Exploring the Impact of Digital Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand

A Thesis submitted to the

UPES

For the Award of

Doctor of Philosophy

in

Management

By

Deepak Mishra

September 2025

Supervisor

Dr. Naveen Agarwal

External Supervisor

Dr. Vinay Kandpal

School of Business

UPES

Dehradun – 248007, Uttarakhand, India

Exploring the Impact of Digital Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand

A Thesis submitted to the

UPES

For the Award of

Doctor of Philosophy

in

Management

By

Deepak Mishra

School of Business – Management (Finance)

(SAP ID: 500107510)

September 2025

Supervisor
Dr. Naveen Agarwal, Assistant Professor
UPES ON
(Centre for Continuing Education), Dehradun, Uttarakhand, India

External Supervisor
Dr. Vinay Kandpal, Professor (Research)
Department of Management Studies,
Graphic Era (Deemed to be University),
Dehradun, Uttarakhand, India

School of Business

UPES

Dehradun – 248007, Uttarakhand, India

DECLARATION

I declare that the thesis entitled **Exploring the Impact of Digital Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand** has been prepared by me under the guidance of Dr Naveen Agarwal, Assistant Professor of UPES ON, Centre for Continuing Education, UPES Dehradun and Dr Vinay Kandpal, Professor, Department of Management Studies, Graphic Era (Deemed to be University), Dehradun. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

Deepak Mishra

School of Business,

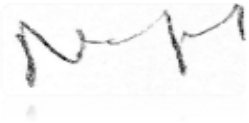
UPES Kandoli Via Premnagar, Dehradun, Uttarakhand, India

DATE: 11/09/2025

CERTIFICATE

I certify that **Deepak Mishra** has prepared his thesis entitled "**Exploring the Impact of Digital Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand**", for the award of PhD degree of UPES, under my guidance. He has carried out the work at **School of Business, UPES, Dehradun**.

Internal Supervisor



Dr Naveen Agarwal
Assistant Professor,
UPES ON,
Centre for Continuing Education,
UPES Dehradun, Uttarakhand, India
Date: 11/09/2025

Graphic Era Deemed to be University DEHRADUN

NAAC GRADE A+ ACCREDITED

CERTIFICATE

I certify that **Deepak Mishra** has prepared his thesis entitled "**Exploring the Impact of Digital Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand**", for the award of PhD degree of UPES, under my guidance. He has carried out the work at **School of Business, UPES, Dehradun**.

External Supervisor
Dr Vinay Kandpal
Professor,
Department of Management Studies,
Graphic Era Deemed to be University,
Dehradun, Uttarakhand, India
Date: 11/09/2025

ABSTRACT

Despite the growing availability of digital financial tools, many women are finding it difficult to adequately use these tools due to a lack of digital financial literacy, which limits their ability to feel empowered economically and make informed financial decisions. This study examines the promotion of Fintech adoption and digital financial literacy for women in India by examining the relationship between digital financial literacy and women's empowerment while considering the mediating role of financial resilience.

Additionally, we examined how the dependent variable, Women empowerment (WE), was impacted by independent variables like digital financial literacy (DFL) and financial resilience (FR). This research used structural equation modeling (SEM) to analyze 385 Indian women respondents. In order to empirically validate the proposed research model, this research used structural equation modelling (SEM) using AMOS 29. SEM is deemed an appropriate statistical tool to analyze cross-sectional data. The study followed the two-step process introduced by (Anderson & Gerbing, 1992). This two-step process allows researchers to test for reliability and validity in the first place by defining the measurement theory, and later in the second stage, the proposed structural theory is validated. To assess the reliability and validity of study constructs, the measurement model was specified. The model comprised three variables--- Women empowerment, financial resilience, and digital financial literacy. The two constructs, namely Women empowerment and digital financial literacy, were specified as second-order constructs, whereas financial resilience was specified as a first-order construct. For testing study hypotheses, the researcher IBM SPSS PROCESS macro (Hayes, 2013). The Model-4 of the PROCESS macro was selected and executed on the imputed values from the measurement model above. The PROCESS macro is a sophisticated tool to test the hypotheses involving mediation analysis. The findings

suggest that digital financial literacy significantly influences women empowerment. Overall, digital financial literacy accounts for nearly 19% of the variance in women empowerment. Secondly, there was a significant effect of financial resilience on women empowerment. In addition, the model accounted for almost 85% of the variance in women empowerment. The total effect of digital financial literacy on women empowerment was significant; the model accounted for 43% of the variance. The indirect effect of digital financial literacy on women's empowerment was significant (zero did not span between the bootstrap intervals), which supports the mediation hypothesis that financial resilience mediates the role of Digital financial literacy on women's empowerment. Further revealed that the direct effect of digital financial literacy on women's empowerment was still significant. These results point to the need for a targeted government strategy and initiatives that promote Fintech adoption by Indian women in urban and rural areas. This study relates to the UN Sustainable Development Goals (SDGs) 1: No Poverty, SDG 8: Decent Work and Economic Growth, and SDG 5: Gender Equality.

Keywords: Financial market (FM), Women empowerment (WE); Financial decision-making (FDM); Sustainable Development Goals (SDGs); Financial resilience (FR); Intention towards investment (INT); Financial inclusion (FI); Digital financial literacy (DFL)

ACKNOWLEDGEMENT

I want to express my deepest gratitude to God Almighty for providing me with the strength, clarity of thought, patience, and perseverance to finish this research work. It is by their divine grace that I have made it through this journey and arrived at this fulfillment. Every aspect of this work has received their unseen assistance, guidance, and boundless mercy, for which I am eternally grateful. With equal reverence, I would like to dedicate this work to my loving parents, whose love, sacrifices, and above all, their unshakeable faith in my potential have been the driving force behind every endeavor that I have engaged in. Their support, encouragement, moral support, and above all, constant prayers have represented an anchor in times of doubt and difficulty. I owe both my success and my happiness, therefore, over a life-long journey, to their presence and nurturing contribution, and love.

My sincere, heartfelt thanks must go to my supervisors, Dr. Naveen Agarwal, Assistant Professor, Centre for Continuing Education, UPES Dehradun, and Dr. Vinay Kandpal, Professor, Department of Management Studies, Graphic Era (Deemed to be University), Dehradun. Their intellectual, academic, administrative, professional, and personal guidance, suggestions, support, and feedback have been invaluable with respect to the direction and academic nature of this thesis. They have made my doctoral experience enjoyable and inspiring. Their professional guidance, advice, and support unconditionally shaped this work's direction, depth, purpose, and relevance. Their knowledge not only catalyzed the diversity of research areas explored in this study but also gave rise to educational ambitions and integrity.

I want to express my sincere gratitude to Dr. Ram Sharma, Vice Chancellor, UPES Dehradun, for encouraging a positive and intellectually vibrant research

environment. Heartfelt congratulations to Dr. Pankaj Thakur, Associate Dean – Research, for his encouragement and commitment to implementing a research culture at UPES. My sincere thanks to Dr. P. C. Bahuguna, Professor and Research Coordinator, School of Business, for his suggestions, support, and guidance at all stages of my work. I would also like to thank Professor Rahul Nainwal, Director, School of Business, for his visionary leadership and encouragement, which inspired my academic journey.

I also want to acknowledge and thank the academic and administrative staff at UPES Dehradun, who made this thesis possible; without them, much like all the other influences I have mentioned in this thesis that supported me at different times in my research and in completing it, it simply could not have happened. Lastly, to my friends, fellow students, and supporters, who have contributed to the end of the journey, that is this thesis, in a variety of ways. Finally, to my friends, fellow students, and near and dear ones, who have contributed to this journey in a variety of ways.

This work represents a compilation of all their support, blessings, and beliefs above, all of whom I am eternally grateful.

TABLE OF CONTENTS

CHAPTER	PAGE NO.
Cover Page	i-ii
Declaration	iii
Certificate	iv -v
Abstract	vi-vii
Acknowledgement	viii -ix
Table of Contents	x-xii
List of Figures	xiii
List of Tables	xiv-xv
List of Appendices	xv
CHAPTER 1	1
1. Introduction	1
1.1. Overview of Digital and Financial Literacy	3
1.2. Overview of Women Empowerment	7
1.3. Overview of Financial Resilience	12
1.4. Sustainable Development Goal	16
1.5. Need for the Study	19
1.6. Current Initiatives on Financial Inclusion	25
1.7. Business Problem	27
CHAPTER 2	30
2. Literature Review	30
2.1. Digital financial literacy and financial accessibility	30
2.2. Financial inclusion and Women empowerment	40
2.3. Financial decision making and financial resilience	47
2.4. Consolidated Research Gaps	51
2.5. Research Problem	52

2.6. Research Questions	52
2.7. Research Objectives	52
2.8. Rationale of the Study	53
2.9 Theoretical Background	53
2.9.1 Theory of Planned Behavior	54
2.9.2. TPB (Theory of Planned Behavior) in comparison to other theories	59
2.10. Conceptual Model	62
CHAPTER 3	65
3. Research Methodology	65
3.1. Selection of Research Approach	65
3.2. Research Approach	67
3.3. Research Design	67
3.4. Sample Size	68
3.5. Sampling Method	68
3.6. Source of Data Collection	69
3.7. Variable Used	69
3.8. Reliability Analysis	71
3.9. Confirmation of Measurement Items	71
3.10. Assessment of Reliability and Validity of the Measurement Instrument	71
CHAPTER 4	72
4. Data Analysis	72
4.1. Profile and Background of The Respondents	72
4.2. Analysis	77
4.3 Reliability and validity of the study construct	78
CHAPTER 5	86

5. Discussion	86
5.1. Digital financial literacy and Women empowerment	86
5.2. Digital financial literacy and financial resilience	87
5.3. Financial resilience and women empowerment	87
5.4. Digital financial literacy, financial resilience and women empowerment	88
CHAPTER 5	89
6. Conclusions	89
6.1 Overview or Summary	89
6.2. Contribution of Research	91
6.3. Theoretical contribution	92
6.4. Implications	93
6.5. Recommendations and suggestions	95
6.6. Scope for future work	98
References	100
List of Publications	128
Appendix	129

LIST OF FIGURES

FIGURES	PAGE NO.
Figure 1.1 Elements of SDGs covered in proposed work	16
Figure 1.2 Labor force participation rate graph	24
Figure 1.3 Gender, Income, age, education and Workforce Gaps	25
Figure 2.1 Conceptual Model	61
Figure 3.1 PRISMA Model	66
Figure 4.1 The measurement model	79

LIST OF TABLES

Table	PAGE NO.
Table 1.1- Labor force participation rate	23
Table 2.1- Variable used	62
Table 4.1- Residential status	72
Table 4.2- Marriage Status	72
Table 4.3- Age	73
Table 4.4- Education of the respondents	73
Table 4.5- Number of Children	74
Table 4.6 Employment Status of the Respondents	74
Table 4.7- Monthly income of the respondents	75
Table 4.8 -Number of earning adults in the family of the respondents	75
Table 4.9- Religion	76
Table 4.10- Caste/ Category of the respondents	76
Table 4.11- Reliability and convergent validity analysis	79
Table 4.12- Discriminant validity results	81
Table 4.13- Hypothesis results	82
Table 4.14- Test of moderation	83
Table 4.15- Conditional process analysis at the value of a moderator	83
Table-4.16-Coefficient	83
Table 4.17- Model summary	84
Table-4.18- Coefficient	85
Table 4.19- Indirect effect of digital financial literacy on women empowerment	85

Table 4.20- Direct effect of digital financial literacy on women empowerment	85

List of Publications **128**

LIST OF APPENDICES

A: Survey Form of The Study **129**

CHAPTER 1

1. Introduction

The world has seen tremendous technological progress and digital transformation in recent years, which has revolutionized many industries and facets of our life. As a result of these advancements, there is a rising understanding of how important Digital financial literacy is to empowering people, particularly females, and achieving the SDGs of the UN. Achieving SDGs depends heavily on Women Empowerment, a great thought with social, economic, and political aspects. The advantages of women's empowerment are well known, and they benefit in addition to women, their families and communities as a whole. This is why the empowerment of women and gender parity is highlighted as one of the main objectives of the SDGs, a global development agenda approved by the United Nations (SDG 5).

Being financially adapted has become increasingly vital and significant in the modern period due to the expansion of the market for finance and the creation of fresh, sophisticated financial products. The significance of enhancing individuals' financial capability through better personal finance management has been emphasized by international organizations, financial services regulators, educators, financial service providers, and policymakers at both the national and international levels. Having financial capacity becomes increasingly important over time as financial decisions get more complex. People who lack basic financial understanding and abilities are unable to make sound financial judgments (Tanzile et al., 2023). Women who used digital financial services were 20% more likely to save compared to those without access to such services. When combined with digital financial literacy, women can better understand how to maximize savings through online banking tools and investment platforms (Chen & Guo, 2023).

Generally speaking, women's career choices may be restricted by social standards and family responsibilities like childrearing, which leads to shorter career lifespans. In certain nations, women are compensated less than men in the workforce, which has the effect of lowering the amount of money they have saved over time. In the meantime, women are economically vulnerable due to demographic issues. Not only do women often provide the majority of care for their children, but they also have a higher likelihood of being single guardians. The monetary consequences of divorce also have a greater impact on women. Women are also more deprived in terms of their legal and property rights as a result of widowhood. The men's and women's abilities to acquire financial literacy are also impacted by the disparities in their intrinsic qualities and preferences. Variations in learning ability and patterns may result from variances in demographic characteristics such as age, formal schooling, mathematical proficiency, and personality attributes, including risk-taking ability, endurance, and risk avoidance. The ways that men and women learn about the various facets of personal finance are further impeded by the disparities in the contextual constraints that they encounter, such as cultural and occupational conventions. In order to create the various incursions, identify the sources of the disparities, and accommodate the varying learning methods of men and women, it is imperative to distinguish between the differences. It is essential to prevent concerns with dishonest policy proposals and the continued marginalization of gender differences.

Because the financial industry is expanding at the same rate as rising countries like India, in order to keep up with the rise in consumption and income levels, the need for sound financial decision-making and financial literacy has increased. The majority of people in emerging economies lack financial literacy and decision-making skills due to ignorance about financial concepts and products. This negatively affects demand for financial products and services and has an adverse effect on savings and future returns. Determining women's financial decision-

making proficiency and its consequences for their financial well-being is, therefore, extremely important. Women make up about 49.58% of the world population. According to estimations, the population of India will increase by 0.97% by increasing from 1.38 billion in 2020 to 1.4 billion in 2021. India has the second-largest population. In 2021, the sex ratio in India was 108 men for every 100 women. India's female population stands at 669.44 million, and the male population stands at 723.97 million. This means that they are comprised of 51.96% men and 48.04% women. India has a surplus of 54.54 million more men than women in their population. According to Statisticstimes (2021), in terms of the ratio of women to men, India is on position of 189th position out of 201 countries.

India's overall sex ratio improved from 991 women per 1,000 men in NFHS-4 (2015-16) to 1,020 women per 1,000 men in NFHS-5 (2019-21), marking the first time women outnumbered men in the population

The complete set of development indicators compiled by the World Bank shows India's total labour force from 50,770,4840 in 2021 to 593729164 in 2023. India's women labour force participation rate was stuck at around 22.99% in 2021 and did not change from 2020 (Klapper & Miller, 2021). The Periodic Labour Force Survey's (PLFS) October 2023 report by the Labour Bureau shows an increase in participation of women in the labour force, from 23.3% in 2017–18 to 37% in 2022–23. The female labour force participation rate for India is 32.7% in 2023, while the male labour force participation rate is 76.8%. The current composition of the labour force is approximately 58% men and women. Research from Bloomberg Economics indicates that closing that gap could increase India's GDP by about one-third in 2050. If the issue is left unresolved, the country's efforts to be a competitive world market producer may be seriously jeopardized (Mazumdar & Chaudhary, 2022).

1.1 Overview of Digital and Financial Literacy

Digital financial literacy is a combination of digital literacy and financial literacy, with the combined concept often referred to as "Digital Financial Literacy" (DFL), and DFL is “financially literate on digital platforms” (Lyons & Kass-Hanna, 2021). Digital financial literacy is calculated by metrics of both financial literacy and digital literacy (Ravikumar et al., 2022).

Financial Literacy (FL) implies the capacity to apply financial knowledge and techniques to handle financial wealth and attain sound financial well-being is a prerequisite for financial literacy (FL), which includes an understanding of financial products and services (Xiao, Ahn, et al., 2014). Financial literacy is the ability to make prudent choices in various financial circumstances, enhance people's and society's financial health, and facilitate economic inclusion. It involves the ability, motivation, and confidence to apply one's education and experience to financial lessons and danger (Xu et al., 2022). Financial literacy is the capacity to make informed judgments about one's financial resources. It includes skills, understanding, and comprehension of financial concepts. It covers a wide range of topics related to personal finance, such as debt handling, borrowing, and investment.

A vital component of financial literacy is the capacity to understand and weigh the value, danger, and benefits of financial services and products, such as investments, credit cards, loans, and insurance (Lusardi & Mitchell, 2014a). According to a report by (World Bank, 2022), women in India are 35% more likely to access microloans through digital platforms after receiving financial literacy training. The Self-Employed Women’s Association (SEWA), for instance, has partnered with fintech providers to train rural women in digital literacy, enabling them to access affordable credit for their businesses.

Digital Financial Literacy (DFL)

Digital literacy (DL) is defined as “the ability to define, access, manage, integrate, communicate, evaluate, and create information safely and appropriately through digital technologies and networked devices for participation in economic and social life” (Alliance for Financial Inclusion, 2021; UNESCO Institute for Statistics, 2018).

Digital literacy is the ability to use and navigate technologies efficiently and responsibly. It includes the abilities, knowledge, and outlook needed to use digital tools, apps, and internet platforms for a variety of objectives, such as interaction, creativity, problem-solving, data retrieval, and analytical thinking. It involves adapting to evolving technologies in addition to continuously acquiring and enhancing digital skills (Martin, 2008).

“DFL” is defined as “acquiring the knowledge, skills, confidence, and competencies to safely use digitally delivered financial products and services, to make informed financial decisions and act in one’s best financial interest per individual’s economic and social circumstance” (Ravikumar et al., 2022). Morgan et al. (2019) state that the complex concept of DFL comprises "knowledge of digital financial products and services, awareness of digital financial risks, knowledge of digital financial risk control, and knowledge of consumer rights and redress procedures. According to the goal framing theory, people engage in a range of self-regulating actions to achieve their objectives, which include general well-being.

Digital financial literacy is defined as financial knowledge and four dimensions of digital literacy (digital knowledge, awareness, behavior of digital financial services, practical know-how of using digital financial services, and the ability to avoid digital fraud) (Choung et al., 2023).

Sub-dimensions of digital financial literacy (DFL) (Ravikumar et al., 2022; Choung et al., 2023)

Digital financial knowledge and awareness (DFLKA).

An individual's understanding of Knowledge of basic finance and DFS, Awareness of risk associated with DFS, attitude, Knowledge of controlling digital financial risk, and Knowledge of consumer rights and issue redressal (Morgan et al., 2020).

Digital financial behavior (DFLB). This dimension emphasizes the link between digital financial literacy and financial behavior, Basic knowledge and skill, Practical know-how, influence, perception, and capability to invest (Kass-Hanna et al., 2022a).

Digital financial management (DFLM).

This dimension focuses on the role of digital financial literacy in promoting sound Management of daily finance, the setting of financial goals, the ability to choose the right DFS, the usage of digital and financial knowledge, and satisfaction with DFS transactions (Alliance for Financial Inclusion, 2021; Bill and Melinda Gates Foundation, 2021; World Bank, 2022). Financial education can improve financial behavior, such as saving habits, spending patterns, and investment decisions. financial products, services, and concepts, which are crucial for making informed and effective financial decisions (Hung et al., 2012). Financial knowledge is essential for individuals to navigate the increasingly complex financial landscape, as it enables them to make better choices regarding savings, investments, insurance, and retirement planning (Lusardi & Mitchell, 2014a).

