Determinants of financial capability and financial satisfaction among low-income individuals: A case study of India

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Doctoral Thesis Summary

Tomas Bata University in Zlín

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Determinanty finanční způsobilosti a finanční spokojenosti jedinců s nízkými příjmy: Případová studie Indie

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ABSTRACT

Increasing financial market complexities, a highly volatile and unpredictable environment, economic ups and downs, and unexpected trauma like a pandemic of COVID-19, and many others, are giving substantial challenges to individuals to achieve and maintain their financial stability and well-being in recent times. Experts around the globe are soliciting financial literacy improvement, and indeed a lot has been done too. However, people still lack, and merely financial literacy may not be enough alone. Recently, researchers have been putting forward the concept of financial capability, which is not much research yet. Based on the capability theory, experts advocate that financial capability building is crucial for financial stability and asset building. Financial literacy deals only with the individual's internal ability and does not cover what is needed beyond individual internal abilities that capability fills. Here comes the concept of financial capability. Since the field of financial capability is still not researched much, it needs more studies and research to extend and find what else can contribute apart from the existing factors affecting financial capability building and financial satisfaction. Therefore, the present thesis investigates the key determinants that can affect financial capability building under the scope of capability theory given by Amartya Sen and Nussbaum and the concept of financial capability by Johnson and Sherraden. Limited studies have measured a few factors on financial capability in different studies. Moreover, most of the studies on financial capability are limited to the developed nations.

A significant portion of the low-income population dwells in South Asia regions, and this segment is always at risk of financial vulnerability and financial instability. A slight economic shock can shake their stability and lead to low financial satisfaction. Specifically, though the GDP is over three trillion US dollars, India is still one of the homes of low-income individuals due to the second highest population and suffers from inequality problems. It attracts research on how an individual's financial capability and satisfaction can be improved. Hence, the concern is what can affect financial capability and financial satisfaction with the focus on the developing countries, which deals with more chunk of the population with low income.

Furthermore, in the Indian sub-continent, the literature on this theme barely exists. To the extent of the researcher's knowledge, no study has extensively

explored what factors can play a crucial role in individuals' financial capability building and financial satisfaction in developing countries, specifically in the Indian subcontinent cultural environment based on the capability theory. Against this background, the proposed dissertation sought to address the missing gap by developing a comprehensive research model regarding the determinants of financial capability and financial satisfaction among low-income individuals in India.

The study was conducted in Uttar Pradesh, the most populated region, and most of the population belongs to the low-income category. The study used a mixed-method approach. The research strategy used in this thesis is expert opinion for qualitative and survey method for quantitative. The sample frame for qualitative consists of industry experts who frequently deal with them and understand what affects the low-income individuals' financial literacy, capability and satisfaction. The quantitative approach is a major part of the analysis to test the formulated hypothesis. Five hundred ten questionnaires were collected, and only 407 samples were used after the data cleaning. Data analysis is done through Microsoft Excel, SPSS 23 and SmartPLS 3.0. The partial least square (PLS) structural equation modelling (SEM) method is performed to examine and test the formulated research model. Opinions are collected from eleven experts through an interview guide for qualitative analysis.

The main findings from the quantitative analysis suggest that: (i) Financial advice and counselling, financial inclusion, financial knowledge, and Economic hardship have a positive effect on financial capability (ii) Interestingly, financial attitude and financial behaviour do not have a positive effect on financial capability. (iii) Financial behaviour, Financial capability, Economic hardship and risk tolerance hypotheses are supported by the outcome of the analysis. Under qualitative text analysis, findings support and validate the quantitative analysis results and add more factors for future studies.

The work contributes to the financial literacy, financial capability and financial satisfaction literature under the personal finance category and enriches the existing literature by filling in the identified research gaps. The research implications, the study's novelty, limitations and future research are highlighted.

ABSTRAKT

Rostoucí složitost finančních trhů, vysoce nestabilní a nepředvídatelné prostředí, ekonomické vzestupy a pády a neočekávaná traumata, jako je pandemie COVID-19 a mnoho dalších, představují v poslední době pro jednotlivce značné výzvy k dosažení a udržení finanční stability a blahobytu. Odborníci na celém světě se přimlouvají za zlepšení finanční gramotnosti a skutečně se také hodně v této oblasti udělalo. Lidem však stále chybí hlubší znalosti a pouhá finanční gramotnost nemusí sama o sobě stačit. V poslední době vědci předkládají koncept finanční způsobilosti, který zatím není příliš prozkoumán. Na základě teorie schopností odborníci zastávají názor, že budování finančních schopností je klíčové pro finanční stabilitu a nabývaní majetku. Finanční gramotnost se zabývá pouze vnitřní schopností jednotlivce a nezahrnuje to, co je potřeba mimo vnitřní schopnosti jednotlivce, které tato schopnost naplňuje. Zde přichází na řadu koncept finanční schopnosti. Vzhledem k tomu, že oblast finančních schopností není dosud příliš prozkoumána, je třeba ji rozšířit o další studie a výzkumy a zjistit, co dalšího může ještě přispět – kromě stávajících faktorů ovlivňujících budování finančních schopností a finanční spokojenost. Proto tato práce zkoumá klíčové determinanty, které mohou ovlivnit budování finanční schopnosti v rámci teorie schopnosti dané Amartyou Senem a Nussbaumovou a konceptu finanční schopnosti Johnsona a Sherradena. V různých studiích bylo v omezené míře zjišťováno několik faktorů ovlivňujících finanční schopnost. Navíc studie o finanční schopnosti provádějí převážně vyspělé státy ve svých regionech a rozvojové státy se na ni musí ještě zaměřit.

Značná část obyvatel s nízkými příjmy žije v jihoasijských regionech a tento segment je vždy ohrožen finanční zranitelností a finanční nestabilitou. Mírný ekonomický šok může otřást jejich stabilitou a vést k nízké finanční spokojenosti. Konkrétně Indie, ačkoli její HDP přesahuje tři biliony amerických dolarů, je stále jedním z domovů osob s nízkými příjmy kvůli druhému nejvyššímu počtu obyvatel a trpí problémy s nerovností. To láká k výzkumu, jak lze zlepšit finanční schopnosti a spokojenost jednotlivce. Proto se zabývá tím, co může ovlivnit finanční schopnost a finanční spokojenost se zaměřením na rozvojovou zemi, která se zabývá velkou částí obyvatelstva s nízkými příjmy.

Navíc na indickém subkontinentu literatura na toto téma téměř neexistuje. Pokud je výzkumníkovi známo, žádná studie se dosud rozsáhle nezabývala tím, jaké faktory mohou hrát zásadní roli při budování finanční způsobilosti a finanční spokojenosti jednotlivců v rozvojových zemích, konkrétně v kulturním prostředí indického subkontinentu na základě teorie způsobilosti. Na tomto pozadí se navrhovaná disertační práce snažila zaplnit chybějící mezeru vytvořením komplexního výzkumného modelu týkajícího se determinantů finanční schopnosti a finanční spokojenosti u jednotlivců s nízkými příjmy v Indii.

