FACTORS INFLUENCING FINANCIAL INCLUSION

(A Consumer Perspective Study on Nepali Context)

A Research dissertation submitted to

Kathmandu University School of Management

in partial fulfillment of the requirements for the

Master of Philosophy (MPhil) in

Management

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DECLARATION

I hereby declare that this research work entitled 'Factors Influencing Financial Inclusion (A Consumer Perspective Study on Nepali Context)' embodies the result of an original research work I carried out in partial fulfillment of the requirements for the degree of Master of Philosophy (MPhil) in Management of Kathmandu University and that this dissertation has not been submitted for candidature for any other degree.

Ganga Thapa

October, 2020

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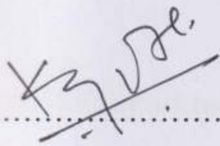
RECOMMENDATION

This is to certify that Mr. Ganga Thapa has completed his research work on *Factors Influencing Financial Inclusion (A Consumer Perspective Study on Nepali Context)* under my supervision and his dissertation embodies the result of his investigation conducted during the period he worked as an MPhil candidate of the School of Management. The dissertation is of the standard expected of a candidate for the degree of MPhil in management and has been prepared in the prescribed format of the School of Management. The dissertation is forwarded for evaluation.



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APPROVAL

We have conducted the viva-voce examination of the dissertation *Factors Influencing Financial Inclusion (A Consumer Perspective Study on Nepali Context)* by Ganga Thapa and found the dissertation to be original work of the candidate and written according to the prescribed format of the School of Management. We approve the dissertation as the partial fulfillment of the requirements for the degree of Master of Philosophy (MPhil) in Management.

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ABSTRACT

Financial inclusion is a multi-dimensional concept relevant to the anticipated enhancement of mainstream financial services to all the members of the economy. It helps to overcome the market friction preventing the financial market operations in favor of marginalized segments of an economy. In the context of Nepal, various policies and regulations have been undertaken to enhance financial inclusion status still it is not at a satisfactory level. Thus, this research was carried out to examine the influence of personal and social capabilities on financial inclusion from the consumer perspective.

This study was based on positivist epistemology. Usable primary data was collected from 417 Nepali adults having accounts in financial institutions through an online survey mechanism. The hypothesized relationship between study variables was examined using the partial least square structural equation modeling (PLS-SEM) approach.

The result shows that individuals' personal capability viz. financial attitude, and financial literacy as well as social capability viz. subjective norms except social networks have a statistically significant influence on the inclusive financial system. Similarly, the integrative form of personal capability and social capability has a key influence on financial inclusion. Further, financial self-efficacy has a significant mediating impact on the relationship between study variables. Hence, the result of the research is in line with Sen's capability theory and it can be taken as an effective tool to estimate financial inclusion in the context of Nepal.

Keywords: financial inclusion, financial attitude, financial literacy, financial self-efficacy, social networks, and subjective norms.

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ABBREVIATIONS

AVE	Average Variance Extracted
CB-SEM	Covariance Based Structural Equation Modeling
CR	Composite Reliability
CSV	Comma-separated Value
FATT	Financial Attitude
FLIT	Financial Literacy
HTMT	Heterotrait-Monotrait
LV	Latent Variable
MM4P	Mobile Money for the Poor
PC	Personal Capability
PLS	Partial Least Square
PLS-SEM	Partial Least Square Structural Equation Modeling
RSRF	The Rural Self Reliance Fund
SC	Social Capability
SEM	Structure Equation Modelling
SNET	Social Networks
SNOR	Subjective Norms

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CHAPTER 1

INTRODUCTION

General Background

Financial inclusion is a multi-dimensional concept relevant to the anticipated development of savings, credit, insurance, and remittance to all the members of the economy. It is the portion of financial consumers who have subscribed to mainstream financial services (Demirgüç-Kunt, Klapper, Singer, & Van Oudheusden, 2015). It also plays a significant role to minimize a kind of market friction that is constantly preventing the marginalized groups of an economy through the proper expansion of financial services (Aduda & Kalunda, 2012). Bringing all people of the nation closer to the mainstream financial system helps to increase credit, savings, insurance, and remittance-related services consumption facilities for those who were yet unbanked or did not have proper accessibility to formal financial services, thereby helping in poverty alleviation through economic insertion.

The concept of inclusion financial system as ease in accessibility and subscription of economic amenities was primarily used in the early 90s with the expectation of grasping concentration towards the segment having a relatively lower level of admittance towards formal financial instruments (Kempson & Whyley, 1999). Providing ease on financial services to the people of an economy helps to achieve sustainable economic development by reducing prevailing societal inequality. Similarly, proper access to and usage of formal financial services stimulate individuals' participation in financial markets to overcome prevailing income inequality and achieving enhanced economic growth at the individual and firm-level (Ojah, 2013; Pandey & Raman, 2012). This is consistent with the growth theories that explain enhancing productive financial growth is possible through the proper

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synchronization of both a financial services producer leading and financial consumer following financial strategy at the individual and firm-level (Demirgüç-Kunt et al., 2015).

The wider banking system walks together with economic growth because of the strong correlation between access to financial services and GDP (Peachey & Roe, 2004). *Financial inclusion positively affects the economic well-being of an individual along with the social status of the people and economic growth.* Therefore, the estimate of access to financial services availed by the supply side is imperative, it is also essential to focus on the traits of the consumers on financial services to fulfill a synchronized balance towards achieving financial inclusion and sustainable economic growth. However, the likelihood of enhancing balanced economic growth is possible if an economy properly synchronizes the effect of consumer-side and provider-side of financial services (Agrawal, 2008; Kumar & Mohanty, 2011).

The foremost economic rationale behind increasing the all-encompassing financial system is to incorporate the omitted segments making an important component of the mainstream financial system by facilitating more safer and trustable ways of savings, credit, insurance, and remittances. Additionally, an all-inclusive financial system also assists to prevent the users from the use of more costly informal financial services. According to Burgess and Pande (2005) broadening branches of financial institutions in the county, helps to minimize the prevailing poverty level by increasing savings and their utilization through lending and borrowings may improve the financial status of the people. In this process, it is also clear that the expansion of financial services probably helps to reduce income inequality (Demirgüç-Kunt & Klapper, 2012b).

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Kempson and Whyley (1999) have also stated that most of the people across the world are still left out of mainstream financial products. Probably the reason behind that may differ individually. Besides, several pieces of research have been done considering financial inclusion as mere ownership of a bank account but then it also includes other financial products and their actual usage. It is also important to have proper accessibility of financial services among the people who are using informal financial markets because all the people of the nation are supposed to engage in financial activities disregarding their level of poverty (Beck, Demirgüç-Kunt, & Honohan, 2009). Similarly, they are also assumed to develop and execute financial strategies for the addition of assets, management of future contingencies, and also to meet their daily activities to sustain their lives (Cohen & Sebstad, 2005).

Furthermore, the association of most of the rural households in informal financial activities may not be convincing whether it is safe and reliable or not. According to Schindler (2010), the fusion of formal and informal financial markets may provide a positive result in an economy because of the greater size of using informal financial services compared to formal. This unification may improve the financial status of the citizens, particularly inhabitants in the rural part, by offering a broader array of safe and convincing financial services. However, proper integration of these financial markets is possible having proper knowledge of the user's capability that an individual posture to adopt the available formal financial institutional models. For the effectiveness of the services of financial institutions, it is necessary to have an in-depth understanding of individual user's capabilities of the various segments (Sen, 1979).

Theories and empirical studies relating to decision-behavior of individuals towards the selection of financial services have inattentive towards increasing

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concentration on the mental procedures based on observed judgment (Allen, Demirguc-Kunt, Klapper, & Peria, 2012; Clamara, Pena, & Tuesta, 2014; Demirgüç-Kunt & Klapper, 2012b; Demirgüç-Kunt et al., 2015). This insight is fundamental to undertaking the study. Regarding this, the scope of behavioral finance is explained as a collaboration of psychology with financial actions and performance is in the developing phase (Shefrin, 2002; Statman, 1995). Therefore, this study tried to examine a more distinct and unified explanation of decision-making amongst financial services users from the personal and social capability perspective.

Even though the financial services provider side is crucial for achieving better financial inclusion status, the users' side cannot be ignored as a medium for foreseeing financial inclusion. In line with this statement, Kumar and Mohanty (2011) also state that the status of proper financial inclusion can be achieved through the integration of both perspectives. Therefore, the implementation, stability, and worth of the services provided by the mainstream financial institutions through the proper access, usage, and quality dimensions necessitate the assessment of the individuals' preparedness to participate in the formal financial system. Based on this, only broadening the scope of prevailing financial services is not likely to improve the consumers' participation in financial services particularly among the people of rural areas in Nepal. Thus, this research has concentrated on the consumer side perspective to examine the effect of an individual financial consumer's personal capability (PC); - financial attitude (FATT), financial literacy (FLIT), and social capability (SC); - social networks (SNET) and subjective norms (SNOR), on financial inclusion in Nepali context.

Contextual Background

The formal banking practice in Nepal does not have a long history. It can be traced back to 1937 AD when Nepal Bank Ltd. was established. Similarly, Nepal

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Rastra Bank was established in 1956. Rastriya Banijya Bank and the Agricultural Development Bank were also incorporated in 1966 and 1968 respectively. With the expectation of all-inclusive financial status from all segments of the nation, Nepal Rastra Bank had taken different banking developing incentives programs in the late 1960s. Based on those kinds of incentives, commercial banks were motivated towards opening branches in specified areas within the first 5-years of operations.

Besides, agriculture-based savings and credit cooperatives were initiated which were the basis for the establishment of microfinance services in Nepal. Some improvements were done to Small Farmers Development projects to develop Small Farmers Cooperatives. The government-owned banks were concentrating on the practice of several programs to enhance financial access till 1970. However, after the implementation of liberalization policy in Nepal various private sector banks were mushrooming to assist financial services in the nation.

Nepal government initiated 'The Rural Self Reliance Fund (RSRF)' with the expectation of facilitating the wholesale loan to people who are residing in the rural area. Similarly, the Rural Microfinance Development Centre and Sanakisan Bikas Bank are also granting loans to microfinance institutions and cooperatives.

Furthermore, more than 13000 savings and credit cooperatives are playing a vital role to extend financial services and are taken as the third pillar of the national economy. *Bank and Financial Institutions are mandatory to provide at least 30 percent* of their initial public offerings to the general public with the expectation of providing investment opportunities for the population at large. Similarly, there is a mandatory provision for the allocation of 10% of equity shares to the public who are influenced by the hydropower projects.

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The first federal budget of the Democratic Republic of Nepal for the fiscal year 2018/19 has also targeted to digitize its payments and revenue collection as well as to execute an aggressive movement of every Nepali citizen with a bank account within a year. The fiscal policy of the country has also aimed to increase the status of all-inclusive financial status through the ease of access to mainstream financial services. By the digital practice on receipts and payment of government, Nepal government will be able to minimize its transaction costs as well as it can be more efficient through the reduction in the number of people who were left out from the mainstream financial system.

Policies towards Financial Inclusion in Nepal

In the context of Nepal, the realization of the need for an all-inclusive financial system can be observed from the strategic plan of NRB which focuses on broadening the status of financial inclusion. Similarly, it is also undertaken in the monetary policy of 2017 for extending the degree of financial literacy. According to the BAFIA, Nepali financial institutions are necessary to avail cheaper cost funds to the microfinance institutions so that financially excluded segments may consume those services for their financial wellbeing. Nepal Rastra Bank has initiated various financial models to improve the financial inclusion status with the association of the Nepal government. Since 2019, the Nepal government has initiated opening bank accounts of every Nepali citizen who currently does not have any bank account depositing Rs.100 from the side of the bank.

Nepal Rastra Bank has also undertaken certain policies and provisions with the expectation of extending all inclusion financial status like:

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- Incentives to expand financial institutions' facilities in a rural area

According to the policy of Nepal Rastra Bank, Bank & Financial institutions, specifically commercial banks, and financial companies expanding their services within defined 14 rural district headquarters may enjoy the facility of cost-free loan up to Rs.5 millions as well as up to Rs.10 million for such services expansion outside the specified district headquarters. Similarly, Micro Finance Institutions receive an interest-free loan of Rs. 3 million for extending branches in the specified 22 remote districts.

- Special refinance facility

Similarly, Nepal Rastra Bank has also made a provision of a special refinance facility intending to encourage Bank and Financial Institutions (A, B, and C class) to extend loans to agriculture and small business-based income-generating activities in poverty-stricken areas of the country at 1 percent interest.

- Separate Client Protection Fund

Micro Finance Institutions are required to develop a separate Client Protection Fund for the institutional development and welfare of the borrowers. One percent of the profit of microfinance institutions should allocate to the fund and an additional twenty-five percent of dividends if the dividend amount exceeds twenty percent of their profit.

- Programs related to financial literacy

The primary intention of the financial literacy programs is to enhance awareness about banking and non-banking institutions as well as providing knowledge to the community on formal as well as informal financial sectors such as dhukuti, hundi, etc.

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- The Financial Sector Development Strategy (FSDS)

This strategy covers the period of 2016 to 2021 focusing on certain measures for enhancing financial access.

Statement of the Problem

Financial inclusion has become a concerning issue in Nepal. A substantial portion of people is still unable to access formal financial services. About 14 million Nepali adults are still out of banking services (Wagle, 2019). According to Demirgüç-Kunt, Klapper, Singer, Ansar, and Hess (2018), the majority of the population i.e. 79.85 percent of Nepalese are living in rural areas. Most of them do not have proper access to formal financial services and have been conveniently using costly and exploitative informal financial services. It is only about 61 percent of adults having proper access to finance. Similarly, only 25.31 percent of the Nepalese adults had accounts in financial institutions in 2011, 33.80 percent in 2014, and 45.40 percent in 2017 respectively (Demirgüç-Kunt et al., 2018). It is also found that 14.5 percent of accounts are not active resulting in around 31 percent of active account status. Even though the quantitative increment is significant, the proportion of adults having an account in Nepali financial institutions is still lower than the world's average 67.10 percent, and SAARC average 68.40 percent in 2017. It indicates that financial inclusion is a pertinent issue in Nepal.

It is crucial to enhance the status of access and usage of formal financial services through increasing individuals' consumption, investment, and insurance to minimize uncertainties and difficulties of the low-income segments (King, 2014). Sarma and Pais (2011) also state that the benefits of financial services can only be grasped if they are easily available, of quality, and relevant to the needs of people. Proper access to mainstream financial services may assist to transform the lives of

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low-income segments. Therefore, financial inclusion acts a vital role in making personal and social well-being by addressing the problem of financial exclusion. In the context of Nepal, it is also crucial to note that financial inclusion is necessary to lift the country from the least developed country status by 2022, to achieve the United Nations' Sustainable Development Goals, and to become a middle-income country by 2030 as envisioned by the Government of Nepal.

Contrary to the findings of various studies, a strong relationship between prosperous economic growth and financial development, Clamara et al. (2014) also advocate that it is necessary to go beyond this relationship for having a relatively more understanding of the relevant context. Most of the earlier studies have articulated financial inclusion as merely account ownership but then financial inclusion also includes the convenience of credit, insurance, and payment, etc. It is also important to note that the non-use of financial products and services does not necessarily mean a lack of access to these facilities because people may have proper access to financial services but may choose not to use them (Demirgüç-Kunt et al., 2015). Therefore, it can be further argued that several other non-financial factors may have been influencing individuals' actions towards the subscription to financial services.

To advance an inclusive financial system, contemporary policies and practices should aim towards developing a supportive environment and formulating a favorable framework for improving product design and accessibility to make sure the low-income rural segments are included. These time-relevant novelties intents to minimize cost and physical barriers to access, accordingly examining the financial inclusion from the consumers' perspective using client research is necessary. Similarly, it is necessary to have depth knowledge about consumers' needs, behavior, and

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preferences towards financial products for responsible delivery and their subscriptions as per the target right from the beginning of the development of the products. This suggests that to achieve effective and lucrative product development, it is very important to understand potential consumers through their needs. It is also accepted in theory and empirical literature that both the consumer and producer-side factors drive inclusive financial growth.

Furthermore, several prior studies have contributed to the financial inclusion domain measuring financial depth in terms of how much finance rather how many users and what affects them to use financial products. Similarly, those studies are not able to disclose a real picture of financial inclusion focusing on access, usage, and quality components rather accessibility and availability. It is also found that most of the studies have used aggregate data of bank accounts but not differentiated individual's and firm's accounts as well as individuals and firms with multiple accounts. Additionally, earlier studies have not used access to the entire range of financial services besides bank accounts and credit (Beck et al., 2009). Thus, conducting more studies on the financial inclusion context undertaking the deficiencies in supply-side studies at the individual level provides an alternative and/or complementary deportment.

Despite the importance of financial inclusion, there are bizarrely very few studies on financial inclusion in the Nepali context. The empirical studies on financial inclusion in Nepal have mainly focused on the service provides side (Dhungana & Kumar, 2015; Pant, 2016; Shrestha, 2020) but have not covered user side factors such as individual consumer's capabilities; - financial attitude, financial literacy, financial self-efficacy, an alliance to social networks and subjective norms which may have a crucial impact on the financial behavior and consequently financial inclusion. The

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relevant and existing knowledge on financial consumer decision-making associated with to use of financial services does not have attention (Gibbs, 1998). Various researches undertaken in diverse economies have also argued that personal and social characteristics have an important impact on an individual's financial behavior and consequently financial inclusion (Allen et al., 2012; Clamara et al., 2014; Demirgüç-Kunt & Klapper, 2012b; Honohan, 2004; Rathod & Arelli, 2013).