Additionally, the theory implies that people attempt to accomplish opposing or conflicting goals, which compels them to focus on higher-order cognitive processes. For example, impulsiveness (hedonic goal frame) might cause someone who is financially literate and has a saving attitude or gain goal frame to spend excessively or make bad investments. It should be emphasized as a result that a mix of external factors and behavioral control determines how many goal frames are taken into account when making decisions. By managing their finances digitally, women can reduce dependency on male family members for financial support. This independence has been especially notable among women in Bihar and Uttar

Pradesh, where traditional norms often restrict women's access to financial resources. Through digital financial literacy, these women have been able to set up personal bank accounts, use digital wallets, and increase their financial autonomy (UN WOMEN, 2020).

The World Bank (2022) report found that women who have their accounts, especially digital ones, are more likely to have control over their finances. Digital financial literacy helps women understand secure account management, which can reduce their dependency on others for financial transactions and protect them against financial exploitation.

1.2 Overview of Women Empowerment

Women's empowerment is a global initiative. The concept of women's empowerment was initially put forth at the 1985 global women's summit in Nairobi. Women's liberation has undergone significant change as a result of education, which has enabled them to take charge of their lives and defy social norms. Empowerment is about change, choice, and power. It is a process of change by which the individuals and groups with little or no power gain the power and ability to make choices that affect their lives. Women empowerment is a stage of acquiring power for women in order to understand their rights and to perform their responsibilities towards themselves and others in the most effective way (Sobha, 2021).

"Women empowerment is any process that provides greater autonomy to women through the sharing of relevant information and provision of control over factors affecting their performance" (Sayulu et al., 2005).

The following are important dimensions of women's empowerment (Das, 2022):

1. Education and literacy: Equitable access to education must be guaranteed for women and girls to be empowered. Education gives women the information, abilities, and self-assurance they need to make wise decisions and fully engage in society.

2. Decision-making capability and economic empowerment: This involves providing women with equal economic opportunities, such as access to employment, entrepreneurship, and financial resources. It includes promoting fair wages, eliminating gender-based discrimination in the workplace, and supporting women-owned businesses.

3. Freedom, Gender equality, and rights: Empowering women requires challenging and changing discriminatory attitudes, norms, and laws that perpetuate gender inequality. It promotes equal rights and opportunities for women in all spheres of life, including legal rights, political representation, and decision-making processes.

4. Leadership and participation: Encouraging women's participation in leadership roles and decision-making positions is crucial for their empowerment. This includes promoting women's representation in politics, business, academia, and other fields where they have historically been underrepresented.

5. Social and cultural change, Women Choice towards Progressive Attitude: Empowerment involves challenging and transforming social and cultural norms that limit women's potential and reinforce gender stereotypes. It requires promoting gender-sensitive attitudes, behaviors, and standards that value and respect women's rights and contributions.

The definition and measurement of women's empowerment have several issues. As many researchers and institutions have perceived and explained the concept in distinct approaches based on the different prevailing conditions, several indicators and methods are deployed for its measurement (Kapiga et al., 2019; Kazembe, 2020). Social empowerment refers to the key enablers that strengthen a woman's social relations and her position at the individual household level and society as a whole (Khursheed, 2022; Maldonado-Castro et al., 2024; Sinha et al., 2019). On the other hand, economic empowerment deals with the reinforcement of the role of

women in gaining greater control over resources, equal economic opportunities, and a strong sense of financial safety (Kabeer, 2011; Park & Mercado, 2015).

There are several indicators in the literature that are being utilized to measure women empowerment via some sub-categories such as self-sufficiency in decision-making, ownership of assets, autonomy from domination, no mobility restriction, earning status and their contribution in family income, participation in family purchases and spending, access to information and reproductive rights, taking part in political campaigns and public protests and involvement in development programs (Malhotra & Schuler, 2005; Rastogi & Ragabiruntha, 2018).

Many empirical studies have illustrated the social and economic facets of women, such as her earning position in the family, education, property ownership, and gender of household head as essential determinants of women empowerment (Demirguc-Kunt et al., 2018a; Fletschner & Kenney, 2014; Kaur & Kapuria, 2020). Economically empowered women tend to have a greater influence over the household decision-making process by contributing resources through earned income and greater efficacy in acting self-reliantly (Akhter & Cheng, 2020; Allen et al., 2021; Brulé & Gaikwad, 2021). Further, women empowerment has given considerable importance in the literature because women are likely to stand up for their rights, effectively able to manage money for personal wealth and secure their own and their child's well-being, experience less domestic violence, and promote efficacy in bargaining power over household saving and expenditure (Prina, 2015). Now, access to a formal financial system is an efficient instrument for women's empowerment as it facilitates broader financial and social inclusion (C.-Y. Park & Mercado, 2015). Demirguc-Kunt et al., (2018b) identified a list of indicators to measure access to finance, such as account ownership, use of accounts, savings, and borrowing from the formal financial system by adults of 148 economies in the world. The results reveal a substantial increment in account ownership across the world among males and females from the year 2011 to 2017. However, a significant

difference has been observed in account ownership by males and females in both high-income economies and in developing economies.

Sub-dimensions of women empowerment (WE) (Pal et al., 2022; Showkat et al., 2025; Venugopalan, 2014)

Women empowerment through financial autonomy and decision-making (WEFD). The Financial Autonomy and Decision-Making (EWFD) dimension focuses on women's ability to independently manage and make decisions regarding their finances (Sultana, 2011). Women's financial autonomy is central to Economic Empowerment of Women (EW), as it provides them with the freedom to control their financial resources, including income, savings, spending, and investments (Nisar et al., 2022). This level of autonomy is essential for promoting women's independence within households and communities, as emphasized by (Agarwal & Chua, 2020; Kabeer, 2005).

Women empowerment through access to financial resources (WEAFRS)

Access to Financial Resources and Security (WEAFRS) is another crucial sub-dimension of the Empowerment of Women (EW) (Okoi et al., 2022). It refers to women's ability to access and use financial services, such as savings accounts, credit, loans, insurance, and other financial products (Cole & Buel, 2000). This highlights that access to financial resources is essential for women's financial security, enabling them to plan for their future and reduce their financial dependence.

Women empowerment through participation in asset management and leading family financial planning (WEAP).

The dimension of Involvement in Asset Management and Family Financial Planning (EWAP) focuses on women's participation in managing household assets and financial planning (Ajzen, 2011). Active involvement in asset management and family financial planning is essential for the Empowerment of Women (EW) because it gives women a direct role in shaping the economic future of their families

(Stewart & Jürjens, 2018). Women's engagement in these activities contributes to their empowerment by enhancing their economic control and decision-making ability (Malhotra & Schuler, 2005).

Women empowerment through freedom, equality, and social & cultural change (WEFEC).

It is a fundamental human right and a key driver of social and economic development. In this dimension, empowerment is achieved through freedom, equality, and social and cultural change, all of which contribute to dismantling gender-based barriers and fostering inclusive societies. This dimension explores how freedom, equality, and social and cultural transformation contribute to women's empowerment, leading to a more just and progressive world (Simone & Lombardini, 2017).

The rise of female entrepreneurs and their economic impact has been vital for a developing nation. Women are starting to make an economic contribution through their distinct vocations. From their traditional roles as housewives, they have developed into important business leaders who possess the ability and drive to independently manage a firm, taking on any hurdles that may come in order to reap its benefits. The growing IT environment has given women entrepreneurs more opportunities to grow their businesses and achieve greater success. IT is another element that is acknowledged as being more significant in organizational operations and decision-making: the ability to conceive and benchmark work. It supports the positive behavior of female entrepreneurs in a given culture and society. (Andriamahery & Qamruzzaman.,2022)

Digital financial services can help a business grow far more efficiently than physical facilities and can result in prices that are up to 90% lower than those associated with cash-based services and transactions. Examples of these services include e-commerce platforms, debit and credit cards, and mobile money. Women's financial participation is one of the many powerful instruments available to us to

advance gender equality, but until we have a comprehensive grasp of the realities that women face, we will not be able to make headway in this direction. We are also looking into how women may use technology to overcome some of the social and cultural barriers that prevent them from becoming financially included. Allowing women to apply for accounts via an automated process, for instance, guarantees that agents who feel women shouldn't manage their finances won't reject them. Kristalina Georgieva, the interim president of the World Bank, likens the blind audition method that many big orchestras already employ to digital financial apps. She asserted that digital financial services "would do for women in business what the curtain has done for women in music." Given that the government provides cash transfers to 80 million unbanked women in developing countries, there is a significant opportunity to integrate and empower women financially. But only if we take into account the subtleties of how people make and spend money can this become a reality. Because of this, we work with governments on social payment schemes in three ways: by concentrating on women specifically, by digitizing supply-side payments, and by tailoring the program to their particular requirements. Women will only achieve and gain from inclusion when all three factors are considered (Hendriks, 2019).

The World Bank (2022) report found that women who have their accounts, especially digital ones, are more likely to have control over their finances. Digital financial literacy helps women understand secure account management, which can reduce their dependency on others for financial transactions and protect them against financial exploitation. Studies indicate that providing women with digital financial tools can boost economic participation.

1.3 Overview of Financial Resilience

Financial resilience, the terms "resilience" and "resiliency" have gained significant prominence in discourse since the onset of the mortgage meltdown and subsequent financial crisis. Financial resilience refers to an individual's capacity to endure and

recover from life circumstances that harm their income or assets. The longer-term perspective pertains to one's connection with finances. Financial inclusion initiatives aim to improve the accessibility of financial services for vulnerable populations, fostering greater inclusivity and financial resilience within societies. The rise of the fintech industry and digital means of payment, coupled with the fact that more than two-thirds of the world's population now owns a mobile phone, all indicate how digital financial literacy is now taking hold in societies worldwide. In response to this shift, it is time to reimagine financial literacy by blending it with digital literacy– something that has important implications for countries aspiring to adopt either a dual-track or a combination approach to improving the long-run resilience of households (Kass-Hanna et al., 2022). India has the highest percentage of inactive bank accounts in the world, at 35 percent (Dhanamalar et al., 2020). According to the Findex survey, 2021, more than 32 percent of women-owned bank accounts in the country are inactive. The country shows the highest gender gap in inactivity, with a difference of 12 percentage points. Surprisingly, fewer than one in five banked women save formally with the bank (World Bank, 2021).

"Women's financial resilience was a core criterion of the UNDP ICMIF Insurance Innovation Challenge and is a now core feature of each of the four winning projects, because empowering women isn't just a matter of equality - it's an essential strategy for sustainable development," said Tuga Alaskary, Technical Specialist, Risk Financing, and Gender Lead, UNDP Insurance and Risk Financing Facility. The ability to adapt creatively to unfavorable life events and function effectively in the midst of disruption, uncertainty, or difficult or hazardous situations is known as resilience. The ability to endure both positive and negative life events that affect one's assets and/or income is known as financial resilience (Xiao & O'Neill, 2011). Women with financial resilience are more likely to save regularly, providing them with a buffer against financial shocks such as job loss or unexpected medical expenses. According to the **Reserve Bank of India (RBI)**, households with

financially resilient women report having emergency savings that cover at least three months of expenses, resulting in a 20% reduction in economic hardship during crises (RBI, 2021). Financial resilience helps women build confidence in managing money, making them more likely to seek formal financial services. According to a **World Bank** report, financially resilient women are twice as likely to open bank accounts, access credit, and invest in financial products compared to women with low resilience. This financial confidence empowers women to plan for their future, breaking free from traditional dependencies (World Bank, 2020).

Your capacity to endure life events that affect your assets, or income is known as financial resilience. It is a more long-term strategy for your financial partnership. Being able to handle unforeseen costs indicates that you are a resilient person financially. These days, providers are integrating credit and insurance, as well as other financial services, into these platforms. Women's online data trails can provide insight into how equally they participate in the digital economy and how they might use finance and digital tools to seize new opportunities. Women's sex-disaggregated data can be used to inform goods and policies that promote greater empowerment.

At 35%, India has the largest percentage of dormant bank accounts worldwide. (Reserve Bank of India, 2021). Financial resilience helps women build confidence in managing money, making them more likely to seek formal financial services. According to a **World Bank** report, financially resilient women are twice as likely to open bank accounts, access credit, and invest in financial products compared to women with low resilience. This financial confidence empowers women to plan for their future, breaking free from traditional dependencies (World Bank, 2020). According to the 2021 Findex data, more than 32 percent of bank accounts held by women in India remain dormant. The gender gap in account inactivity is the biggest in the country, at 12 percentage points. Many women primarily use their bank accounts for government aid requests, emergency withdrawals, and wage

withdrawals; less than one-fifth of them save formally with the bank. Women continue to save money through informal structured groupings such as neighborhood savings groups (Dhanamalar et al., 2020).

Women with financial resilience have greater decision-making power within their households. According to the National Family Health Survey (NFHS-5), financially resilient women in India are 25% more likely to participate in decisions related to household spending, children's education, and healthcare. This increased agency empowers women to influence family welfare positively (Ministry of Health and Family Welfare & National Family Health Survey-5, 2019). Resilience is a multidisciplinary concept that incorporates knowledge from supply chains, organizations, psychology, economics, and ecology. An organization or individual that possesses resilience actively engages in and contributes to the growth of their local environment. Being resilient involves more than just being able to withstand harm or hazardous circumstances. Resilience can be defined as an individual's or an organization's ability to sustain a state of biological, psychological, and spiritual equilibrium in the face of potentially dangerous situations (Briguglio et al., 2009).

According to Cox & Hamlen (2014), there are five attributes that make people and organizations more resilient to the ups and downs of daily life. Positivity, attention, adaptability, organization, and activity are the five traits. Other facets of financial resilience have been brought to light by earlier studies. For instance, the idea of financial resilience has been increasingly popular in scholarly discussions, especially in relation to Activity, adaptability, attention, organization, and cheerfulness are these five attributes. A few more aspects of financial resiliency have been highlighted in previous research. For instance, the idea of financial resilience has become more well-liked in scholarly circles, especially when considering a changing business climate. According to Chinenyem & Omale (2022), companies must have substantial financial reserves, flexibility, and the capacity to foresee and recover from financial shocks to endure volatile market

conditions. Businesses with strong financial resilience are better able to withstand adversity and thrive. It enables them to manage long-term issues, identify and seize opportunities, and manage competition.

According to the OECD (2021), financial resilience is the "ability of individuals or households to resist, cope, and recover from negative financial shocks." Stevenson et al. (2022) have classified financial resilience measurement methodologies into two primary categories: objective and subjective. The ratio of financial assets to debt, debt to income, credit to income, or savings to income could be the target indicator. The subjective measurement includes measures of financial literacy and competence (e.g., financial knowledge and skills with behavior and attitudinal information), as well as the capacity to manage finances and deal with unforeseen financial shocks. “The ability to access and draw on internal capabilities and appropriate, acceptable, and accessible external resources and support in times of financial adversity" is what Salignac et al. (2019) specify as financial resilience. The binary notion of "financial inclusion" (service accessibility) has been significantly expanded to include a more complete and dynamic notion of "capacity to manage" financial strain over time. Salignac et al. (2019) define financial resilience as the capacity to endure adverse financial situations and adjust to changing circumstances. A multidimensional paradigm for financial resilience was introduced by Salignac, which included both objective and subjective measurements and covered four components: social capital, financial resources, financial knowledge and behavior, and economic resources. Economic resources include savings and the ability to raise money in an emergency; financial knowledge and conduct include self-assurance and a willingness to act; and financial resources include access to bank accounts and credit. Financially resilient women often become role models in their communities, promoting financial literacy among other women.

1.4 Sustainable Development Goal

The Sustainable Development Goals provide a comprehensive framework for advancing gender equality across multiple areas, from education and health to economic growth and political inclusion. Through targeted goals and collaborative efforts, the SDGs aim to dismantle the systemic barriers that hinder women's empowerment, thereby creating an inclusive and equitable world. By achieving these targets, societies can unlock the full potential of women and girls, ultimately leading to sustainable development for all" (Mackie & Allwood, 2022; United Nations Sustainable Development Group, 2019).

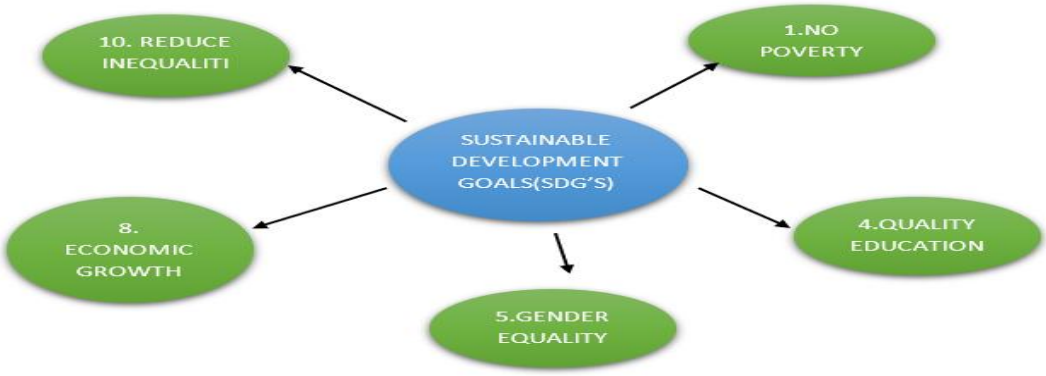


Figure 1.1 Elements of SDGs covered in Proposed Work

The Sustainable Development Goals (SDGs) promote gender equality through a multifaceted approach that aims to address economic, social, and environmental factors affecting women and girls worldwide. While SDG 5 is dedicated specifically to gender equality, the interconnected nature of the goals means that various SDGs collectively contribute to advancing gender equality by enhancing the availability of resources, chances, and rights for women. Here's how the SDGs promote gender equality in detail:

1. **SDG 5: Achieve Gender Equality and Empower All Women and Girls**

SDG 5 seeks to remove all types of discrimination against women, including in areas such as education, employment, and healthcare. This also involves creating equal opportunities in leadership, legislation, and economic participation.

2. **SDG 4: Quality Education**

Access to Education for All: SDG 4 promotes inclusive, equitable, quality education for all, aiming to eliminate gender disparities in education. Education empowers girls with knowledge and skills, enabling them to pursue better job opportunities, achieve economic independence, and make informed choices.

Promoting STEM Education for Girls: Specific emphasis on STEM education for girls under SDG 4 helps to reduce gender stereotypes in traditionally male-dominated fields, promoting equal opportunities in high-demand industries.

3. **SDG 8**: **Decent Work and Economic Growth**

Employment Equality: SDG 8 advocates for inclusive and sustainable economic growth, with full and productive employment for all. Addressing the gender pay gap, providing equal pay for equal work, and ensuring safe working environments are critical components that lead to financial independence and equality for females.

Promoting Women in the Workforce: Increasing women's participation in the workforce contributes to economic growth and raises household income levels, reducing poverty. When women are economically empowered, they can make decisions that positively affect their families and communities.

4. SDG 1: No Poverty

Poverty Reduction for Women: Since poverty disproportionately affects women, SDG 1 aims to reduce poverty and support social protection systems that benefit women and children. Addressing poverty is essential for gender equality, as it creates access to healthcare, education, and employment opportunities for women, breaking cycles of deprivation.

5. SDG 10: Reduced Inequalities

Equality of Opportunity: SDG 10 focuses on reducing inequality within countries, including inequalities based on gender. It addresses income disparities and

promotes social, economic, and political inclusion for women, particularly those in marginalized communities.

Social Protection Policies: Initiatives under SDG 10 support social protection systems that benefit women, such as maternity leave policies and other supportive structures that allow women to balance career and family life effectively.

1.5 Need for the Study

According to Global Findex (2021), 77% of adults in India now have a bank account, up from 53% in 2014. However, around 12% of women in India remain unbanked. Many females dwell in slum areas where digital financial literacy can provide access to online banking and mobile financial facilities, overcoming geographical barriers (World Bank, 2022).

Women are more likely to work in hazardous, low-wage, or underappreciated jobs. Gender inequities were even worse during the COVID-19 epidemic, which caused unprecedented job losses that predominantly affected women. Men and women do not have equal access to financial services. Even before the epidemic, women accounted for 56% of individuals without bank accounts, meaning that about one billion females do not have access to banking facilities (Kumar, 2020).