Studie byla provedena v Uttarpradéši, nejlidnatějším regionu, kde většina obyvatelstva patří do kategorie nízkopříjmových osob. Ve studii byl použit smíšený metodický přístup. Výzkumnou strategií použitou v této práci je expertní názor pro kvalitativní analýzu (pro doplnění zjištění kvantitativní analýzy) a metoda průzkumu pro kvantitativní analýzu. Výběrový soubor pro kvalitativní metodu tvoří odborníci z oboru, kteří s obyvatelstvem často jednají a rozumí tomu, co ovlivňuje finanční gramotnost, schopnosti a spokojenost nízkopříjmových osob. Kvantitativní přístup je hlavní součástí analýzy, která má ověřit formulovanou hypotézu. Bylo shromážděno 510 dotazníků a po očištění dat bylo použito pouze 407 vzorků. Analýza dat je provedena prostřednictvím programů Microsoft Excel, SPSS 23 a SmartPLS 3.0. Ke zkoumání a testování formulovaného výzkumného modelu je použita metoda modelování strukturálních rovnic (SEM) metodou parciálních nejmenších čtverců (PLS). Názory jsou shromažďovány od jedenácti odborníků prostřednictvím průvodce rozhovorem pro kvalitativní analýzu.

Z hlavních zjištění kvantitativní analýzy vyplývá, že: (i) finanční poradenství a konzultace, finanční začlenění, finanční znalosti a ekonomické potíže mají pozitivní vliv na finanční schopnost; (ii) zajímavé je, že finanční postoje a finanční chování nemají pozitivní vliv na finanční schopnost; (iii) hypotézy o finančním chování, finanční způsobilosti, ekonomických potížích a toleranci k riziku jsou výsledkem analýzy podpořeny. V rámci kvalitativní analýzy textu – zjištění podporují a potvrzují výsledky kvantitativní analýzy a přidávají další faktory pro budoucí studie.

Práce přispívá k literatuře o finanční gramotnosti, finančních schopnostech a finanční spokojenosti v rámci kategorie osobních financí a obohacuje stávající literaturu tím, že zaplňuje zjištěné mezery ve výzkumu. Zdůrazněny jsou důsledky výzkumu, novost studie, omezení a budoucí výzkum.

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LIST OF ABBREVIATIONS

FC	Financial Capability
FS	Financial Satisfaction
FL	Financial literacy
FAD	Financial advice and Counselling
FI	Financial Inclusion
FK	Financial Knowledge
FB	Financial Behaviour
FA	Financial Attitude
EH	Economic Hardship
FH	Financial Hardship
RT	Risk Tolerance
PL-SEM	Partial Least Square-Structural Equation Modelling

1. INTRODUCTION

1.1. Research Background

Life satisfaction has many facets and is constantly evolving (Campara et al., 2017). The individuals personal satisfaction is made up of satisfaction in several different life categories that are grouped together (Rojas, 2006). Loewe *et al.* (2014) examined among workers seven significant life domains, including financial circumstances, to identify determinants of total life satisfaction. There are several domains identified, and it can range from a few to infinity. Therefore, according to the research goals and objectives, a study can choose any or in a combination of them (Rojas, 2006). As financial well-being is imperative and financial satisfaction can be used as one measure of financial well-being (Brüggen et al., 2017). Even a small number of research use financial satisfaction as a measure of overall wellbeing. (Praag & MS., 2004). Therefore, the current study has chosen to analyze financial satisfaction in order to determine how satisfied people are with their current financial situation.

Poverty cannot be seen just as lowness of income; it is about a lack of basic capabilities, says noble laureate Amartya Sen (2000). Financial capability denotes to a individual's understanding of financial matters, ability to manage their finances, and control over their money. Theoretically, having poor financial capabilities is distinct from having a low income or experiencing shortage. Low incomes may be associated with those who are financially capable, whereas high incomes along with high standards of living may be associated with those who are less financially capable. Therefore, having a high income cannot prove a higher financial capability. It is about how you manage your funds and money worth (Taylor, 2011). The financial capability notion was make known to in 2006 (Atkinson et al., 2006). The importance of fostering financial capability has grown in recent years (Loke et al., 2015; Luukkanen & Uusitalo, 2019). Financial capability introduces a financial capability concept as opposed to the flimsy notion of financial literacy, which is about the ability to act but leaves out the chance to act. (Despard& Chowa, 2014; Johnson & Sherraden, 2007; Kempson, Perotti, & Scott, 2013). Financial literacy comprises the ability to act but lacks external opportunities measurement such as financial advice and financial inclusion, which come under the opportunity to act and with both, together, financial capability can be developed (Johnson & Sherraden, 2007; Kempson et al., 2013; Sherraden, 2013) and that's the another chosen dependent variable of the study.

1.2. Research problem and gap

Post economic crisis of 2007, studies identified different types of issues and challenges about the individuals' financial stability around the world. The number of evidence indicated that less financially literate and incapable individuals have higher chances to have problems with debts, low savings, indulge in high fees mortgages, and have a higher possibility of poor retirement planning (Kefela, 2011). Some of the critical difficulties arising, identified from different studies are increasing complexities of financial market and products and economic crises which is now a big worrisome to society as well (Crotty, 2009), how to make the prudent economic decision to protect investments in crisis (Lusardi & Mitchell, 2014), protection from miss-selling of financial products (Atkinson et al., 2007), increasing old age population and economic burden on states (EC, 2017), dynamic economic environment and old age retirement planning choice (Rooij et al., 2011). Authors have covered even more than the above mentioned issued and stressed for improving individual's financial capability to help themselves, their families, and communities as well as to survive and achieve their desired financial goals in such a critical scenario, to be financially satisfied and improve financial well-being in long run. The reports and discussed issues substantially highlight the need and importance of determining individual's financial capability and financial satisfaction, as the outcome of the study can help the lawmakers, policymakers, and educators to strategize their policies and curriculum to make and support individuals not only to achieve their financial goals but be able to survive financial turbulence. The majority around the world are now out of the ambit of extreme poverty, but still, they have limited opportunities and the resources to control their lives (Pedro, 2019). In these circumstances, it seems logical to study how they are building their financial capability and are they financially satisfied. Still, approximately 600 million people live on less than $1.90 a day, and a substantial portion lives in India (Pedro, 2019). A continuous challenge the world is facing in term of income and wealth distribution have severe effects on individual financial capability. According to the Oxfam report (2020), Reducing inequality is one of the sustainable development goals to be accomplished by 2030. The richest 1% of people on the planet have more than twice as much wealth as 6.9 billion people.