Specifically, while empirical studies on financial inclusion are growing, it is still not sufficient in terms of empirical findings within the Nepali context explaining financial inclusion from the perspective of individual capabilities. Although the influence of consumers' attributes on their behaviors is supported in the literature (Clamara et al., 2014; Muradoglu & Harvey, 2012; Norvilitis et al., 2006), empirical studies on financial inclusion integrating personal and social attributes are still lacking. Most of the studies have used a single theoretical perspective which would perhaps limit further on theory development. This study tried to investigate the influence of consolidative consumer side attributes on financial inclusion in the Nepali context to address the following queries:

- How do personal capability viz. financial attitude and financial literacy, and social capability viz. social networks and subjective norms influence financial inclusion?
- In what way does financial self-efficacy mediate the relationship between personal capability and social capability, and financial inclusion?

Objectives of the Study

This study examined the impact of personal and social capabilities enriching the financial behavior towards financial inclusion from the consumers' perspective. The objectives of the study are as follows:

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1. To examine the influence of personal capability viz. financial attitude and financial literacy, and social capability viz. social networks, and subjective norms on financial inclusion
2. To assess the mediating role of financial self-efficacy between personal capability and social capability and financial inclusion

Significance of the Study

This study was primarily focused to develop an approach explaining the financial services user's personal and social aptitudes which are central in shaping optimal decision making. More precisely, economic actions in the financial insertion domain. Financial inclusion is worth taking initiative for reducing poverty among the people of the rural area resulting in economic progress. However, it is likely to achieve if the nation applies a well-adjusted synchronize upshot between the financial service providers and consumers. Therefore, this study intends to guide financial service providers within the surrounding of the least developed country from consumer insights. It probably helps to develop alternative tactics to enhance the consumption of formal financial services.

This study further intends to provide a relevant platform for government and non-government agencies working in the financial sector to formulate appropriate programs for enhancing and motivating the use of financial services within rural areas. From a policymaker's point of view, this study tried to support planning and setting more favorable guidelines and strategies for promoting the execution, extension, and subscription of available financial services so that mainstream financial services could be reached to the people of every segment. The result of the study can be used as a yardstick and would assist policymakers to way out as well as to assess efforts to enhance the degree of subscription of financial services.

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Organization of the Report

This report has been organized into five chapters, each devoted to some aspects of the study of factors influencing financial inclusion in the Nepali context:

Chapter – 1 has covered the background of the study, statement of the problem along with research questions, objectives of the study, significance of the study, and organization of the report.

Chapter – 2 has covered a review of the relevant theoretical and empirical literature, and the theoretical framework of the study at the end of the chapter.

Chapter – 3 has included a philosophical foundation, research design, sampling procedure, and sample size, unit of analysis, variables and their operationalization, research hypotheses, instrumentation, data collection methods, and data analysis procedure.

Chapter – 4 has covered the results of respondent characteristics, measurement model assessment, structural model assessment, and mediation test.

Chapter – 5 has covered the summary of the findings, discussions, implications for practice and research, and critique of the study.

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CHAPTER 2

LITERATURE REVIEW

This section presents an extensive review of prevailing theoretical and empirical knowledge in the relevant field of the study topic. The review of literature tries to identify the important themes, concepts, variables, and relationships among these variables assisting to frame and develop (propose) hypotheses for the study.

Theoretical Review

Decision-making is, intentional or unintentional, an ongoing process made at micro as well as macro levels (Kahneman & Tversky, 1984). Kahneman and Tversky (1984) conducted a study within the microeconomic viewpoint focusing on decision making at the individual level and found that either at an individual level or organizational level, decision making is a part of continuous and collaborative methods to manage the dynamic atmosphere where they function. The fundamental base for framing this study was the assumptions of maximizing consumer's expected utility relating to various wings of economics.

The Expected Utility Theory (EUT) propounded by Bernouli in 1738 explains the rationale theory under a price-gamble puzzle. The significant assumption of EUT is that during the process of selection of alternatives and making the proper decisions, an individual depends on the expected economic values depending upon assigned probabilities. Despite having the significant importance of EUT for making decisions, it is extensively criticized by different scholars over time. Criticisms are made on several aspects like insufficient descriptions of individual choice (Kahneman & Tversky, 1979), and the haziness of lower possibilities influencing decision-making (Tversky & Kahneman, 1992). Other different experiential studies argued that most people show irrational behavior during choices and decision-making. Risk appraisal

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and decisions are not made only depending upon expected economic utility, hence the advancement of alternative theory i.e. non-expected utility is unavoidable. It also contradicts and violates the assumptions of the theory of rationality in selecting the best alternative which challenges this study as well.

Expected Utility Theory has been expanded later along with psychology and behavioral financial economic models and taken as comparatively representative frames of reference. This study assumes there are some other factors affecting individuals' financial choices and decision making moreover standard economic factors to maximize their expected utility. These factors may be financial attitude, financial literacy, financial self-efficacy, social networks, and subjective norms which are key components in shaping the decision choices and ultimately predicting the economic behavior of consumers. In line with this argument, a study made by O'Donoghue and Rabin (2001) also found the sensitivity and cognitive factors led to optimal choice. According to them, an individual is rational during the process of selecting the best alternatives assuming the mindfulness for willpower in the course of action. This also infers that some other factors affecting the financial decision-making process also exist.

To cope with the shortcomings of expected utility theory another new theory was developed focusing on probabilistic judgment and reasoning called non-expected utility theory. Based on psychology, prospect theory (Kahneman & Tversky, 1979) has been developed to enlighten choice and decision making. It has accentuated diminishing sensitivity (Tversky & Kahneman, 1992) and affective reactions (Rottenstreich & Hsee, 2001) which affects the result of uncertain selections, and the salience of available preferences (Bordalo, Gennaioli, & Shleifer, 2012), for example,

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financial products and services. As per prospect theory, decision-making will depend upon assumed gains or losses among given options.

Besides the prospect theory, some other different non-expected and behavioral theories are mushrooming such as the Optimal Expectation Theory (Gerardi, Goette, & Meier, 2010). Tversky (1969) states that if individuals faced complex decision-making issues, various investigative dealings play a noteworthy role to streamline and appraise awaited consequences. Although Heuristics play a significant role in decision-making, decision-makers need to have various abilities such as skills, knowledge, and attitude to assist in better decision-making. Financial decision-makers need several financial literacy sessions, financial self-efficacy, positive financial attitude, and social consensus for making well-versed outcomes. Therefore, an individual's personal and social abilities may influence the screening process and the subsequent decision-making affecting financial behavior commenced by an individual with a selection problem, thus grasping financial inclusion.

As a branch of behavioral and financial economics, a new theory was developed to cope with the deficiencies in the existing literature. It indicates that knowing the individual's financial behavior with the anticipation of various aspects of human nature into financial and economic models is crucial, however, it is not properly discussed in earlier models (Olsen, 1998; Thaler & Shefrin, 1981). Behavioral finance mainly concerns the way an individual thinks disregarding the restrictions to arbitrage at the time of the inefficient market. It has distinct arguments over efficient and linearity assumptions of expected utility maximization theory. It tries to explicate the what, the why, and the how of an individual's economic activities from a humanoid standpoint (Ricciardi & Simon, 2000).

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Behavioral finance integrates many other disciplines like psychology, marketing, finance, and management among each-others integrating the different aspects of human nature with economic and finance theories. Therefore, it is an enhancement to the expected utility theory and non-expected utility-maximizing models in decision making incorporating the normative and descriptive dimensions of decision making.

The decision-making behavior studies have started to move towards the understanding of the psychological process through experimental choices (Payne, Braunstein, & Carroll, 1978). This perception is key in enlightening this study converging financial consumer's choice and decision for subscribing to mainstream financial services.

Financial Inclusion

The concept of financial inclusion, financial exclusion in the absenteeism of financial inclusion, was primarily applied in the early 90s with the expectation of seeking attention towards the people having inadequate contact with economic products. It positively helps to alter the financial condition of the people inhabitant in the rural area, specifically, in the least developed or developing countries. The subscription of available financial services as per expectation is possible if there is ease inaccessibility, of better eminence, and pertinent to the user's desires (Sarma & Pais, 2011).

Financial inclusion became a chunk of the societal policy terminology in all nature of countries alike and is realized to be critical for the public to engage in social happenings to advance their wellbeing. Along with the significant findings of various empirical studies, Hannig and Jansen (2010) also stated that lacking in measuring criteria that can be used to evaluate financial inclusion still exists.

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Generally, the literature on financial index reveals that financial inclusion has mostly been studied from the side of financial products and services providers. It can be operationalized in diverse settings among individuals, households, firms, and at the country level. This study is limited to the individual level focusing on the investment behavior and status of financial products subscriptions compared to the supply of financial services by mainstream financial institutions. Therefore, this study tried to add literature on financial inclusion discipline from users' viewpoint of financial products.

Several prior studies have shown individuals are substantially benefited from financial inclusion through the ability to have a safe place to keep their money in the form of savings, safer as well as relatively cheaper and reliable access to remittances and other payment services, loans, or insurance payments to cover health or education expenses, and other uncertainties, often from one financial services provider (Peachey & Roe, 2004; Pearce, 2011). Ellis and Lemma (2010) also argued that people are required to save and borrow money from formal financial service providers for household consumption, investment motives and to diminish contact to any contingencies that may affect adversely. As a result, this stimulates them to provide significant exertion to finding feasible solutions using the financial service providers' options available to them.

However, Swamy (2014) concluded that financial inclusion was perceived to threaten the economic mechanism sustainability and stability of financial service providers if there is not sufficient financial counseling or information provided to the users of these products particularly credit facilities. In the same line, Aduda and Kalunda (2012) have also pointed out the role of credit information before issuing credit facilities. Similarly, findings by Burgess and Pande (2005) indicate that

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financial inclusion for instance in the rural locations of India was enhanced by opening more bank branches through policies imposed by the state. These were seen to radically respond to poverty reduction in the rural locations notwithstanding that the focus was only on the access dimension, ignoring the importance of usage and quality towards financial inclusion. A user side study by Dupas, Karlan, Robinson, and Ubfal (2013) argued that there is a need to ensure quality, affordability of financial services, and trust among the users besides simply expanding accessibility through bank branches for achieving complete financial inclusion.

The Centre for Financial Inclusion at Accion (CFI) referred to financial inclusion as "a state in which all people who can use financial services have access to a full suite of quality services, provided at affordable prices conveniently, and with pride." This definition implies the importance of financial inclusion presently and in future research.

Dimensions of Financial Inclusion

Financial inclusion can be postulated via three dimensions viz: *access, usage,* and *quality* of financial products and services (Amidzic, Mialou, & Massara, 2017). Different scholars like Hannig and Jansen (2010), and Sequeira, Serrao, and Hans (2012) have also argued that measurement of financial inclusion should be able to monitor the levels and broader understanding of factors associated with financial inclusion which supports the hypothesis test between financial inclusion and other variables.

The first and foremost component of financial inclusion is the *access* dimension. It generally deals with the physical expansion of financial services, and individuals' ability to use them at a service point. The availability of financial services at a short length of distance is preferable in a rural area in comparison to an urban

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area. Another dimension is the *usage*, which measures an individuals' ability to derive permanent purpose and utility from a particular-financial product and services. The third dimension is the *quality* which measures the relevance of the financial services in the day-to-day needs of the consumers. In line with this, The World Bank has also used a multidimensional approach to define and operationalize financial inclusion. The main argument behind using a multidimensional approach to measuring financial inclusion is the integration of different aspects from different perspectives to reduce the most common mistakes of existing assumptions that financial inclusion can be achieved through the expansion of access points only (Demirgüç-Kunt et al., 2015).

Kumar and Mohanty (2011) have conducted a study to test the link between inclusion and development as well as to test the influence of income, financial literacy, inequality, urbanization, and infrastructure on inclusion factors using the index developed by Sarma (2008). Furthermore, Ardic, Heimann, and Mylenko (2011) also modified the index of financial inclusion developed by Sarma (2008) to predict the number of bank accounts for each type of regulated institution in the financial access database. However, they are both limited to access dimensions using bank accounts which do not give a comprehensive picture of financial inclusion in each country vis a vis the consumer side.

Similarly, Arora (2010) modified Sarma's (2008) financial inclusion index and established the Financial Access Index (FAI) to measure financial access by considering more variables in the outreach dimension as well as both demographic and geographic penetration factors to the dimensions which were previously excluded. However, this index has also excluded a usage component to measure financial inclusion, hence the index is incomplete. It requires not only the mere ownership of financial services but also to add some more components like usage of

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financial services for economic prosperity and well-being. Therefore, any effort to measure financial inclusion needs to critically consider several dimensions that define the extent of financial inclusion.

Gupte et al. (2012) computed an index to assess the level of the inclusive financial system in India and included more variables/factors in the index for a more robust analysis which was adopted by Arora (2010). However, there were limitations to variable coverage to comprehensively compute the level of financial inclusion, given the dimensions. Their study provided a more indicative index of financial inclusion and tends to highlight the more impactful dimensions among other existent measures previously developed by Arora (2010); Beck and De La Torre (2007). Kidwell, Brinberg, and Turrisi (2003). It has used various but still limited dimensions to measure inclusion.

The literature on financial inclusion shows continuous modifications have been done to make a comprehensive and robust measurement scale of it. When its dimensions are used separately, only partial information on the level of inclusiveness is provided. According to Sarma (2008), a single-digit scale only allows for cross-country comparisons that are usually used to predict the progress of economic growth given the levels of financial inclusion. The formulation of the measurement scale has not been used at the individual or household level. It is therefore imperative to note that there is a need to consider the individual capabilities of a financial consumer such as personal capability as well as social capability. The currently available literature on financial inclusion has not included attributes like financial attitude, financial self-efficacy, financial literacy, social networks, and subjective norms as predictors of financial inclusion, which may have significant explanatory power on financial inclusion at the individual level in the least developed country context.

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The Capability Approach and Financial Inclusion

The capability approach is a multi-dimensional concept associated with the individuals' competencies needed to empower them to realize valuable benefits to their lives such as financial wellbeing (Sen, 1993). This approach disagrees with the rational choice theory of expected utility theory where an individual tries to maximize expected monetary values depending upon probability. This approach posits that the benefit of available financial product and services can be effectively realized by individual consumers if those services are suitable to the needs of the people, frequently available, and accessible to address short-term and long-term needs and intentions of the people of all income levels - hence financial inclusion. Sen's capability approach is linked with a set of aptitudes based on which an individual chooses to act. He has also said that a combination of interrelated capabilities including socio-economic attributes enables individual functionality which results from their capabilities (Sen, 1970). Besides, those abilities separately seem to be worthless if the user does not utilize them.

Sen (1993) has also identified the space where capability may play a crucial role to achieve development. In line with his point, this study assumes that financial inclusion leads to development, then a financial consumer's capabilities will naturally influence financial inclusion. Different scholars in the field of economics and development agree that the capability approach offers a vision into the concepts of security, poverty, and development. Thus, the capability approach is inevitably used because it presents qualities that generally inform the context, focusing on the individual capabilities that influence financial behavior and consequently financial inclusion. It is also stated by Sharma (2005) that human development can be conceptualized using the capability approach assuming it as a 'freedom'. It refers to a

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situation whereby people have more freedom or opportunities to live the lives as they value; for instance, a life free from poverty, inequality, and financial exclusion (Sen, 1970, 1993, 1999).

Based on the capability approach of how capabilities influence choice and outcomes, this study attempts to focus on personal and social capabilities. The capability approach can be applied in various forms, but then this study is concentrated on two forms; i) defining capabilities as an individual's ability to realize a favorable outcome, for instance, financial inclusion, and ii) considering exclusion as a lack of individual capabilities (Sharma, 2005). Therefore, the study adopts the capability theory as an analytical framework in defining and analyzing capabilities like the ability to access and usage of financial services to improve welfare and quality of life. This study also assumes that services availed by the financial institutions are the resources whose value is only realized when individuals use their capabilities to convert them into a valuable outcome – financial inclusion.

Personal Capability and Financial Inclusion

In this study personal capability (PC) is generated through the integration of financial attitude and financial literacy that individuals possess to enable them to achieve financial wellbeing. In line with Sen's capability theory, it is assumed that individual consumers' capability influences their behavioral outcome – financial inclusion. An empirical study also found the significant impact of psychological attributes such as financial attitude and financial literacy on financial decision making (Lea, Webley, & Levine, 1993; Pattarin & Cosma, 2012). This finding infers that these factors are significantly related to incentives for using financial services. Similarly, different scholars (Jones & Volpe, 2011; Okten & Osili, 2004) have also found that the probability of using and reflecting the individuals' attitudes is higher if

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there is a unified relationship and these relations may influence financial behavior and consequently financial inclusion.

Financial Attitude and Financial Inclusion

According to Fishbein and Ajzen (2011), the most essential assumption upon the attitude concept is that attitude guides, influences, directs, shapes, and predicts actual behavior. It also can be proposed that through a purposeful process, financial consumers evaluate and judge whether undertaking the use of financial services is important towards improving their wellbeing or not. When decision-makers evaluate the processes and tasks favorable to achieving their intended outcomes, they are likely to engage and undertake them. It is then logical to contend that it is difficult to understand financial inclusion by detaching from the person's attitude, especially among financial consumers who make critical financial choices and decisions among various alternatives.

This is supported by a study conducted by Kidwell et al. (2003), who used the theory of planned behavior (TPB) to enlighten budgeting behavior and financial management respectively, and concluded that positive attitudes are proportionately related to actual financial behavior. Another study was conducted by Pham, Yap, and Dowling (2012) to test the moderating effect of financial knowledge between financial attitude and financial management and found that there is no significant moderating effect of financial knowledge between attitude and financial management. A similar study conducted by Davies and Lea (1995), and Lachance (2012) have concluded that students were forced by their optimistic attitude to recognize the advantages and risks associated with credit. Therefore, there is a positive relationship between an individual's attitude and the use of financial products like credit cards and knowledge of credit. This claim is also consistent with the findings of another study

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that a major predictor of cash flow management towards proper financial planning was a positive attitude (Godwin & Carroll, 1986).

