. *Journal of Financial Education*, 48(2), 98-115.
- Morgan, P. J., & Long, T. Q. (2022). Enhancing financial literacy for financial inclusion: A case study in Asia. *Journal of Financial Education*, 48(2), 98-115.
- Nguyen, Q., Pham, D., & Tran, L. (2024). The influence of financial education programs on financial inclusion among university students in Vietnam. *Asian Journal of Education and Development*, 15(1), 201-218.
- Osei, A., & Boateng, R. (2023). The impact of financial literacy workshops on the financial behavior of small business owners in Ghana. *Journal of Business and Economic Policy*, 30(2), 92-110.
- Ozili, P. K. (2022). Financial inclusion and economic growth: The role of financial literacy. *International Journal of Financial Studies*, 10(1), 1-17. <https://doi.org/10.3390/ijfs10010006>
- Park, S., & Lee, J. (2024). Mobile-based financial literacy interventions and financial inclusion in South Korea. *Journal of Mobile Financial Services*, 22(1), 43-60.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.
- Scott, W. R. (2008). *Institutions and organizations: Ideas and interests* (3rd ed.). Sage Publications.
- Sen, A. (1985). *Commodities and capabilities*. Oxford University Press.
- Sharma, R., & Bhandari, A. (2020). Financial literacy and its impact on financial inclusion: Evidence from Nepal. *Journal of Finance and Economic Policy*, 12(3), 129-145.
- Shrestha, A. (2020). Enhancing financial inclusion through financial literacy: Challenges and opportunities in Nepal. *Nepalese Economic Review*, 14(2), 23-40.
- Silva, M., & Fernandes, P. (2024). Digital financial literacy and its role in improving financial inclusion in Brazil's informal economy. *Journal of Digital Finance*, 18(1), 66-83.

- Singh, R., & Patel, S. (2023). Financial literacy campaigns and their effect on financial inclusion among farmers in India. *Journal of Agricultural Economics and Development*, 7(3), 56-75.
- Xiao, J. J., Chen, C., & Sun, L. (2024). Financial literacy, financial behaviors, and financial well-being: Evidence from a longitudinal study. *Journal of Financial Counseling and Planning*, 35(1), 13-29.
- Zhang, Y., Chen, M., & Li, X. (2024). Peer-to-peer financial education and financial inclusion in rural China: A randomized controlled trial. *Journal of Development Economics*, 40(1), 35-50.

EFFECT OF FINANCIAL LITERACY ON FINANCIAL INCLU...

By: Sumana Gautam

As of: Nov 14, 2024 10:55:14 AM
11,321 words - 28 matches - 6 sources

Similarity Index

6%

Mode: Similarity Report ▾

paper text:

ABSTRACT This study explores the impact of financial literacy on financial inclusion, focusing on how various factors influence individuals' ability to access and use financial services. Key independent variables include social capital, cognition, financial self-efficacy, economic stability, and information technology, while financial inclusion serves as the dependent variable. The research investigates how financial literacy enhances individuals' understanding and use of formal financial systems, particularly in promoting economic participation and reducing financial exclusion. The findings provide insights into the role of financial education in fostering greater inclusion and the importance of enhancing key enablers to drive financial participation. CHAPTER I INTRODUCTION 1.1 Background of the Study Financial literacy refers to the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing. It encompasses the knowledge and confidence

to make informed and effective decisions regarding the use and management of money

6

. High levels of financial literacy are associated with better financial behaviors, such as saving, investing, and managing debt, which are critical for financial well-being. Recent studies highlight that financial literacy is not only crucial for individual financial stability but also for the overall economic health of societies. They emphasize that financial literacy contributes to improved financial behaviors and outcomes, leading to enhanced financial security and well-being for individuals (Xiao et al., 2024). Financial inclusion involves providing

access to useful and affordable financial products and services that meet the needs

6

of individuals and businesses, delivered in a responsible and sustainable way. Key components of financial inclusion include access to credit, savings accounts, insurance, and payment systems. Financial inclusion aims to eliminate barriers to financial services, thereby allowing underserved populations to participate fully in the economy. Effective financial inclusion efforts can help reduce poverty and boost economic growth by enabling individuals to save for future needs, invest in education, and manage financial risks. Ozili (2022) discusses how financial inclusion plays a pivotal role in poverty alleviation and economic development by providing the necessary tools for financial management and economic participation. The relationship between financial literacy and financial inclusion is symbiotic; financial literacy empowers individuals to make better financial decisions, which in turn enhances financial inclusion. Individuals with higher financial literacy are more likely to utilize financial services and products, as they understand their benefits and how to use them effectively. Conversely, financial inclusion provides the opportunity for individuals to apply their financial knowledge in real-world scenarios, further reinforcing their financial literacy. Morgan and Long (2022) highlight that enhancing financial literacy is a key strategy for improving financial inclusion, particularly among marginalized groups, by enabling them to access and effectively use financial services. This study aims to explore the impact of financial literacy on financial inclusion, specifically examining how increased financial knowledge and skills can lead to greater access to and use of financial services. By identifying the factors that influence both financial literacy and