The use of digital payment systems like Unified Payments Interface (UPI) has skyrocketed in India. According to data from the RBI (2021), UPI transactions grew from around 800 million in 2018 to over 4 billion monthly transactions in 2021. Digital financial literacy enables women to use these platforms securely and confidently. Females must have equal access to insurance so they may benefit from risk management strategies, such as business insurance for female-owned businesses.

The **State-wise Sex Ratio at Birth (SRB) in India** from 2014-2015 to 2022-2023 reflects the number of girls live births per 1,000 boys' live births (Source: Ministry of Health and Family Welfare, Govt of India). This metric is a

critical reflector of gender balance and social dynamics in the country. Here's a breakdown of the trends observed in this data and their implications:

1. National Trend in Sex Ratio at Birth

- **Overall Increase in SRB**: The data from the **Ministry of Health and Family Welfare** reveals a gradual increase in the national average SRB over the years, from 918 female births per 1,000 male births in 2014-2015 to 935 in 2019-2020. This increase suggests improvements in gender balance at birth, likely due to government interventions like the *Beti Bachao Beti Padhao* (BBBP) campaign and increased awareness against sex-selective practices.
- **Provisional Data for 2022-2023**: The SRB data for 2022-2023 is provisional, which means further verification might adjust these figures slightly. However, the improvement trend appears to be consistent.

2. Variation across States and Union Territories (UTs)

- **Positive Trends**:
    - **Haryana**: Known historically for a low sex ratio, Haryana showed improvement from 876 in 2014-2015 to 918 in 2022-2023. This change can be attributed to focused government efforts against female feticide and cultural shifts within the state.
    - **Rajasthan**: SRB improved consistently, reaching 946 in 2022-2023, indicating a stable trend toward gender equality at birth.
    - **Punjab**: Another state with a traditionally low SRB, Punjab saw an increase from 892 in 2014-2015 to 927 in 2022-2023, reflecting a positive change.
- **Stable States**: Some states, such as **Kerala** and **Chhattisgarh**, have consistently maintained relatively higher SRBs, showing little variation over the years. For instance, Kerala's SRB remained close to or above 950

throughout the years, reaching 965 in 2022-2023. This stability is likely due to better gender equality and social awareness.

- **States with Declining Trends**:

Bihar: In contrast, Bihar's SRB dropped from 936 in 2014-2015 to 895 in 2022-2023, indicating a concerning trend and showing the requirement for renewed actions to address gender biases and improve health infrastructure.

3. Union Territories with Significant Fluctuations

- **Andaman & Nicobar Islands** and **Lakshadweep** show significant year-to-year fluctuations, possibly due to smaller populations where minor changes can result in pronounced SRB variations. For example, Andaman & Nicobar's SRB fluctuated from 967 in 2014-2015 to 962 in 2022-2023.
- **Ladakh** shows a notable increase in SRB, reaching 1,023 in 2022-2023, the highest in the dataset. This is unusual and could be due to local cultural factors or reporting discrepancies.

4. Insights and Possible Explanations

- **Impact of Social Campaigns**: Government initiatives, such as *Beti Bachao Beti Padhao*, have likely contributed to the positive shift in SRB across many states, especially in northern states with traditionally low sex ratios.
- **Healthcare Access and Reporting Improvements**: Improved access to healthcare and more accurate reporting through systems like the Health Management Information System (HMIS) might also contribute to the recorded increases in SRB.
- **Persistent Challenges**: Despite overall improvements, states like Bihar and UTs like Daman & Diu show persistent issues. These areas may require tailored interventions, including awareness programs and incentives for families to support girl children.

5. Gender Equality and Socio-Economic Factors

Higher SRBs in states like **Kerala** and **Chhattisgarh** correlate with better socio-economic indicators such as higher female literacy rates, better maternal healthcare, and increased participation of women in the workforce. Conversely, states with lower SRBs often have higher levels of gender disparity and socio-economic challenges, underscoring the importance of comprehensive social and economic reforms to promote gender equality.

The **State-wise gender Ratio at Birth (SRB) data from 2014-2015 to 2022-2023** highlights a positive national trend towards gender balance at birth, with variations across states reflecting cultural, socio-economic, and policy-related factors. Ongoing efforts to combat gender discrimination, equitable access to the healthcare system, and strengthening gender inequality programs are still necessary, especially in states and UTs with declining or stagnant SRBs, or at the same time, where the difference in account ownership by gender is documented. Globally, there is a 4-percentage-point sex ratio gap in account ownership, with 78% of men and 74% of women. Developing countries currently have a broader average margin of six percent, down from nine percentage points, following years of stagnation. In 2021, 74% of males and just 68% of females in developing economies had an account. (World Bank, 2022).

Gender, Income, age, education, and Workforce Gaps

Emphasis on Gender Equality

The General Assembly of the United Nations for Sustainable Development established 17 sustainable goals in September 2015 as part of its 2030 vision. Gender equality is a fundamental component of Vision 2030 Goal 5, which includes equal access to financial services, land ownership, and other types of property for women as one of its goals. In a similar vein, the June 2012 G20 Leaders' Declaration recognized gender equality in terms of financial and economic possibilities as part of the OECD's worldwide horizontal gender equality project.

Employment trends in India: Male and Female

PERIODIC LABOUR FORCE SURVEY (PLFS) ANNUAL REPORT [JULY 2023 – JUNE 2024]

National sample survey office, ministry of statistics and programme implementation, government of India

The National Sample Survey Office (NSSO) introduced the Periodic Labor Force Survey (PLFS) in April 2017 in association with the requirement for labor force statistics to be accessible at an increasingly frequent interval.

(a) Labor Force Participation Rate (LFPR): The percentage of the demographic that is either employed is known as the labor force participation rate, or LFPR.

(b) Principal activity status (ps) - The activity status on which a person spent relatively long time (major time criterion) during 365 days preceding the date of survey, was considered the usual principal activity status of the person.

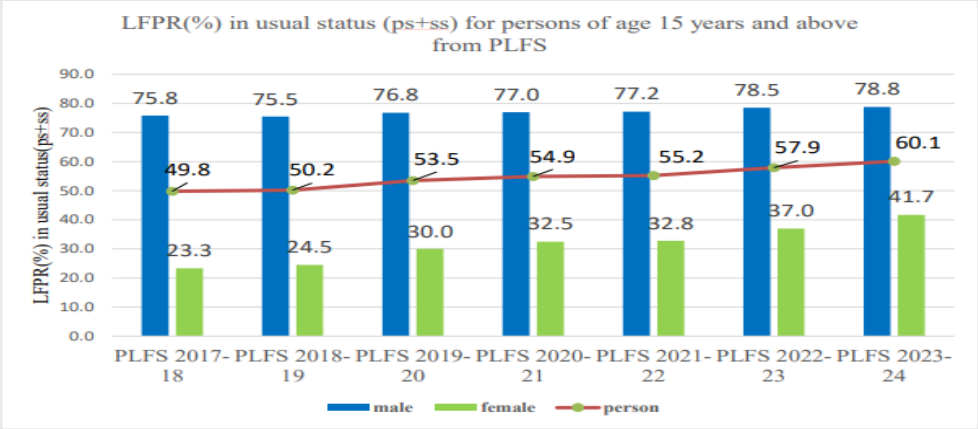
(c) Subsidiary economic activity status (ss)- The activity status in which a person in addition to his/her usual principal status, performs some economic activity for 30 days or more for the reference period of 365 days preceding the date of survey, was considered the subsidiary economic activity status of the person.

(d) Activity Status- Usual Status (ps+ss): The activity status of a person is determined on the basis of the activities pursued by the person during the specified reference period. When the activity status is determined on the basis of the reference period of last 365 days preceding the date of survey, it is known as the usual activity status of the person.

Table 1: Labour Force Participation Rate (LFPR) in usual status (ps+ss) for persons of age 15 years and above all-India									
Survey period	Rural			Urban			Rural+Urban		
	male	female	person	male	female	person	male	female	person
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2023-24	80.2	47.6	63.7	75.6	28.0	52.0	78.8	41.7	60.1
2022-23	80.2	41.5	60.8	74.5	25.4	50.4	78.5	37.0	57.9
2021-22	78.2	36.6	57.5	74.7	23.8	49.7	77.2	32.8	55.2
2020-21	78.1	36.5	57.4	74.6	23.2	49.1	77.0	32.5	54.9
2019-20	77.9	33.0	55.5	74.6	23.3	49.3	76.8	30.0	53.5
2018-19	76.4	26.4	51.5	73.7	20.4	47.5	75.5	24.5	50.2
2017-18	76.4	24.6	50.7	74.5	20.4	47.6	75.8	23.3	49.8
Note: (ps+ss) determined considering both principal activity status and subsidiary economic activity status 2023-24 refers to the period July 2023 – June 2024 and likewise for 2022-23, 2021-22, 2020-21, 2019-20, 2018-19 and 2017-18									

Table 1.1

Figure 1.2



• For those 15 years of age and older, the labor force participation rate (LFPR) in ordinary status (ps+ss) was 60.1% from July 2023 to June 2024. The figures were similar for men and women, 78.8% and 41.7%, respectively.

• For individuals who are 15 years of age and older, the overall LFPR in typical status (ps+ss) increased from 57.9% in July 2022 to June 2023 to 60.1% from July 2023 to June 2024. The LFPR for females in ordinary status (ps+ss) who are 15 years or older has increased from 37.0% in July 2022–June 2023 to 41.7% in July 2023–June 2024. During the same time period, the LFPR in ordinary status (ps+ss) for men in the same age group increased from 78.5% to 78.8%.

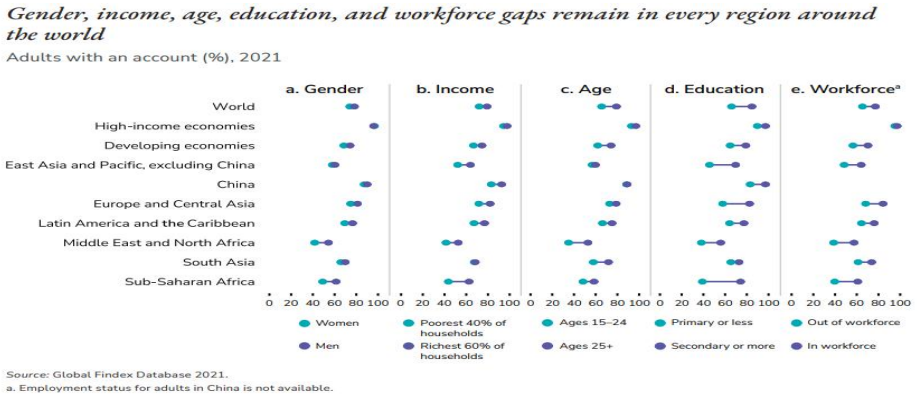


Figure 1.3 Gender, Income, age, education and Workforce Gaps

Work and social networks are the most popular ways for people in emerging economies to get emergency funds. They are still not as dependable as savings, though. Additionally, women are more likely than men to believe that getting emergency funding would be challenging. Compared to 59% of males, 50% of women in developing nations stated they could consistently find emergency funds. The region with the biggest gender disparity in financial resilience is Latin America and the Caribbean, where 39 percent of females and 56 percent of males, respectively, claim they can consistently obtain emergency funds.

Women may find it difficult to obtain emergency finances because, as was already mentioned, family is the most common source of funding in times of need and is therefore not always dependable. Women appear to find it more difficult to obtain cash from families in developing economies as well: compared to males, 44% of women say it would be extremely difficult for them to get emergency finances from their families, whereas 50% of women say it would be very tough. These variations might also be related to the makeup of men's social networks in contrast to women's. Men have more possibilities to build larger networks since they prefer to work outside the home.

This shows that females perform worse than males based on several factors that make them more likely to live in poverty. Although financial and economic

inclusion can lead to each other, gender dynamics impede women from attaining both at the same time. This needs to be addressed somehow. In favor of men and established businesses, commercial banks often ignore the women who comprise a significant and growing share of the informal sector. Much more is needed to change the current scenario, from formalizing MFIs to educating women about money, even though several microfinance institutions (MFIs) have stepped up to the plate, focusing mostly on women.

1.6. Current Initiatives on Financial Inclusion

The nationalization of banks in 1969 and 1980 marked the beginning of India's financial inclusion history. Although the nationalization of banks has a controversial history, one of its objectives was to extend the banking system to the nation's deprived areas. Even with inclusion, a sizable portion of the populace continued to be unaffiliated with the official financial system (Reserve Bank of India, 2008)

Beginning in 2005, the RBI encouraged banks to reach out to all segments of the public by providing minimal balance requirements and basic account services. According to data from the 2011 Census, just 58.7% of households in the nation have access to banking. In 2016, 99% of Indian families, both rural and urban, had access to financial institutions, according to a household study conducted by the nonprofit organization ICE 360 (Bhattacharya, 2016)

Financial inclusion that specifically targets women benefits not just the individual but also entire households. Studies show that females contribute greater percentages of their earnings to domestic consumption (Trivelli et al., 2018).

Pradhan Mantri Jan Dhan Yojana (PMJDY)

The Pradhan Mantri Jan Dhan Yojana (PMJDY), launched in 2014, has focused on enhancing financial inclusion by providing basic financial services to the underserved population. As of 2021, women held about 56% of the PMJDY

accounts, demonstrating the program's success in reaching female participants. Digital financial literacy can help these account holders better understand and utilize online banking, which promotes autonomy in financial management. The gender disparity in India's bank account access decreased from 20 to 6 percentage points between 2014 and 2017. The drive came from the (PMJDY), which was introduced in 2014 and aims to link mobile phones and direct biometric identification under Aadhaar with Jan Dhan bank accounts, which are basic savings accounts without a minimum balance requirement. This allows for direct financial transfers. Financial services can be delivered and accessed more quickly and efficiently through digital technology, as evidenced by the so-called Jan Dhan, Aadhaar, Mobile (JAM) trinity (D'Silva et al., 2019).

The government also gains from the DBT since it reduces costs associated with providing social security and removes middlemen. The Indian government is anticipated to have saved INR 44,000 crore in the fiscal year 2020–21 alone due to fewer duplicate names and fraudulent beneficiaries (Shishir Sinha, 2021). The government sent women INR 500 a month for three months in 2020 as part of what was arguably its most expansive cash transfer scheme to date to support homes throughout the pandemic. To enable women to secure funds, obtain loans, exchange payments, and manage risk, the principles of financial inclusion seek to provide them with access to a bank A/C and reasonably priced financial instruments. Savings and credit, which are seen as the cornerstones of financial inclusion, nonetheless have gaps. Less than one-fifth of women who have bank accounts formally save with the financial institutions; for many, their use is restricted to taking out money for unforeseen events, fetching their salaries, or receiving government assistance. females continue to secure money through casual structured groupings such as neighborhood savings groups. Over the past ten years, women's shares of total bank credit have increased, although at a much slower level than men's; the relatively low absolute levels of women's shares of bank credit remain

low. Women's share of total bank credit was only 7% in 2017, while men's was 30% (Chavan, 2020).

1.7 Business Problem:

The exclusion of women from the economy results in a significant opportunity loss for the nation, impacting GDP, overall welfare, and sustainable development. Similarly, excluding women from financial decision-making further hampers economic growth, reduces household and national prosperity, and limits progress toward an inclusive and equitable society. Empowering women in economic and financial spheres is essential for maximizing national potential and fostering long-term socio-economic development.

Despite the significant growth in branch networks and several government programs, a sizable portion of India's female population still does not have access to the formal banking system or the formal workforce. Women have fewer economic opportunities worldwide. Compared to 75% of men, less than half of all eligible women are employed (Gender and Financial Inclusion, 2023). Furthermore, females are more probably to work in lower-wage, vulnerable, or underappreciated jobs and informal employment. Recording the disparity between genders in account ownership around the world, 74 percent of women and 78 percent of men have accounts, representing a 4-percentage-point gender discrepancy. After years of staying the same, the average difference in developing economies has shrunk from nine percentage points to six. Only 68% of women in developing countries held an A/C in 2021, compared to 74% of males (Global Financial Index 2021). Despite making up 48% of the population, women only make up about 17% of India's GDP, in respect to 40% in China. Additionally, the document noted that job development was initially a top priority for PM Modi's administration. However, his administration hasn't done much to improve working women's chances. More than two/third of India's 1.3 billion inhabitants reside in

rural areas, where this is particularly true (Prashar, 2023). Additionally, it would treble the expected rise in GDP produced by female workers internationally between 2014 and 2025, according to the analysis. Despite making up 50% of the working-age population globally, women only account for 37% of the global GDP in the 95 countries that were evaluated. The GDP contribution of each region as a whole conceals significant regional disparities. In India, women only make up 17% of the region's output; in the Middle East and North Africa (MENA), they make up 18%; and in South Asia (without India), they make up 24%. In China, North America, Oceania, Eastern Europe, and Central Asia, the percentage is between 40 and 41 percent.

Financial decision-making encompasses behavioral characteristics and how they influence investment intention, as well as aspects like financial literacy and related ideas like knowledge and skills. Undoubtedly, financial inclusion and literacy will increase people's financial empowerment, but it remains to be seen if these measures will lower the financial vulnerability of low-income households, particularly for women.

Summary

It highlighted the critical role of digital financial services in empowering women and emphasized the increasing importance of financial literacy in today's world. The need for research in this area is urgent, as financial exclusion and lack of literacy hinder women's ability to make informed financial decisions and reduce their economic vulnerabilities. This chapter has set the foundation for the study by providing an overview of the research's objectives and the structure of the work. The next chapter will delve deeper into the existing literature on the subject, providing a comprehensive review of the concepts and studies that form the basis for this research

CHAPTER 2

Literature Review

Overview

The purpose of this chapter is to critically examine and summarize the existing body of knowledge on the intersections of digital financial literacy, financial resilience, and their effects on women's empowerment. The rapid growth of digital finance has introduced new avenues for individuals to engage with financial products and services, but the extent to which digital financial literacy influences women's financial resilience and empowerment remains underexplored. This chapter aims to consolidate previous research to better understand these interconnections.

An in-depth literature review was conducted using academic databases such as Scopus, Science Direct, and Google Scholar. The search was driven by keywords including "digital financial literacy," "financial well-being," "financial resilience," "financial decision-making," "investment behavior," and "women empowerment." The review focused on experimental studies written in English and published in peer-reviewed journals between 2010 and 2024. Initially, 1,045 items were observed, of which 85 articles met the criteria for inclusion.

2.1 Digital financial literacy and financial accessibility:

Digital financial literacy is increasingly recognized as a crucial competency in the modern economy, particularly in the context of digital disruption. This literature review synthesizes findings from various studies, highlighting the interplay between digital and financial literacy, their impact on economic inclusion, and the challenges faced in promoting these literacies.

The four components of digital financial literacy—digital knowledge, awareness of digital financial services, practical understanding of using digital financial services, and the capacity to prevent digital fraud—are classified as financial knowledge. Across all sociodemographic groups, digital financial literacy showed substantial effects and had larger marginal effects on financial well-being than financial knowledge (Choung et al., 2023). Digital financial literacy enhances individuals' ability to navigate financial technologies, leading to improved financial behavior and decision-making (Jose & Ghosh, 2024). Digital financial literacy is crucial for economic stability, enabling individuals to navigate digital financial services. It comprises comprehending online financial activity, awareness of hazards, and knowledge of consumer rights, combining financial and digital literacy to make informed financial decisions (Gumilar et al., 2024).

Financial well-being has received substantial attention from scholars and policymakers around the world as a measure of financial health in the aftermath of financial disasters. Furthermore, financial inclusion has been a top priority for developing countries in their efforts to relieve poverty and integrate marginalized populations into the traditional financial system. Furthermore, the transformation in digital technology and financial services has overcome access and usage constraints by achieving digital financial literacy (Kamble et al., 2024).

The results show that digital financial knowledge (DFK), digital financial experience (DFE), and digital financial skills (DFS) have a significantly negative impact on impulsive behavior but a significantly positive impact on self-control. Additionally, the study shows that while self-control has a positive impact on financial well-being, impulsive behaviour has a negative impact. The study highlights how little students in Andhra Pradesh's higher education institutions worry about long-term financial planning (Bhat et al., 2024).