Fishbein and Ajzen (1975) articulated the link between attitude and an individual's behavior assuming that individuals are rational decision-makers through a theory of reasoned action. The theory of reasoned action states that people think consciously through the reasons for their actions assessing the possible implications of all those activities (Orobia, 2013). Based on this claim, when decision-makers evaluate behavior as favorable for achieving a certain expected result, it obviously will stimulate an individual's participation in the behavior that consequently influences their access and use of financial services. This association has been examined by several studies in diverse domains, however, most of the studies have focused on the attitude-behavior relationship in financial management. If processes and tasks are being evaluated positively to attain their expected results, people are expected to involve and accept those activities. Therefore, it is reasonable to elucidate that financial inclusion cannot be explained separately detaching from an individual's attitude during the process of making critical financial choices.

Several empirical studies have elaborated on the concept of attitude to explain individual and organizational behavior and performance (Bagozzi & Burnkrant, 1979; Bagozzi, Lee, & Van Loo, 2001; Bentler & Newcomb, 1986). Different contradictory findings have been made through several studies assessing the influence of attitude towards individual or organizational behavior in different contexts. Few studies have examined the influence of financial attitude on an individual's financial behavior, hence financial inclusion (Godwin, 1997; Norvilitis & Mao, 2013). However, Fishbein and Ajzen (1975) found a greater predictive power of attitudes if it is

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domain-specific. Therefore, in the finance domain attitude is proposed as financial attitude to examine its' influence on financial inclusion.

According to Pattarin and Cosma (2012), attitude is significantly associated with the motivations during financing as well as it plays a vital role. Similarly, Livingstone and Lunt (1992), and Norvilitis et al. (2006) also concluded in their study that an individual's attitudes towards financial behavior have a positive impact, especially in the debt context. Besides, it is also said that sound financial decision-making for achieving an individual's financial well-being is possible through attitude and behavior. During the process of performaing any action, attitudes play a positive role i.e. if there is positive perceived social approval. Similarly, every activities of human being is affected by a kind of beliefs of the likely result of behavior, for instance, financial behavior (Ajzen, 1985; Ajzen & Beck, 1991).

According to the theory of planned behavior, an individual's attitude strongly affects behavior and the actual act to be undertaken (Fishbein & Ajzen, 1975). It is also said that if an individual is noticed about his/her abilities in terms of capabilities to produce any expected results, it plays a vital role to change their behavior directly or indirectly. A study conducted by Taylor and Todd (1995) has also claimed that the theory of planned behavior clearly explains the behavioral intention and perhaps applicable to other behaviors and intended results in various contexts. Hence, financial attitude independently is a significant predictor of financial management.

Financial Literacy and Financial Inclusion

In this dynamic financial environment, many complexities are arising therefore such difficulty necessitates financial services users to make financial decisions more actively (Braunstein & Welch, 2002). The empirical literature has also stated that one of the major reasons behind the proper financial decision as well as the

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inactive implementation of and resulting in lower demand for financial services is an insufficient amount of basic knowledge (Giné & Yang, 2009). Most of the consumers are having a problem with a sufficient level of financial concepts, knowledge, and skills that can be used to make the most favorable financial decisions so that people will be able to increase the status of their financial wellbeing. In that sense, financial literacy is generally taken as a kind of strategy to shape the consumers' behavior towards the consumption of available financial services.

Financial literacy also helps to enhance the level of necessary skills that can be used to evaluate available services whether they are beneficial to subscribe or not for improving their financial situation i.e. financial inclusion (Braunstein & Welch, 2002). Studies have also concluded that people who are more familiar with fundamental monetary notions are feeling easy to judge and to subscribe to those services compared to others. Remund (2010) also states that financial literacy is a measurement of ones' understanding of key financial concepts enhancing the level of certainty to properly sort-out personal financing issues through appropriate instant decisions as well as strategic financial strategies to survive in the changing environment.

According to the Social Learning Theory of Bandura (1971), individuals' capabilities are significantly affected by their innate cognitive abilities to provide the behavioral framework and achieve any expected performance. The Social Learning Theory assumes that the behavioral activities of the people are knowingly or unknowingly affected by the behavior of others within the surroundings. This theory further suggests that unlike traditional learning, individual behavior is a consequence of directly experienced learning thus, observation can be taken as the basis of most of the learnings. It can be taken as an individual's ability to acquire knowledge and

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awareness gradually through observation and to alter his/her behavior through the hit and trial process (Bandura, 1971).

Exploration in the United States by Gerardi et al. (2010) has likewise presumed that a person without having a fitting degree of money-related education was bound to take up sub-prime home loans and to default on them. This finding was predictable with some different investigations (Lusardi and Tufano, 2009; Mottola, 2013) who finished up people having lower levels of budgetary education with a higher measure of credit loadings because of the absence of information and aptitudes to pass judgment on their obligation position. Notwithstanding, in opposition to these discoveries it tends to contend that in light of an absence of fundamental money-related information needy individuals will be unable to make an adequate measure of reserve funds for their future possibilities accordingly, they have to include in a more costly wellspring of financing. In opposition to this contention, Bertrand and Morse (2011) additionally contended that the vast majority of the financial customers' intellectual factors likewise assume an indispensable part to settle on the money-related choice to utilize not to utilize accessible administrations rather monetary information or comprehension.

Sarma and Pais (2011) found that grown-up education is decidedly and fundamentally connected with budgetary incorporation, inferring that the higher the grown-up proficiency, the higher will be the degrees of money-related consideration among economies. Essentially, Hilgert, Hogarth, and Beverly (2003) in their family unit monetary administration concentrate in which they inspected the association between budgetary information and conduct discovered a solid connection between money-related proficiency and everyday budgetary administration abilities. Subsequently, people with legitimate monetary information were bound to enjoy

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prescribed money-related practices consequently pushed to utilize budgetary administrations to enhance wellbeing. Additionally, (Arrondel, Debbich, and Savignac, 2012; Lusardi, 2008a; Lusardi and Mitchell, 2013) likewise settled a positive causal connection between budgetary education and securities exchange cooperation; money related proficiency and family speculation conduct just as retirement arranging separately. It is additionally contended that the more numerate and monetarily educated an individual is, the more probable they are to partake in monetary business sectors and therefore affecting budgetary incorporation.

Hence, setting up monetarily comprehensive social orders requires improving budgetary proficiency as far as giving monetary aptitudes and information just as their application while settling on money-related choices. This is because budgetary proficiency upgrades the degree of people's capacity to settle on educated monetary dynamic, just as lifts certainty improving one's capacity to serenely access and utilize formal money-related administrations, consequently monetary incorporation.

Social Capability and Financial Inclusion

In this study, the social capability is taken as the integrative variable of social attributes like a social network and subjective norms. These social ascribes are commonly controlled by people to use them for acknowledging financial results. This is because of the impacting intensity of organizations among individuals and at various levels associated with, and the qualities that administer the method of their lives – subscription of financial services. Various investigations have discovered a huge connection between social ability and money-related conduct in different conditions. Lea et al. (1993), and Pattarin and Cosma (2012) have also stated that the effect of social attributes on financial behavior or decision cannot be overlooked because those attributes are crucial for motivating individuals towards using financial

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services. Similarly, through social values, beliefs, and culture or religion, subjective norms can stimulate an individual's financial behavior (Kempson & Whyley, 1999; Stulz & Williamson, 2003).

Social Networks and Financial Inclusion

People need to deal with their day-by-day lives as they associate and encircle themselves inside complex connections. In the field of sociology, the interpersonal association is one of the effective ideas in which people are connected through interrelationships at various levels and impact their behavior (Granovetter, 1990). Informal associations have been characterized as a blend of individuals connected by their ties (Granovetter, 1983) which can be depicted from either person's point of view or network viewpoint (Ladin and Hanto, 2010). Informal communities are likewise characterized as a piece of people, firms, or associations by explicit collaborations, for example, kinship, for the trade of information or different assets (Carpenter, Li, and Jiang, 2012; Kilduff, Tsai, and Hanke, 2006; Phelps, Heidl, and Wadhwa, 2012). It presents a channel inspecting aggregate behavior through people's commitment in comparative practices with others, a stream of data inside the organizations, or embracing the accepted practices inside these collaborations that intrinsically impact their demeanor and therefore gainful results (Evans, 2002; Fischer, 1982; Ladin and Hanto, 2010; Okten and Osili, 2004; Rowley, 1997).

According to the social network theory, a person can engage or form a well-functioning group of people among the community where s/he is related to interactions and for sharing available resources (Granovetter, 1983, 1973). This theory is an extension of social capital theory. Social network theory has recognized the presence of critical ties or connections to consolidate links of companions – defined as weak ties while close cohorts, family members, or neighbors are strong

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ties. Granovetter's (1983) strong-weak ties hypothesis expresses that feeble ties furnish individuals with admittance to information beyond those accessible in their nearby groups of friends, that is the strong ties. He further contended that the significance of compact ties is only seen as a far superior inspiration for help and ordinarily more effectively open than the frailties. The remarks on Granovetter's hypothesis of strong-weak ties proposed that whether an individual chooses to utilize frail or solid ties for different purposes depends not just on the number of connections that one has at different degrees of tie quality yet additionally on the estimation of ties of different quality. He further contended that people inside organizations who find weak ties more important than solid ties ought to be obliged to utilize the last mentioned if frailties structure a more modest segment of their contacts. Alternately, a private who may discover solid ties more significant for a particular reason could likewise be socially segregated and made to swear by shabby connections to comprehend an effective result from the cooperation inside their assumed networks.

As per Granovetter's (1985) fundamental paper on the embeddedness of financial choices among people with social relations, various works in different fields have concentrated on the benefits of social ties have had in different settings. (Borgatti & Foster, 2003) established that within social associations, the communications are made of different kinds of ties ordinarily expected to work diversely inside a given setting. In their investigation during which they examine the rising network worldview in authoritative exploration, they contend that a gathering of ties of a given kind, as an illustration, companionship tie, work ties, network ties among others, are produced using a social relationship and each connection characterizes an extraordinary organization albeit observationally they could be associated.

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Several empirical studies are wiped out different context to conceptualize the concept of social networks, as an example, entrepreneurship (Naudé, Zaefarian, Tavani, Neghabi, and Zaefarian, 2014), leadership studies (Parkinson, 2013), organizational behavior (Baker and Faulkner, 2004; Carpenter et al., 2012; Kadushin, 2002), etc. A large portion of the investigations helped to know what and how organizations are utilized as social ascribes. Craftsman et al. (2012), in their precise inspection of methodological issues and decisions of social networks research, shown that to successfully look at the impact of networks at each level, there is a necessity to embrace either an inner or outer view that helps in comprehension and building an important hypothetical model inside a given setting. Walker, Kogut, and Shan (1997) recognized the internal deem as one that centers around the network's structural patterns rather than the progression of assets that sway singular results. However, different other researchers have distinguished the outer deem that centers around whether an individual in an organization uses the valuable resources that the ties/connections have or not. All in all, how well do the people inside the networks use the information to fulfill their ideal results like financial inclusion?

Financial inclusion is a general result to be accomplished, ownership of money-related information, and abilities which will be achieved from the social interactions are basic to making the monetary decisions, hence affecting users' finance-related demeanor. (Zhang, Lin, & Li, 2012) found a major positive connection among networks and family unit decisions of financial mediators. The idea of individual behavior was proposed by Burt explaining the independent needs of individuals. This theory argues that the assessment of information by an individual is suffering from other's perception among the people of the network alike to him/her. For instance, budgetary data passing on among the networks may influence a person's

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money-related behavior contingent on how others see or utilize analogous information. this may thus cause either the use or non-utilization of formal money-related decisions to upgrade their welfare and life's quality.

Subjective Norms and Financial Inclusion

Subjective norm is a kind of belief about what significant others perceive in one's engagement in a certain behavior and one's motivation toward certain actions to suit specific referents. Consistent with Eagly and Chaiken (1993), subjective norms as a person's perception or belief towards reaction on acceptance or rejection of specific action by significant to them. It is a kind of individual's perception towards involvement during a certain activity that might be accepted or not by significant to them (Ajzen & Beck, 1991; Fishbein & Ajzen, 1975). In line with the theory of planned behavior, the chances of advancement of an individual's intentions towards financial behavior are expected to be higher if there is a greater degree of the subjective norm. The empirical finding also shows that because of such effect and pressure imposed by the social environment an individual would perform any activity although s/he is not expected to undertake a specific behavior (Venkatesh & Morris, 2000).

A study conducted by Liu, Lu, and Veenstra (2014) concluded that there is a solid alliance among social norms, incentives towards financial activities, and actual financial behavior of the people who are constantly participating in the financial markets. Furthermore, another study by Taib Ramayah and Razak (2008) also determined that there is a significant positive impact of subjective norms on the expectation to relate in a negligible degree of partnership in home financing. Some other studies are finding somehow contradictory results. An argument by Liu et al. (2014) is that folks might not be able to adhere to subjective norms if there is a

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particular financial reward within the market. consistent with this, it can be said an individual will be able to follow subjective norms if the prospect of monetary gain is not sure. In another word, it is inferred that the value of subjective norms is critical if a person is within the dilemma of selecting the best alternatives for monetary rewards only. However, Collard, Kempson, and Whyley (2001) make an argument that certain norms incorporating social norms were found to be key restrictions in an attempt to contact financial services among women. Thus, it suggests that within a particular-segment or society, individuals' behavior towards involvement in financial services is often affected by the insights of significant others to them. Individuals may plan to consume financial products depending upon others' participation who are significant to them. Therefore, subjective norms are often taken together of the predictor variables of a person's behavior, hence financial inclusion.

As per prior studies, those previous studies are lacking to show the empirical connection between subjective norms and financial inclusion. The existing conversation has mostly been revolved around the influence of subjective norms on behavior in various domains except finance. In the early economics studies, Akerlof (1980) examined social norms and appealed that there exist social norms because of the alleged loss of status to the individual meaning to act diverting from what the many others notice the envisioned actions. Insight of the fundamental role of financial service users as a path for realizing financial inclusion, the financial consumer's social capability, like subjective norms, is prospective to supply a stronger understanding of financial inclusion. It is also considered that an individual's significant others critically affect financial behavior to realize their financial welfare and the quality of life.

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Financial Self-Efficacy and its Mediating Role

Financial self-efficacy (FSE) is the degree of sureness in one's competencies to cope with a financial state without being overwhelmed. This concept was developed around the social cognitive theory of Bandura (1997). This theory explains the significance of an individual's cognitive thinking for guiding an individual's stimulation towards financial behavior (Sandler, 2000). It measures the level of self-assurance an individual grasps in terms of competencies to subscribe to available financial services (Bandura, 1997).

Self-efficacy in the area of financial discipline is taken as the financial self-efficacy variable which is used to investigate and explain its impact on financial inclusion. The efficacy variable is undertaken to guess the chances of an individual financial consumer being able to access and use formal financial services. Therefore, assessing the concept of self-efficacy as an influencing factor on financial inclusion is necessary due to its association with individuals' beliefs in one's abilities to engage in any activities.

According to Tokunaga (1993), a missing link between an individual's competencies required to perform any financial activities as an outcome may be fulfilled by financial self-efficacy. Financial self-efficacy is not only necessarily predisposed by financial literacy and skills but also by other different traits, other subjective factors either independently or collectively for instance; family history, personality, social influence, etc. (Bandura, 1994). It significantly stimulates the competencies of borrowers. Financial self-efficacy was found a key construct for having a deep understanding of successful behavior in different surroundings where financial inclusion is one of them (Amatucci & Crawley, 2011).

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A finding of Engelberg (2007) suggests that young adults are more influenced towards savings to manage economic changes through the proper interaction between psychological aspects and economic sureness, hence the greater self-efficacy stimulates the higher level of involvement in financial activities. Therefore, in the context of the financial inclusion domain, a higher degree of self-efficacy produces a more encouraging impact on an individual's movements towards the subscription of financial services. Lown (2012) also argues the level of confidence, say financial self-efficacy, in one's ability to deal with a financial situation without being overwhelmed, is one of the major qualities that affect financial behavior. Different studies have concluded that one of the major influencing factors of an individual's movements in behavioral activities is self-efficacy (Hira, 2012). Hence, an individual with a higher level of confidence in his/her abilities may be motivated to subscribe to the products and services provided by available financial institutions as well as they may disclose their persistence if the situation is not as expected towards the consumption of financial services.

According to Bandura (1994), a person's task or activity may be influenced directly or indirectly by self-efficacy during the process of achieving desired outcomes. This variable is taken in some researches as an intervening variable and found a key predicting element of an individual's behavior and behavioral change (Bailey & Austin, 2006). Findings of different studies over the period are also in line with the argument of Bandura supporting cognitive factors i.e., self-efficacy significantly mediates the relationship between different variables and intended outcomes in a specific condition. Similarly, Bouffard-Bouchard (1990) concluded in a study that self-confidence has a significant impact on different expected actions and consequently those outcomes. A study conducted by Seibert, Zhao, and Hills (2005)

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to examine the intervening effect of self-efficacy towards the encouragement of entrepreneurial intentions found a significant mediating effect of self-efficacy in the relationship between implicit learning from entrepreneurship-related courses, experience, and risk taking skills on entrepreneurial intents.