1.2.1. Knowledge Gap

The present study is based on the Capability approach given by Sen extended by Martha Nussbaum (1993). Later Johnson and Sherraden (2007) extended it on financial capability. The present study will offer an augmented model based on the mentioned previous works. How an individual can achieve the capability or freedom to live the life the way he or she wishes to live. Hence the study will determine the factors affecting financial capability and financial satisfaction of individuals and how they can be enhanced. Limited studies were found regarding financial satisfaction concerning individual satisfaction of life (Vera-Toscano et al., 2006). Financial satisfaction is one of the major determinants of an individual's overall well-being financial satisfaction is a reflector of financial well-being, and it is a crucial constituent of overall life satisfaction (Woodyard & Robb, 2016).

Various studies suggested that financial capability needs further evaluation in different ways and different contexts such as, According to Xiao et al., (2014),the financial capability was measured by very limited variables. There may be additional factors that can be utilized to more accurately gauge financial capabilities. To further comprehend this phenomenon in varied socioeconomic circumstances, data from other industrialized and developing nations might be studied. According to Storchi and Johnson (2016) financial capability needs an investigating framework for the investigation of how poor people take financial decisions and involve with financial services, does it improve their happiness. Financial capability is gradually becoming a priority for policymakers in both developed and developing economies as it is helping towards financial stability, financial inclusion, and to the effective functioning of financial markets as well (World Bank, 2013). According to Despard and Chow (2014), there is still a vacuum to develop further financial capability measurement scale. According to Banerjee (2016), the Financial capability of poor people requires significant research evidence in India. Mixed-methods research should examine existing financial capability programs and extract the influence of location, gender, marital status, family size, family type, education, and health in both financial inclusion and individuals' abilities, the outcomes of the study should be implemented through inclusions and education plans and policies to pull up all the people living below per day minimum income level. The expected analysis will reflect how individuals' financial satisfaction can be attained by increasing their level of financial literacy, inclusion, and advice total financial capability. Therefore, the present study will investigate how ability and opportunities can bring financial capability, freedom to live the life the way an individual wish to, and cope with financial hurdles and risky affairs.

1.2.2. Geographical Gap 'India'

Reports claim India is the seventh-largest economy of the world in terms of GDP (World Bank, 2019). On the other hand, when it comes to per capita income, India ranked one hundred twenty-sevenths in terms of purchasing power parity. Though the number of millionaires raised from just 34 thousand in the year 2000 to 759 thousand by 2019 which disclose how fast the wealth has been growing in India, but the problem is, it is not shared with everyone, 78% of the adult owns wealth less than 10,000$ and just 1.8% adults have a net worth more than 100,000$. Around 827,000 adults belong to the world's top 1 percent wealth owners, which is just 1.6% of the population (Lluberas & Shorrocks, 2019).It is the home of the world's 3rd largest number of billionaires along with the highest number of poor people in the world. Therefore, people's prosperity and well-being widely vary across the country (WB, 2018). Less than one-fifth of the population is covered by some form of social protection (WESO, 2019). Moreover, net financial assets per capita are just 1320 euros one of the lowest in the world (Grimm et al., 2019). Therefore, what is still pulling back India's growth is poverty, income inequality, inequality in wealth and individuals well-being. Future research needs to examine further the factors affecting financial capability among low-income consumers (Potocki & Cierpiał-Wolan, 2019)

1.3. Research Questions

RQ1. How does financial inclusion, financial advice and counselling, financial attitude, financial knowledge, financial behaviour, and economic hardship effects the financial capability of low-income individuals in India?

RQ2. How does financial behaviour, financial capability, economic hardship, and risk tolerance affect the financial satisfaction of low-income individuals in India?

1.4. Research objectives

1. To investigate how does financial inclusion, financial advice and counselling, financial attitude, financial knowledge, financial behaviour, and economic hardship affect the financial capability of low-income individuals in India.

2. To investigate how does financial behaviour, financial capability, economic hardship, and risk tolerance affect the financial satisfaction of low-income individuals in India?

2. LITERATURE REVIEW

The literature review explores and investigates the theoretical background from the existing literature databases to identify the factors affecting financial capability and financial satisfaction.

2.1. Financial inclusion and Financial capability

According to the Organization for economic cooperation and development (OECD, 2013), Financial inclusion ensures that people may readily access financial services and products by focusing on promoting awareness, accessibility, and availability of financial products and services. People's capacity to save money sensibly, plan efficiently for cost-effective borrowing, and protect themselves and their families from everyday catastrophes like starvation, natural calamities, crime, etc. are all hampered by insufficient access to and usage of financial services (GPFI, 2010). Therefore, improving financial inclusion is necessary and can lead to the development of financial capability (Grady, 2019). Financial inclusion is made possible by timely, inexpensive, useful, financially enticing, practical, safe & secure, easy to use, and reliable financial products & services (Aprea et al., 2016; Sherraden, 2013). In addition, a study that focused on external aspects (i.e., access to and use of services and products) regarding the improvement of financial capability specified that financial inclusion is an important issue to take care of when it comes to the growth of financial capability (Chowa et al., 2014). Financial inclusion affects financial capability (Aprea et al., 2016; Johnson & Sherraden, 2007). Financial inclusion has a sturdy and positive association with people's savings because access to bank accounts is tied to financial inclusion, which increases people's capacity to save and protect themselves from risk. (Kempson et al., 2013), eventually improved saving increases people financial safety. Capability approach not only emphasizes internal capabilities, which includes individual characteristics but the external environment as well, within that, an individual has to function and connect to the other environments (Nussbaum, 2011; Reyers, 2019). Therefore, financial inclusion covers the people under the ambit of basic financial products, and how their accessibility and availability strengthen their financial capability.

2.2. Financial advice and counselling and Financial capability

Financial advice is being paid hefty attention in recent past years (Von Gaudecker, 2015). Because it was traced that financial advice enhance ability for better financial decision making (Kim et al., 2018). That could also be the reason why a significant part of households seek professional help when making financial decisions (Stolper & Walter, 2017). According to Moreland (2018), specifically, individuals with less financial knowledge can get enormous benefits from financial advice therefore, financial advice improves financial decision making. Additionally, to be financially capable, individuals have to have advice and guidance how to plan and be able for a stable financial future (Sherraden et al., 2015a). Increasing complexities of financial products worry about saving for retirement and household requirements, all of these have increased the significance of financial advice and financial advice matters where there is the poor financial capability (Georgarakos & Inderst, 2011). Existing literature is not very rich, which establishes the connection between financial advice and financial capability.

2.3. Financial attitude and Financial capability

Attitudes affect financial decision making (Shih & Ke, 2014). Rai, Dua, and Yadav (2019) financial attitude can be described as a person's approach to financial matters and issues. Moreover, it is about the confidence to make suitable financial selections (French & McKillop, 2016). The monetary and non-monetary beliefs of an individual establish a financial attitude, and it is a crucial aspect of the decision-making process (Ajzen, 2009; Potrich et al., 2015). It was also found that attitude affects an individual's financial capability (S. Shim et al., 2013). Furthermore, enhanced financial attitudes can increase financial capability, and this supports a likely optimistic association amongst financial attitude and financial capability (Batty et al., 2015). It reflects financial attitude has a direct influence on financial capability. Therefore, it will be reasonable to say that financial attitude affects financial capability positively. The present study will try to establish a direct positive connection between financial attitude and financial capability.