Reducing economic inequality and enhancing financial inclusion in developing nations requires digital finance. Digital financial literacy (DFL) is a crucial factor

that influences the extent to which this function may be used, given the digital and financial aspects of digital finance. Empirical evidence linking DFL to rural income disparity is scarce (G. Xu et al., 2024). With the rapid advancement of digital financial products and services, including mobile payments, digital credit, and digital investment, traditional definitions and measuring indicators of financial literacy are inadequate in capturing the distinct characteristics of digital finance. Thus, an increasing number of experts assert the necessity for more research on financial literacy in the context of financial digital transformation (Lyons & Kass-Hanna, 2021). Digital financial literacy encompasses the knowledge and skills necessary to navigate financial systems securely in the digital economy. It includes recognizing online financial risks, understanding digital security measures, and employing best practices to protect against cybercrime and fraud (Ogunola et al., 2024). The knowledge and abilities required to use digital financial services efficiently are referred to as digital financial literacy. The research indicates that higher financial literacy significantly enhances the use of digital finance, particularly in online borrowing and financial products, especially among disadvantaged groups (Yang et al., 2023).

Studies indicate that DFL significantly influences financial behavior, promoting better financial decision-making and self-control among individuals, particularly students (Bhat et al., 2024). The country's financial system can now help more citizens, especially the impoverished and those who were previously financially excluded, thanks to digital financial inclusion. Robust financial frameworks support the expansion of both new and established enterprises. (Kass-Hanna et al., 2022b).

Poor internet connection and low cell phone use are the major barriers to financial inclusion, according to this study, which uses ICT data from Thailand to provide a focus on the factors influencing net banking among the elderly. Gender differences do not exist in financial inclusion. This study reveals the characteristics that affect

net banking among the elderly using ICT data from Thailand. It shows that poor connection and less cell phone use are the major hindrances to financial inclusion (Bui & Luong, 2023). Through the processes of entrepreneurship and financial inclusion, we found that financial literacy lowers poverty, depending on region and gender. These findings suggest that, mostly in Tanzania, Kenya, and Uganda, financial literacy lowers poverty. In addition to improving our knowledge of the link between financial literacy and poverty, the results can direct contextually relevant activities and policies (Koomson et al., 2023).

We identify five barriers to adoption and fifteen characteristics that promote the use of digital financial transactions (DFTs). According to the research, the main factors impacting the adoption of DFTs include perceived usefulness, perceived simplicity of use, compatibility, trust, security, effort expectation, performance anticipation, and enabling circumstances. According to the research, major barriers to DFT adoption include perceived danger, complexity, expense of usage, unwillingness to change, and privacy concerns (Kajol et al., 2022).

To investigate the relationship between fintech innovation and corporate transformation, the fintech development index was developed using factor analysis and text mining techniques. The results show that fintech innovation promotes transformation, sustainably grows the real economy, and greatly increases the overall factor productivity of real enterprises. The information effect and the resource allocation effect are the two main ways that fintech development affects the development of business organizations (Luo et al., 2022). Despite the increasing interest in financial inclusion (FI) among scholars and policymakers, the impact of digital finance (DF) on FI remains little researched. DF improves access to, availability of, and utilization of financial services in the MENA area and the overall financial inclusion level (Al-Smadi, 2023)

This paper looks at the causal links between the GCC region's adoption of Digital Payment Systems (DPS) during the study period and the public and private sectors'

digitalization of utility service payments, emergency fund access, and electronic payment processing. Using the quadruple helix paradigm, the findings demonstrated that, when it came to financial inclusion—that is, increasing access to a transaction account with a debit card attached—the use of DPS by its members to meet their consumption demands between 2013 and 2017 had no discernible impact on social well-being. This seems to require greater financial inclusion strategies, like facilitating credit card ownership, savings accounts, and loans (Niankara, 2023).

Financial literacy has attained global significance over time, mostly due to the growth of capital markets, the increased diversity of financial items attainable to consumers, and the financial requirements associated with the heightened participation of individuals in microeconomics. This fact necessitates the incorporation of an appropriate amount of foreign language instruction into education. Economic transformations also impact nations within the Latin America and the Caribbean (LAC) area. Nevertheless, studies concentrating on delineating the financial literacy of residents from these nations are limited (Méndez Prado et al., 2022).

This study observes the relationship between financial satisfaction and confidence in financial knowledge. The multivariate analysis's findings indicate that overconfidence (underconfidence) in one's financial literacy is positively (negatively) correlated with greater financial contentment and negatively (positively) correlated with lower financial happiness (Pearson & Korankye, 2023). In order to evaluate the influence of technical skills, financial literacy, and women's empowerment, the research aims (Adil et al., 2022) to ascertain women's entrepreneurial growth. The findings demonstrated a statistically significant positive correlation between sustainability in entrepreneurship and women's empowerment. Furthermore, the mediating effects on women's empowerment were shown. According to the study's findings, the economy as a whole must enact

reasonable legislation pertaining to financial accessibility, the advancement of technological expertise, and financial understanding in order to assist women-owned enterprises. These laws would make progress toward women's empowerment possible (Andriamahery & Qamruzzaman, 2022).

The purpose of this study is to look at how gender disparities in investment decisions are impacted by behavioral biases, including overconfidence, risk aversion, herd mentality, and disposition. The authors also look into the moderating effect of financial knowledge on the relationship between gender-specific investment choices and behavioral biases. According to the study's findings, risk aversion and herding had a negative and statistically significant influence on male investors' investment decisions, whereas overconfidence had a positive and statistically significant impact. However, the disposition was shown to have no statistically significant impact. The results demonstrated that female investors' investment decisions were negatively and statistically significantly impacted by risk aversion and herd mentality (Adil et al., 2022).

This study examined how financial literacy relates to the connection between green microfinance and women's empowerment. Financial literacy acts as a mediator in part of the interaction between women's empowerment and green microfinance. An option to mainstream women's empowerment in local development is financial literacy based on local wisdom (Lee & Huruta, 2022). Lack of financial literacy and sophistication are significant problems since they affect a person's well-being for a long time. The Baby Boomer generation, which was 51–56 years old in 2004, knew very little about inflation. This could be because they had not experienced inflation in the past or because they were in their 20s during the period of high inflation in the 1970s and early 1980s. On average, planners accumulate three times the wealth of non-planners. Another variable is the degree of planning. others who create and stick with a plan end up accumulating much more wealth than others who just plan (Lusardi & Mitchell, 2014b).

Those who used mobile payments had lower financial vulnerability than those who did not, and women were more likely than men to use digital payment technology (Seldal & Nyhus, 2022). It is observed that Mexicans' levels of financial education vary and are specific to each demographic group. Particular findings from sociodemographic characteristics are found to be predictive of the likelihood that Mexicans who are eighteen years of age or older will correctly respond to the financial literacy questions. The study's findings give Mexico evidence regarding certain demographic groups that exhibit notable disparities in financial literacy, including those with low educational attainment, women, the disabled, retirees, low-income individuals, those outside the financial system, and those without prior financial education training (Mejía et al., 2022). This study examines the extent to which high school girls' financial literacy is enhanced by the financial literacy program Invest in Females (IIG). The curriculum was improving the students' financial capabilities and encouraging them to investigate the variety of career paths accessible in finance, according to the findings of the longitudinal study (Park et al., 2021).

Within the context of the regional economy of the Gulf Cooperation Council, this study examines the causal link between demand-side financial inclusion indicators and social acceptability of digital payment systems (DPS). The findings demonstrated that in terms of financial inclusion, increasing access to a transaction account with a debit card attached, the use of DPS by its members to meet their consumption needs did not substantially impact social well-being between 2013 and 2017 (Niankara & Traoret, 2023).

This study examines the effects of multifaceted measures of financial and digital literacy on resilience-building financial behaviours, such as borrowing, risk management, and saving, using data from the Inter Media Financial Inclusion Insights surveys for seven South Asian and Sub-Saharan African nations. The results repeatedly demonstrate that fostering diversity and financial resilience

requires a strong foundation in digital and financial literacy. There are geographical and poverty-related heterogeneities for rural, female, and disadvantaged families. Additionally, a robustness check is provided to address any endogeneity (Lyons et al., 2020).

This study looks at how financial literacy and automated investing technology affect people's intentions to invest in the capital markets in the early phases of the pandemic. The researchers discovered that students' inclination to invest in capital markets was influenced by automatic investing technology and financial knowledge. The majority of students with a moderate degree of financial literacy closely followed those with low and high literacy scores. Furthermore, it didn't seem that the students' financial literacy scores could be impacted just by their backgrounds in economics and finance (Aisa, 2021). The study's findings contribute to the corpus of research demonstrating how digital technology and financial literacy may improve the influence of digital financial services on MSME owners' financial behavior (Angeles, 2022).

The purpose of this study is to examine the relationship between digital financial literacy and consumers' perceived financial behavior in the Kuwaiti setting. Additionally, it will examine the relationship between financial behavior and digital financial literacy in greater detail. The results showed a significant relationship between financial behavior and digital financial literacy, with an R2 value of 0.581, a p-value of 0.000, and a path coefficient of 0.542. Significant connections between many facets of digital financial literacy and other facets of financial behavior were found in the exploratory model. More specifically, the best indicators of financial behavior were knowledge, financial awareness, and decision-making (Abdallah et al., 2025).

The goal of this research is to confirm how financial literacy and digital proficiency among college students affect their intention to start their businesses and how entrepreneurship acts as a mediator. The study's findings support the need for

additional education by demonstrating the critical importance of financial literacy, digital proficiency, and entrepreneurialism for college students to support start-ups and adjust to new trends in the quickly evolving job market following COVID-19 (Kang et al., 2024).

Understanding why individuals use fintech and how it impacts their access to financial services was the main goal of this study. It also took into account the moderating influence of perceived regulatory support and the mediation function of digital financial literacy. The results demonstrated that trust, perceived security, and service quality are all important factors in promoting the usage of FinTech services. This study also shows how FinTech facilitates access to formal financial services, hence promoting financial inclusion. Furthermore, it has been discovered that digital financial literacy plays a key mediating role in the adoption of FinTech and financial inclusion. The study also showed that perceived regulatory support considerably moderates the relationship between FinTech and financial inclusion (Amnas et al., 2024).

By employing behavioral change theory and cyber financial literacy to uncover significant and related variables, this study validated positive motivating influences on digital financial skills and capabilities. The results demonstrated the constructive relationship and relationship between the knowledge and motivation components. It helps small business owners continually improve their skills and talents. These individuals need to increase their digital financial literacy in order to keep up with the growth in business and innovation that has occurred since the COVID-19 outbreak (Uthaileang & Kiattisin, 2023).

This study looks at the connection between quality of life (QoL) and financial literacy. The study also looks at how the association between financial literacy and quality of life is mediated by leisure and fintech adoption. The findings highlight the importance of digital literacy in an increasingly digitalized society by illuminating the mediating function of fintech adoption in the relationship between

financial literacy and quality of life. Leisure also affects the mediating relationship. Current research on the relationships between leisure, perceived autonomy, and internal locus of control supports the idea that people who have plenty of free time are more likely to see the risks and uncertainties of new technology with hope. Digital literacy is a necessary component of financial literacy in order to utilize cutting-edge technologies for more effective financial management (Kakinuma, 2022). New fintech services like peer-to-peer lending, robo-advisors, and Insurtech are being embraced by tech-savvy households more and more. To find out how digital literacy and financial literacy complement each other to enhance wellbeing, further study may be conducted. To better understand the link between financial inclusion and sustainable development in Cameroon, this study looks at the mediating effects of financial literacy and the moderating function of social capital. This study's main drawback was that it only looked at Cameroon and a few other developing nations while taking SD, the variable of interest, into account. A cross-national investigation will be necessary because sustainable development is a concern for many African countries. Given the cross-sectional character of the study, a longitudinal approach is required to ascertain the long-term effects of FI on SD. The convenience sampling strategy further constrained this investigation. This can result in skewed research and inaccurate representation (Lontchi et al., 2022).

This study looks at the combined effects of digital literacy on two behaviors that are similar but fundamentally different from one another: security control behavior and e-payment continuing intention. The experimental results of the study demonstrate that the digital literacy platform is responsible for customers' desire to use the electronic payment system just once and for increased security behavior (Nguyen et al., 2024). This study aims to investigate the relationship between college students' financial behaviors and their financial well-being, taking into account their financial education, financial inclinations, and demographic and

financial factors. Means comparisons revealed significant disparities in the degree of financial well-being across different socioeconomic characteristics and financial practices. When demographics, financial traits, and financial dispositions were considered, OLS regression analysis showed a substantial correlation between financial well-being and obsessive buying, saving, budgeting, and using credit cards in a risky way. Overall, this study found a correlation between college students' financial activity and financial well-being after controlling for financial dispositions, demographics, and financial characteristics. The financial stability of college students was generally favorably connected with sound financial behaviors, with the exception of budgeting (Gutter & Copur, 2011).

This study looks at novel variables related to web browsing and uses them as probability of default (PD) predictors in survival analysis. Our empirical results shed light on how people use the internet, demonstrate how non-standard factors might enhance lending decisions and credit risk score models, and maybe offer a solution to the thin file issue. Our findings also point to a direct benefit to the online retail credit sector, as businesses may take advantage of the growing consumer trend of embracing digital environments (Rozo et al., 2023).

The moderating effect of fintech self-efficacy (FSE) on the attitude-investment intention relationship is also examined in this paper., Notwithstanding the sample's preponderance of Muslim investors, the present study provided important new information about the variables affecting Malaysians' propensity to invest in IUTs through extended TPB. All Malaysians, regardless of their religious beliefs, should be included in future studies. Future research should use an experimental and longitudinal examination for a deeper understanding, as this study also used a cross-sectional research approach. According to the study's findings, attitude, subjective norms, IFL, religion, and FSE may explain 43.1% of the variation in the intention construct ($R2 = 0.431$). The dependent variable may also be further explained by combining several drivers, such as personality factors (Hassan et al., 2024).

The importance of digital and financial literacy for women's empowerment and attaining sustainable development goals is emphasized in the article. It emphasizes how, in spite of current educational and cultural constraints, these literacies improve women's access to information, entrepreneurship, and financial independence (Mishra et al., 2025).

2.2 Financial inclusion and Women empowerment

This research, which uses ICT data from Thailand to shed light on the factors impacting net banking among senior citizens, finds that the two main obstacles to financial inclusion are inadequate internet connections and low mobile phone use. There are no gender differences in FI. This study uses Thai ICT data to shed light on the characteristics that encourage older adults to utilize mobile banking. It also shows that the biggest barriers to financial inclusion are the absence of internet access and mobile phone use (Bui & Luong, 2023).

The study aims to determine how financial inclusion impacts the financial well-being of working women and to ascertain how financial inclusion affects financial well-being while accounting for the arbitrating role of financial capability. The results demonstrate a significant and positive direct beta without mediation between working women's financial well-being and financial inclusion, suggesting partial mediation. According to research, there is a positive and important relationship between financial capability and financial well-being (Rashid et al., 2022).

This study looks at how human capital is affected in SSA nations by financial inclusion and income inequality. According to our research, human capital is improved by increased financial inclusion and a reduction in economic disparity (Huang et al., 2023). This study uses a sample of 60 low- and middle-income countries to investigate the combined impacts of financial inclusion and foreign remittance inflows on economic growth over the 1996–2017 period., The results suggest that remittances' capacity to promote growth may be enhanced by financial inclusion. Therefore, the study aids in understanding the development conundrum

of remittance inflows and financial inclusion in order to assist the economic progress of the nations that send migrants (Ali Bare et al., 2022). The results indicate that personal remittances have an asymmetric effect on economic growth; positive remittance shocks negatively influence economic growth, whereas negative shocks have a positive effect, resulting in an overall positive impact. Both FD and INQ exert a favorable impact on long-term EG. No evidence exists to support the threshold impact of foreign direct investment on economic growth (Islam & Alhamad, 2022).

To evaluate the effect of technical skills, financial literacy, and women's empowerment, the research aims to ascertain women's business skills development. The findings demonstrated a statistically significant positive correlation between sustainability in entrepreneurship and women's empowerment. Furthermore, the mediating effects on women's capability were shown. According to the study's findings, the economy as a whole must enact reasonable legislation pertaining to financial accessibility, the advancement of technological expertise, and financial understanding in order to assist women-owned enterprises. The progress of women's empowerment would be made possible by these laws (Andriamahery & Qamruzzaman, 2022).

This study examined how financial literacy relates to the connection between green microfinance and women's empowerment. Financial literacy acts as a mediator in part of the interaction between women's empowerment and green microfinance. Financial literacy grounded in local knowledge might serve as a stand-in for mainstreaming women's empowerment in local development (Lee & Huruta, 2022). Using the project-level Women's Empowerment in Agriculture Index (pro-WEAI) and the abridged Women's Empowerment in Agriculture Index (A-WEAI), the study examines the effect of SHG membership on women's empowerment in agriculture using panel data from 1470 rural Indian women across five states. According to the study's findings, participation in SHGs significantly improves

measures of women's empowerment in general and closes the gender gap in empowerment ratings. This gain in overall empowerment is being driven by improvements in women's scores rather than a decline in men's. Second, although not included in the paper, qualitative research on how men and women perceive empowerment can shed further light on the various elements that both facilitate and hinder empowerment. A greater understanding of these structures is crucial for them to receive higher results on their evaluation. However, there aren't many effects on other aspects of empowerment (Kumar et al., 2021; Quisumbing et al., 2022).

This study is to ascertain whether the female members of SHGs operating microbusinesses in Uttarakhand's rural areas are aware of the workings and importance of bank credit. To ascertain whether the SHG functionaries who are specifically targeting women are aware of the terms and conditions and the current status of the credit facility they have obtained from the Bank, and to determine how satisfied women working for Self-Help Groups are with the bank-provided credit facilities., Women SHG members with bank credit have extremely low literacy rates. Rural women still lack familiarity with the banking system and lack confidence when seeking bank credit. When the funds are not used appropriately or do not yield the expected returns, they are left to handle the matter on their own. The loans are provided to fulfill the priority sector lending objective and are not tailored to the requirements (Pathak & Pant, 2018).

This article will conduct a thorough, methodical literature analysis to identify the factors influencing women's financial inclusion, the gender gap that arises from it, and the importance of promoting greater financial inclusion for women. To map the present state of a studied issue and expand our understanding, literature reviews are necessary. To guarantee comprehensive coverage, this study looks at 75 peer-reviewed publications published between 2000 and 2021. The findings are presented using a conceptual model (Roy & Patro, 2022). The synthesized evidence

indicates that demand-side issues are the primary cause of gendered financial inclusion. Numerous social and cultural factors are also believed to have an impact on women's financial exclusion.

The aspects of global financial inclusion are covered in this essay, along with how they affect the UNDP's goal of achieving universal development. According to the findings, advancements in financial inclusion pave the path for better economic growth, gender equality, women's empowerment, and universal access to high-quality education. Additionally, it simultaneously reduces the infant mortality rate and income inequality (Huang et al., 2023). This study looks at how human capital in SSA nations is affected by financial incorporation and income inequality. We discover that financial incorporation is a significant factor in determining human capital since it makes money available to everyone, especially the less fortunate, and therefore improves a nation's overall economic circumstances (Niankara, 2023).

The acquisition of digital payment solutions (DPS) by the general public in the local economy of the Gulf Cooperation Council is examined in this study in connection with demand-side financial inclusion indicators., The findings demonstrated that, in terms of financial inclusion—that is, increasing availability to a transaction account with a debit card attached—the use of DPS by its members to meet their consumption needs did not substantially impact social well-being between 2013 and 2017 (Shaikh et al., 2022).

The objectives of this study were to determine the role of mobile money agents in the shift from traditional to mobile money services and to investigate how mobile money services may be a dependable force behind digital financial inclusion. We discovered that a significant factor in promoting financial inclusion is the interactions and exchanges that take place between the customer, the agent, and the digital financial platform made possible by mobile money technology, or FinTech.