According to Bandura (1997), and Stajkovic and Luthans (1998) individual's self-confidence skill is an energetic inner trait that can be used in several frameworks; thus, it can create some changes in the behavior of people. Considering the facts in empirical studies and the claim of Bandura's that is the belief of self-efficacy has a significant mediating link between predictor variables and perceived actions in an explicit domain. Therefore, this study is also trying to examine the intervening influence of financial self-efficacy construct on the link between personal capability and social capability, and financial inclusion.

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Theoretical Framework

Based on the theoretical and empirical review of existing literature, the following pictorial form of theoretical framework showing the relationship among the variables has been developed.

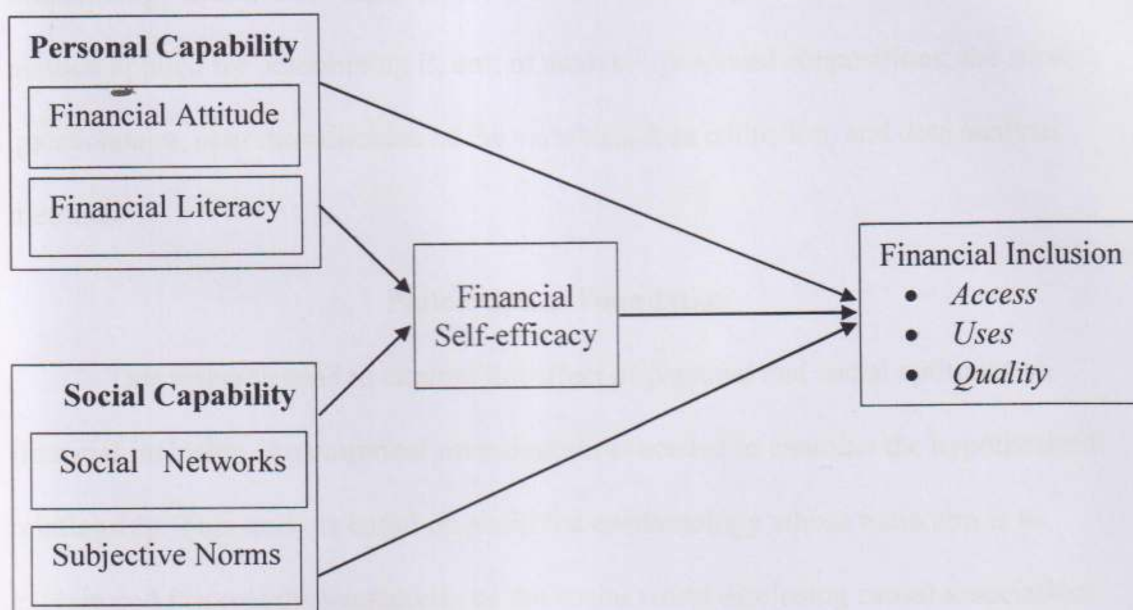

Figure 2.1. Theoretical framework.

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CHAPTER 3

RESEARCH METHODOLOGY

This section presents the basic framework on which this study is based. It also includes the philosophical foundation, research design as well as overall research methodology that is used. Similarly, it elucidates the sample and its size including the method applied for determining it, unit of analysis, proposed suppositions, the survey questionnaire, operationalization of the variables, data collection, and data analysis methods.

Philosophical Foundation

This research tried to explore the effect of personal and social aptitudes on financial inclusion. An empirical investigation is needed to examine the hypothesized relationship. This study is based on positivist epistemology whose main aim is to explain and forecast the happenings of the social world disclosing causal associations between elements (Crotty, 1998). This approach is appropriate if the objective is to record, evaluate, and produce inferences towards authenticity through a set of variables. Similarly, this study is carried out from the objectivist ontological standpoint. Objectivist ontology undertakes that a single reality exists where human behavior can be assessed ignoring the gist of an individual's measurable behavior.

Research Design

This study has used a cross-sectional survey with a causal research design. Cross-sectional research involves gathering necessary data at a time. Saunders et al. (2011) state that a cross-sectional inquiry is an appropriate tool for statistical descriptions and predictions of key elements of the study. It is also treated as comparatively cheaper, quicker, and easier to do, as well as meaningful for creating

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and illuminating hypotheses. This research was designed based on the deductive approach. The deductive approach is appropriate if the conclusion of a study is derived from the basis of the logical consequences of its hypotheses.

Sampling Procedure and Size

It is a procedure of choosing an adequate number and precise type of elements to study a certain population. The convenience sampling approach was applied because of the pandemic situation of COVID-19. The sample size was computed using the Z-score formula with a 95% confidence level and a five percent level of significance as follows:

$$\text{Minimum Sample Size Required (n)} = \frac{z^2 \times p \times (1-p)}{c^2}$$

$$= \{(1.96)^2 \times 0.5 \times 0.5)\}/ (0.05)^2$$

$$= 384$$

Where,

Z = Z-value (e.g., 1.96 at 95% confidence level)

p = chances of selecting an alternative (0.5 used for sample size needed).

c = level of significance (e.g., 0.05 = ±5)

Therefore, 384 adult individuals are the sample size for this study. Since this research was conducted at the individual level, respondents are chosen out of total adults (i.e., individuals age group of 15+ years) following a convenience approach. This study has adopted the age criteria of 15+ years to define adults based on the minimum age of Nepali citizens to get citizenship.

Unit of Analysis

It is the essential object undertaken to examine in the study. The element of investigation can be at an individual, group, or organizational level. Thus, the unit of examination is the adult individual represented by a citizen of Nepal having an

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account in any formal financial institutions including, savings and credit cooperatives, and microfinance institutions.

Variables and their Operationalization

In this study, financial inclusion is the outcome construct. It is an integrative form of access, usage, and quality dimensions of financial services. Furthermore, this study has one mediating variable i.e., financial self-efficacy.

Financial inclusion: A situation in an economy where all segments have accessibility to a complete package of reasonable and quality financial services with pride.

Access: It is the range of financial services as well as consumer's ability to subscribe to those services provided by mainstream financial organizations.

Usage: It is the financial consumer's necessary aptitude for inspiring everlasting drive and use of available financial services.

Quality: It is the degree of significance of the available financial services to fulfill the requirements of the financial consumer.

Financial Attitude: It refers to an individual's evaluative judgment i.e., positive, or negative evaluation to perform a behavior in a financial context.

Financial Literacy: It refers to the financial consumer's knowledge of financial concepts and the capability of their application in financial decision-making.

Social Network: It refers to the financial consumer's association (ties) with other people through any means of connection.

Subjective Norms: It refers to the financial consumers' belief in their financial decision-making by others who are significant to them.

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Financial self-efficacy: It refers to the confidence of an individual where s/he can take control of their movements and other actions influencing their financial wellbeing.

Furthermore, the relationship between study variables generally concentrates on quantitative data because of its lacking in modeling non-linear associations. Thus, for considering that information in the study demographic variables were transformed into dummy characteristics. In this study categorical variables were used creating a dummy as follows:

Dummy Gender = 1 for male, 0 for others

Dummy Marital Status = 1 for Single, 0 for others

Dummy Community Lived-in = 1 for Rural, 0 for others

Research Hypothesis

Research hypotheses are some assumptions to be proved or disproved and it brings clarity, specificity, and focus in a research problem. It is necessary to set the predicted relationship between study variables based on theoretical and empirical evidence to achieve the proposed objectives of the study. Hence, this study examined the influence of financial attitude, financial literacy, social network, subjective norms, personal capability, and social capability on financial inclusion. This study also tested the arbitrating character of financial self-efficacy between study variables. Thus, the proposed hypotheses to be tested in this study are:

H_{A1}: There is a significant influence of financial attitude on financial inclusion.

H_{A2}: There is a significant influence of financial literacy on financial inclusion.

H_{A3}: There is a significant influence of social networks on financial inclusion.

H_{A4}: There is a significant influence of subjective norms on financial inclusion.

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H_{A5}: There is a significant influence of personal capability on financial inclusion.

H_{A6}: There is a significant influence of social capability on financial inclusion.

H_{A7}: There is a significant mediating effect of Financial self-efficacy in the relationship between financial attitude and financial inclusion.

H_{A8}: There is a significant mediating effect of Financial self-efficacy in the relationship between financial literacy and financial inclusion.

H_{A9}: There is a significant mediating effect of Financial self-efficacy in the relationship between social networks and financial inclusion.

H_{A10}: There is a significant mediating effect of Financial self-efficacy in the relationship between subjective norms and financial inclusion.

H_{A11}: There is a significant mediating effect of Financial self-efficacy in the relationship between personal capability and financial inclusion.

H_{A12}: There is a significant mediating effect of Financial self-efficacy in the relationship between social capability and financial inclusion.

Instrumentation

In this study, items of various study variables were adopted from the previously validated constructs. These are modified versions of survey items from contextualization. Previously developed and tested altogether 48 items were used in this study. It would be advantageous to reuse pre-validated instruments if the scholar is following the survey method (Straub (1989). It minimizes the efforts in reliability and validity tests as well as provides confidence in the assessment quality of prior measures to evaluate (Bryman & Bell, 2007).

This study adopted the financial inclusion construct through three magnitudes used by Hannig and Jansen (2010), Demirguc-Kunt and Klapper (2013), Cámara and

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Tuesta (2014), Sarma (2008; 2012), and World Bank (2012). Similarly, this research used the financial self-efficacy scale established by Amatucci and Crawley (2011) and Lown (2012). It was developed by Jerusalem and Schwarzer (1989) and grounded on the self-efficacy scale of Bandura (1977). The financial attitude construct was developed based on Ajzen (1991), Fishbein and Ajzen (1975); Eagly and Chaiken (1993); and Hira (2012). The financial literacy scale was taken from Atkinson and Messy (2012), and Huston (2010). External view of social networks construct was taken based on Kilduff et al. (2006) and Carpenter et al. (2012) studies. The subjective norms construct was derived adopting the degree of subjective norm and its effect on individual behavior in several fields (Ajzen & Fishbein, 1980; Ajzen, 1991; Liu et al., 2014).

These measures have been used by different researchers in previous studies, and have been found to be valid and reliable to capture the variables under investigation. Response for the items were captured in a 7-point Likert scale where 1 = Strongly Disagree, 2 = Disagree, 3= Somewhat Disagree, 4 = Neutral, 5 = Somewhat Agree, 6 = Agree, and 7 = Strongly Agree. In this study, questionnaires related to Access (6 items), Usage (6 items), Quality (5 items), Financial Self-efficacy (6 items), Financial Attitude (6 items), Financial Literacy (5 items), Social Networks (7 items), and Subjective Norms (7 items) were included.

Data Collection Method

This study was based on primary data only. Primary data refers to the data gathered originally by the researcher for the study purpose. This study gathered primary data through a self-structured questionnaire using an online survey from respondents because of the unfavorable pandemic situation of COVID – 19. However, it is important to preserve the trustworthiness and legitimacy of the primary facts. An

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acceptable level of composite reliability is used to prove the consistency of the scales used.

Data Preparation

This is a process of coding collected responses systematically, entering, filtering, and locating missing responses properly. Because of the online method used in this study, data is entered automatically into a database. After downloading survey responses, a sincere review was done to identify incomplete or invalid data. The survey form was sent to 550 individuals through email and other electronic means with the expectation of getting 384 responses as per the sample size calculated. Only 440 responses were received being an 80 percent response rate. Out of 440 responses, 23 responses were found to be invalid because respondents entered the identical response for all statements (e.g., 7, or 1 or 5, etc. for all statements).

Following this evaluation process, usable data were entered into SPSS software, tested for missing and invalid data, and generated descriptive statistics reports. Data were transformed into comma-separated value format in excel. Finally, anticipated model testing was done using PLS-SEM through Smart PLS software.

Data Analysis

For achieving the objectives of the study, the proposed hypotheses were tested using a path modeling approach.

Structural Equation Modeling

The Structural Equation Modeling approach, one of the techniques under multivariate statical methods, can be adopted to test the direct and indirect association between study variables at a time. This approach can be used for several statistical analyses including multiple regression analysis, path analysis, factor analysis, etc. This approach also permits the examination of the overall fit and to assess the

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structural model altogether (Chin, 1998b; Gefen et al., 2000). The proper application of SEM provides advantages over other techniques. Generally, two types of SEM approaches i.e., Covariance-based and Variance-based SEM is in practice.

Criteria for Choosing CB-SEM or PLS-SEM

Choosing an appropriate data analysis approach is one of the major tasks of the researcher. This process requires to have a proper understanding of the underlying assumption based on the purpose of the study, types of measurement model specification, and model evaluation (Hair, Ringle, & Sarstedt, 2011). According to Hair et al., (2011), various guidelines can be used for selecting an appropriate structural model.

The purpose of the inquiry is the first selection criteria. If the investigation is done to assess or sanction a theory, then covariance-based SEM is suitable. However, the Partial Least Square approach is suitable if the aim is to forecast and concept building. Further, Covariance based approach would be better if the study has reflective constructs only. Unlike CB-SEM, PLS-SEM can be used for both reflective and formative constructs (Chin, 1998b).

Finally, the assumption of data normality is another deficiency of CB-SEM over PLS-SEM. PLS-SEM is a more robust approach that can be used to analyze ignoring normality assumption because it uses standardization mechanisms that convert any non-normal data which adheres to the theory of central limit (Beebe et al., 1998).

Partial Least Square Structure Equation Modeling (PLS-SEM)

This method was instigated by an econometrician Herman Wold in 1970 (Chin, 1998b) using alternating least squares algorithms. The path of the PLS model is usually applied to the measurement model and the structural model (Henseler et al.,

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2009). The first one examines the relationships among indicators of latent variables, whereas the second one postulates the associations between latent variables and manifest variables. The Partial Least Square approach trails the following stages:

Stage one: it predicts the score of latent variables following the procedure until achieving convergence through a) outer approximation of the latent variable scores; b) estimation of inner weights; c) inner approximation of the latent variable scores; and, d) estimation of the outer weights.

Stage two: Estimation of outer weights/loading and path coefficients.

Stage three: Estimation of location parameters.

This study adopted established analytic criteria, adopting a partial least square approach based on the following reasons:

a) The objective is to examine (predict) the relationship between study variables
b) The study has a large number of study variables as well as has a complex research model
c) This research intends to examine the associations based on pre-defined theoretic understanding.

Assessing Measurement and Structural Models using PLS-SEM

Using the PLS-SEM approach, the proposed model is validated through the assessment of the measurement model as well as the structural model. The procedure and strategies applied to assess the measurement and the structural model are presented in the following subsection. The corroboration of a reflective measurement model was established by inspecting its indicator reliability, internal consistency, convergent validity, and discriminant validity (Lewis et al., 2005; Straub et al., 2004). Similarly, the formative model was scrutinized by examining the significance and relevance of the indicator's outer weights.

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Indicator Reliability

An indicator reliability test is carried out to know whether a proposed variable or a set of variables is reliable with what it intends to measure (Urbach & Ahlemann, 2010) as well as the construct is autonomous and has a distinct calculation from others. The standard criteria of each item loading are at least 0.70 (Chin, 1998b). However, some studies have suggested a value of factor loadings greater than 0.5 for better results (Hulland, 1999; Truong & McColl, 2011). Before dropping any item, one must be conscious of its lower loading as well as a substantial increment in composite reliability value (Hensler et al., 2009).

Internal Consistency

Conventionally, Cronbach's alfa (α) is mostly used by various researchers to measure internal consistency reliability. The higher the value of Cronbach's alfa (α) implies better reliability of items (Cronbach, 1971). This technique is grounded on the inter-correlations among indicators. However, internal consistency can be assessed employing composite reliability (Chin, 1998b) under PLS-SEM. Composite reliability is taken as superior to Cronbach's alfa because of its capability of considering the various weight of loading of each indicator (Werts et al., 1974).

Convergent Validity

It examines the degree of individual items' convergence assessing different variables (Urbach & Ahlemann, 2010). Convergent validity can be tested and established using the average variance extracted (AVE). If the AVE coefficient of a latent variable is at least 0.5, then the construct does not have any concern of convergent validity (Fornell & Larcker, 1981).

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Discriminant Validity

It is used to assess the distinctness between the constructs (Urbach & Ahlemann, 2010). This test also assists to know whether the questions used for measuring a construct are measuring the intended construct or not. In PLS, discriminant validity can be established through (1) Fornell-Larcker's criterion (Fornell & Larcker, 1981); (2) Cross loadings (Chin, 1998b); and (3) Heterotrait-Monotrait ratio of correlations (HTMT).

The latest tool for assessing discriminant validity is the HTMT criteria. It is a newly developed method based on the Multitrait-Multimethod matrix and developed as a more reliable tool than Fornell-Larcker's criteria and cross-loading method. Generally, discriminant validity is assessed based on a predefined threshold i.e. 0.85 (Kline, 2011) and 0.90 (Gold, Malhotra, & Segars, 2001). The following criteria are applied for model validity:

- each item's loading is ≥ 0.7
- composite reliability value is > 0.8
- the AVE value for each construct is > 0.5.
- HTMT value is less than 1.

Significance and Relevance of Formative Indicators

The assessment of the significance and relevance of the formative indicators is the process of establishing the formative measurement model. Outer weight is an essential measure for evaluating the formative indicator's contribution. Petter, Straub, and Rai (2007) state that the indicators with insignificant item weights may be removed from the model. However, the insignificant indicator can be retained since the content validity may be undermined (Nunnally & Bernstein, 1994). Therefore, any decision on eliminating the indicators of formative constructs should be made with

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caution (Diamantopoulos & Winklhofer, 2001). In this study, the significance level of the outer weight of each formative indicator is assessed. Notably, Hair et al. (2016) state that the insignificant indicator of the formative variable still can be retained for preserving content validity, which is also known as a relative contribution.