2.4. Financial knowledge and Financial capability

Understanding the effects of microeconomics, macroeconomics, and personal finance management constitutes financial knowledge (Rothwell et al., 2016). A individual's knowledge of financial system and markets is an indispensable constituent of financial capability (Lusardi & Mitchell, 2014). As previously indicated, one of the key elements of financial literacy is financial knowledge, which must be investigated separately to reveal the precise imfluence of financial knowledge on financial capability (Rothwell et al., 2016) because the emphasis has moved towards financial capability building (Atkinson et al., 2006).

Furthermore, financial capability is inclusive of three interconnected components: financial knowledge, skills, and attitude (Collard et al., 2006). So, internal financial capability focuses on financial knowledge (Reyers, 2019). Learning about finances is linked to better attitudes and behaviors, and if done consistently, it may lead to increased financial capabilities. (Batty et al., 2015). Individuals who have less schooling are additional expected to display behaviors associated with low financial capability (Lusardi, 2011); therefore, growing financial knowledge is the main requirement for financial capability. Financial knowledge has a positive impact on future financial competence, but there aren't yet enough studies to back it up (Batty et al., 2015), and this is probably a nascent field to look into.

2.5. Financial behaviour and Financial capability

Financial behaviour is a composite term and covered all the monetarist actions undertaken by the individuals (Mudzingiri, Muteba Mwamba & Keyser, 2018). Likewise, Bhushan and Medury (2014) also clarified that financial behaviour is all-encompassing of all types of behaviour that deal with monetary decision-making and money management. Rai, Dua, and Yadav (2019) indicated that all these like financial forecasting, saving, budgeting, planning, investing, obligation payment, etc. falls under the ambit of financial behaviour. Some studies have supported a extensive relationship between financial behaviour and financial capability. Theoretically, improved financial behaviours are connected with improved financial capability. Financial behaviour is a significant aspect that forms financial capability (Potocki & Cierpiał-Wolan, 2019; Xiao et al., 2014). Developed financial capability is connected with positive and a lesser amount of risky financial behaviours. Financial capability can be assessed through financial behaviours (Atkinson et al., 2007; Lusardi & Mitchell, 2011), and it is further mentioned that one of the crucial components of financial capability is financial behaviour (Xiao et al., 2014). A person's financial behaviour is actually taken into consideration as an important topic to be analysed from the point of view of scholars in the current years. Financial behaviour has a significant impact on people's financial capability and is a key factor in identifying that capability (Potocki & Cierpiał-Wolan, 2019; Xiao et al., 2014). Therefore, financial behaviour is considered to be a critical factor affecting financial capability.

2.6. Economic hardship and Financial capability

Economic hardship or financial hardship it is about an individual’s inability to meet basic needs (Huang et al., 2015). Economic hardship affects families in several ways. Economic hardship might be related to failure to pay the bill, rent on time, inabilities to fulfil needs and cutting personal expenses (Williams et al., 2015). As financial capability is about how individuals manage and control their finances (Taylor, 2011), so failure to control and manage properly may negatively affect financial capability. A study by (Ranta et al., 2019) considers economic hardships based on income insufficiency and income decrease found insufficient income at a younger age results lower level of financial capability and higher level of economic pressures. It reflects there is an inverse relationship between the two. According to (Huang et al., 2015) economic vulnerability might be intensified by poor financial capability. Having higher financial capability, which is inclusive of financial abilities and financial opportunities, has higher chances to reduce the risk of economic hardship. Within the limited resources, an individual with higher financial capabilities can manage his/her finances in such a way which can help them to avoid economic hardships and with better financial capabilities individuals have higher abilities to allocate their limited resources efficiently to use it in hard times, this reveals the inverse relation between the financial capability and economic hardship again. Income insufficiency and poor management can affect financial capability.

2.7. Financial behaviour and Financial satisfaction

Preceding studies found the significant positive connection between financial behaviour and financial satisfaction (Davis & Runyan, 2016; Hasibuan et al., 2018; Zainul, 2018). Another study by Aboagye & Jung (2018) state that importance of savings and spending behaviour has a positive influence on overall financial satisfaction. The most influential factor of financial satisfaction was a person's financial behaviour (So-hyun Joo & Grable, 2004). The desirable financial behaviour upsurges while risky financial behaviour cuts financial satisfaction, it reflects a sturdy relationship between financial behaviour and financial satisfaction (Xiao et al., 2014). Based on the previous study, the present study will further test the positive relationship between financial behaviour and financial satisfaction.

2.8. Financial capability and Financial satisfaction

A study analysed the statistics from the 2009 United States, Survey of Financial Capability, found a positive relationship between perceived financial capability and financial satisfaction (Xiao, 2016).Another study by (Zainul, 2018) found financial capability has a positive impact on financial satisfaction, also states that financial capability is related to the ability of an individual to use finance in such a way to achieve what is anticipated to gain financial wellness. It was also found that financial capability contributes to financial satisfaction (Xiao & O'Neill, 2018). Moreover, Financial capability is the individuals ability to use elementary financial knowledge and occupy essential financial behaviors to accomplishing financial well-being, as it is exposed that financial capability has a stout effect on financial satisfaction (Xiao & Porto, 2017). It witnesses the connection amongst financial capability and financial satisfaction.

2.9. Economic hardship and Financial satisfaction

Financial satisfaction is about a state of being happy and unrestricted from financial burdens and worry (Zimmerman, 1995). Individuals suffered more from economic hardship as a result of economic fluctuation (Eurofound, 2015). Studies confirm that economic stress and financial failure to fulfil an obligation, upsurge the risk of general dissatisfaction (So-hyun Joo & Grable, 2004). Financial satisfaction is about an individual's satisfaction with the current financial condition (Hira and Mugenda, 1998; Joo & Grable, 2004). It is an individual analysis of the financial conditions to determine whether an individual is happy with it or not (Arifin, 2018). Having economic hardship such as debt burden, insufficient income, decrease in income, or economic crisis due to economic fluctuations can affect an individual's freedom or happiness negatively. A study by Ranta et al. (2019) stated that higher-income insufficiency at a younger age predicted a lesser level of life satisfaction. Having difficulties meeting the routine expenses and daily requirements brings economic hardship, and it might have a direct effect on an individual's financial satisfaction.