The consumer is empowered in large part by the agent. Customer empowerment is significantly impacted by the caliber of agent services (Ghosh, 2022).

The study looks into how women's financial inclusion is affected by their political empowerment in India., Research suggests that women's political empowerment has a significant impact on how women behave (Kass-Hanna et al., 2020). This study examines the effects of diverse financial and digital literacy initiatives on resilience-building financial practices, such as risk management, borrowing, and saving. This is done using information from the Inter Media Financial Inclusion Insights surveys for seven countries in South Asia and Sub-Saharan Africa. The results continually reveal that developing diversity, and financial resilience requires a strong foundation in both digital and financial literacy. Heterogeneities exist for disadvantaged, rural, and female families, as well as regionally. Additionally, a robust check is included to resolve any endogeneity (Setiawan et al., 2024).

Recognizing the elements that affect women's adoption and use of financial technology (Fintech) services. According to this study, the value of the status quo had the greatest influence on use behaviour in the post-COVID-19 era, and attitude had the most impact on explaining behavioural intention. Government support and digital financial literacy have a minor impact on the association between behavioural intention and usage behaviour, while the value of the status quo has a major influence. The results also showed that different urban and rural populations' consumption habits are affected differently by government aid. These results underline the necessity of a fresh government approach to promote Fintech adoption among Indonesian women in both urban and rural regions (Ashoer et al., 2024).

The purpose of this study is to forecast the variables that influence digital financial inclusion and mobile fintech apps from the viewpoint of Indonesia's Bottom of the Pyramid (BOP) population. Regarding constraints and further studies, these could include other variables that could improve the current theory. Moreover,

broadening the sample coverage can boost the range of conclusions drawn about the items (Agboola & Tunay, 2023). The study aims to include a comprehensive analysis of the several ways that ICT supports urban sustainability and a look at how it influences stakeholder involvement and participation in these sustainability projects., According to the study's implications for the Engineering Application Potential, building smart cities requires efficient use of information and communication technology (ICT) and construction. This means that the impact, design, and implementation of ICT-based programs must be thoroughly thought out in Nigeria (Afjal, 2023).

In this work, bibliometric analysis is done on the research conducted between 2010 and 2023 on how digital financial services could help with financial access and economic development Biblioshiny and VOS viewer were used to analyze 695 papers that were chosen from the Scopus database., Future research might examine specific ways that digital financial services could help with global concerns including poverty alleviation, gender equality, and climate change mitigation. All things considered, by looking at these novel trends and lines of inquiry, the academic community can keep improving our knowledge of the relationships among FinTech, financial inclusion, and economic development. This will contribute to the development of evidence-based policies and procedures that optimize the potential of digital financial services to promote shared prosperity and inclusive growth (Amnas et al., 2024). By considering the moderating impact of perceived regulatory support and the mediating function of digital financial literacy, this study aimed to understand why consumers adopt FinTech and how it impacts their access to financial services. The results showed how crucial high-quality services, perceived security, and trust are in promoting the usage of FinTech services. This study also showed how FinTech increases access to formal financial services, hence promoting financial inclusion. Additionally, it has been shown that digital financial literacy is an essential link between financial inclusion and FinTech

adoption. The study also demonstrated that the association between FinTech and financial inclusion is significantly moderated by perceived regulatory support.

This study examines the cross-sectional variation in the link between stock market participation and financial literacy in emerging economies, specifically in Pakistan. The study's findings indicate that stock market participation is often higher among those with greater financial literacy. This study also supports the gender gap in stock market involvement and financial literacy. Additionally, it has been shown that participation in the stock market is favorably correlated with age, education, and income (Md Kassim et al., 2018).

This study aims to investigate the relationship between women's financial wellness in community-based organizations and financial competence, as well as the role that decision-making skill plays as a mediator in this relationship., To support women from middle-class or lower-class families in making financial decisions, financial social workers should concentrate their efforts on enhancing their financial literacy. Women connected to community-based organizations have greater opportunities for financial socialization and appropriate guidance. Government officials and other professionals can take advantage of this chance to improve their financial situation and help these women become more empowered, starting at the local level (Parvathy & Kumar, 2022).

2.3 Financial decision making and financial resilience

The purpose of this study is to provide empirical support for adapting the fundamental ideas of prospect theory (PT) to the Argentine setting. This study's primary focus was on how students in the economic-administrative academic program at two public and private institutions in Córdoba make financial decisions. By confirming that people base their financial decisions on the PT independent of their gender, degree course, semester, level of progress, or type of university (public or private), this study contributes to the empirical findings in a distinct Latin American scenario (Ladrón de Guevara Cortés et al., 2023).

The paper looks at current research and advancements in biodiversity finance and green finance to determine why financial decision-making is driven to ignore biodiversity problems and usually falls short of optimizing biodiversity conservation or nature-positive financing. Based on the deficiencies found, the research provides four recommendations for integrating biodiversity into financial decision-making: Because finance only views some parts of nature as "bankable," and the destruction of other parts has no value to the investor, either positively or negatively, regulation must limit the exploitation of nature; (2) financial risk evaluations related to biodiversity must focus on local risks due to the local nature of biodiversity impacts and dependencies (like the global risks associated with climate finance, for example); (3) scale biodiversity finance using its secondary benefits, especially in conjunction with climate finance; and (4) financial decision-makers must co-lead and support the development of biodiversity finance (Nedopil, 2023).

The results of an experiment (N=420) reported in this research imply that psychological traits moderate risk-taking behavior in such situations. The results imply that underlying (idiosyncratic) emotions and desires, rather than a true belief in control, are at least partially responsible for "illusion of control" effects. In terms of applicability, the findings highlight how crucial individual traits are to decision-makers' actions in a financial setting (Schütze et al., 2024). This study compares the impact of financial literacy on the process of making financial decisions for adults and adolescents. The goal of this study is to ascertain how the two groups' varying degrees of financial literacy affect their decision-making processes. According to the study's findings, one's capacity to make sound financial judgments improves with more financial literacy. According to this study, a person's financial behaviour is greatly influenced by their financial decisions and level of financial literacy. Individuals' financial decision-making process is significantly influenced by their degree of financial literacy (Adelia, 2024).

Examining how different behavioural, psychological, and demographic factors impact people's capacity for financial decision-making is the aim of this study. By restating how crucial it is to use an integrated approach for better decision-making, where each system may produce the best outcomes in a variety of situations. The following strategies are used to accomplish this: (a) examining the subtle but important contributions that behavioural and psychological factors make to FDM; (b) thinking about the connection between these factors and FDM and broadening the scope of the literature that already exists; (c) assessing the moderating effects of gender on the determinants of FDM; and (d) finally drawing conclusions from the observations (Kumar et al., 2023).

This study's goal is to present a thorough analysis of how the COVID-19 pandemic has impacted digital financial ecosystems by accelerating the financial services industry's widespread digitization, which has already been largely completed in both developed and developing nations. The country's financial system can now help more citizens, especially the impoverished and those who were previously financially excluded, thanks to digital financial inclusion. Robust financial frameworks support the expansion of both new and established companies (Kass-Hanna et al., 2022).

This study systematically reviews literature on sustainability principles in financial risk management, highlighting benefits like improved organizational resilience, reputation, and stakeholder relationships, while addressing challenges such as limited resources and low awareness, and recommending supportive regulations and investment in predictive technology (Wahyuni et al., 2024). The study employs a qualitative literature review methodology to explore financial education's role in enhancing SME resilience. It highlights determinants of resilience, community-led interventions, and the positive correlation between financial literacy and SME performance, contributing important views for decision-makers and practitioners (Sutomo, 2024).

The study emphasizes that resilience is crucial for banks to effectively tackle emerging challenges and risks. It highlights the need for banks to enhance resilience through strategic planning, security fortification, and compliance with regulations to thrive in a competitive environment (Sylvia et al., 2024). The paper reviews financial resilience literature, analyzing how vulnerability factors and anticipatory capacity affect municipalities' coping abilities during economic instability. It emphasizes the importance of understanding these vulnerabilities for effective public management and future crisis preparedness (Sutton et al., 2023).

The study carries out a systematic review of the literature on the connection between organizational resilience, sustainability, and financial performance. It highlights current trends and debates in financial resilience in the context of sustainability and synthesizes findings from 116 studies found in major databases. (Neacșu & Georgescu, 2024). The paper does not provide a literature review on financial resilience. It focuses on COVID-19 business support in four European countries, analyzing coping responses and the impacts of support programs on bankruptcies and employment figures (van Helden et al., 2024). The paper reviews financial resilience literature by identifying key determinants such as income stability, savings behavior, and financial literacy. It emphasizes the importance of understanding diverse demographic responses to economic stressors and the effectiveness of coping mechanisms for enhancing resilience (Kakde, 2024).

The paper emphasizes financial resilience as crucial for households, particularly highlighted by the COVID-19 pandemic. It explores predictors of saving behavior through the Theory of Planned Behavior, integrating digital financial education to enhance understanding of financial resilience in a digital context (Rahayu et al., 2023; Rahayu et al., 2024). The paper conducts a scoping systematic review focusing on resilience to natural hazards within economics and business literature. It highlights the importance of financial resilience in mitigating impacts and enhancing recovery from such events (Schöllhorn et al., 2023). The study provides

a structured literature analysis on behavioral finance, highlighting prejudices affecting investment choices, including emotional, cognitive, and financial biases. It emphasizes the role of financial literacy and risk perceptions in moderating these biases in financial decision-making (Amgain, 2024).

The study highlights that financial decision-making importantly impacts women's financial empowerment, emphasizing the role of digital financial literacy, financial attitude, and government support in enhancing women's financial capabilities and investment intentions, aligning with gender equality and economic growth goals (Mishra, Agarwal, et al., 2024). This paper systematically reviews the literature on behavioral biases in financial decision-making, highlighting the shift from classical to behavioral finance. It emphasizes cognitive limitations and psychological tendencies that influence individual investors, market dynamics, asset pricing, and investment strategies (Kanapickiene et al., 2024).

2.4. Research Gaps (RG)

The literature analysis makes clear that most research on financial capability focuses on consumers, millennials, and emerging adults; very few studies measure women's financial capability (Sultana, 2011). In a similar vein, the majority of research is carried out in industrialized nations like Asia and Europe. Comparably, a dearth of studies on evaluating women's financial decision-making, since the maximum number of studies spotlights financial incorporation and literacy rather than behavioral factors, in addition to similar knowledge and skills (Haque & Zulfiqar, 2016). There is currently no research of this kind that demonstrates how women's empowerment is affected by digital financial literacy (Ravikumar et al., 2022). The majority of research on women focuses on financial empowerment and financial literacy; however, no research examines the behavioral dimensions of women's empowerment and financial resilience. Therefore, it is critical to understand how digital financial literacy influences women's financial resiliency

and ability to make financial decisions and influences their overall development and growth (Setiawan et al., 2024; Sherwani et al., 2023; Sundarasen et al., 2023).

RG1 Insufficient empirical validation and comprehension of Digital financial literacy significantly influence women's empowerment (Rahman & Rahman, 2023).

RG2 Impact of Financial Resilience on women empowerment (Holloway et al., 2017).

RG3 Impact of the Digital financial literacy on financial resilience (Lusardi et al., 2021; Klapper & Lusardi, 2020).

RG4 Examining the moderating impact of financial resilience on digital financial literacy and women's empowerment (Xiao & O'Neill, 2011; OECD., 2021).

RG5 Recommending measures to improve the financial decision making and Intention towards investment of women.

2.5. Research Problem

To examine the Impact of Digital Financial Literacy on Women Empowerment, considering the mediating effect of financial resilience (FR).

2.6. Research Questions

RQ1 What is the impact of digital financial literacy (DFL) on women empowerment (WE)?

RQ2 What is the impact of digital financial literacy (DFL) on financial resilience (FR)?

RQ3 What is the impact of financial resilience (FR) on women empowerment (WE)?

RQ4 Does Financial Resilience (FR) mediate the relationship between Digital Financial Literacy (DFL) and Women Empowerment (WE)?

RQ5 What measures are required to improve Women empowerment (WE)?

2.7 Research Objectives

RO1 To examine the impact of digital financial literacy (DFL) on women empowerment (WE).

RO2 To examine the impact of digital financial literacy (DFL) on financial resilience (FR).

RO3 To analyze the impact of financial resilience (FR) on women empowerment (WE).

RO4 To examine the impact of digital financial literacy (DFL) on women empowerment (WE) by considering the financial resilience (FR) as a mediating variable.

RO5 To suggest measures so that the empowerment of women (WE) can be improved.

2.8 Rationale of the study

1. The research concerns the evaluation and analysis of digital financial literacy (DFL) on women empowerment (WE) of women in Uttar Pradesh and Uttarakhand, and the study of the relationship between the two.

2. This research will provide information on how financial resilience (FR) affects the digital financial literacy (DFL) and women empowerment (WE), which will assist in increasing their quality of life.

3. This research will have policy implications for organizations creating financial literacy and financial inclusion programs since it will focus not only on the information and skills related to financial literacy but also on women's behavioral elements.

4. This research might be important for researchers and government bodies to design programs for improving the empowerment of women (WE), thus also helping in the improvement of their efficiency.

2.9. Theoretical Background

People in behavioral science and behavioral finance are regarded as irrational because they have limited access to knowledge, make varied financial judgments, behave differently in various contexts, and derive utility from snap decisions. To the extent that they are able, their financial choices can affect people's financial health.

2.9.1 Theory of Planned Behavior (TPB)

Theory of Planned Behavior, which was presented by Ajzen in 1991.

According to the theory of planned behavior (Ajzen, 1991), three elements influence intentions: perceived behavioral control, attitudes, and subjective norms. Behaviors are then determined by intents. Depending on how much behavior is truly under the individual's control and how well perceived behavioral control reflects actual behavioral control, external forces may also directly compel or prohibit behaviors, regardless of the intention.

Strengths:

1. **Focus on Intentions:** TPB is highly effective in predicting behaviors that are under volitional control by focusing on behavioral intentions.
2. **Clear Constructs:** The constructs (attitudes, subjective norms, and perceived behavioral control) are well-defined and relatively easy to measure.
3. **Predictive Power:** TPB has been shown to have strong predictive validity in a variety of behavioral domains, such as health behaviors, environmental behaviors, and consumer behaviors.

Comprehensive View of Influencing Factors

TPB takes into account a wide range of factors that can influence behavior:

- **Attitudes** represent the person's assessment of the behavior, whether favorable or unfavorable.

- **Subjective norms** are concerned about the social influences or pressures from classmates, family, and society while deciding whether to participate in the behavior.
- **Perceived behavioral control** captures how much control or ability an individual believes they have over performed the behavior.

TPB's prediction accuracy is strengthened by the comprehensive model that this mix of internal and external elements offers to explain behavior.

According to TPB, attitudes, subjective norms, and perceived behavioral control influence intentions and actions. In this study, TPB is employed to understand women's perceptions of digital financial literacy (DFL) and their corresponding Digital financial behaviors (DFL-B), which are integral to achieving economic empowerment.

TPB contends that intentions and behaviors are influenced by attitudes, perceived behavioral control, and subjective standards. In order to comprehend women's views on digital financial literacy (DFL) and the associated digital financial behaviors (DFL-B), which are essential to attain economic empowerment, TPB is used in this study.

1. Attitudes indicate the value placed on Digital financial knowledge.

2. Subjective norms encompass social influences on Digital financial behavior, and

3. Perceived behavioral control reflects confidence in managing finances effectively.

She et al. (2023) support the importance of understanding these factors in understanding proactive financial behavior. TPB enables examination of how 'Digital financial literacy' leads to adoption and use of Digital financial services, along with financial decision making and accessibility, contributes to 'women's empowerment'. This study advances existing research by analyzing the interactions

among these constructs and their combined impact on women's financial inclusion and autonomy in the digital era. these constructs and their hypothesized relationships, encapsulating the interconnected pathways through which TPB explain women's DFS adoption and economic empowerment.

Theory of Planned Behavior (TPB)

Three different groupings of factors are identified and derived using the theory, and they include the following:

(a) Attitude Influencing Women Empowerment (WE)

Vargas-Sánchez et al. (2016) state that attitude includes a person's opinions and assessments of a certain thing, person, or circumstance, in addition to their inclination to react favorably or unfavorably to a given concept, thing, person, or circumstance. There is strong evidence that financial attitude and financial literacy have a favorable impact on financial behavior, according to research by (Rai et al., 2019). Even while financial literacy (FL) itself may not have a significant influence on investment choices (IDs), investigating the link between FL and IDs can provide valuable insights into investor behavior (Brooks & Williams, 2021; P. Kumar, Pillai, et al., 2023; Maheshwari et al., 2024).

(b) Subjective norms/prescriptive influencing women empowerment (WE)

Subjective norms, also known as prescriptive influences, are the perceived societal pressures people experience to engage in or refrain from engaging in particular behaviors. Subjective norms in the context of financial decision-making include the impact of friends, family, coworkers, and cultural expectations on financial behaviors, including spending, investing, and saving. According to the social influence theory, people are frequently driven to adopt the attitudes and actions of others around them, which may have a big impact on their financial decisions (Khaw et al., 2023).

Individuals often face pressure to align their financial behaviors with the expectations of their social circles. For instance, if saving for retirement is highly valued among peers or family, individuals may feel compelled to prioritize this goal (Ajzen, 1991). This pressure to conform can lead people to make financial decisions that are socially acceptable, even if they may not align with their personal preferences.

Broader cultural and societal norms also impact financial choices. In cultures that prioritize collective welfare, for example, there may be greater encouragement for conservative financial behaviors, like saving and risk aversion, to ensure stability for the group. Conversely, individualistic societies may encourage riskier financial behavior, such as investing in stocks, as a form of self-advancement. With the rise of social media, prescriptive influences extend beyond immediate social circles. Online forums, influencers, and digital communities can create strong norms around financial products and strategies, driving trends like the popularity of certain stocks or cryptocurrencies (White et al., 2019).

(c) Perceived behavioral control influencing women empowerment (WE)

Perceived behavioral control (PBC) refers to an individual's belief in their capability to carry out a specific behavior, based on factors like available resources, skills, and perceived obstacles. In financial decision-making, PBC influences how empowered people feel to take control over financial matters such as saving, investing, and budgeting. According to Ajzen's Theory of Planned Behavior (1991), PBC is a key determinant of behavioral intention and, by extension, actual behavior, meaning that individuals with high perceived control over their finances are more likely to engage in proactive financial behaviors.

High PBC can help individuals overcome perceived barriers to financial success, such as limited income or lack of investment knowledge. For instance, someone who believes they have the knowledge or resources to navigate financial markets is more likely to make investment decisions despite risks or market volatility (Ajzen,

1991). PBC also plays a role in how individuals respond to financial stress. Those who feel more in control of their finances tend to have greater resilience during economic downturns, as they feel capable of adjusting their strategies to cope with the stress. This resilience can reduce impulsive or fear-driven decisions, helping them maintain long-term financial goals (Sharahiley, 2020).

When individuals perceive themselves as having sufficient control over financial outcomes, they may feel more confident in taking calculated financial risks, such as investing in stocks or starting a new venture. Conversely, individuals with low PBC may avoid risky financial decisions, even if they have the resources, due to fear or perceived lack of control (Lusardi & Mitchell, 2014a). Perceived behavioral control can motivate individuals to seek financial education and create plans, as it instills a belief that they can control and improve their financial situation. This is especially evident in retirement planning, where people with high PBC are more probably to set retirement goals and actively save for the future (Xiao, Chen, et al., 2014).

A social psychology theory called the Theory of Planned Behavior (TPB) examines how behavioral, normative, and control beliefs interact to explain human behavior. Since Icek Ajzen first put out the idea in 1991, it has been extensively applied in a wide range of disciplines to comprehend and forecast human behavior.

Perceptions of behavior: These reflect the knowledge about the activity in question. The intentions and behaviors of an individual are either determined by or influenced by their beliefs. Three components comprise beliefs.