Structural Model

The anticipated model is tested to validate proposed hypotheses using R^2 and path coefficients only after the proper test and satisfaction of the measurement model (Urbach & Ahlemann, 2010). Where R^2 is used to measure the portion of variance explained by independent variables. Similarly, the path coefficient test is done to determine the impact of independent constructs on the dependent construct. This study has adopted the following criteria for testing the strength of the path coefficient:

- the coefficient of determination (R^2) should be greater than 0.19.
- path coefficients between study variables are at least 0.1, follow the correct algebraic sign (positive or negative), and are significant (at least at 0.05).

Mediation Relationship

Simply a mediator is a construct that modifies the relationship between the independent and dependent variables. According to Baron and Kenny (1986), independent constructs affect the dependent construct through another intervening variable. In PLS-SEM, results can be generated by using the bootstrapping tool in Smart-PLS. The proposed hypothesis is accepted when the p-value is ≤ 0.05. Similarly, if the test of indirect specific path coefficient is significant but the direct effect between study variables is not significant, then the effect is treated as full mediation otherwise partial mediation.

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CHAPTER 4

RESULTS

The foremost aim of this study was to examine the impact of behavioral factors on financial inclusion in the Nepali context. The specific focus was on financial consumers' behavioral factors: - personal capabilities and social capabilities. Personal capability includes financial attitude and financial literacy whereas social capability includes social networks and subjective norms. It also presents the results of descriptive analysis, the statistical analysis used to assess the reliability and validity of the research model, and the result of the hypothesis test using PLS-SEM. Finally, it also presents the results of the mediation tests.

Respondents' Characteristics

As mentioned above, this section deals with demographic characteristics and descriptive of the respondents who participated in the survey. Demographic characteristics are the most basic form of summary and are used to describe the characteristics of the sample selected for the study. A total of 417 responses were valid for analysis. This section provides the presentation and analysis of the demographic profile and descriptive statistics of respondents.

Percentage analysis is one of the statistical measures used to describe the sample in terms of their demographic characteristics such as gender, marital status, educational qualifications, etc. The distribution of the sample based on the above-mentioned demographic characteristics is presented in the following table.

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Table 4.1

Respondents' Characteristics (N = 417)

		Frequency	Percent
Gender			
	Female	148	35.5
	Male	269	64.5
Marital Status			
	Married	168	40.3
	Single	249	59.7
Community Lived-in			
	Urban	267	64
	Rural	150	36
Qualification			
	No formal education	1	0.24
	Up-to primary level	1	0.24
	SLC/SEE	7	1.68
	Intermediate/+2	21	5.04
	Bachelor level	194	46.52
	Masters and above	193	46.28
Income (Monthly in NPR)			
	Up to Rs.20,000	147	35.3
	Rs.20,001 to Rs.40,000	108	25.9
	Rs.40,001 to Rs.60,000	99	23.7
	Rs.60,001 to Rs.80,000	63	15.1
	Above Rs.80,000	0	0

As shown in Table 4.1, 148 (35.5%) respondents are female and 269 (64.5%) are male. The size of male respondents is more than the size of the female in this study.

Table 4.1 also shows the number and percentage of the marital status of the respondents. Out of 417, 40.3 percent of respondents are married whereas 59.7

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percent are single. It clearly shows that most of the respondents in this study are single individuals. Additionally, the result also shows that 267 (64%) respondents are from the urban area and 150 (36%) respondents are from the rural area. Result reveals that respondents from the urban area are greater than that of rural area.

Similarly, Table 4.1 shows the frequency distribution of the respondents' academic qualifications. Out of 417 respondents, 194 (46.50%) respondents have completed bachelor level, 193 (46.28%) respondents have completed masters and above. Only 21 (5.04%) of the respondents have completed Intermediate/+2. Only 7 (1.68%) respondents have completed SLC/SEE. Only 1 (0.24%) respondent is from a primary level of education and the same number of respondents having no formal education. In this study, most of the respondents have completed their university level of education.

Table 4.1 further reveals the monthly income of the respondents. 147 (35.3%) respondents earn less than Rs. 20,000. Similarly, 108 (25.9%) respondents earn Rs. 20,001 to Rs. 40,000 per month. In the third-ranking, 99 (23.7%) individuals are from the group of Rs. 40,001 to Rs. 60,000, and 63 (15.1%) respondents from the category of Rs. 60,001 to Rs. 80,000 monthly incomes. It is also noted that none of the respondents are from the group with a monthly income of Rs. 80,000 and above.

Frequency of Respondents' having Accounts in Formal Institutions

The following table depicts the frequency distribution of respondents' having accounts in different formal financial institutions.

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Table 4.2

Frequency Distribution of Name of Institutions Having Account

	Responses		
	N	Percent	Percent of Cases (out of 417)
Accounts in Commercial Bank	387	63.65	92.80
Accounts in Development Bank	52	8.55	12.50
Accounts in Finance Companies	24	3.95	5.80
Accounts in Insurance Companies	49	8.06	11.80
Accounts in SACCOS	88	14.47	21.10
Accounts in MFIs	8	1.32	1.90
Total	608	100.00	

Table 4.2 shows most of the respondents have used formal financial institutions' products/services from a commercial bank. The percentage of respondents having an account in a commercial bank represents 92.80. Similarly, 21.10% of respondents have an account in saving and credit cooperatives. The table also shows 12.50%, 11.80%, 5.80%, and 1.90% of the respondents have accounts in development banks, insurance companies, finance companies, and microfinance institutions respectively. Based on the result, the saving and credit cooperative is in second-ranking providing and using financial services among respondents of the study.

Descriptive Statistics of Respondents' Age

The following table shows the descriptive statistics of respondents' age in this dissertation.

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Table 4.3

Descriptive Statistics of Respondents' Age

	N	Minimum	Maximum	Mean	Median	Std. Deviation
Age	417	18	64	29.63	26	9.262
Valid N (listwise)	417					

Table 4.3 portrays the statistics of the respondents' age. The age of respondents lies in the range of 18 years to 64 years. The average (mean) age of respondents is 29 years with a standard deviation of 9.262. The result also demonstrates that the Median age of respondents is 26 years.

Measurement Model Assessment

Smart PLS 3.0 was used to assess the measurement model and the structural model. This statistical software assesses the psychometric properties of the measurement model and estimates the parameters of the structural model (Ringle, Da Silva, & Bido, 2015).

Reflective Measurement Model Assessment

The validity and reliability of the reflective measurement model are evaluated by assessing: (1) indicator reliability; (2); internal consistency reliability (3) convergent validity; and (4) discriminant validity. The following section presents the results of the analysis to evaluate the validity and reliability of the measurement models.

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Table 4.4

Indicator Reliability, Internal Consistency Reliability, and Convergent Validity

Latent Variables (LVs)	Items	Loadings	Cronbach's alpha (α)	CR	AVE
Financial Attitude	FATT1	0.867	0.843	0.895	0.681
	FATT2	*0.789*			
	FATT3	0.797			
	FATT5	0.845			
Financial Literacy	FLIT1	0.818	0.829	0.880	0.595
	FLIT2	0.701			
	FLIT3	0.710			
	FLIT4	0.777			
	FLIT5	0.839			
Financial Self-efficacy	FSE1	0.799	0.850	0.893	0.626
	FSE2	0.754			
	FSE3	0.810			
	FSE4	0.839			
	FSE5	0.751			
Social Network	SNET1	0.751	0.864	0.898	0.595
	SNET2	0.806			
	SNET3	0.840			
	SNET4	0.724			
	SNET5	0.767			
	SNET7	0.733			
Subjective Norms	SNOR1	0.706	0.898	0.920	0.621
	SNOR2	0.832			
	SNOR3	0.849			
	SNOR4	0.779			
	SNOR5	0.794			
	SNOR6	0.828			
	SNOR7	0.719			

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Indicator Reliability

The indicator reliability of the measurement model was measured by examining the loadings of the items. A measurement model is said to have satisfactory indicator reliability when each item's loading estimates is at least 0.70.

Table 4.4 shows the loadings for each indicator items after dropping some of the items being the value of loadings less than 0.70. The list of dropped indicators was FATT4, FATT6, FSE6, and SNET6. The result shows all remaining items in the measurement model exhibited significant loadings exceeding 0.70, ranging from a lower bound of 0.701 to an upper bound of 0.867. Thus, all remaining items used for this study demonstrate satisfactory indicator reliability.

Internal Consistency Reliability

A measurement model is said to have satisfactory internal consistency reliability when the composite reliability (CR) coefficient of each construct exceeds the threshold value of 0.80.

Table 4.4 shows the CR of each construct for this study ranges from 0.880 to 0.920. Traditionally, reliability also can be tested using Cronbach's alpha. Alpha coefficients of this study are greater than 0.70 being the lowest coefficient 0.829 to the highest coefficient 0.898. Thus, the results indicate that there is a satisfactory level of internal consistency reliability.

Convergent Validity

The measurement model's convergent validity was assessed by using the average variance extracted value. If the AVE value is greater than or equal to 0.50, then it is assumed that there is no issue of convergent validity. Table 4.4 depicts that

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all the variables have an AVE value within the range of 0.595 to 0.681 suggesting the measurement model exhibits adequate convergent validity.

Discriminant Validity

This study has adopted the HTMT ratio of correlations criteria for testing discriminant validity. It is the percentage of an average value within the constructs' correlations to the average value of between the constructs' correlations (Thurasamy Ramayah, Ling, Taghizadeh, & Rahman, 2016). Gold, Malhotra, and Segars (2001) suggest that if the HTMT value is less than 0.90, there will be no problem with discriminant validity. Based on the above analysis, the value of HTMT is examined and displayed in the following table.

Table 4.5

HTMT Criteria for Discriminant Validity

	FATT	FLIT	FSE	SNET	SNOR
FATT	1.000				
FLIT	0.827	1.000			
FSE	0.702	0.678	1.000		
SNET	0.554	0.620	0.529	1.000	
SNOR	0.767	0.719	0.636	0.615	1.000

The values in Table 4.5 reveal that there is appropriate discriminant validity. It is calculated using a bootstrapping technique with a two-tailed, 0.05 significant level, and a 95% confidence interval using Smart PLS. When the HTMT value for the path of the structure is less than 1, it means the data do not have the problem of discriminant validity. Therefore, there is satisfactory discriminant validity since the value of *1 is not contained in any of the columns as the results.*

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The result of the HTMT criteria indicates that the discriminant validity is established for the reflective measurement model of this study. Overall, the reliability and validity tests conducted on the measurement model were satisfactory, suggesting that items used to measure constructs in this study were valid and fit to be used to estimate parameters in the structural model.

Formative Measurement Model Assessment

Financial Inclusion is the formative construct used in this study. To assess the formative model assessment, the significance and relevance of outer weights of the formative indicators are examined by looking at the significance level and the result of outer weights, and then decide whether eliminate or retain the formative indicators.

Significance and Relevance of Formative Indicators

The last stage of the formative model measurement is to assess the significance and relevance of formative indicators. Formative indicators are assessed using the outer weights of indicators and their significance. The test result with the outer weight of each formative indicator along with their respective significance level is presented in the following table.

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Table 4.6

Significance and Relevance of Weight of Formative Constructs' Indicators

Items → Constructs	Weight	t value	p - value
ACC1 → Access	0.247	12.656	0.000
ACC2 → Access	0.208	11.557	0.000
ACC3 → Access	0.255	17.576	0.000
ACC4 → Access	0.247	16.168	0.000
ACC5 → Access	0.246	14.904	0.000
ACC6 → Access	0.265	16.290	0.000
USE1 → Uses	0.256	14.393	0.000
USE2 → Uses	0.208	12.768	0.000
USE3 → Uses	0.228	15.826	0.000
USE4 → Uses	0.274	20.075	0.000
USE5 → Uses	0.243	19.299	0.000
USE6 → Uses	0.242	18.664	0.000
QUAL1 → Quality	0.295	20.603	0.000
QUAL2 → Quality	0.266	25.122	0.000
QUAL3 → Quality	0.219	17.664	0.000
QUAL4 → Quality	0.255	21.042	0.000
QUAL5 → Quality	0.269	20.495	0.000

Table 4.6 exhibits the results of the outer weights of each indicator of the formative constructs and are calculated through bootstrapping. Looking at the t-values or the p-values, it shows that all indicators are significant. Hence, none of the indicators of formative constructs have been removed.

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Descriptive Statistics of Latent Variables

Descriptive statistics of the latent variables in this study are presented in the following table.

Table 4.7

Descriptive Statistics of Study Variables

Constructs	No. of Items	Mean	Standard Deviation
ACC	6	5.17	1.25
USE	6	5.18	1.27
QUAL	5	4.89	1.21
FSE	5	5.38	1.12
FATT	4	5.20	1.15
FLIT	5	5.24	1.19
SNET	6	4.70	1.21
SNOR	7	5.16	1.17
FINC	17	5.08	1.00
PC	10	5.22	1.07
SC	13	4.93	1.04

Table 4.7 shows the descriptive statistics of all the latent variables of the study. The mean value of all the latent variables ranges from 4.70 to 5.38 with the standard deviation ranging from 1 to 1.27 on a seven-point Likert scale. However, the average values of the constructs were more than the midpoint of 3.50.

Structural Model Assessment

This subsection is to discuss the validity assessment of the structural model for this study. As discussed in Chapter 3, the validity of the structural model is examined by five steps: lateral collinearity, path coefficient, R square, effect size (f^2), and

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predictive relevance (Q^2). To test for the significance of the path coefficient, all the data are run using bootstrapping by 5000 subsamples, a two-tailed type of test with a 0.05 significance level. The details and importance of these findings are presented and discussed in the sub-sections below.

Lateral Collinearity

It is essential to examine lateral collinearity in the first step of analyzing the structural model i.e., inner model. Even though the discriminant validity (which is known as vertical collinearity) of the data met the criterion, the issue of lateral collinearity may still exist and mislead the result of findings (Kock & Lynn, 2012). That is to say, every independent variable should be measured disjointedly for every subset of the structural model. In this study, the Smart PLS algorithm function is used to produce the inner variance inflation factor (VIF) values. The results of the values are presented in the following table.

Table 4.8

Structure Model Inner Variance Inflation Factor (VIF)

Independent Variables	VIF
FATT	2.773
FLIT	2.376
FSE	2.062
SNET	1.610
SNOR	2.276

Table 4.8 depicts all the values of the structure model inner VIF for the independent variables (FATT, FLIT, SNET, and SNOR) are lower than 5.0 even than

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3. It demonstrates that the potential collinearity problem is not a concern for this study.

Path Coefficients

Each path of the structural model connecting two latent variables represents one hypothesis. The analysis of the structural model can confirm or reject each hypothesis and have knowledge of the relationship between variables. Partial Least Square is a non-parametric analysis which is not making assumptions regarding the data distribution (Ramayah et al., 2016). The significance level of each relationship is examined based on the output of t-statistics or p-values. As mentioned above, t-statistics are calculated using the bootstrapping function in Smart PLS. First, the result of beta coefficients (β), t-statistics, and p-value are taken from bootstrapping output. After that, the results are used to determine the acceptance or rejection of the proposed hypotheses. Further details of hypotheses testing are discussed in the following section.

Coefficient of Determination (R^2)

The next step of the assessment is examining the predictive accuracy of the model by using the coefficient of determination score. The coefficient of determination is measured using the value of R square (R^2). R square is considered as the combined impact of the predictor variables for the outcome variable within the model. It is viewed as the extent to which the independent constructs could explain the variance on the dependent construct. The higher value of R square means more predictive accuracy of the model. According to the rule of thumb for R square acceptance from Cohen (1988), 0.26 (26%), 0.13 (13%), and 0.02 (2%) respectively represent three levels of predictive accuracy: substantial, moderate, and weak. Table

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4.9 shows the results of the combined effect of predictor variables on the outcome variable. It indicates that the independent variables explain 59.50% of the variance in Financial Inclusion.

Effect Size (f^2)

The coefficient of determination is measured by using the value of R square to disclose the variance explained by independent variables together. Whereas, the effect size is measured using Cohen's f square value. The value of f^2 is used to assess the relative impact of the independent variable on the dependent variable. It is calculated considering the difference of R square value for the model assessment including or excluding the independent variable. The value of f^2 denotes large, medium, and small effects if it is 0.35, 0.15, and 0.02 respectively. Table 4.9 shows a small effect of all study variables except the medium effect of financial attitude (0.095) for producing the R square on financial inclusion.

Predictive Relevance (Q^2)

Additionally, the predictive relevance of the path model is assessed using Stone and Geisser's Q^2 value (Stone, 1974; Geisser, 1984). The value of Q^2 is calculated using the blindfolding procedure in Smart PLS software. According to Fornell and Cha (1994), if the value of Q^2 is greater than 0, then independent variables have predictive relevance on the dependent variable of the study. Table 4.9 shows the value of Q^2 is which is greater than 0 (i.e. 0.370) indicating independent variables have predictive relevance for their dependent variable.

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Table 4.9

Effect of Financial Attitude, Financial Literacy, Social Network and Subjective Norms on Financial Inclusion

Paths	β	t – statistics	p – values	f^2	R^2	Q^2
Dummy Community → FINC	-0.017	0.502	0.616	0.001	0.595	0.370
Dummy Gender → FINC	0.036	1.125	0.261	0.003		
Dummy Mar. Status → FINC	-0.070	2.249	0.030	0.012		
FATT → FINC	0.319	6.389	0.000	0.095		
FLIT → FINC	0.099	1.700	0.089	0.006		
SNET → FINC	0.075	1.617	0.106	0.015		
SNOR → FINC	0.111	2.122	0.034	0.017		

Hypotheses Test

In order to assess the authentication of the proposed suppositions of this study, the path coefficient between study variables is examined. Table 4.9 shows the outcome of the proposed hypotheses test and its significance. All path coefficients between independent and dependent variables are statistically significant at a 1% level of significance except for social networks on financial inclusion. Financial literacy has a significant positive effect only at a 10 percent level of significance. According to the result, the most influencing independent variable is the financial attitude with a 0.319 standardized beta coefficient followed by subjective norms with a beta coefficient of 0.111 respectively. The proposed hypotheses of the study $\mathbf{H_{A1}}$, $\mathbf{H_{A2}}$, and $\mathbf{H_{A4}}$ are accepted. However, the proposed hypothesis of $\mathbf{H_{A3}}$ is not supported by the result.