2.10. Risk tolerance and Financial satisfaction

Risk tolerance can be explained as the amount of risk that a person is ready to bear in the quest for desired goals. In the financial context, risk tolerance is the amount of risk a person has opted while making a financial decision (Roszkowski & Davey, 2010). It reflects risk tolerance is related to financial decision making. Some recent studies have also shown that the choice in financial decision making may affect financial satisfaction (Aboagye & Jung, 2018). Financial satisfaction may result from sound financial decisions (Arifin, 2018). Making the right financial decision may affect financial satisfaction rightly. Taking a high risk and getting high return seems logical and justify the individuals' expectations for taking high-risk tolerance. But studies found there exist negatives relations too, which might affect the individual's financial satisfaction negatively; even taking high-risk tolerance may result in lower financial satisfaction. Having higher financial risk tolerance increases the individual's expectations, it means an individual want more to feel financially satisfied. When they compare their standard of living and fall in the case below the expectation or the current level it brings mismatch between high-risk tolerance and his expectations, it negatively affects the individuals with higher risk tolerance. It is how higher risk tolerance can adversely affect financial satisfaction, and that's what the study found, financial risk tolerance negatively affected financial satisfaction (So-hyun Joo & Grable, 2004). Another study by Asebedo & Payne (2019) stated with the accurate risk tolerance assessment, and an adequately framed portfolio individuals feel comfortable and satisfied with their financial situation. Still, the same study results were astonishing and found that risk tolerance is negatively associated with financial satisfaction. It may differ from person to person, case to case. So, when it affects negatively, it reduces an individual's financial satisfaction. The proposed dissertation on the based on the Capability theory (capability approach) by noble laureate Amartya Sen.

2.11. Proposed Conceptual Framework

Based on the theoretical dimensions and extensive literature review to accomplish the aim of the study, which is to identify the determinants of financial capability and financial satisfaction. The study has proposed an integrated financial capability and financial satisfaction framework to determine individual financial satisfaction among low-income individuals in India. Based on the literature review, the study develops a research model as shown in Figure.1

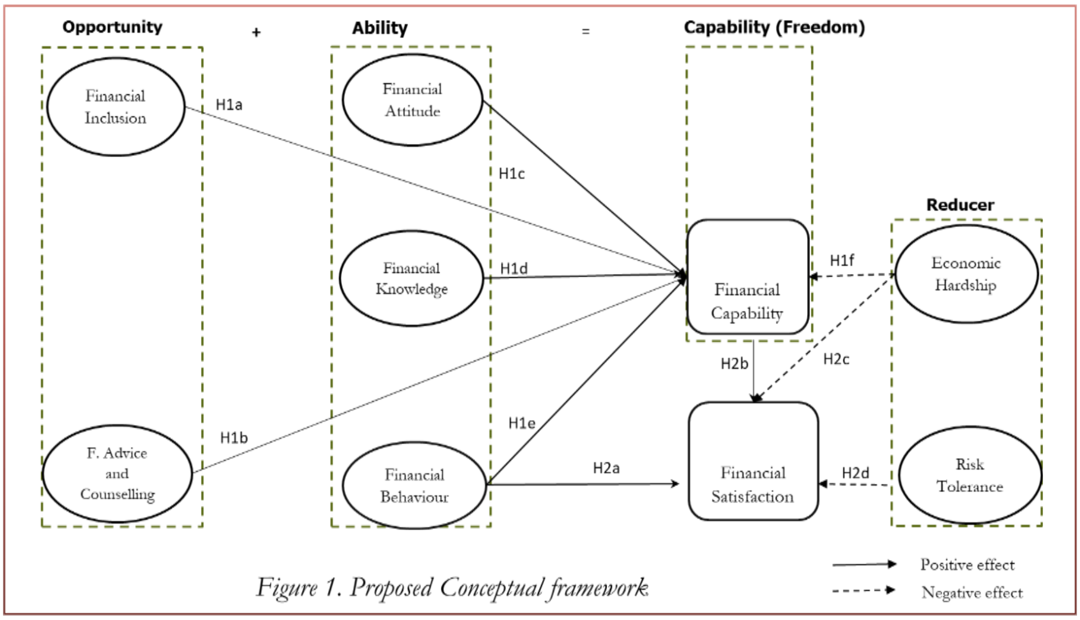

Figure 1 Proposed Research Model Source: own research

2.12. Research hypothesis

Based on the discussed literature and theoretical background, the following research hypotheses has been framed

H1a. Financial inclusion has a positive effect on financial capability.
H1b. Financial advice and counselling have a positive influence on financial capability.
H1c. Financial attitude has a positive effect on financial capability.
H1d. Financial knowledge has a positive effect on financial capability.
H1e. Financial Behaviour has a positive effect on financial capability.
H1f. Economic hardship has a negative effect on Financial capability.
H2a. Financial behaviour has a positive effect on financial satisfaction.
H2b. Financial capability has a positive effect on financial satisfaction.
H2c. Economic hardship has a negative effect on financial satisfaction.
H2d. Risk tolerance has a negative effect on financial satisfaction.

3. RESEARCH DESIGN

3.1. Research Design and Methodology

The proposed study begins with theoretical research on the determinants of financial capability and financial satisfaction among low-income individuals in India. The conceptual model developed earlier in the literature (see Figure 1) is examined based on the research design explained in this current chapter. A deductive-inductive inquiry has been executed to accomplish the study's overall objectives. The study executed both quantitative and qualitative approaches. The major analysis is primarily done using quantitative research techniques and a deductive approach to reasoning. Also, a qualitative approach to explore and understand the undertaken research phenomenon. The study's chosen methodology can be called mixed methods, emphasising the quantitative approach. All the framed objectives are accomplished using quantitative methods through the testing of hypotheses.

3.2. Population, Unit of analysis and self-reporting

Hanlon & Large (2011) defines “A population is all the individuals or units of interest”. Population under the research methodology is sampled based on common traits or characteristics (Saunders et al., 2009), and A sample is a subset of the individuals in a population”. The research population is the total number of persons or items researcher samples to arrive at a logical conclusion or results relevant to the study. For the purposes of this research, the population for the study consisted of all the individuals with low-income levels within the geographical coverage of the study. Hence, the unit of analysis for this study is Individuals. The present study collected data through a self-reporting questionnaire designed in English. Almost all the questionnaires were filled face to face.

3.3. Questionnaire

Since the study is intended to collect data through a survey method. A structured questionnaire was designed. The questionnaire was framed using the existing scales in the available literature. The questionnaire used a Likert scale (strongly disagree 1 to strongly agree 5). The questionnaire was initially designed in English and requested some random individuals to check whether they could understand it in English or not. Since English is quite commonly used in India, individuals can understand and write simple English. Therefore, in the questionnaire were circulated in English only.

Most of the questionnaires were filled in the researcher's own presence face to face, to help the respondents in case they face any problem in understanding the question, but no major problem was found. The data collection process was started in online mode but in the presence of the researcher on his own electronic device. Respondents were made aware of their rights to participate in or refrain from answering the questionnaire at any moment while the data is being collected.