According to the TPB, behavior is determined by three types of belief:

1. Perceived consequences of behavior and the evaluation of those effects are known as behavioral beliefs.
2. The evaluation of perceived social pressure to engage in behavior or abstain from it is known as normative beliefs.

3. The perceived barriers or facilitators of a behavior, as well as the evaluation of those barriers and facilitators, are known as control beliefs.

According to TPB, these three types of beliefs influence a person's subjective norm, behavioral objectives, and behavior, which in turn determine how they feel about a behavior. In a number of fields, including marketing, environmental conservation, and health promotion, the concept has been applied to comprehend and predict behavior. The TPB is a useful tool for developing behavior-changing interventions and for predicting intentions and behavior in a range of contexts. According to the Theory of Planned Behavior, people weigh the consequences of their choices before making reasonable judgments. When there are explanations accessible and a decision needs to be made, both the Theory of Reasoned Action and the Theory of Planned Behavior are pertinent (Ajzen, 2005).

The Theory of Planned Behavior states that a person's conduct is ultimately determined by the intent to engage in a particular behavior. Attitude, or how well or poorly a person feels about engaging in the behavior; subjective norm, or how well a person feels about social pressure to engage in the behavior; and perceived behavioral control, or how well a person feels about their ability to engage in the behavior in question, are the three factors that in turn affect intentions.

2.9.2. Theory of Planned Behavior (TPB) in comparison to other theories

The Theory of Planned Behavior (TPB) stands out among behavioral theories due to its comprehensive inclusion of attitudes, subjective norms, and perceived behavioral control as key predictors of intentional behavior. Here's a comparison of TPB with other prominent behavioral theories:

1. Theory of Reasoned Action (TRA)

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA) and shares several foundational elements with it. Both theories emphasize the role of attitudes and subjective norms in shaping an individual's behavioral intentions, operating on the assumption that intentions guide behavior.

However, a key distinction lies in TPB's inclusion of perceived behavioral control as an additional factor influencing behavior. Unlike TRA, which assumes individuals have complete control over their actions, TPB acknowledges that external factors, such as time, money, or skill limitations, can restrict one's ability to carry out intentions. This addition makes TPB more applicable for predicting behaviors in real-world situations where individuals may encounter barriers.

2. Social Cognitive Theory (SCT)

Both the Theory of Planned Behavior (TPB) and Social Cognitive Theory (SCT) emphasize the significance of self-efficacy, a concept similar to TPB's perceived behavioral control, as a key factor in determining behavior. Additionally, both theories recognize that environmental factors can influence behavior. However, there are notable differences. Developed by Albert Bandura, SCT places greater emphasis on the dynamic interaction between personal factors, environmental influences, and behavior, a concept known as reciprocal determinism. SCT also highlights observational learning and the role of reinforcement, whereas TPB focuses more specifically on predicting intentional, deliberate actions shaped by attitudes, norms, and perceived control. The strength of TPB lies in its straightforward approach; while SCT offers a broader, more complex framework for understanding behavior, TPB’s emphasis on behavioral intentions and social norms provides a simpler, more direct model for predicting specific, planned behaviors.

3. Transtheoretical Model (TTM)

Both the Theory of Planned Behavior (TPB) and the Transtheoretical Model (TTM) are widely used in behavior change interventions, particularly for health-related behaviors like smoking cessation and exercise. However, they differ in their approach. TTM focuses on the stages of change—pre-contemplation, contemplation, preparation, action, and maintenance—that individuals go through when modifying behavior, offering a framework to understand progression over

time. In contrast, TPB does not delineate stages but rather identifies key factors that affect an individual's wish to act at any point. The strength of TPB lies in its clear identification of behavior predictors, namely attitudes, subjective norms, and perceived behavioral control. TTM, on the other hand, is particularly useful for understanding the different phases of behavior change, allowing for tailored interventions that align with the individual's current stage.

4. Self-Determination Theory (SDT)

Both the Theory of Planned Behavior (TPB) and Self-Determination Theory (SDT) explore the motivations behind individuals' engagement in certain behaviors, acknowledging the significance of personal attitudes and external influences. However, they differ in focus and emphasis. SDT distinguishes between intrinsic and extrinsic motivation, highlighting the necessity of fulfilling basic psychological needs for autonomy, competence, and relatedness as essential for fostering motivation. In contrast, TPB concentrates more specifically on the predictors of intentional behavior, including attitudes, subjective norms, and perceived behavioral control, rather than on the types of motivation driving those behaviors. The strength of TPB lies in its structured approach to predicting and influencing behavior through intentions and social influences, while SDT provides valuable insights into the quality and nature of motivation, enriching the understanding of what drives individuals to act.

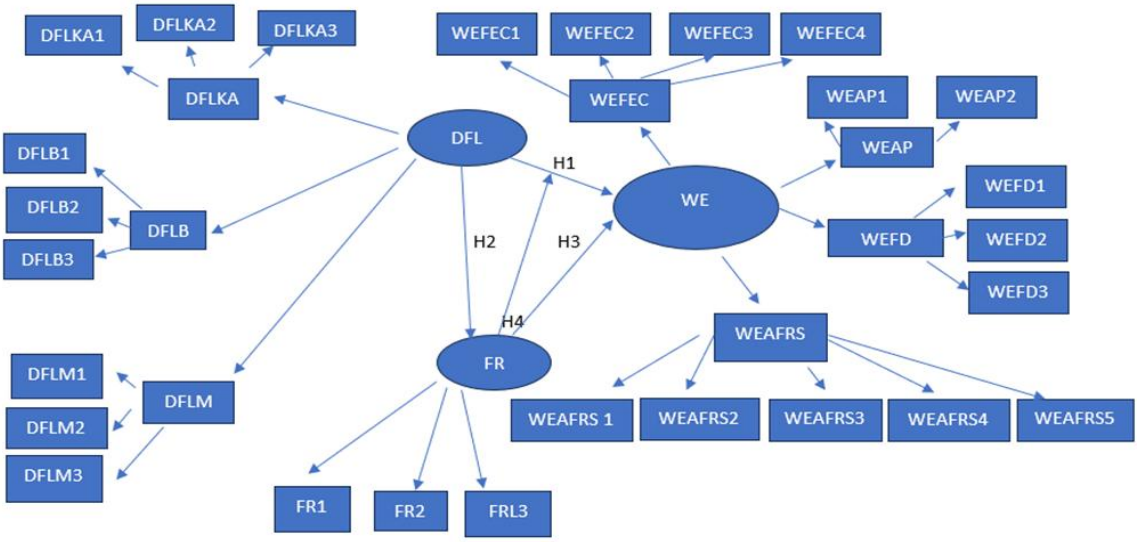


Figure 2.1. Conceptual Model

DFL	**Digital financial literacy**
DFLM	**Digital financial literacy management**
DFLB	**Digital financial literacy behavior**
FR	**Financial Resilience**
WEAP	**Women empowerment through involvement in asset management and family financial planning**
WEFEC	**Women empowerment through freedom, equality, social & cultural change**
WEAFRS	**Women empowerment through access to financial resources and security**
WEFD	**Women empowerment through financial decision making**
WEFEC	**Women empowerment through freedom, equality, social & cultural change**

Table 2.1 Variable Used

2.10. Conceptual Model

2.10. Conceptual Model:

In this study, different types of variables or factors are recognized and drawn from the theory, which is stated below:

2.10.1 Digital financial literacy (DFL) Influencing women empowerment (WE)

Empowerment is a critical aspect of women's autonomy and well-being, and digital financial literacy plays a vital role in this process (Rahman & Rahman, 2023). Kabeer (2005) discusses the importance of financial decision-making capabilities in achieving economic empowerment, which financial literacy directly enhances. This empowerment is reflected in women's ability to participate in the economy,

negotiate better employment terms, and make informed business decisions (Doepke et al., 2011). Financial literacy directly influences women's economic participation, leading to greater empowerment through informed and strategic financial choices (van Rooij et al., 2011). Based on the aforementioned literature, it has been postulated that:

H1: Digital financial literacy (DFL) has a significant effect on Women Empowerment (WE**).**

2.10.2 Digital financial literacy (DFL) Influencing Financial resilience (FR)

Clark & Mitchell (2022) observed that the receipt of stimulus checks correlated with greater financial resilience. Financial literacy enhances financial resilience, while their studies lacked empirical support and an in-depth exploration of mechanisms, particularly during economic shocks (Klapper & Lusardi, 2020; Lusardi et al., 2021). Kass-Hanna et al. (2022b) investigated the impact of digital financial literacy on resilience-enhancing behaviors, but did not provide a precise measurement of financial resilience, nor did they assess its impact in the context of economic disturbances. Our study distinguishes itself by developing a dynamic indicator for assessing financial resilience and systematically exploring the impact of digital financial literacy on financial resilience.

H2: Digital financial literacy (DFL) has a significant effect on financial resilience (FR).

2.10.3 Financial resilience (FR) influencing Women empowerment (WE)

Being financially resilient can have transformative effects for women. When women actively participate in the financial system, they can better manage risk, smooth consumption in the face of shocks, or fund household expenditures like education (Dupas & Robinson, 2013). Providing low-income women with the right financial tools to save and borrow money, make and receive payments, and manage risk is important for women's empowerment, but also for poverty reduction, especially since women disproportionately experience poverty (Holloway et al.,

2017). Building financial resilience leads to greater empowerment by enabling individuals to make informed and strategic financial decisions. Based on the aforementioned literature, it has been postulated that:

H3: Financial resilience (FR) has a significant effect on Women empowerment (WE).

2.10.4 Financial resilience acts as a mediating factor in the relationship between digital financial literacy (DFL) and women empowerment (WE)

Resilience is the ability to adapt imaginatively to complex life events and function effectively in the face of adversity, hardship, or danger. The ability to endure both positive and negative life events that affect one's assets and/or income is known as financial resilience (Xiao & O'Neill, 2011). One of the hypotheses put forth in the study was to examine the impact of financial resilience on the connection between digital financial literacy and women empowerment (WE). According to Yeo et al. (2023), the implementation of prudent financial planning techniques is the foundation for financial resilience. The research found a strong and significant correlation between financial literacy and financial resiliency (P. Kumar, Islam, et al., 2023; Seraj et al., 2022). Financial resilience acts as a protective factor, empowering women to take calculated risks (like investing) and endure economic hardships without falling into financial distress. For women with low financial resilience, despite having access to digital financial tools or knowledge, the fear of financial instability may prevent them from acting on their investment intentions, thus impacting their empowerment (Lusardi et al., 2021). The presence of financial resilience enables women to strategically use the knowledge and tools provided by digital financial literacy to enhance their long-term financial security, which in turn strengthens their economic empowerment.

H4: Financial Resilience (FR) acts as a mediating factor in the relationship between Digital Financial Literacy (DFL) and Women Empowerment (WE)

CHAPTER 3

Research Methodology

3. Research Methodology

3.1 Selection of Research Approach:

Based on study requirements, the researchers selected an appropriate study type. A systematic literature review (SLR) was conducted for the Literature Review to analyze all the literature and provide a constructive analysis that explores, identifies, and provides solutions for potential issues for future research. According to (Massaro et al., 2016), a systematic literature review (SLR) is a systematic process of reviewing scholarly literature to deduce insights, provide critical reflections, identify potential new research directions, and ask research questions. The SLR approach gathers all relevant articles in terms of a particular research question and considers them in a systematic way (Mukherjee et al., 2017).

It helps make the review impartial and transparent. It is exhaustive and not as casual as a traditional review (Alan Bryman, 2012; Choong, 2014). This article first searched, identified, and reviewed the financial inclusion and sustainable development literature from 2013 through to 2024 through the use of terms like 'digital financial literacy', 'financial well-being', 'financial resilience', 'financial decision making', 'investment behaviour', 'women's empowerment' and combined these as the subject coverage. The papers were then screened and filtered after identifying the boundaries of the review scope to the scientific qualification type e.g., 'empirical, review papers', etc. It was first sifted through articles of higher quality and higher impact, which are provided in electronic databases, such as Scopus, Web of Science (WoS) /Social Science Citation Index (SSCI)/ Journal Citation Report, which holds a list of academic journals that have an IF. This search locates and identifies potential sources of review (Paul et al., 2017).

PRISMA FLOW DIAGRAM: PRISMA flow diagram illustrating the progression of the search in the identification and screening of sources for systematic review.

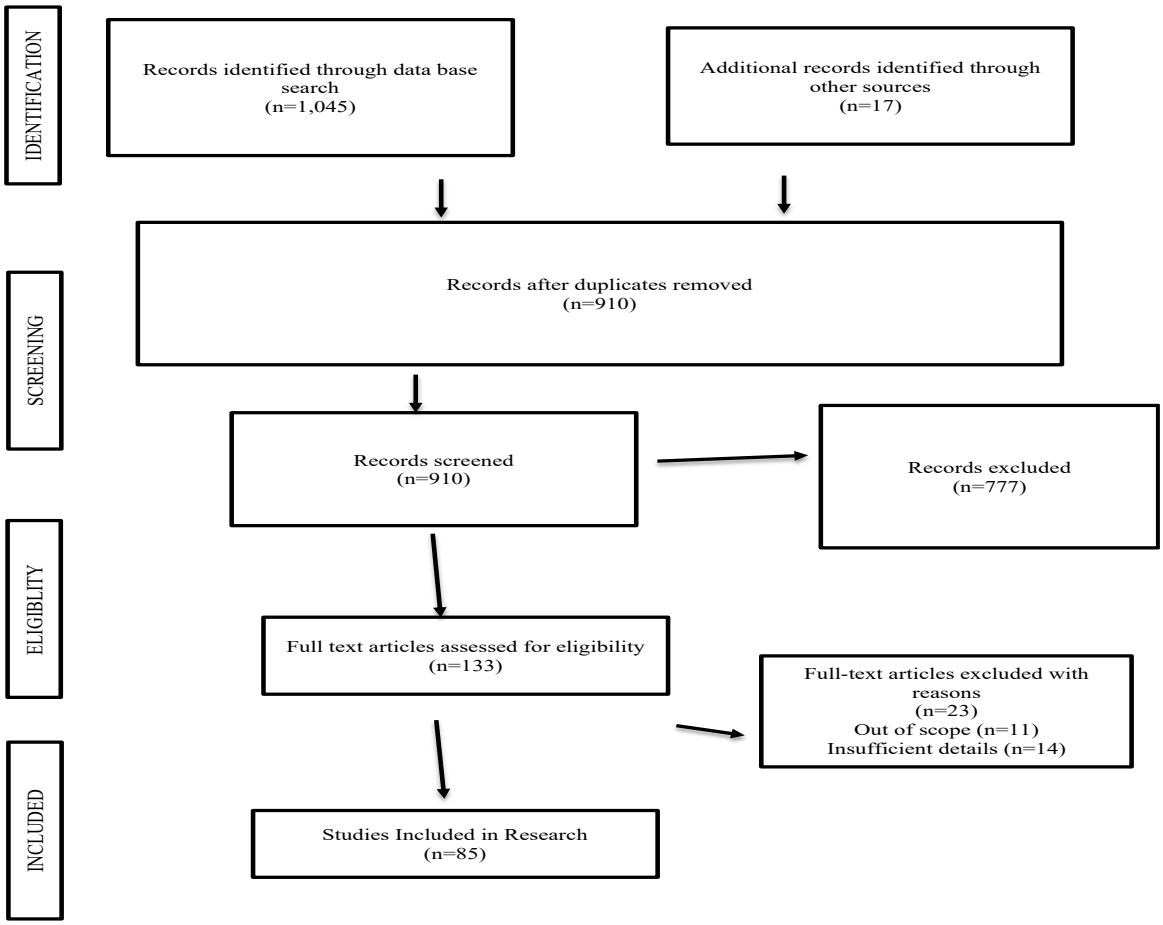


Figure 3.1 PRISMA Model

The literature search must be comprehensive and include as many databases as possible. There is a great advantage to using many databases with the risk of duplicating articles, this limits the chance of failing to discover a significant publication (Vieira & Gomes, 2009). The first phase of the literature search generated 1045 research articles. The second phase of our work produced a group of 85 papers, which were examined and analyzed in terms of the review type and

classification of research, and their study types, focusing on India and emerging economies. Conference proceedings and book chapters were not included in the research. Extracts from Scopus and WOS for this study were completed on February 20, 2024. The articles studied were considered and analyzed in detail, mainly with respect to the area of research. This study also included secondary data sources, such as reports published by institutions such as the World Bank, Asian Development Bank, UNESCO, and ILO.

3.2 Research Approach:

Quantitative techniques were used in analyzing survey responses. One component of financial inclusion is digital and financial literacy, which is connected to a number of other elements that are arguably directly connected to the empowerment of people living in cities and rural environments. There were many substantial factors with respect to digital and financial literacy, including income, employment, bank fees, quality of service, level of financial education, and access to financial instruments and services, which the literature review indicates are all connected somehow. This intended research is to analyze which elements or factors impact women's financial decisions.

Quantitative methods:

This study surveyed women in the Indian states of Uttarakhand and Uttar Pradesh who received training in financial literacy and digital literacy using quantitative methods. The survey was concerned with women's involvement in the economy, their ability to make decisions pertaining to finances, and the influence that financial and digital literacy training had on their life. Statistical analysis software was employed to analyze the data to discover trends and relationships among variables.

3.3 Research Design

This section outlines the study population, sampling frame, sample size calculation and sampling method. The study population comprised women residing in Indian

states Uttarakhand and Uttar Pradesh and had multiple industries including SHGs, MSMEs, healthcare, and educational institutions. Given that illiteracy remains a major issue for many women (especially in rural areas), we included illiterate women in the sampling population in order to give attention to those who may otherwise not receive attention due to their non-involvement in either formal financial systems or purposefully learning about digitally literate possibilities. That is consistent with SDGs such as gender equality (SDG 5) and reducing inequalities (SDG 10).

It's important to appreciate that illiterate women are likely to have different barriers for financial inclusion than that of literate women. It is critical to better understand these barriers to help create solutions for financial empowerment and digital literacy and programming that can overcome barriers when developing solutions.

3.4 Sample Size:

The formula for producing a representative sample for proportions in large populations was derived by (Cochran, 1977).

$n0 = Z2pq/e2$

$= (1.96)2\ (0.5)\ (0.5)/(0.05)$

$= 385$

This is valid where n0 is the sample size, Z2 is the abscissa of the normal curve that cuts off an area α at the tails (1 − α equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population, and q is 1 − p. The value for Z is found in statistical tables, which contain the area under the normal curve.

3.5 Method of Sampling

This study employs purposive sampling. Purposive sampling, where the researcher identifies and selects the most informative cases about the subject of interest, is a commonly used sampling strategy in quantitative research. Purposive sampling is often relied upon in quantitative research to find and select an information-rich

sample and use as much of the limited resources as possible (Patton, 2002). This means finding and selecting individuals or groups of individuals who possess specialized knowledge, which is knowledge about digital financial literacy in this study, is used for sampling (Creswell et al., 2011).

3.6 Source of Data Collection:

This study collected data from both primary and secondary sources. The primary data was collected using the survey method with the help of a structured questionnaire. The questionnaire was developed based on literature review. However, it was modified to suit the needs of the study.

The survey questions/constructs were adapted from prior research to ensure alignment with the study objectives. Responses were measured on a 5-point Likert scale, ranging from 5 (strongly agree) to 1 (strongly disagree). A structured questionnaire was used for the Survey. A 5-point Likert scale was used. A semi-structured questionnaire for respondents was designed and utilized to collect data from working women. The questionnaire was carefully and systematically designed according to the objectives of the study, which involved consulting ten experts in the relevant field. For quantitative data analysis, a reliability test was done to determine the reliability of items used in the questionnaire, and then a confirmatory factor analysis was done to confirm the factors that influence the investment behavior of women working in the states of Uttar Pradesh and Uttarakhand in India. The researcher administered the questionnaires through email and personal contacts to collect the data from women. Secondary data was collected based on keywords like financial literacy, digital literacy, fintech, Sustainable Development Goals (SDGs), women empowerment, financial well-being, financial resilience, and financial decision-making, and considered various research articles, journals, newspapers, and reports that are relevant to our research topic and research objectives. The measurement scale items for "financial literacy" will be adopted from (Rastogi & Ragabiruntha, 2018).