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According to the results shown by Table 4.9, the impact of control variables is not statistically significant except for marital status (β = -0.070, p = 0.030). This result indicates that there is a lower level of financial inclusion status of the single (unmarried) compared to married individuals. Whereas, gender (β = 0.036, p = 0.261); and community where they are living (β = -0.017, p = 0.616), do not have statistically significant impact on access and usage of formal financial services.

Table 4.10

Effect of Personal Capability and Social Capability on Financial Inclusion

	β	t-statistics	p-values	f^2	R^2	Q^2
Dummy Community → FINC	-0.018	0.537	0.591	0.001	0.593	0.372
Dummy Gender → FINC	0.025	0.790	0.430	0.002		
Dummy Mar. Status → FINC	-0.056	1.755	0.079	0.007		
PC → FINC	0.393	7.608	0.000	0.146		
SC → FINC	0.150	2.680	0.007	0.153		

Table 4.10 shows the result of the path coefficient test between study variables. Path coefficient between personal capability and financial inclusion is significant (β = 0.393; p = 0.000) at a 1% level of significance, hence $\mathbf{H_{A5}}$ is accepted. Similarly, the structural path coefficient between social capability and financial inclusion is statistically significant (β = 0.150; p = 0.007) at a 1% level of significance, hence $\mathbf{H_{A6}}$ is also accepted. Statistically, the significant result indicates that the personal capability of an individual is more important for enhancing financial inclusion compared to social capability ($\beta_{PC} = 0.393 > \beta_{SC} = 0.150$). Similarly, only marital status has a statistically noteworthy influence on dependent variable.

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Test of Mediation Effect

The mediation effect of financial self-efficacy between study variables was tested. The Smart PLS software follows a bootstrapping procedure that exhibits higher levels of statistical power (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). According to Baron and Kenny (1986), there should be a direct effect of the predictor construct on the outcome variable so that further analysis of mediation could be done. However, Zhao, Lynch, and Chen (2010) strongly criticized and suggested that for testing mediation influence direct effect is not mandatory. This study has adopted Zhao et al. (2010) approach and advanced with further mediation testing of independent variables.

The necessary conditions for testing the mediation effects are a significant influence of predictor construct on mediating construct as well as mediating construct's influence on outcome construct for mediation test (Zhao et al., 2010). If the condition is fulfilled then there exists a mediation effect.

Table 4.11

Path Coefficient Test of Independent Variable to Mediating Variable, and Mediating Variable to Dependent Variable

	β	t – statistics	p – values
FATT → FSE	0.275	4.527	0.000
SNET → FSE	0.117	2.375	0.018
FLIT → FSE	0.213	3.343	0.001
SNOR → FSE	0.182	2.908	0.004
PC → FSE	0.448	7.197	0.000
SC → FSE	0.267	4.347	0.000
FSE → FINC	0.316	6.978	0.000

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Table 4.11 clearly shows the mediation effect of financial self-efficacy is possible between independent and dependent variables. It is because of the significant relationships between independent to mediator variables and mediator to dependent variable respectively.

The non-parametric technique was adopted for examining the mediation effect with 5000 resamples. Smart PLS Bootstrapping has been chosen over others because it can be used in complex and several pathways. The test results are disclosed in the following table.

Table 4.12

Indirect Effect of Financial Self-efficacy on Path Coefficient between Financial Attitude, Financial Literacy, Social Networks and Subjective Norms, and Financial inclusion

Paths	β	t – statistics	p – values
FATT → FSE → FINC	0.087	3.892	0.000
FLIT → FSE → FINC	0.067	2.936	0.003
SNET → FSE → FINC	0.037	2.171	0.030
SNOR → FSE → FINC	0.058	2.725	0.006
PC → FSE → FINC	0.141	4.962	0.000
SC → FSE → FINC	0.084	3.657	0.000

Table 4.12 shows the indirect specific relationship between variables. It confirms that all the indirect specific coefficient of independent variables on the dependent variable through financial self-efficacy is significant at a 1% significance level except for social network at a 5% significance level. Therefore, the result infers a significant mediation impact of financial self-efficacy between study variables.

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However, the direct association between the social networks and financial inclusion, in the absence of a mediating variable, is not significant whereas the indirect specific effect is significant, in presence of financial self-efficacy as an intervening variable. It indicates that the mediating variable i.e., financial self-efficacy has an indirect only mediation effect between social networks and financial inclusion. Thus, all the proposed hypotheses $\mathbf{H_{A7}}$, $\mathbf{H_{A8}}$, $\mathbf{H_{A9}}$, $\mathbf{H_{A10}}$, $\mathbf{H_{A11}}$, **and** $\mathbf{H_{A12}}$ are accepted.

The strength of the mediation effect can be assessed through the value of variance accounted for (VAF), which shows the forte of the indirect effect to the total effect. If the VAF coefficient is lesser than 0.20, then the mediation effect does not exist. Similarly, if it is more than 0.80, then it is called full mediation. Finally, if the value of VAF lies within the range of 0.20 to 0.80, it indicates a partial mediation effect. The values of VAF are disclosed in the subsequent table.

Table 4.13

Variance Accounted For (VAF) Results for Assessing the Strength of Mediation Effect

	Indirect Effect	Total Effect	VAF (Indirect effect/Total effect)
FATT → FINC	0.087	0.407	0.214
FLIT → FINC	0.067	0.166	0.403
SNOR → FINC	0.058	0.169	0.343
PC → FINC	0.141	0.536	0.263
SC → FINC	0.084	0.245	0.342

Table 4.13 discloses all VAF values within the range of 0.2 to 0.8. It is also confirmed that financial self-efficacy has partial mediating effects on study variables. The most influencing variable is financial literacy having a VAF value of 0.403 followed by subjective norms, social capability, personal capability, and financial attitude having VAF values 0.343, 0.342, 0.263, and 0.214 respectively.

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Zhao et al. (2010), if there exists a significant indirect effect with the insignificant direct effect, in the absence of mediating variable, then such influence is defined as indirect only intervention effect that is the case for Social Networks (SNET) on Financial Inclusion (FINC). Thus, this study confirms that financial self-efficacy has an indirect only mediation effect between social networks and financial inclusion.

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CHAPTER 5

SUMMARY, DISCUSSIONS, AND IMPLICATIONS

This chapter presents the summary of findings, discussions, and implications based on the results generated in the fourth chapter connecting the proposed research inquiries and the result of testing hypotheses. This study investigated the extent to which an individual's capability described financial inclusion in the Nepali context. This section also offers some implications upon which various recommendations can be drawn.

Summary of the Findings

The main thrust of this study was to fulfill the knowledge gap in the financial inclusion domain from the financial consumers' perspective. The main issue that the study envisioned to address was whether the theorized capabilities; financial attitude (FATT), financial literacy (FLIT), social networks (SNET), and subjective norms (SNOR) that individuals possess influence financial inclusion (FINC). A dependent variable (financial inclusion) was formed with the combination of access, usage, and quality dimensions associated with mainstream financial services.

This study was quantitative with positivist epistemology and objectivist ontology. Cross-sectional data for the study was collected primarily through a self-administered survey questionnaire using an online survey technique because of the undesirable pandemic situation of COVID-19. Properly usable data from 417 respondents were analyzed using Partial Least Square Structural Equation Modeling approach. Measurement model assessment was done by testing indicator reliability, internal consistency reliability, convergent validity, and discriminant validity of reflective constructs. Similarly, the significance and relevance of the formative construct were assessed. After completion of the measurement model assessment, a

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path model examination was done to test the proposed hypothesis of the study. The coefficient of determination of the model (R^2) was 0.595. It means 59.5 percent of variance on financial inclusion is explained by independent variables together.

Descriptive statistics of study variables disclosed that the average value (mean) of each study variable ranges from 4.70 to 5.38, and the value of standard deviation ranges from 1.00 to 1.27 (Table 4.7). The mean value of all the constructs is greater than that of mid-point i.e., 3.5 at a 7-point Likert scale.

This study used Gender, Marital Status, and Community where respondents are living-in as control variables creating dummy variables. The result shows marital status only has statistically significant differences in the subscription of financial services. It is also seen that if personal and social attributes are taken individually, there is a significant difference between Single and Married people on the subscription of formal financial services (Table 4.9). If individuals' capabilities were combined, only the marital status of the control variables taken in this study was statistically significant (Table 4.10).

The result of the hypothesis test between financial attitude and financial inclusion shows a statistically significant ($\beta = 0.319$, $p = 0.000$) relationship. It indicates that if the index of financial attitude changes by 1 standard deviation, then the index of financial inclusion also changes by 0.319 standard deviations proportionately. The result indicates that financial consumer's judgemental capability proportionately influences their decision-making towards using available financial services.

It is also noted that the path coefficient between financial literacy and financial inclusion shows a statistically significant ($\beta = 0.099$, $p = 0.089$) relationship. It indicates that an increase in 1 standard deviation of the financial literacy index

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upsurges the financial inclusion index by 0.099 standard deviations. It reveals that making any changes in the understanding level of basic financial knowledge and skills positively influences the status of financial inclusion.

Similarly, the outcome of the hypothesis test between social networks and financial inclusion shows a statistically insignificant ($\beta = 0.075$, $p = 0.106$) relationship. If the index of the social networks varies by 1 unit, then the index of financial inclusion changes by 0.075 unit of standard deviations but insignificantly. The result suggests that any kind of association between people through formal or informal networks does not help to provide financial information about savings, credit, insurance, and remittance. However, regarding the theory, such ties support to overcome any kinds of unexpected financial adversities so that people may manage their financial wellbeing properly.

The test of structural path between subjective norms and financial inclusion found statistically significant result ($\beta = 0.111$, $p = 0.034$). It depicts that if the index of subjective norms changes by 1 standard deviation, then the index of formal financial inclusion also changes by 0.111 standard deviations. It infers that any kind of belief towards the thinking of people who are kin to them such as friends, family members, or supervisor significantly and positively affects the financial behavior of the users.

Furthermore, the test of association between personal capability and financial inclusion found statistically significant ($\beta = 0.395$, $p = 0.00$) relationship. If the personal capability index changes by 1 standard deviation, then the index of financial inclusion also fluctuates by 0.395 standard deviations. The result conjectures that a financial consumer having judgemental ability along with basic concepts and skills of financial products are more likely to subscribe those services.

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The test of relationship between social capability and financial inclusion found statistically significant result (β = 0.161, p = 0.006). This result indicates that 1 unit of standard deviation in social capability consequences 0.006 unit of deviation in the financial inclusion index proportionately. It reveals that the combination of any kind of social ties among people and normative beliefs towards others who are important to them proportionately influences the consumption of available financial services.

According to the result of mediation effect of financial self-efficacy between variables, it is observed that all standardized coefficients are statistically significant. Referring to the outcome of significant mediating effect, all the relations are mediated by financial self-efficacy. Financial self-efficacy has highest mediating effect between personal capabilities and financial inclusion (β = 0.141, p = 0.00), followed by financial attitude and financial inclusion (β = 0.087, p = 0.00), social capability and financial inclusion (β = 0.084, p = 0.00), financial literacy and financial inclusion (β = 0.067, p = 0.00), subjective norms and financial inclusion (β = 0.058, p = 0.01) and social network and financial inclusion (β = 0.037, p = 0.03) respectively.

The value of variance accounted for (VAF) was computed to test the strength of the mediation effect between study variables. The result shows that VAF of FLIT, SNOR, SC, PC, and FATT on financial inclusion are 0.403, 0.343, 0.342, 0.263, and 0.214 respectively. It indicates that FSE significantly partially intercedes the relationship. However, it has an indirect only mediating effect between social networks and financial inclusion. This variable does not have any significant direct relationship with financial inclusion but a significant indirect relationship.

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Table 5.1

Summary of the Result of Hypothesis Test

Proposed Hypothesis	Findings
H_{A1}: There is a significant influence of financial attitude on financial inclusion.	Supported
H_{A2}: There is a significant influence of financial literacy on financial inclusion.	Supported
H_{A3}: There is a significant influence of social networks on financial inclusion.	Not Supported
H_{A4}: There is a significant influence of subjective norms on financial inclusion.	Supported
H_{A5}: There is a significant influence of personal capabilities on financial inclusion.	Supported
H_{A6}: There is a significant influence of social capabilities on financial inclusion.	Supported
H_{A7}: There is a significant mediating effect of Financial self-efficacy in the relationship between financial attitude and financial inclusion.	Supported
H_{A8}: There is a significant mediating effect of Financial self-efficacy in the relationship between financial literacy and financial inclusion.	Supported
H_{A9}: There is a significant mediating effect of Financial self-efficacy in the relationship between social networks and financial inclusion.	Supported
H_{A10}: There is a significant mediating effect of Financial self-efficacy in the relationship between subjective norms and financial inclusion.	Supported
H_{A11}: There is a significant mediating effect of Financial self-efficacy in the relationship between personal capability and financial inclusion.	Supported
H_{A12}: There is a significant mediating effect of Financial self-efficacy in the relationship between social capability and financial inclusion.	Supported

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Discussions

This section explains the meaning of findings on the financial inclusion domain relating to the prevailing literature. The discussion part is also framing within the proposed research issues as well as presumed hypotheses results that accept or do not draw definite conclusions within the Nepali context. Generally, individuals are influenced not only by financial but also by so many other non-financial factors during the process of choosing financial services based on their competencies along with basic concepts and skills of financial products, the geographical location where they lived-in, and the way of life they are living. This study was structured within the theory of Sen's capability that is a multidimensional approach associated with the competencies that an individual has and posses to accomplish desired results. Hence, this approach permits to critically examine an individual's likelihood of financial inclusion from the users' perspective through their aptitudes.

Research question 1: How do personal capability viz. financial attitude and financial literacy, and social capability viz. social networks, and subjective norms influence financial inclusion?

In this study, the personal capability construct is derived through the combination of personal attributes i.e., financial attitude and financial literacy of an individual financial consumer to envisage financial inclusion. It is seen that personal capability has a positive influence on an all-inclusive financial system which is consistent with the findings of Lea et al. (1993), and Pattarin and Cosma (2012). Generally, the personal attributes of an individual cannot be ignored while making financial decisions due to their significant association with stimulation towards subscribing to mainstream financial services. In the Nepali context, the likelihood of financial consumers for the usage of available financial services has been significantly

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affected by their constructive judgemental ability as well as an understanding of financial concepts and skill of financial computations. It also explains that at the micro-level a financial consumer needs to have an evaluative judgmental ability as well an aptitude and knowledge to have proper fundamental financial concepts for deciding to use available services or not.

Furthermore, the result shows a statistically significant influence of financial attitude, separately, on financial inclusion. It supports the predicted hypothesis i.e., there is a noteworthy effect of financial attitude on financial inclusion. The finding of the research is in line with the argument and results of Norvilities et al. (2006), Fishbein and Ajzen (2011), and Cosma (2012) i.e. an individuals' attitude shapes and predicts the actual behavior. The financial attitude variable in this study was taken based on the Theory of Planned Behavior (Ajzen, 1985) and findings of this study in the Nepali context have significantly supported the theory indicating Nepali Financial Consumers are conscious of future financial activities and probable adversities.

It is also observed a statistically noteworthy influence of financial literacy on financial inclusion. Theoretically, enhancing the knowledge, skills, and level of understanding of finance positively affects the level of financial inclusion among the people of the nation. The higher the level of understanding and knowledge of finance, the greater will be the possibility of analytical skills that may provide a proper answer to why and how the available financial services should be subscribed. Furthermore, people can identify the role of using financial services in their financial wellbeing and quality of life. The result agrees with the findings of Lusardi and Mitchell (2013) who found that the knowledge and understanding of financial services is the precursor of making an active and better choice of financial services of an individual. Similarly, it is also consistent with the findings of Sarma and Pais (2011). However, the finding of

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this study contradicts Bertrand and Morse (2011) Thus, an individual having a better understanding, skills, and knowledge of financial services is sufficient for making decisions to use or not to use financial services.

This study used individuals' social networks and subjective norms together to generate social capability variable to predict financial inclusion. It has been observed that a statistically noteworthy positive influence of social capability on financial inclusion. It is consistent with the theory that social networks are a crucial determinant factor for creating a keen relationship with mainstream financial service providers. The findings suggest that financial service providers should understand financial consumers' social attributes to enhance the broader usage of mainstream financial services. It is significant to enlarge social networks among financial consumers for providing important info about the site and distance services availability, availability of intermediaries and institutions of financial services providers, and the whole process of subscription.

The findings of the study showed an insignificant positive impact of social networks on financial inclusion. It infers that there is not substantial importance of notable individual's association with personal, household, and institutional ties as the sources of financial information about savings, credit, insurance, and remittance services. Furthermore, the result of this study contradicts the findings of Jones and Volpe (2011) who conclude social ties as the means of remitting the financial information among the members of such ties. Theoretically, the social network is viewed as a common platform that helps to gain shared values, preferences, and mechanism for achieving them due to the level of individual capability to gain value of similar things may not be the same. It is also consistent with the finding of Evans

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(2002) i.e., any kinds of formal or informal associations among the people are key to the lives through the financial well-being of the people.