3.4. Sampling technique

The survey was conducted in a state of India called Uttar Pradesh. For the purpose of the study, the survey was conducted in the top ten most populated cities. Since the study targeted only low-income individuals, finding people with only low income wasn't feasible. To find low income individuals, the study used the public distribution and ration card system in Uttar Pradesh, India.

For the purpose of data collection, public distribution store is located at a number of locations in every city. Since the study targeted only ration card holders, the public distribution stores were the data collection point for the purpose of this study. Individuals visiting public distribution stores were contacted randomly. The study used stratified random sampling, first divided into ten cities and then random sampling to contact random individuals at public distribution stores. Some responses were taken immediately. A few respondents shared their emails to fill out the questionnaire later. That is how the data was collected.

Table 1 Ration Cards classifications in the sample

Ration Card		Frequency	Percent	Valid Percent	Cumulative Percent
	Yellow	188	46.2	46.2	46.2
	Red	151	37.1	37.1	83.3
	White	68	16.7	16.7	100.0
	Total	407	100.0	100.0	

Source: own research

3.5. Sample Size determination

Hair et al. (2010) recommends a minimum sample size of 10 observations for each independent variable.. Though the G*power analysis and the rule of thumb both suggested the smaller sample size. PLS-SEM effectively handles small sample sizes and intricate models (Hair Jr et al., 2016). But the present study intended to go for the large sample size, believing the suggestion given by (Asiamah et al., 2017) larger samples produce approximations that better estimated the population parameters and larger samples lead to more precise estimates. Moreover, the larger the sample size the lower the possible error in generalising (Saunders et al., 2009). Larger sample sizes upsurge the exactness (i.e., consistency) of PLS-SEM estimations (Hair Jr et al., 2016).

Out of the set target of 1100 samples, only 510 questionnaires were filled, reflecting a response rate of 46.36 percent. After removing the partially filled questionnaires, i.e 103, almost 80% of 510 were useable. Hence, the final usable sample was 407 from the set target of 1100 samples, showing a 37% in percentage. There were some challenges in data collection (Table 03). First, the covid-19 delayed the data collection plan schedule. Second, the social distancing and other restrictions affected the data collection even after the lockdown was lifted. Due to covid-19, the estimated plan to finish the present study was delayed. Since the 407-sample size satisfies much more than the minimum criteria for the sample size, the study proceeded to data analysis.

Table 2 Samples collected from the cities

Cities	Frequency	Percent	Valid Percent	Cumulative Percent
Kanpur	30	7.4	7.4	7.4
Lucknow	65	16.0	16.0	23.3
Varanasi	46	11.3	11.3	34.6
Agra	26	6.4	6.4	41.0

Meerut	24	5.9	5.9	46.9
Ghaziabad	18	4.4	4.4	51.4
Prayagraj	94	23.1	23.1	74.4
Aligarh	68	16.7	16.7	91.2
Moradabad	16	3.9	3.9	95.1
Bareilly	20	4.9	4.9	100.0
Total	407	100.0	100.0	

Source: own research

Data Analysis tools and software

The study used PLS-SEM) known as partial least squares path modelling. a structural equation modelling technique that estimates intricate cause-and-effect relationships in path models with latent variables. The measurement and structural models are the two sub-models that make up the PLS-structural equation model. The measurement models represent the links amongst the observed data and the latent variables. The structural model signifies the connections amongst the latent variables (Hair et al., 2017; Hair Jr et al., 2016; Joseph F. Hair et al., 2014). In the social science fields, PLS-SEM is becoming more widely used and can provide much value in behavioural-related studies (Hair Jr et al., 2016; Lowry P B & J, 2014). The present study used SMARTPLS version 3 software to execute the data analysis and SPSS version 28 for descriptive statistics.

The criteria to use PLS-SEM can be used to assess the validity and reliability of the measurement model. The AVEs of the constructs must be more than the suggested value of 0.50 and should show that the constructs have a reasonable level of reliability and convergent validity. The Cronbach's alpha coefficients verify the internal consistency of the measurement items, which must be more than the minimum of 0.70. The CR coefficients should be more than the cutoff point of 0.60, demonstrating a robust variance sharing across the corresponding items or indicators. If the conditions mentioned above are met, it can be concluded that the model's convergent validity and reliability are appropriate, allowing the researcher to move on to evaluating the structural model. Convergent validity is used to assess the scales' validity. Factor loading can guarantee convergent validity, and the criterion is that each scale should surpass 0.70 (Bagozzi & Yi, 1988; Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, 2014).

Measurement of Variables used in the study

There are nine constructs in the study. The measurement scale is adopted from the articles indexed on the web of science and Scopus in the context of financial capability and financial satisfaction.

Data Analysis and results

Part I Measurement Model

To analyze the proposed framework, the first step in PLS-SEM is to execute and verify the threshold specified under the measurement model. The relationship between indicators and latent variables is specified by the measurement model, also known as the outer model (Henseler et al., 2009). Before moving on to the structural model evaluation, the measurement model assessment was undertaken to make sure the quality standards were met. Therefore, four things are checked separately (see figure 4): Loading, Internal consistency, Convergent validity and discriminant validity. First, Indicator loading were checked and compared with the recommended threshold that the loadings should be above 0.70 (Hair et al., 2019). The first part, called the measurement model, checked four things to ensure the quality, reliability, validity, discrimination between latent variables and consistency.

At the first step, the items' outer loading is checked. Those items with poor loading and higher HTMT, which is less than 0.70 and above 0.90, have been removed. Since the existing literature supports considering values above .60 which are close to 0.70, are acceptable and are used in many studies in a similar field (Ali et al., 2015; Gentjan Çera, Khan, Mlouk, et al., 2020). In general, loadings of the items which are less than 0.4 or 0.5 should be dropped (Hulland, 1999).

The internal consistency reliability of the reflective measurement model is evaluated in the second stage (Table 07). In exploratory research, reliability levels between 0.60 and 0.70 are acceptable; values between 0.70 and 0.90 imply satisfactory to good. Even while high values are preferable, values above 0.95 are regarded as troublesome since they indicate that the indicators are redundant, which lowers construct validity (Hair et al., 2019). In the case of the PLS-SEM approach in particular, composite reliability is thought to be more resilient than the two statistics given (Cronbach's alpha and composite reliability) (Hair et al., 2019). All the values were found within the permissible range. Cronbach's Alpha is above 0.7 in all the variables, all are between 0.766 to 0.873 indicates acceptable good level. Regarding rho a which vary from 0.774 to 0.874. The scale's reliability falls between good and good according to the general guideline. These results demonstrate that internal consistency reliability is not a problem for the current study.