3.7 Variable Used:

Dependent Variables:

In line with earlier studies (Allen et al., 2012; Demirguc-Kunt & Klapper, 2013; Efobi et al., 2014; Nino-Zarazua & Copestake, 2008; Y. Gitaharie et al., 2014) which focused on the sample using a structured questionnaire. This research recognizes digital and financial literacy by considering women as 'included' if any are financially and digitally literate. The dependent variable is the 'Inclusion Score'. The various factors (explanatory variables) selected are in accordance with the findings of the literature.

Digital and financial literacy is an indicator of investment behavior and contributes to women's empowerment. We analyzed the association or impact of digital literacy on women's empowerment, which includes financial decision-making, financial accessibility, management, and social and cultural change.

Independent Variables:

Gender, Income, Age, Education, Occupation, Bank information (Bank account, loan, deposits, savings, no. of accounts, chequebook, ATM, credit and debit cards, frequency of access, ease of access), Ethnicity, Investment objective, and digital financial literacy.

Mediating Variable

Financial resilience was used as a mediating variable between digital financial literacy and women empowerment.

The information regarding the background and demographic profile of the respondents was collected through a combination of open-ended and multiple-choice questions. The information related to the various constructs or variables related to the study was collected through the questions designed using a five-point Likert Scale. The whole questionnaire was divided into sections based on the variables of the study. The questions were framed in statement form, and the responses were obtained with the help of a five-point Likert Scale pertaining to

each construct or dimension of the study. The responses ranging from Strongly Agree to Strongly Disagree based on Five Likert Scale related to Women empowerment, Financial Resilience, Digital Financial Literacy, were collected, a 5-point score was given to strongly agree, 4 point to agree, 3 points to neutral, 2 points to Disagree, and 1 point to Strongly Disagree.

Initially, the question was designed in English; however, for the collection of the data, it was translated into Hindi with the help of a language expert, as the respondents were more comfortable understanding questions in Hindi. This contributed to gaining the trust of the respondents and helped in obtaining legitimate and sincere responses to each question. The study's aims and objectives were considered meticulously while designing the framework of the questionnaire. Reliability analysis of the questionnaire was performed through pilot testing before going for the entire data collection.

3.8 Reliability Analysis:

For checking the reliability of the scale after modification, Cronbach's Alpha value was used, which is significant in social science research for testing the reliability of the scale. Hence, if Cronbach's Alpha value is found nearer to 0.70, the researcher can continue with the questionnaire for their studies (Taber, 2018).

3.9 Confirmation of Measurement Items

The measurement items were confirmed under the latent constructs through Confirmatory factor analysis (CFA). The CFA model confirmed the validity and reliability of scaled measurement items.

3.10 Assessment of Reliability and Validity of the Measurement Instrument:

To assess the accuracy of the measurement models, construct reliability, convergent validity, standardized factor loadings, critical ratio (t-value), composite reliability (CR), and average variance extracted were used.

CHAPTER 4

4. Data analysis

4.1. Profile and Background of The Respondents

Residential Status

The table and figure below show the women's residence status. Given that 43.37% of the 385 respondents live in a town, 37.40% live in a village, and 19.22% live in a city, it is evident that the majority of respondents are married.

Table 4.1 Descriptive Statistics

	Occurrence	Percent
Village	144	37.40
Town	167	43.37
City	74	19.22
Total	385	100.0

Marital Status

The table and figure below show the women's marital status. It is evident that the majority of the 385 respondents are married. Of them, 48.05% are Unmarried, and 51.95% are married.

Table 4.2 Marital Status Distribution of Respondents

		Occurrence	Percent
Valid	Unmarried	185	48.05
	Married	200	51.95
	Total	385	100.0

Age

The respondents' ages are shown in the table and figure below. It can be seen that the highest frequency for Age 25-34 is 163, and the percentage is 42.33%, and the second highest frequency for Age 35-44 is 30.64%. Thus, most of the respondents lie in this age category. From the Table below, it is quite evident that most of the respondents lie in the age bracket of 25-44.

Table 4.3- Age of the respondents

	Occurrence	Percent
18-24	31	8.05
25-34	163	42.33
35-44	118	30.64
45-54	51	13.24
55-60	22	5.71
Total	385	100.0

Education

The table and figure below display the women's educational attainment. It can be seen from the following table that the maximum number of women, i.e., 165 out of a total of 385, about 42.85%, are matriculate, 50% are intermediate, i.e., 12.98%, and graduates are 71, i.e., 18.18%, postgraduates are 31, i.e., 8.05%, and doctoral are 34, i.e., 8.83%.

Table 4.4 Education of the Respondents

		Occurrence	Percent
	Illiterate	35	9.11
	Matriculation	165	42.85
	Intermediation	70	18.18
	Graduation	50	12.98
	Post Graduation	31	8.05
	Doctoral	34	8.83
	Total	385	100.0

Number of Children

The table below shows the number of children that the women have; around 76.57% of women have 2 children, i.e., 295 out of 385 women.

Table 4.5- Number of Children

	occurrence	Percent
.0	33	8.57
1.0	77	20.00
2.0	185	48.05
3.0	35	9.09
4.0	15	3.89
5.0	23	5.97
6.0	12	3.13
7.0	5	1.29
Total	385	100.0

Employment Status

The table and figure below show the employment status of women; it can be seen that 42.33%, i.e., 163 out of the total respondents, are part-time earners, 7.53% are full-time earners, 14.54 % are contractual workers, 35.32% are unemployed, and 0.25% are unable to work.

Table 4.6 Employment Status of the Respondents

		Occurrence	Percent
	Full-time	29	7.53
	Business owners	56	14.54
	Unemployed	136	35.32
	Unable to work	1	0.25
	Total	385	100.0

Monthly Income

The table below shows the monthly incomes of the women. Around 10.64% of the respondents fall in the Rs 0 to 10,000 monthly income bracket, and only 15.32% of the women earn more than Rs 40,000 monthly.

Table 4.7 Monthly income of the respondents

	occurrence	Percent
0-10,000	41	10.64
10,001-20,000	113	29.35
20,001-30,000	118	30.64
30,001-40,000	54	14.02
More than 40,000	59	15.32
Total	385	100.0

Earning Adults

Table 4.8 below shows the distribution of adults in the family of Women. About 56.36 % or 217 out of 385 respondents have only a single member in the family who is responsible for earning income for the family to meet the expenses. While only 15.32% of the members have two earning adults in the family.

Table 4.8 -Number of earning adults in the family of the respondents

	Occurrence	Percent
0	63	16.36
1.0	217	56.36
2.0	59	15.32
3.0	30	7.79
More than 3	16	4.15
Total	385	100.0

Religion

The table and figure below show the distribution of religion among the respondents. The maximum percentage of the respondents are Hindu, i.e., 42.59%, 18.96% are Sikh, 4% are Christians, 23.63% are Muslims, 8% are Jain, and 11.71% belong to other religions.

Table 4.9- Religion

	occurrence	Percent
Hindu	164	42.59
Sikh	73	18.96
Christian	4	1.03
Muslim	91	23.63
Jain	8	2.07
Others	45	11.71
Total	385	100.0

Caste/category

The table and figure below show the distribution of caste/ category to which the Women SHG members belong. A maximum number of women, i.e., 154 or 40.00 % out of 385, belong to the General category, while 34.28% belong to OBC, 15.84% belong to the SC category, and 9.87% belong to the ST category.

Table 4.10- Caste/ Category of the Respondents

		Frequency	Percent
	General	154	40.00
	OBC	132	34.28
	SC	61	15.84
	ST	38	9.87
	Total	385	100.0

It is evident that the majority of respondents are married, with 51.95% of the 385 total respondents being married and 48.05% being single. The predominant demographic of respondents is aged 25 to 34. The highest proportion of women are literate at the matriculate level, followed by those educated up to the 12th grade, postgraduate level, and the illiterate population. Approximately 48.05% of employed women have two children. A total of 42.33% of respondents are part-time workers, 7.53% are full-time earners, 14.54% are business owners, and 35.32% are unemployed. Nearly 10.64% of the respondents belong to the monthly income bracket of INR 00,000 to INR 10,000, whereas 60% are classified within the income range of INR 10,001 to INR 30,000. Additionally, 29.34% belong to the income bracket of INR 30,000 or above. The predominant percentage of respondents identifies as Hindu, at 42.59%, followed by Muslim, Sikh, and Christian affiliations. 40% belong to the General category, 34.28% to OBC, 15.84% to the SC category, and 9.87% to the ST group.

4.2 Analysis:

In order to empirically validate the proposed research model, this research used structural equation modelling (SEM) using AMOS 29. SEM is deemed an appropriate statistical tool to analyze cross-sectional data. The study followed the two-step process introduced by (Anderson & Gerbing, 1992). This two-step process allows researchers to test for reliability and validity in the first place by defining the measurement theory, and later in the second stage, the proposed structural theory is validated.

Before moving on to the main analysis, the data was cleansed. Later, the data were subjected to the common method bias. The study followed Harman's single-factor test to examine the possibility of common method bias. According to Harman, if a single factor accounts for more than 50% of the variance, then it is concluded that the data has the presence of common method bias. However, if this single factor

explains less than 50% of the variance, then the chances of common method bias are ruled out (Podsakoff et al., 2003). In this study, the single factor explained only 39.04% of the variance; hence, the chances of common method bias were completely ruled out

4.3 Reliability and validity of the study construct:

To assess the reliability and validity of study constructs, the measurement model was specified. The model comprised three variables: women empowerment, financial resilience, and digital financial literacy. The two constructs, namely Women empowerment and digital financial literacy, were specified as second-order constructs, whereas financial resilience was specified as a first-order construct.

Now, the different measurement scales are assessed for reliability and validity. The study employed three procedures to assess reliability: 1) Average variance extracted (AVE), 2) Composite reliability (CR), and 3) Cronbach's Alpha. The scales are said to meet reliability criteria if the Cronbach's Alpha is greater than 0.60 (Nunnally, 1978), the CR value is greater than 0.70, and the AVE is greater than 0.50 (Hair et al., 2014). The results revealed that all three criteria were adequately met, hence, the scales were said to have good reliability (Table 4.11).

Now the confirmatory factor analysis (CFA) results were assed to verify the convergent and discriminant validity of the study constructs. The CFA model showed good model diagnostics (Chi square/df = 3.61; GFI = 0.875; CFI = 0.799; TLI = 0.801; RMSEA = 0.092), suggesting that the model fits the data well.

Further, the convergent validity of the study constructs was assessed based on two criteria: 1) the item loadings are significant and greater than 0.70, and 2) the AVE for each of the constructs is greater than 0.50. As reported in Table 4.11, both the above criteria were sufficiently met, hence the constructs were deemed to have convergent validity.

Figure 4.1: Measurement model

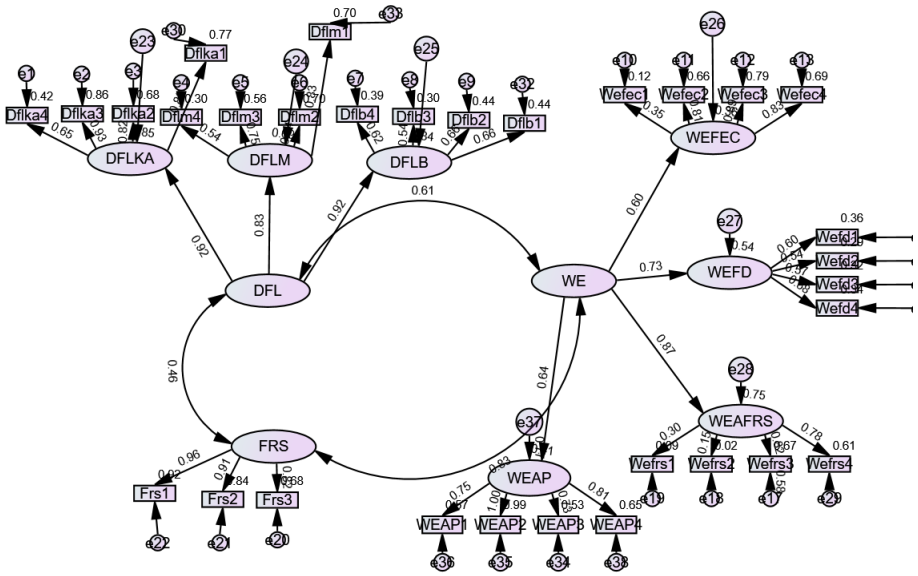


Table-4.11: reliability and validity results

Construct	Subconstruct & Items	Loadings
Digital Financial Literacy (CR = 0.921; 0.779 AVE = 0.795)	Digital financial literacy knowledge and awareness (Alpha = 0.791; CR = 0.778; AVE = 0.6545)	0.921
	DFLKA1	0.647
	DFLKA2	0.929
	DFLKA3	0.822
	DFLKA4	0.813
	Digital financial literacy management (Alpha =0.82; CR = 0.801; AVE = 0.6086)	0.833
	DFLM1	0.69

	DFLM2	0.75
	DFLM3	0.837
	DFLM4	0.834
	Digital financial literacy behavior (Alpha = 0.93; CR =0.902; AVE = 0.534)	0.918
	DFLB1	0.7
	DFLB2	0.69
	DFLB3	0.68
	DFLB4	0.81
Women Empowerment (CR= 0.927; AVE = 0.810)	Women empowerment through involvement in asset management and family financial planning (Alpha = 0.851; CR = 0.828; AVE = 0.685)	0.64
	WEAP1	0.726
	WEAP2	0.997
	WEAP3	0.753
	WEAP4	0.809
	Women empowerment through freedom, equality, social & cultural change (Alpha = 0.89; CR = 0.671; AVE = 0.67)	0.61
	WEFEC1	0.72
	WEFEC2	0.813
	WEFEC3	0.889
	WEFEC4	0.831
	women empowerment through financial decision making (Alpha = 0.91; CR = 0.892; AVE = 0.64)	0.732

	WEFD1	0.76
	WEFD2	0.77
	WEFD3	0.81
	WEFD4	0.85
	Women empowerment through access to financial resources and security (Alpha = 0.893; CR = 0.88; AVE = 0.75)	0.866
	WEAFRS1	0.89
	WEAFRS2	0.88
	WEAFRS3	0.91
	WEAFRS4	0.783
Financial Resilience (Alpha = 0.951; CR = 0.882; AVE = 0.81)	FRS1	0.822
	S2	0.914
	FRS3	0.959

Next, the discriminant validity was assessed by comparing the square root of each construct's average variance extracted with its parallel inter-construct correlations (Hair et al., 2014). Since the square root of each construct's AVE exceeded the parallel inter-construct correlations, the discriminant validity was also established (Table 4.12).

Table 4.12 Discriminant validity results

Second-order Construct	WE	DFL	FRS
Women Empowerment (WE)	*0.716*		
Digital Financial Literacy (DFL)	0.614	*0.892*	
Financial Resilience (FRS)	0.351	0.461	*0.900*

Note: The diagonals represent the square root of average variance extracted, and the off-diagonals represent inter-construct correlations.

Hypotheses testing:

For testing study hypotheses, the researcher IBM SPSS PROCESS macro (Hayes, 2013). The Model-4 of the PROCESS macro was selected and executed on the imputed values from the measurement model above. The PROCESS macro is a sophisticated tool to test the hypotheses involving mediation analysis. The proposed model included the following four hypotheses: ----

H1: Digital financial literacy has a significant effect on women empowerment.

H2: Digital financial literacy has a significant effect on financial resilience

H3: Financial resilience has a significant effect on women empowerment.

H4: Financial resilience mediates the relationship between digital financial literacy and women empowerment, i.e., the effect of H1 passes through financial resilience.

According to Hayes (2013), the PROCESS macro fits the data using the following two linear equations:

$$M = i_M + aX + e_M \quad \text{---------- 1}$$

$$Y = i_Y + c'X + bM + e_Y \quad \text{---------- 2}$$

Where M -> mediator, Y -> The dependent variable, and e_M & e_Y are the respective error terms.

The results from the PROCESS macro are presented in the following tables—

Table 4.13: Model summary

R	R-sq	MSE	F	df1	df2	P
0.4353	0.1895	1.076	81.8407	1	350	0

DV (Dependent variable) = Financial resilience (equation -1)

Table 4.14: Coefficients

Source of variation	Coeff	se	t	p	LLCI	ULCI
Constant	0.9694	0.2982	3.2504	0.0013	0.3828	1.556
DFL	1.5354	0.1697	9.0466	000	1.2016	1.8693

As evident from the above results, digital financial literacy has a significant effect on women empowerment (beta = 1.535, p = 0000 < 0.01). Overall, digital financial literacy explains almost 19% of the variance in women empowerment. Hence, H2 is supported.

Further, the results across equation-2 are presented below: --

Table 4.15: Model Summary

R	R-sq	MSE	F	df1	df2	P
0.9228	0.8516	0.0789	1001.48	2	349	000

DV (Dependent variable) = Women empowerment (equation -2)

Table 4.16: Coefficients

Source of variation	Coeff	se	t	p	LLCI	ULCI	Collinearity Statistics	
							Tolerance	**VIF**
Constant	0.4837	0.082	5.9007	000	0.3224	0.6449	---	---
DFL	0.7636	0.051	14.9578	000	0.6632	0.864	0.81	1.234
FRS	0.4554	0.0145	31.4624	000	0.4269	0.4838	0.81	1.234

As can be seen, controlling for the effect of digital financial literacy, there was a significant effect of financial resilience on women empowerment (beta = .4554, p = 000 < 0.01). Also, the model explained almost 85% of the variance in women empowerment. Hence, hypothesis 3 was also supported.

Multicollinearity is a typical problem encountered in multiple regression, which exists if the independent variable is found to be highly correlated. The PROCESS macro tests for mediation by estimating the following two equations: -----

M = i M + aX + e M ----------1

Y = i Y + c′X + bM + e Y ---------- 2

Where X-> DFL, M->FR, and Y -> WE.

Corresponding to equation 1, there is no point of collinearity since it involves only one independent variable. However, equation 2 involves two independent variables, and therefore, it is important to see if collinearity exists. To this end, the researcher estimated the variance inflation factor (VIF) scores by checking the collinearity diagnosis option in SPSS. The results revealed that VIF scores corresponding to DFL and FR were less than 10 (Hair et al., 2014), indicating the absence of any multi-collinearity.

Hence, the result estimates are true and trustworthy. Accordingly, I have reported collinearity diagnostics in Table 4.16. Furthermore, the variance inflation factor scores were less than 10 (Hair et. al., 2014), indicating the absence of multi-collinearity between the independent variables. Hence, the results are indeed trustworthy**.**

Now, the total effect model was assessed to check the tenability of H1. The results of the total effect are given in the tables below.

Table 4.17: Model summary (total effect)

R	R-sq	MSE	F	df1	df2	P
0.6563	0.4307	0.3018	264.829	1	350	000

DV = Women empowerment

Table-4.18: Coefficients

Source of variation	coeff	Se	t	p	LLCI	ULCI
constant	0.9251	0.1579	5.857	000	0.6145	1.2358
DFL	1.4628	0.0899	16.2736	000	1.286	1.6395

As seen above, the total effect of digital financial literacy on women empowerment was significant (beta = 1.46, p = 000 < 0.01), and the model explained 43% of the variation. Hence, H1 was also fully supported.

Next, an assessment about the direct and indirect effects was done to assess the mediation **Hypothesis-4.** The results of the same are given below:

Table 4.19: Indirect effect of digital financial literacy on women empowerment

Effect	BootSE	BootLLCI	BootULCI
0.6992	0.0678	0.5628	0.8314

Table 4.20: Direct effect of digital financial literacy on women empowerment

Effect	se	t	p	LLCI	ULCI
0.7636	0.051	14.9578	0	0.6632	0.864

As evident from Table 4.19 that the indirect effect of digital financial literacy on women empowerment was significant (zero did not span between the bootstrap intervals), supporting the mediation hypothesis-4. However, a closer look at Table 4.20 further revealed that the direct effect of digital financial literacy on women empowerment was still significant (p = 000 < 0.01). Hence, it was partial mediation only, and therefore H4 was partially supported (Hayes, 2013).