Regarding the statistically insignificant result, it can be said that people are engaged in networks still they are using their cognition for making decisions. One of the reasons could be respondents are in weak tie relationships so that members of the weak ties are not believing each other. Similarly, this construct was developed based on social network theory which may not be properly tailored in the least developed country context.

This study used the variable subjective norms as a predictor influencing the financial inclusion status of an individual. The result of this study shows that subjective norms has a statistically significant proportionate effect on financial inclusion among the financial consumer of Nepal. Result suggests that financial consumers beliefs towards the perception of other people such as their spouse, friends, and other family members significantly affects the financial decision behavior of them. This result is consistent with the argument made by Akerlof (1980) and Liu et al. (2014) who state that people's expected behavior is affected by their thinking towards alleged reputation within the surrounding of other people who are important to them.

According to the research, an individual's behavior regarding their decision to use mainstream financial services is significantly affected by their prevailing beliefs towards the perception of people who are significant to them. Generally, people may observe the financial practices and the values they endorse, regarding usage of financial services, and may try to imitate themselves. One of the reasons could be respondents are dominated by prevailing beliefs and culture in the Nepali context.

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Research question 2: In what way does financial self-efficacy mediate the relationship between personal capability and social capability, and financial inclusion?

The significant impact of financial self-efficacy on financial inclusion (Table 4.11) reveals that when a financial consumer poses a higher level of confidence towards financial activities there will be a higher level of financial inclusion. Generally, an individual should have a higher degree of confidence and ability to overcome any difficulty linked to achieving a positive outcome. The result of this study is consistent with Bandura (1986), who has claimed that an individual's certitude towards performing any action is a key predictor of behavior and quality within people-focused circumstances.

The result of the study is consistent with the argument of the Social Cognitive Theory which accepts that an individual may undertake any activity to realize the expected result despite having certainty (Bandura, 1986; 1997). This study provides the findings in line with the findings of Amatucci and Crawley (2011). An individual financial consumer having a greater degree of self-confidence shows a higher level of certainty during the time of financial decision-making. Therefore, in the Nepali context enhancing an all-inclusive financial system service providers require to boost the financial consumers' level of confidence.

Generally, theoretical literature assumes that an individual's capabilities and behavioral outcomes are, perhaps, mediated by financial self-efficacy. The result has added value to the existing knowledge in the financial inclusion domain that there is a significant mediating impact of financial self-efficacy in the relationship amid personal capability (PC) and Social Capability. It also shows there is a significant and positive but partial interceding role of financial self-efficacy between the relationship

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of financial attitude, financial literacy, social network, and subjective norms on financial inclusion.

The findings further indicate that the relationships between social networks and the all-inclusive financial system are not merely a direct one. However, this result does not suggest these competencies are less worthy hence need not to be cared for. It is because of the findings that there is a significant and positive relationship between the all-inclusive financial system and users' related attributes. Therefore, further practices must be towards confirming financial consumers' higher level of self-confidence to subscribe to available financial services.

Therefore, this study notes that financial self-efficacy is a key aptitude in boosting consumer-related capabilities towards attaining financial inclusion in the Nepali context.

Implications

The theory of Sen's capability approach was adopted to set the framework of this study that is the integration of financial consumers' personal and social attributes enabling their financial behavior. An Individual's capability may not be worthy unless utilizing them to realize an outcome.

The findings of this study have further supported the multidimensional insight into the literature of the financial inclusion domain. Practitioners should design policies and strategies focusing on multiple dimensions of financial inclusion – access, usage, and quality. This study has opened a new avenue through the combination of multiple theories that may increase value by enhancing the theoretical and empirical sway of financial inclusion. According to the significant influence of personal and social capability, as a collective measure, on financial inclusion in the Nepali context, government and policymakers should develop more integrative and

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favorable strategies regarding personal attributes like attitude and financial literacy as well as a social network and subjective norms. It is because all those attributes are not significantly influencing financial inclusion when using separately.

Similarly, practitioners should develop some effective strategies/policies connecting the cognitive factors, say financial self-efficacy, so that gained financial concepts, knowledge, and skills, and other attributes can be utilized properly for choosing mainstream financial services by individuals.

From the viewpoint of researchers, the multidimensional approach of financial inclusion, as well as the capability approach, can be used for further behavioral study on specific domains and contexts. It is also crucial to conduct further research investigating the relationship between personal capability and social capability variables on individual behavioral outcomes using some moderating variable(s) for its generalizability.

Critique of the Study

According to the present financial inclusion status of Nepal, limited portions of the people who are residing in the remote parts have subscribed to mainstream financial services. This study has tried to identify some crucial factors influencing financial inclusion so that the results can be implemented by policymakers and practitioners to increase financial inclusion status in Nepal.

The relationship between different study variables has been tested using primarily collected data from both urban and rural areas of Nepal. The result may not be generalizable specifically for the rural areas because of the higher degree of accessibility of mainstream financial services in urban areas compared to rural. Thus, it would be better to conduct this kind of study focusing merely on the rural areas of Nepal so that findings can be properly implemented to enhance rural poor segments

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towards an all-inclusive financial system. Similarly, this study has adopted cross-sectional data. Probably the result would be more generalizable if a similar study could have done taking longitudinal data.

Because of the pandemic situation of COVID - 19, data were collected through email and other electronic means. It would be more fruitful if data were collected through the researcher's visit. The researcher's physical availability could help to clarify the statements provided if there are any kinds of difficulty to understand. Similarly, this study has taken a quantitative approach only. Further study could be done using a mixed approach so that more relevant and reliable findings can be generated.

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REFERENCES

Aduda, J., & Kalunda, E. (2012). Financial inclusion and financial sector stability with reference to Kenya: A review of literature. *Journal of Applied Finance Banking, 2*(6), 95.

Agrawal, A. (2008). The need for financial inclusion with an Indian perspective. *Economic Research, 3*, 1-10.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11-39): Springer.

Ajzen, I., & Beck, L. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of research in personality, 25*(3), 285-301.

Akerlof, G. A. (1980). A theory of social custom, of which unemployment may be one consequence. *The Quarterly journal of economics, 94*(4), 749-775.

Allen, F., Demirguc-Kunt, A., Klapper, L., & Peria, M. M. (2012). Foundations of Financial Inclusion. *Policy Research Working Paper, 6290*.

Amatucci, F. M., & Crawley, D. C. (2011). Financial self□efficacy among women entrepreneurs. *International Journal of Gender and Entrepreneurship*.

Amidzic, G., Mialou, A., & Massara, A. (2017). Assessing countries' financial inclusion standing—A new composite index. *Journal of Banking and Financial Economics*(2 (8)).

Ardic, O. P., Heimann, M., & Mylenko, N. (2011). *Access to financial services and the financial inclusion agenda around the world: a cross-country analysis with a new data set*: The World Bank.

Arora, R. U. (2010). Measuring financial access. *Griffith Business School Discussion Papers Economics, 1*(7).

Digitalized by Gyanbazzar

Bagozzi, R. P., & Burnkrant, R. E. (1979). Attitude organization and the attitude–behavior relationship. *Journal of personality and social psychology, 37*(6), 913.

Bagozzi, R. P., Lee, K.-H., & Van Loo, M. F. (2001). Decisions to donate bone marrow: The role of attitudes and subjective norms across cultures. *Psychology and Health, 16*(1), 29-56.

Bailey, C., & Austin, M. (2006). 360 Degree feedback and developmental outcomes: The role of feedback characteristics, self□efficacy and importance of feedback dimensions to focal managers' current role. *International Journal of Selection and Assessment, 14*(1), 51-66.

Bandura, A. (1971). Social learning theory. Morristown. In: NJ: General Learning Press.

Bandura, A. (1994). Social cognitive theory and exercise of control over HIV infection. In *Preventing AIDS* (pp. 25-59): Springer.

Bandura, A. (1997). Theoretical perspectives. *Self-efficacy: The exercise of control*, 1-35.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology, 51*(6), 1173.

Beck, T., & De La Torre, A. (2007). The basic analytics of access to financial services. *Financial markets, institutions instruments, 16*(2), 79-117.

Beck, T., Demirgüç-Kunt, A., & Honohan, P. (2009). Access to financial services: Measurement, impact, and policies. *The World Bank Research Observer, 24*(1), 119-145.

Digitalized by Gyanbazzar

Bentler, P. M., & Newcomb, M. D. (1986). Personality, sexual behavior, and drug use revealed through latent variable methods. *Clinical Psychology Review, 6*(5), 363-385.

Bordalo, P., Gennaioli, N., & Shleifer, A. (2012). Salience theory of choice under risk. *The Quarterly journal of economics, 127*(3), 1243-1285.

Borgatti, S. P., & Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of Management, 29*(6), 991-1013.

Bouffard-Bouchard, T. (1990). Influence of self-efficacy on performance in a cognitive task. *The journal of social Psychology, 130*(3), 353-363.

Braunstein, S., & Welch, C. (2002). Financial literacy: An overview of practice, research, and policy. *Fed. Res. Bull., 88*, 445.

Bryman, A., & Bell, E. (2007). Business research strategies. *Business research methods*, 226-238.

Burgess, R., & Pande, R. (2005). Do rural banks matter? Evidence from the Indian social banking experiment. *American Economic Review, 95*(3), 780-795.

Clamara, N., Pena, X., & Tuesta, D. (Cartographer). (2014). Factors that matter for financial inclusion: Evidence from Peru (No. 1409)

Cohen, M., & Sebstad, J. (2005). Reducing vulnerability: The demand for microinsurance. *Journal of International Development: The Journal of the Development Studies Association, 17*(3), 397-474.

Collard, S., Kempson, E., & Whyley, C. (2001). *Tackling financial exclusion*: Policy.

Cronbach, L. J. (1971). Test validation. *Educational measurement.*

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*: Sage.

Digitalized by Gyanbazzar

Davies, E., & Lea, S. E. (1995). Student attitudes to student debt. *Journal of economic psychology, 16*(4), 663-679.

Demirgüç-Kunt, A., & Klapper, L. (2012b). *Measuring financial inclusion: The global findex database*: The World Bank.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). The Global Findex Database 2017: Measuring Financial Inclusion and Opportunities to Expand Access to and Use of Financial Services. *The World Bank Economic Review, 34*(Supplement_1), S2-S8.

Demirgüç-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2015). *The global findex database 2014: Measuring financial inclusion around the world*: The World Bank.

Dhungana, B. R., & Kumar, P. (2015). The status of financial inclusion in Nepal. *Pacific Business Review International, 7*(8), 51-59.

Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of marketing research, 38*(2), 269-277.

Dupas, P., Karlan, D., Robinson, J., & Ubfal, D. (2013). Expanding Access to Formal Savings Accounts in Malawi, Uganda, Chile, and the Philippines. *New Haven, Conn.: Innovations for Poverty and Action.*

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*: Harcourt brace Jovanovich college publishers.

Ellis, K., & Lemma, A. (2010). Investigating the impact of access to financial services on household investment.

Digitalized by Gyanbazzar

Engelberg, E. (2007). The perception of self□efficacy in coping with economic risks among young adults: an application of psychological theory and research. *International Journal of Consumer Studies, 31*(1), 95-101.

Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention Behavior: An Introduction to Theory and Research* (Vol. 578).

Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*: Taylor & Francis.

Gerardi, K., Goette, L., & Meier, S. (2010). *Financial Literacy and Subprime Mortgage Delinquency: Evidence from*. (Federal Reserve Bank of Atlanta Working Paper Series (2010-10)).

Gibbs, P. (1998). Time, temporality and consumer behaviour. *European Journal of Marketing*.

Giné, X., & Yang, D. (2009). Insurance, credit, and technology adoption: Field experimental evidencefrom Malawi. *Journal of development Economics, 89*(1), 1-11.

Godwin, D. D. (1997). Dynamics of Households' Income, Debt, and Attitudes Toward Credit, 1983–1989. *Journal of Consumer Affairs, 31*(2), 303-325.

Godwin, D. D., & Carroll, D. D. (1986). Financial management attitudes and behaviour of husbands and wives. *Journal of Consumer Studies and Home Economics, 10*(1), 77-96.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems, 18*(1), 185-214.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological theory*, 201-233.

Digitalized by Gyanbazzar

Granovetter, M. (1990). The old and the new economic sociology: A history and an agenda. *Beyond the marketplace: Rethinking economy and society*, 89-112.

Granovetter, M. S. (1973). The strength of weak ties. *American journal of sociology, 78*(6), 1360-1380.

Gupte, R., Venkataramani, B., & Gupta, D. (2012). Computation of financial inclusion index for India. *Procedia-Social Behavioral Sciences, 37*, 133-149.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice, 19*(2), 139-152.

Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European business review*.

Hannig, A., & Jansen, S. (2010). *Financial inclusion and financial stability: Current policy issues*. (ADBI Working Paper, No. 259).

Hira, T. K. (2012). Promoting sustainable financial behaviour: implications for education and research. *International Journal of Consumer Studies, 36*(5), 502-507.

Honohan, P. (2004). Financial development, growth and poverty: how close are the links? In *Financial development and economic growth* (pp. 1-37): Springer.

Jones, C., & Volpe, E. H. (2011). Organizational identification: Extending our understanding of social identities through social networks. *Journal of organizational behavior, 32*(3), 413-434.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 99-127): World Scientific.

Digitalized by Gyanbazzar

Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 269-278): World Scientific.

Kempson, E., & Whyley, C. (1999). Kept out or opted out. Understanding and combating financial exclusion. *Insurance Trends*.

Kidwell, B., Brinberg, D., & Turrisi, R. (2003). Determinants of money management behavior. *Journal of applied social psychology, 33*(6), 1244-1260.

King, M. (2014). A conceptual framework for financial inclusion and recent evidence for Sub-Saharan Africa. In *Enacting globalization* (pp. 20-32): Springer.

Kline, R. B. (2011). *Convergence of structural equation modeling and multilevel modeling*: na.

Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for information Systems, 13*(7).

Kumar, B., & Mohanty, B. (2011). Financial inclusion and inclusive develoment in SAARC countries with special reference to India. *Vilakshan: The XIMB Journal of Management, 8*(2).

Lachance, M. J. (2012). Young adults' attitudes towards credit. *International Journal of Consumer Studies, 36*(5), 539-548.

Lea, S. E., Webley, P., & Levine, R. M. (1993). The economic psychology of consumer debt. *Journal of economic psychology, 14*(1), 85-119.

Liu, Y., Lu, H., & Veenstra, K. (2014). Is sin always a sin? The interaction effect of social norms and financial incentives on market participants' behavior. *Accounting, Organizations and Society, 39*(4), 289-307.

Digitalized by Gyanbazzar

Livingstone, S. M., & Lunt, P. K. (1992). Predicting personal debt and debt repayment: Psychological, social and economic determinants. *Journal of economic psychology, 13*(1), 111-134.

Muradoglu, G., & Harvey, N. (2012). Behavioural finance: the role of psychological factors in financial decisions. *Review of Behavioural Finance*.

Naudé, P., Zaefarian, G., Tavani, Z. N., Neghabi, S., & Zaefarian, R. (2014). The influence of network effects on SME performance. *Industrial Marketing Management, 43*(4), 630-641.

Norvilitis, J. M., & Mao, Y. (2013). Attitudes towards credit and finances among college students in China and the United States. *International journal of psychology, 48*(3), 389-398.

Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V., Young, P., & Kamas, M. M. (2006). Personality factors, money attitudes, financial knowledge, and credit□card debt in college students 1. *Journal of applied social psychology, 36*(6), 1395-1413.

O'Donoghue, T., & Rabin, M. (2001). Risky behavior among youths: Some issues from behavioral economics. In *Risky behavior among youths: An economic analysis* (pp. 29-68): University of Chicago Press.

Ojah, K. (2013). Financial inclusion in South Africa: An unfinished conversation. *Wits Business School Journal*, 64-65.

Okten, C., & Osili, U. O. (2004). Social networks and credit access in Indonesia. *World development, 32*(7), 1225-1246.

Olsen, R. A. (1998). Behavioral finance and its implications for stock-price volatility. *Financial analysts journal, 54*(2), 10-18.

Digitalized by Gyanbazzar

Orobia, L. A. (2013). Gender differences in working capital management amongst small business owners in Uganda. *Journal of Economics and Behavioral Studies, 5*(4), 226-236.

Pandey, A., & Raman, R. (2012). Financial Inclusion in Uttar Pradesh and Bihar. *Prajnan, 41*(2).

Pant, B. (2016). Financial inclusion in Nepal: Policy review and prescriptions. *Nepal Rastra Bank.*

Parkinson, S. E. (2013). Organizing rebellion: Rethinking high-risk mobilization and social networks in war. *American Political Science Review*, 418-432.

Pattarin, F., & Cosma, S. (2012). Psychological determinants of consumer credit: the role of attitudes. *Review of Behavioral Finance, 4*(2), 113-129.

Payne, J. W., Braunstein, M. L., & Carroll, J. S. (1978). Exploring predecisional behavior: An alternative approach to decision research. *Organizational Behavior Human Performance, 22*(1), 17-44.

Peachey, S., & Roe, A. (2004). Access to finance-A study for the World Savings Banks Institute. *Oxford policy management*.

Pearce, D. (2011). *Financial inclusion in the Middle East and North Africa: Analysis and roadmap recommendations*: The World Bank.

Pham, T. H., Yap, K., & Dowling, N. (2012). The impact of financial management practices and financial attitudes on the relationship between materialism and compulsive buying. *Journal of economic psychology, 33*(3), 461-470.

Ramayah, T., Ling, N. S., Taghizadeh, S. K., & Rahman, S. A. (2016). Factors influencing SMEs website continuance intention in Malaysia. *Telematics and Informatics, 33*(1), 150-164.