Furthermore, the convergent validity is the extent to which a construct converges to explain the variance of its constituent parts. The average variance extracted (AVE) for all indicators on a construct is the statistic used to assess it. By squaring the loading of each indication on a construct and calculating the mean value, the AVE is calculated. A value of 0.50 or above shows that the construct clarifies at least 50% of the variation amongst its items (Hair et al., 2019). For each set of constructions' components, the AVE metric is calculated, and the results are displayed in Table 08. All AVE values are discovered to be higher than 50%, which means that all evaluated constructs account for more than half of the variation in their indicators. The highest AVE value, which is 0.796, while the lowest AVE value is 0.534.

3.5.1. Discriminant validity and correlation between variables

The fourth step is to find the Discriminant validity in assessing a reflective measurement model. A construct's discriminant validity measures how different it is from other constructs in the structural model in terms of empirical diversity. The standard metric was proposed by Fornell and Larcker (1981), who suggested comparing the AVE of each construct to the squared inter-construct correlation of that construct and any other constructs in the structural model that were reflectively evaluated (as a measure of shared variance). All model constructs' shared variances shouldn't exceed their AVEs. However, new study advises that this metric is not suitable for assessing discriminant validity. For instance, Henseler et al. (2015) demonstrate that the Fornell- Larcker criterion does poorly, particularly when the item loadings on a construct just slightly differ from each other. That’s why the present study check the values with both fornell larcker and HTMT as well. The present study ensure that the value are above and within the threshold limits which ensure the model discriminant validity.

3.5.2. Hypotheses testing

As stated in section 4, Data analysis, SmartPLS 3.0 uses the PLS-SEM technique to evaluate hypotheses. The results of framed hypotheses can be seen in Table 13. The concluding remarks are added on whether the framed hypotheses are supported or not by the data analysis. The bootstrap procedure is used to calculate these pathways, with 5000 iterations of resampling.

Table 12 reveals the results of PLS-sem. Total ten hypotheses were tested with investigated the direct effect on the dependent variables. The outcome of the analysis reveals that eight framed hypotheses are statistically significant, and two were found insignificant. Regarding the factors determining financial capability, out of total six direct relationship, two found i.e financial attitude ($\beta = 0.057$, $t = 0.905$, $p < 0.05$) and Financial behaviour ($\beta = -0.063$, $t = 0.220$, $p < 0.05$) both rejected the framed hypotheses, thus show insignificant positive impact on financial capability. On the other side, four relationship i.e Financial advice ($\beta = -0.063$, $t = 4.176$, $p > 0.05$), Financial Inclusion ($\beta = -0.055$, $t = 2.111$, $p > 0.05$), Financial knowledge ($\beta = -0.060$, $t = 3.287$, $p > 0.05$) and Economic hardship ($\beta = -0.055$, $t = 5.269$, $p > 0.05$) were found significant and support the framed hypotheses.

Second, all four framed hypotheses were found statistically significant regarding the determinants of financial satisfaction. Financial behaviour ($\beta = 0.048$, $t = 3.353$, $p > 0.05$) financial capability ($\beta = 0.055$, $t = 6.558$, $p > 0.05$) economic hardship ($\beta = 0.064$, $t = 2.903$, $p > 0.05$) and Risk Tolerance ($\beta = -0.058$, $t = 2.515$, $p > 0.05$) were significant and all the proposed hypotheses are found supported. Hence the data analysis supports the following hypotheses, H1a, H1b, H1d, H1f and H2a, H2b, H2c, and H2d, except for H1c and H1e.

Table 3 Path Coefficient

	Original Sample (O)	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**T Statistics (|O/STDEV|)**	**P Values**
FA -> FC	0.052	0.050	0.057	0.905	**0.366**
FAD -> FC	0.263	0.263	0.063	4.176	**0.000**
FB -> FC	-0.014	-0.015	0.063	0.220	**0.825**
FB -> FS	0.161	0.161	0.048	3.353	**0.001**
FC -> FS	0.363	0.362	0.055	6.558	**0.000**
FH -> FC	0.290	0.292	0.055	5.269	**0.000**
FH -> FS	0.187	0.187	0.064	2.903	**0.004**
FI -> FC	0.116	0.117	0.055	2.111	**0.035**
FK -> FC	0.196	0.197	0.060	3.287	**0.001**
RT -> FS	0.147	0.150	0.058	2.515	**0.012**

Source: own research

4. DISCUSSION

The purpose of this thesis was to examine the factors that influence financial capability and financial satisfaction. The results are emphasized and explored in relation to the subsequent research problems and questions.

RQ1. How does financial inclusion, financial advice and counselling, financial attitude, financial knowledge, financial behaviour, and economic hardship affects the financial capability of low-income individuals in India?

RQ2. How does financial behaviour, financial capability, economic hardship, and risk tolerance affect the financial satisfaction of low-income individuals in India?

Factors affecting Financial Capability

Regarding the first question mentioned above, except for financial attitude and financial behaviour, the rest confirms their positive impact on financial capability among low-income individuals in the context of the developing country. Comparing the results of the present study finding with the existing studies reflect quite a lot of matching between them. The first hypothesis, which examined whether financial inclusion has a positive effect on financial capability, found significant and it found similarities with the existing studies (Gentjan Çera, Khan, Mlouk, et al., 2020; Potocki & Cierpiał-Wolan, 2019)

The current study is consistent with earlier studies since it demonstrates a favourable effect of financial inclusion on financial capability. In the context of an external opportunity for financial competence building, it highlights the importance of financial inclusion as a key component ((Huang et al., 2013; Mundy, 2011; Sherraden et al., 2015b; Sun et al., 2022). Financial advice and counselling are other factors that positively affect financial capability, and this finding is consistent with several existing studies (Georgarakos & Inderst, 2011; Johnson & Sherraden, 2007). Previous studies revealed that financial attitude is an effective aspect that contributes to financial capability building. However, the present study's finding competes against the earlier studies (Sherraden & Ansong, 2016), but it matches with other studies that it does not have a significant positive effect on financial capability (Khan et al., 2022; Von Stumm et al., 2013). Furthermore, the analysis found a positive impact of Financial knowledge on financial capability and this support the importance of financial knowledge for building financial capability like many prior studies (G Çera et al., 2019; Potocki

& Cierpiał-Wolan, 2019; Serido et al., 2013; Vlaev & Elliott, 2017; Xiao et al., 2014).

The present study does not support that financial behaviour positively affects financial capability. That's a quite interesting finding and goes against the existing (Gentjan Çera, Khan, Mlouk, et al., 2020; Potocki & Cierpiał-Wolan, 2019; Serido et al., 2013; Vlaev & Elliott, 2017). The present study's definition and measurement of financial behaviour and capability need additional effort to distinguish and justify this. One could argue that a better scale would enable financial behaviour to be assessed more effectively. It adds another advantageous element to the literature that already exists.

Another hypothesis which tested economic hardship has a negative effect on financial capability is supported by the present study. And found that it has a negative impact on financial capability. Low financial capability individuals might have a higher chance of financial difficulties, which explains a negative association between economic hardship and financial capability, suggesting that high financial capability reduces one's risk of experiencing economic hardship (Huang et al., 2015), and economic hardship is associated with low financial capability (Ranta et al., 2019; Sun et al., 2022). Not only do economic hardships directly affect well-being, but they also have detrimental consequences on other areas of life. Research using the Family Economic Stress Model has demonstrated the detrimental effects of family financial stress brought on by a recession or unstable employment (Conger, Rand D.; Elder, Glen H., 1994).

Factors affecting financial satisfaction

Financial behaviour has a positive effect on financial satisfaction, which is supported by the present study and shares similarities with other studies (Arifin, 2018; Hasibuan et al., 2018; Xiao & O'Neill, 2018; Xiao & Porto, 2017; Zainul, 2018).

Financial capability has a positive effect on financial satisfaction, is also supported by the present study and put forward an argument that financial capability has a vital role in explaining an individual's financial satisfaction. This finding is consistent with prior studies (Gentjan Çera, Khan, Belas, et al., 2020), which show a positive association between financial capability and financial satisfaction (Khan et al., 2022; Xiao et al., 2014). Hence it can be claimed in the light of the present study results and other existing studies that financial capability positively influences financial satisfaction and could be complementary to each other.

The analysis reveals that economic hardship has a negative effect on financial satisfaction, and in the light of the previous studies, the finding is consistent (Lee & Dustin, 2021) and reduces satisfaction in the general stream of life as well (Blom et al., 2019; J. Shim et al., 2017). Hence the present study aligns its finding with the existing studies that there is a negative association between economic hardship and financial satisfaction. Finally, the results also support the last hypothesis that risk tolerance has a negative effect on financial satisfaction. The previous studies support that risk tolerance has a positive association with financial satisfaction (Aboagye & Jung, 2018; Jeong & Hanna, 2004), which is against the present study result. Before this study finding, to the extent of the researcher's knowledge, only (S Joo & Grable, 2004) found a negative connection between risk tolerance and financial satisfaction. Hence, these findings add that this phenomenon can reverse from the concept that higher risk leads to higher financial satisfaction, especially in the low-income segment.

5. BENEFITS OF THE STUDY

Driven by the capability theory (Sen, 1993) and further extended concept of financial capability (Johnson & Sherraden, 2007), advocated that both ability and opportunity is important for financial capability building. Based on this, the present thesis provides an original and enhanced conceptual framework with the aim to find both how ability in the form of (financial behaviour, financial knowledge and financial attitude) and opportunity in the form of (financial advice and counselling and financial inclusion) along with factors such as (risk tolerance and economic hardship) influence financial capability and financial satisfaction among low-income individuals in the context of the emerging economy. Below are the expanded theoretical and practical benefits of the present thesis results.

Contributions to Theory

In Short, the contribution to the literature is as follows

- The tested conceptual framework linked how individuals' abilities and external opportunities affect financial Capability and satisfaction among low-income individuals.
- An integrated framework identified the determinants of financial capability and financial satisfaction in the context of low-income individuals in an emerging economy.
- Explored the role of financial advice (which is not yet included in any study), financial inclusion, financial literacy components on financial

capability, and how economic hardship and risk tolerance negatively influences financial satisfaction.

- Mix-method approach in the context of the current topic and in the chosen location of study.
- Add to the context of financial capability literature in developing countries, which is not much studied yet to the extent of the author's knowledge.

Practical Implications

The outcomes of the study can help concern policymakers and social practitioners in their practices

- The outcomes are informative for individuals, policymakers, financial planners, and educators to develop adequate financial capability building and inclusion programs to improve individuals' financial capability and satisfaction.
- The results contribute toward Educational curriculum design for financial capability improvement, specifically in the weaker section of the society and at the early stage of education.
- Findings might be useful in policymaking at local, state, and central levels of government and non-government organizations.
- The outcomes provide new insight, especially for the financial planners and financial advisors to understand the factors which are key in financial capability building and achieving a state of financial satisfaction.
- It will help channel and mobilize their hard-earned money in-country financial markets, which is also good for the economy.

Specific Recommendation

- Financial institutions must give a short demo or lesson when opening a bank account (especially first-time bank account openers). In this way, individuals can gain the right approach, knowledge, and behaviour to use it optimally for their financial capability building. Many times, especially in India, free saving accounts are opened, but the users don’t know how much interest or charges they pay for the services. Therefore, the present study recommends that the banks provide short training when opening an account specifically for the low-income segment.
- Children learn from their parents. Therefore, the role of parents, family socialization and digital skills are also key aspects of financial capability and financial satisfaction improvement. Therefore, school colleges or non-

profit social organisations can run periodical sessions for parents, especially those from poor educational or low-income backgrounds. Universities and schools can do this through the university of the third age or from their CSR activities. Give short training or session periodically to parents and community members. Giving financial education to parents is giving financial education to kids indirectly.

- Like doctors, just like everyone has to have their general practitioners, why not a financial advisor? After all, health and wealth are the two most precious things for any individual. This needs active regulation from the government and institutions.

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Research projects

2019-2020 Internal grant agency of faculty of management and economics, funded by TOMAS Bata UNIVERSITY, PROJECT no. IGA/FAME/2019/002: The role of institutional environment in fostering entrepreneurship

2021-2022 Internal Grant agency, faculty of management and economics, funded by Tomas Bata University in Zlin through; IGA/FAME/2021/005 SIGNIFICANT factors in the sustainability of economic growth with a focus on the SME segment.

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Professional Experience: June 2007-Sept 2018

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2018- 2022	PhD in Finance at Tomas Bata University Czech Republic, Thesis submitted final defence expected in December 2022.
Senior lecturer:	ISBAT University, Uganda Africa Financial management, Financial services and Financial Markets May 2012 to Sept 2018.
Assistant Professor (Grade I):	JETGI Lucknow India Financial Management, Working capital Management, and Capital and Money markets
Branch operation Executive:	Axis Bank Ltd India, Retail Banking-Branch Operations Executive Nov 2008 to February 2010
Key Account Manager:	Kotak Securities ltd India, Capital market operations, trading and advisory Nov 2007 to Oct 2008

Academic Qualification: Master of Business Administration in Finance 2007
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Technical certifications and Courses

2020	Statistics for Researchers: Understanding Mediation, Moderation and Beyond, University of Virginia Darden School of Business
2015-2016	Advance Diploma in Oil and Gas Management, Indian Institute of Business Management and Studies
2008	Certificate on Banking Axis bank ltd
2007	NCFM certification in depository operations Module, National Stock Exchange
2005	TA 101 certificate from the International transactional Analyst Association

Other Skills and Trained on

2021	Scrum Foundation Professional certificate
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2019	IBM SPSS
2011-2017	Personal counselling and presentation, event planning and On Interpersonal skills
2009	Counterfeit note detection and Anti-money laundering (organized by Axis bank and RBI)
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Community services and certifications

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Determinants of financial capability and financial satisfaction among low income individuals: A case study of India

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