Digitalized by Gyanbazzar

Ramayah, T., & Razak, D. A. (2008). Factors influencing intention to use diminishing partnership home financing. *International Journal of Islamic Middle Eastern Finance and Management*.

Rathod, S., & Arelli, S. K. P. (2013). Aadhaar and Financial Inclusion: A Proposed Framework to Provide Basic Financial Services in Unbanked Rural India. In *Driving the Economy through Innovation and Entrepreneurship* (pp. 731-744): Springer.

Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs, 44*(2), 276-295.

Ricciardi, V., & Simon, H. K. (2000). What is behavioral finance? *Business, Education & Technology Journal, 2*(2), 1-9.

Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS. *Brazilian Journal Of Marketing, 13*(2).

Rottenstreich, Y., & Hsee, C. K. (2001). Money, kisses, and electric shocks: On the affective psychology of risk. *Psychological science, 12*(3), 185-190.

Sandler, M. E. (2000). Career decision-making self-efficacy, perceived stress, and an integrated model of student persistence: A structural model of finances, attitudes, behavior, and career development. *Research in Higher Education, 41*(5), 537-580.

Sarma, M. (2008). *Index of financial inclusion*. Retrieved from

Sarma, M., & Pais, J. (2011). Financial inclusion and development. *Journal of international development, 23*(5), 613-628.

Digitalized by Gyanbazzar

Schindler, K. (2010). Credit for what? Informal credit as a coping strategy of market women in Northern Ghana. *The Journal of Development Studies, 46*(2), 234-253.

Seibert, S. E., Zhao, H., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of applied psychology, 90*(6), 1265.

Sen, A. (1970). The impossibility of a Paretian liberal. *Journal of political Economy, 78*(1), 152-157.

Sen, A. (1979). Equality of what. *The Tanner lecture on human values, 1*.

Sen, A. (1993). Internal consistency of choice. *Econometrica: Journal of the Econometric Society*, 495-521.

Sequeira, A., Serrao, M. V., & Hans, B. (2012). Designing a methodology to investigate accessibility and impact of financial inclusion.

Sharma, M. (2005). Reifying capability theory in disability and rehabilitation research. *Asia Pacific Disability Rehabilitation Journal, 16*(2), 123-131.

Shefrin, H. (2002). Behavioral decision making, forecasting, game theory, and role-play. *International journal of forecasting, 18*(3), 375-382.

Shrestha, P. K. (2020). *Changing Dimension of Financial Inclusion in Nepal: A Comparative Analysis*. (NRB Working Paper No. 50).

Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational dynamics, 26*(4), 62-75.

Statman, M. (1995). Behavioral finance versus standard finance. *Behavioral Finance Decision Theory in Investment Management*, 14-22.

Digitalized by Gyanbazzar

Straub, D. W. (1989). Validating instruments in MIS research. *MIS quarterly*, 147-169.

Stulz, R. M., & Williamson, R. (2003). Culture, openness, and finance. *Journal of financial Economics, 70*(3), 313-349.

Swamy, V. (2014). Financial inclusion, gender dimension, and economic impact on poor households. *World development, 56*, 1-15.

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information systems research, 6*(2), 144-176.

Thaler, R. H., & Shefrin, H. M. (1981). An economic theory of self-control. *Journal of political Economy, 89*(2), 392-406.

Tokunaga, H. (1993). The use and abuse of consumer credit: Application of psychological theory and research. *Journal of economic psychology, 14*(2), 285-316.

Tversky, A. (1969). Intransitivity of preferences. *Psychological review, 76*(1), 31.

Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk uncertainty, 5*(4), 297-323.

Venkatesh, V., & Morris, M. G. (2000). Age differences in technology adoption decisions: Implications for a changing work force. *Personnel psychology, 53*(2), 375-403.

Wagle, A. (2019). The myths surrounding and the barriers to financial inclusion. *The Kathmandu Post*.

Walker, G., Kogut, B., & Shan, W. (1997). Social capital, structural holes and the formation of an industry network. *Organization science, 8*(2), 109-125.

Zhang, Y., Lin, N., & Li, T. (2012). Markets or networks: Households' choice of financial intermediary in Western China. *Social Networks, 34*(4), 670-681.

Digitalized by Gyanbazzar

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research, 37*(2), 197-206.

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Annexure - 1

Survey Questionnaire

Dear Respondent

This survey questionnaire is a part of the study of Masters of Philosophy (MPhil) to examine the influence of behavioral factors on financial inclusion. The first section seeks your personal information. The remaining sections are for knowing about financial literacy, financial attitude, social networks, social norms, and financial self-efficacy toward fostering financial inclusion.

Please choose an appropriate alternative as per the instructions given below. This study is purely for academic purposes. Strict confidentiality will be maintained with the responses obtained. It will take you about 15–20 minutes to complete this questionnaire.

Thanking you for your cooperation.

Sincerely Yours
Ganga Thapa
MPhil Scholar
Kathmandu University School of Management (KUSoM)
Balkumari, Lalitpur

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SECTION I: PERSONAL BACKGROUND

Name (Optional): ....

Gender: Male ☐ Female ☐

Age: .... Years

Marital Status: Single ☐ Married ☐ Divorced/Separated ☐ Widowed ☐

Academic Qualification: No formal education ☐ Up to primary level ☐ Up to SLC/

Level of Income (Monthly in NPR):

Up to 20,000 ☐ 20,001 to 40,000 ☐ 40,001 to 60,000 ☐

60,001 to 80,000 ☐ Above 80,000 ☐

Community Lived-in: Rural ☐ Urban ☐

I have an account of (You can choose more than one, if applies to you):

☐ Commercial Bank ☐ Development Bank

☐ Finance Company ☐ Microfinance Institution

☐ Saving and Credit Cooperative ☐ Insurance Company

SECTION II: LATENT VARIABLES

Using the scales below, please indicate (✓) one criterion most appropriate to you.

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
SD	D	SWD	N	SWA	A	SA

	FINANCIAL INCLUSION							
Code	Statements (Related to ***Access*** of Financial services)	SD	SWD	D	N	SWA	A	SA
ACC1	There is user access to lending to the nearest formal financial institution							
ACC2	The nearest bank is less than 5 km from my home							
ACC3	I live within less than 1 km of an ATM that I can easily visit to access my account							
ACC4	There are several banking agents' services that I can easily visit near my home							
ACC5	There are insurance operators near my home that I can easily visit							
ACC6	I live within 5 km of a place where I can pay my bills							
Code	Statements (Related to ***Usage*** of Financial Services)	SD	SWD	D	N	SWA	A	SA
USE1	I have used my savings account to save for my future expenses							

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USE2	I have used insurance services for health and others in the forms of coverage							
USE3	I have used my bank account to receive my salary							
USE4	I have used the bank account to receive and to send money							
USE5	I have used mobile money services to pay bills							
USE6	I have used mobile money services to send and/or to receive money							
Code	Statements (Related to ***Quality*** of Financial Services)	SD	SWD	D	N	SWA	A	SA
QUAL1	I am assured of getting customer support on the use of the financial services							
QUAL2	I find the staff in the formal financial institutions friendly and helpful							
QUAL3	When I have an unpleasant experience with the services, the bank staffs solve the issue immediately							
QUAL4	I am sure of the confidentiality and safety of my account transactions							
QUAL5	I can utilize a variety of financial services offered							
	FINANCIAL SELF-EFFICACY							
Code	Statements	SD	SWD	D	N	SWA	A	SA
FSE1	I am confident that I can manage my finances							
FSE2	I am confident that I can comfortably deal with a financial problem							
FSE3	I can easily save part of my income each month							
FSE4	I can confidently deposit money in the bank to plan for the future							
FSE5	I can use insurance facilities for unexpected events							
FSE6	I ensure that I pay back money that I have borrowed in time							
	FINANCIAL ATTITUDE							
S.N.	Statements	SD	SWD	D	N	SWA	A	SA
FATT1	I consider using formal financial services (savings, loans, insurance, remittances) useful							
FATT2	I think changing from informal sources of credit to formal is a wise idea							
FATT3	I believe using insurance services is important to protect me against loss of assets							
FATT4	In my view, service charges of formal services are cheaper than informal services							
FATT5	I think using formal financial service is safe for financial transactions							
FATT6	I believe that it is faster to get a consumption loan from a saving and credit cooperative							
	FINANCIAL LITERACY							
Code	Statements	SD	SWD	D	N	SWA	A	SA
FLIT1	I know how to calculate the cost of loans from a bank							
FLIT2	When I put money into a savings account, I expect to get more money							
FLIT3	When I apply for an insurance policy, I expect to be compensated depending on my monthly payments to the insurance company							

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FLIT4	When I use the bank remittances services, I can get an immediate transfer of money from one point to another at a fee							
FLIT5	When I see information about a loan, I can calculate the total amount I would need to pay							

SOCIAL NETWORKS

Code	Statements	SD	SWD	D	N	SWA	A	SA
SNET1	Social networks are the most important sources of financial information							
SNET2	People in my networks have urged me to set my financial goals							
SNET3	I use the opportunities within my networks to attain my financial goals							
SNET4	Social networks act as guarantees for borrowing or credit							
SNET5	The benefit of social networks depends on their size and composition							
SNET6	I am recognized by a financial institution because of the social network I belong to							
SNET7	I get involved in activities within my networks that improve my financial wellbeing							

SUBJECTIVE NORMS

Code	Statements	SD	SWD	D	N	SWA	A	SA
SNOR1	The people who influence my decisions expect me to save my money in the bank							
SNOR2	Most people who are important to me believe that saving in a bank is safe							
SNOR3	The people important to me would support sending and receiving money through bank remittance services							
SNOR4	The people who are important to me would expect me to use bank credit to finance my income-generating activities							
SNOR5	People whose opinions I value would approve of the usefulness of insurance services							
SNOR6	The people important to me believe I can afford formal financial services							
SNOR7	The people important to me think that formal financial services are cheaper to use							

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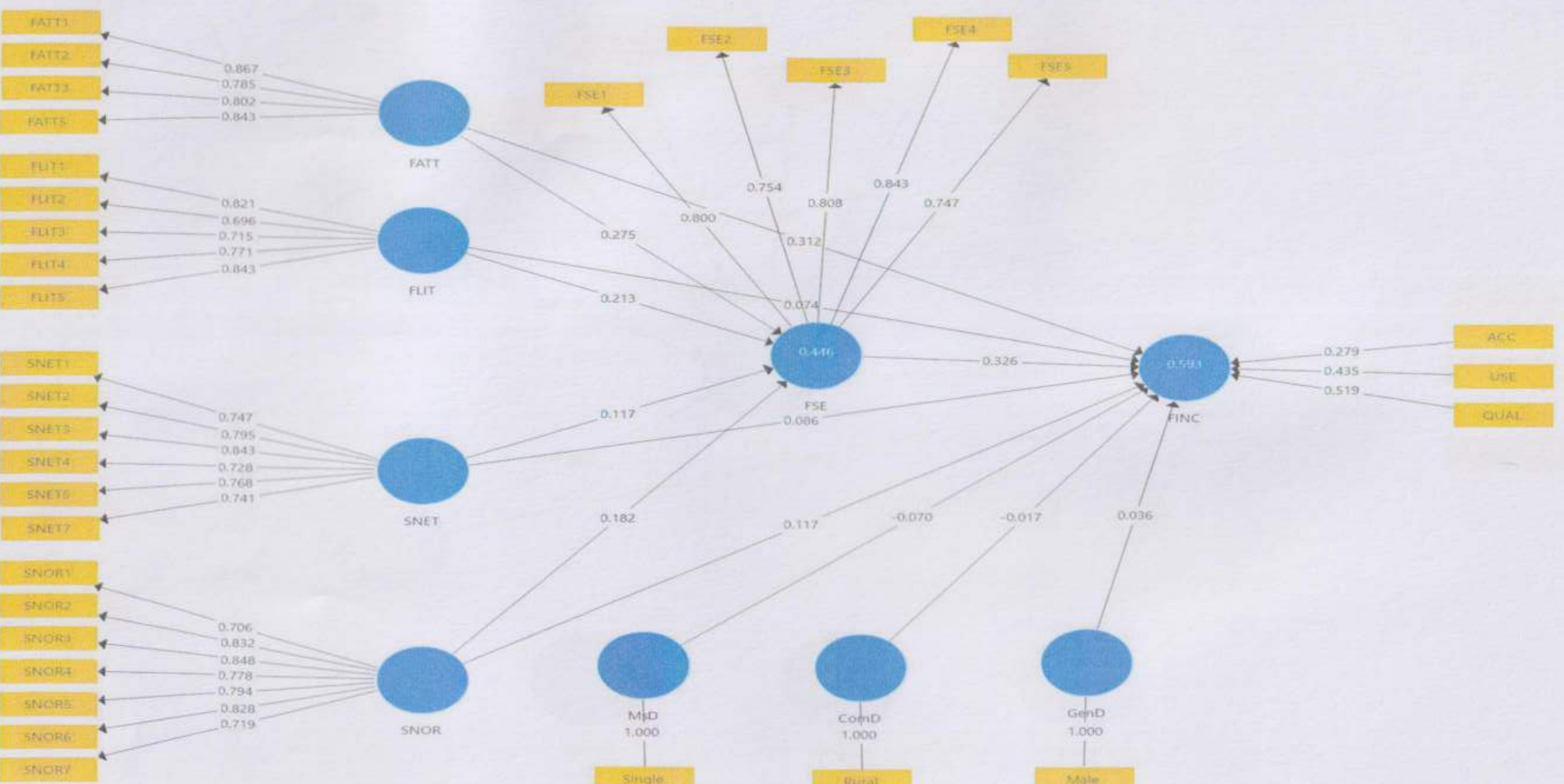
ANNEXURE – 2: PLS-SEM Path Coefficients (β), and R^2



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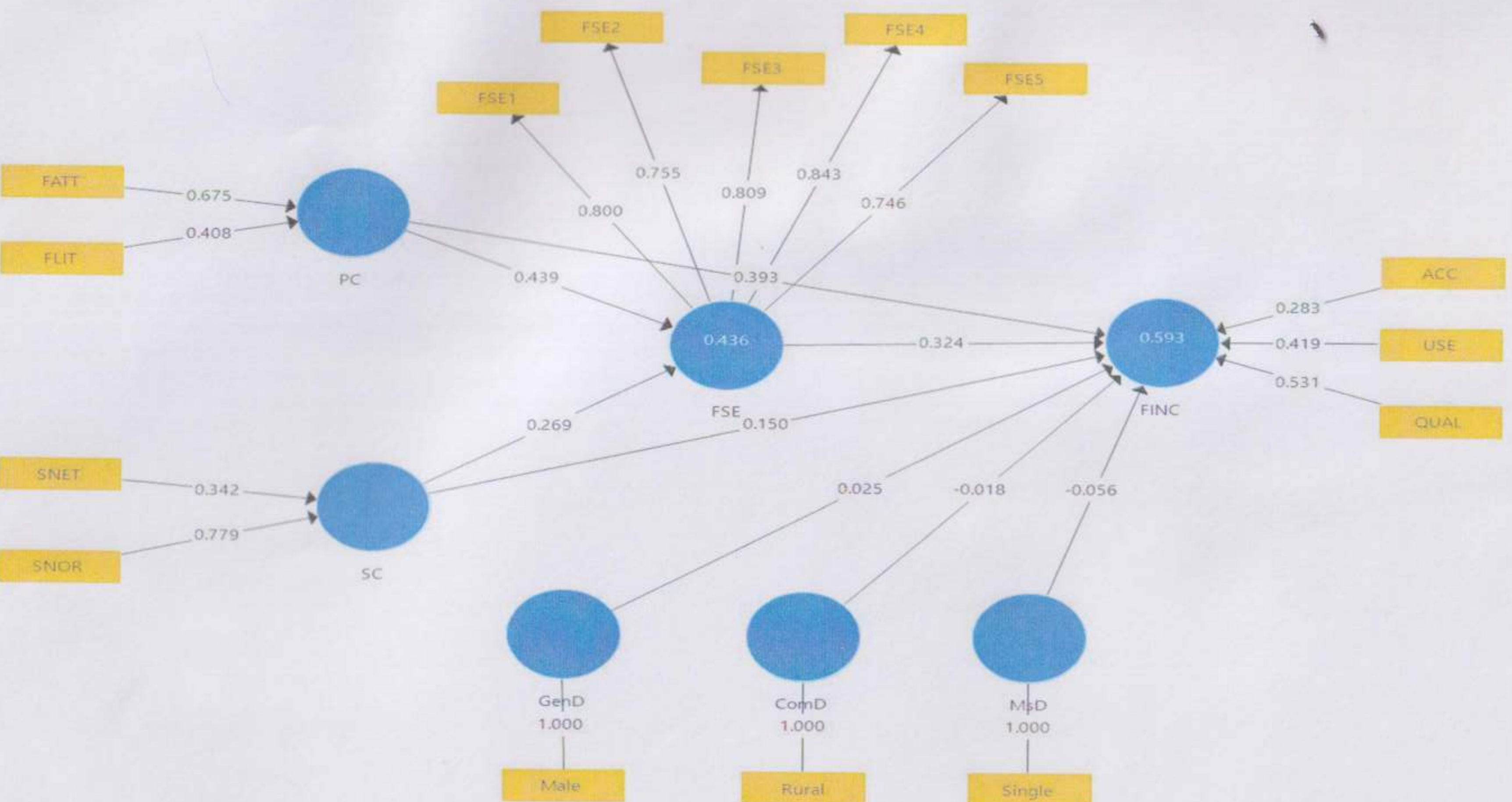
ANNEXURE – 3: PLS-SEM Path Coefficients (β), and R^2



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