CHAPTER 5
Discussion

The study's suggested model illustrating the postulated relation between Digital financial literacy, financial resilience, and women empowerment was evaluated. All of the hypothesized links between the variables that are shown in the study's suggested model were determined to be significant, which means that all of the relationships between the model's various dimensions provide strong support for the research model.

5.1. Digital financial literacy and Women empowerment

The study confirms that Digital financial literacy greatly enhances women empowerment. This finding aligns with existing literature (Doepke et al., 2011; Kabeer, 2005; Koomson et al., 2021), which emphasizes the significant influence of improved financial literacy on women's economic agency and autonomy. Digital financial literacy initiatives empower women by providing them with essential financial information, tools, and skills, enabling them to make educated economic decisions and confidently navigate intricate financial environments. Ongoing support for financial literacy efforts, particularly those aimed at marginalized women, is essential. Accessible and culturally attuned financial education programs can close knowledge disparities, empowering women to engage meaningfully in economic endeavors. These initiatives correspond with the Sustainable Development Goals (SDGs) by fostering inclusive economic growth and gender equality. The results show how crucial it is to launch programs for women to become more digitally financially literate. Digital India, Skill India, Digital Saksharta Abhiyan (DISHA), UMANG (Unified Mobile Application for New-Age Governance), and DIGI GAON are a few examples of such activities.

Improving digital financial literacy for women is crucial to ensuring their full participation in modern financial systems. This involves increasing their knowledge of digital tools and addressing social, economic, and educational barriers.

5.2. Digital financial literacy and financial resilience

A notable result is the confirmed positive correlation between Digital financial literacy and the financial resiliency of women. This finding corroborates previous studies (Kass-Hanna et al., 2022; Klapper and Lusardi, 2020), which indicated that elevated Digital financial literacy correlates with enhanced financial resiliency. This study's empirical results support the notion that women with superior financial literacy are more inclined towards financial security. This highlights the pressing necessity for specialized financial education initiatives designed expressly for women, especially those from underrepresented populations. Programs developed with input from these groups can improve women's financial security and expand their access to digital financial services, enabling them to navigate financial environments more proficiently. Programs such as workshops, online courses, and community-based training sessions are essential in providing women with the necessary skills to confidently utilize digital financial services.

5.3. Financial resilience and women empowerment

Being financially resilient can have transformative effects for women. When women actively participate in the financial system, they can better manage risk, smooth consumption in the face of shocks, or fund household expenditures like education (Dupas & Robinson, 2013). Providing low-income women with the right financial tools to save and borrow money, make and receive payments, and manage risk is important for women's empowerment, but also for poverty reduction, especially since women disproportionately experience poverty (Holloway et al., 2017). Building financial resilience leads to greater empowerment by enabling individuals to make informed and strategic financial decisions

The study endorses the substantial positive effect of financial resilience on women empowerment. This finding aligns with the studies conducted by Dupas and Robinson (2013), which emphasize the role of financial resilience in enhancing women's financial autonomy and their engagement in economic activities. Financial resilience not only offers accessible and secure financial avenues but also empowers women's financial competencies and decision-making power. Policymakers and financial institutions should leverage the transformative potential of digital platforms to promote gender equality, mitigate economic inequality, and enhance financial security. Investing in user-friendly DFS tailored for women enables stakeholders to foster a more inclusive financial ecosystem. This may encompass customized financial solutions, user assistance, and outreach programs aimed at fostering trust among women in engaging with digital platforms.

5.4. Digital financial literacy, financial resilience and women empowerment

The study examines the mediating function of financial resiliency in the relationship between digital financial literacy and women empowerment. Based on the insights of (Xiao & O'Neill, 2011) Financial resilience serves as a vital mediator, enhancing access to financial resources and opportunities that empower women. This mediating effect highlights the necessity of including financial resilience within digital financial literacy initiatives and legislative structures. Policymakers want to integrate digital financial education into current literacy programs to guarantee thorough skill development. Moreover, regulatory frameworks that emphasize gender inclusive policies and enhance the accessibility, affordability, and security of digital financial services for women are crucial for cultivating a more equitable financial ecosystem.

CHAPTER 6
Conclusions

6.1 Overview or Summary

Globally, emerging technologies are utilizing alternative data to evaluate creditworthiness, eliminating the requirement for conventional credit records or collateral. As women have a lower likelihood of owning fixed assets compared to men, this is contributing to the narrowing of the gender gap. Insufficient financial knowledge is hindering numerous women from taking advantage of technology advancements. Therefore, it is crucial that we actively advocate for digital literacy initiatives specifically targeting women, as these campaigns aim to develop their abilities and knowledge in this field. Furthermore, by facilitating women's access to financial services, policymakers can open up several possibilities to increase their involvement in the digital realm.

The correlation between the empowerment of women and finance is partially influenced by their level of financial literacy. Local wisdom-based financial literacy is identified as a viable option for integrating women's empowerment into local development. Furthermore, it is important for gender-specific initiatives to take into account policies that promote literacy to achieve long-term sustainability in green microfinance. This study enhances the existing knowledge on the correlation between Digital financial literacy and women empowerment by including financial resilience as a mediating variable. The inclusion of women in financial literacy initiatives is a significant catalyst for attaining many Sustainable Development Goals. Providing women with equal opportunity for financial literacy results in extensive societal advantages, including poverty alleviation, economic expansion, and gender equity. Consequently, emphasizing inclusivity in financial literacy programs transcends gender concerns and serves as a means to attain sustainable

development and mitigate global disparities. Governments should have a pivotal role in advancing financial literacy by providing policy assistance and fostering partnerships with financial institutions, enterprises, and civil society organizations. Policymakers can foster regional economic resilience by establishing regulatory frameworks, providing tax incentives, and offering subsidies that promote investments (Wei, 2024). To render digital financial literacy genuinely successful and inclusive, it is imperative to incorporate financial and cyber fraud awareness as a fundamental element. Such actions would not only alleviate the threats associated with cybercrime but also enhance confidence and security for women as they engage with the digital financial environment. Failure to overcome this constraint in digital financial literacy programs may render women susceptible to financial exploitation, hence hindering their complete engagement in the digital economy and compromising initiatives aimed at achieving gender parity and financial inclusion in accordance with the SDGs. Reduced reliance on others due to digital financial literacy is a vital aspect of women's empowerment, providing them with autonomy, privacy, and the capacity to make independent financial decisions. Incorporating this element into the research would bolster the case for digital literacy as a vital instrument for achieving gender equality and financial autonomy. It strongly coincides with the Sustainable Development Goals (SDGs) pertaining to gender equality (SDG 5), poverty alleviation (SDG 1), and economic advancement (SDG 8).

6.2 Contribution of research

This study represents a unique and valuable contribution by focusing on women's empowerment in the Indian states of Uttarakhand and Uttar Pradesh. It is among the first to specifically investigate the financial behavior and resilience of women, addressing a significant gap in research. While financial decision-making has

gained attention globally, studies in India continue to prioritize financial literacy, with financial competence still being a relatively underexplored area.

Most previous research has looked at resilience, investment behavior, and financial decision-making in broad populations, such as youth or general consumers. However, this study sets itself apart by concentrating specifically on women. Drawing from a comprehensive literature review, it develops and validates a survey instrument to assess the relationship between digital financial literacy on women empowerment, considering the mediating effect of financial resilience. Moreover, the study proposes and validates a model illustrating the interconnectedness between these factors, offering new insights into women's financial behavior.

A major contribution of this research is its examination of how demographic factors influence women's empowerment. By identifying which demographics impact women's financial behavior, the study provides a foundation for improving their investment practices both in the short and long term. Although many studies have focused on financial inclusion, literacy, and empowerment, this study takes a novel approach by evaluating women's digital financial literacy, resilience, and empowerment more holistically.

6.3 Theoretical contribution

Traditionally, TPB has been widely applied to predict and explain behavior in various contexts, but this research highlights its specific relevance to women's financial behavior. By incorporating digital financial literacy and financial resilience into the TPB model, the study introduces an enhanced framework that considers not only psychological factors like attitudes, subjective norms, and perceived behavioral control but also emphasizes the critical role of digital financial literacy in shaping women's empowerment.

The revised model offers deeper insights into the mechanisms driving financial and social behavior among women. By including elements such as digital financial

literacy and financial resiliency, it creates a more robust tool for understanding behavior, particularly in contexts where access and knowledge of financial services are vital for the economic and social empowerment of women. The findings confirm the significant impact of digital financial literacy and financial resiliency alongside traditional TPB factors (attitude, subjective norms, and perceived behavioral control) on women empowerment. This expanded application of the TPB framework also provides new perspectives on women empowerment, highlighting its role in adopting digital financial services and boosting women's decision-making, participation, accessibility, security, and resiliency.

By applying the broadened TPB framework specifically to women in low-income and communal settings, the study sheds light on the unique challenges and opportunities present in such environments. This contextual application extends the relevance of TPB and serves as a foundation for further research on economic empowerment in similar socio-economic contexts. Overall, this study enriches the theoretical landscape by enhancing the TPB framework with the inclusion of digital financial literacy, demonstrating its pivotal role in the empowerment of women. This updated framework is an effective tool for advancing financial and social empowerment in disadvantaged populations.

These frameworks provide a comprehensive approach to understanding the factors influencing women’s adoption and sustained use of digital financial services and their financial decision-making processes, which are key to achieving economic and social empowerment (WE). The TPB component focuses on users’ perceptions of the utility and ease of use of Digital financial services, which are central to adoption behaviors. By evaluating dimensions including perceived convenience, contentment, and overall utility of these services, this study used TPB to examine women's views towards digital financial tools and services. Increased financial resilience (FR) and the adoption and continuous use of digital financial services might result from favorable impressions in these areas, improving women's access

to financial resources and fostering social and economic empowerment. TPB has been effectively used in a number of studies, such as those by Setiawan et al. (2024), to examine the adoption of digital financial services across a range of demographic groups, confirming its applicability to this study. The "Theory of Planned Behavior (TPB)" is supplemented with an analysis of the social and cognitive elements that influence financial behavior. TPB contends that intentions and behaviors are influenced by attitudes, perceived behavioral control, and subjective standards. In order to comprehend women's views on digital financial literacy (DFL) and the associated financial behaviors (FL-B), which are essential to attaining social and economic empowerment, TPB is used in this study.

6.4 Implications

This research has significant policy implications with a clear goal for increasing financial capacity and inclusion. Policymakers are better equipped to develop and execute policies that improve outcomes and equip individuals with the financial literacy and skills they need to thrive in the contemporary world. This study provides useful information that will allow policymakers to focus on financial inclusion and literacy, which will eventually result in people's financial independence and satisfaction. This paper makes suggestions on how women in the financial and non-financial sectors ought to manage financial matters and choices. Additionally, this study offers suggestions to scholars and researchers for enhancing their understanding and consciousness of the flexible financial orientation that the researchers have not fully explored. With a population of more than 1.4 billion, India is a prime example of rising economies' efforts to promote financial and digital inclusion. Investing in women's digital financial literacy is a powerful tool for social change that goes beyond just economic need. The analysis conducted in India will provide crucial information about how digital financial literacy can advance global Sustainable Development Goals and financial

inclusion. We implore governments, representatives, international organisations, and interested parties to support and promote laws that promote a more equal and inclusive society for women. This plea underlines the issue's local importance and global relevance, portraying the research as a key achievement in reaching the SDGs and encouraging gender equality internationally.

The results of this study in India have important implications for stakeholders, financial institutions, and governments. Measures that increase women's access to digital financial services, resilience, and financial literacy should be given top priority by policymakers. The positive correlation between digital financial literacy and the use of digital financial services suggests that focused educational programs can significantly increase women's economic empowerment, which will benefit the entire community. To create gender-specific financial education programs that provide women the skills they need to properly use digital financial technology, collaboration between financial institutions and educational institutions is crucial. This customized strategy can elevate women's confidence and involvement with Digital financial services, consequently improving their economic participation. Financial service providers must create gender-sensitive products that address women's specific demands, guaranteeing accessibility, usability, and security. These efforts address women's unique obstacles while simultaneously cultivating client loyalty, ultimately benefiting institutions over time. Enhancing technological infrastructure, including a dependable internet connection and digital literacy initiatives, is crucial for closing the digital divide. This initiative will enhance women's participation in digital financial services, fostering inclusive economic growth. Moreover, specialized initiatives for women entrepreneurs that offer training, mentorship, and networking opportunities are essential for surmounting obstacles to financing and market access. Empowered women typically reinvest in their families and communities, generating a beneficial economic ripple effect. In summary, our findings highlight the necessity for cohesive policies that

amalgamate financial knowledge, access to digital services, and supportive infrastructures to promote economic and social empowerment for women in India.

6.5 Recommendations and Suggestions

Measures to improve financial accessibility

Improving the financial accessibility of women requires addressing a combination of social, cultural, economic, and structural barriers that limit their participation in financial systems. Below are several strategies that can enhance financial inclusion for women:

1. Financial Literacy and Education Programs

- Workshops and Training: Providing targeted financial literacy programs, particularly for women in underserved areas, can empower them with the knowledge to manage savings, credit, and investment.
- Tailored Content: Customize financial education programs to solve the particular problems suffered by females, such as balancing household responsibilities with income generation or understanding business financing.
- Digital Literacy: Given the increasing role of digital finance, training in using online banking platforms, online wallets, and net banking is crucial.

2. Access to Credit and Financial Products

- Microfinance and Microcredit: Small loans with flexible terms can enable women to start or expand small businesses, especially in rural areas. Many microfinance institutions have been successful in targeting women, but further improvement can be made by tailoring products to women's needs.
- Reduced Collateral Requirements: Women often have less access to property and other forms of collateral, so creating credit systems that don’t rely on traditional collateral, such as character-based loans, can be beneficial.

- Women-Centric Financial Products: Financial products that consider the specific needs of women, such as flexible repayment plans, lower interest rates, and insurance that covers maternity or childcare costs, can encourage women to engage more with the financial system.

3. Digital Financial Services and Mobile Banking

- Mobile Money Solutions: Women, especially in rural areas, often have less access to physical bank branches. Expanding mobile banking and digital financial platforms can reduce geographic barriers and provide easier access to savings, credit, and payment services.
- Simplified KYC Processes: Many women lack formal identification or proof of address. Simplified Know Your Customer (KYC) requirements can help women open accounts more easily.

4. Support for Women Entrepreneurs

- Business Grants and Competitions: Providing seed funding through grants or competitions specifically for women entrepreneurs can reduce the financial burden of starting a business.
- Access to Business Development Services: Offering mentorship, networking opportunities, and training in business management can improve women's ability to run successful enterprises.
- Venture Capital for Women-Led Businesses: Expanding women's access to venture capital, or promoting women-centric venture funds, can enhance their chances of scaling businesses.

5. Public Policy and Legal Reforms

- Equal Property and Inheritance Rights: In many parts of the world, women are denied equal property and inheritance rights, which affects their ability to access collateral and credit. Legal reforms that grant women equal property rights can enhance financial inclusion.

- Maternity and Family Leave Policies: Introducing or strengthening policies related to paid maternity leave and childcare support can help women maintain financial independence while balancing family responsibilities.
- Anti-Discrimination Laws in Finance: Enforcing regulations that prevent discrimination in lending, investing, and employment can create a more level playing field for women.

6. Collaboration with Private Sector and Financial Institutions

- Gender-Responsive Banking Services: Encourage banks and financial institutions to offer gender-responsive services by providing training for staff to understand the specific needs and constraints of women customers.
- Partnerships with NGOs and Community Organizations: Collaborating with NGOs, community leaders, and women's groups can improve outreach and understanding of local challenges women face in accessing finance.

7. Encouraging Women's Savings Groups

- Community Savings and Credit Associations (ROSCAs): These traditional savings groups, often run by women, provide a sense of security and community. Supporting and formalizing these systems can help women pool resources and access credit collectively.
- Digital Savings Platforms: Digital platforms that cater to savings groups can improve transparency and reduce administrative costs, making it easier for women to save and access loans collectively.

8. Reducing Cultural and Social Barriers

- Promoting Financial Independence: Cultural norms often discourage women from participating in financial decisions. Public awareness campaigns that promote women's financial autonomy and decision-making in households can help break down these barriers.
- Inclusive Workplace Practices: Encourage companies to create more inclusive environments with equal pay, flexible work arrangements, and

support for women returning from maternity leave, thus helping women maintain their financial independence.

9. Data Collection and Monitoring

- Gender-breakdown Data: Collect and analyze gender breakdown data on financial inclusion to better understand the specific challenges women face and to design targeted interventions.
- Monitoring Progress: Governments and financial institutions should regularly track progress in closing the gender gap in financial inclusion to ensure that policies are effective and identify areas for improvement.

10. Social Protection Programs

- Direct Cash Transfers: Conditional and unconditional cash transfer programs targeted at women, such as those for low-income families, can help improve their financial resilience and ability to invest.
- Pension Schemes and Social Insurance: Ensure that women, especially those in informal sectors, have access to pension schemes, social insurance, and healthcare benefits.

By implementing a combination of these strategies, financial accessibility for women can be significantly improved, empowering them economically and contributing to broader social and economic development.

6.6 Scope for Future Work

Behavioral economics, access disparities, cybersecurity awareness, and the impact of emerging technologies are some of the contemporary issues that might be addressed to improve financial inclusion. The breadth may be increased by collaborative, multinational research and longitudinal impact studies, guaranteeing

global significance and fostering inclusive growth. More measuring items for resilience, investment intention, and financial decision-making can be added to better examine the connections between these variables. Moreover, incorporating financial inclusion as a separate construct would provide a clearer evaluation of how these factors interact. This expanded approach could offer deeper insights into the dynamics between financial inclusion, decision-making, resilience, and women's intention to invest. Future research efforts could focus on participants from diverse cultural and social backgrounds, thereby expanding the breadth of the investigation. Different method of sampling can also be used in future like probability sampling.

References:

Abdallah, W., Tfaily, F., & Harraf, A. (2025). The impact of digital financial literacy on financial behavior: customers' perspective. *Competitiveness Review: An International Business Journal*, *35*(2), 347–370. https://doi.org/10.1108/CR-11-2023-0297

Adil, M., Singh, Y., & Ansari, M. S. (2022). Does financial literacy affect investor's planned behavior as a moderator? *Managerial Finance*, *48*(9/10), 1372–1390. https://doi.org/10.1108/MF-03-2021-0130

Afjal, M. (2023). Bridging the financial divide: a bibliometric analysis on the role of digital financial services within FinTech in enhancing financial inclusion and economic development. *Humanities and Social Sciences Communications*, *10*(1), 645. https://doi.org/10.1057/s41599-023-02086-y

Agarwal, S., & Chua, Y. H. (2020). FinTech and household finance: a review of the empirical literature. *China Finance Review International*. https://doi.org/10.1108/CFRI-03-2020-0024

Agboola, O. P., & Tunay, M. (2023). Urban resilience in the digital age: The influence of Information-Communication Technology for sustainability. *Journal of Cleaner Production*, *428*, 139304. https://doi.org/https://doi.org/10.1016/j.jclepro.2023.139304

Aisa, N. N. (2021). Do Financial Literacy and Technology Affect Intention to Invest in the Capital Market in the Early Pandemic Period? *Journal of Accounting and Investment*, *23*(1), 49–65. https://doi.org/10.18196/jai.v23i1.12517

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2005). Attitudes, Personality, And Behavior. In *Open University Press: Vol. 2nd Editio*.

Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health*, *26*(9), 1113–1127. https://doi.org/10.1080/08870446.2011.613995

Akhter, J., & Cheng, K. (2020). Sustainable empowerment initiatives among rural women through microcredit borrowings in bangladesh. *Sustainability (Switzerland)*, *12*(6), 1–19. https://doi.org/10.3390/su12062275

Al-Smadi, M. O. (2023). Examining the relationship between digital finance and financial inclusion: Evidence from MENA countries. *Borsa Istanbul Review*, *23*(2), 464–472. https://doi.org/https://doi.org/10.1016/j.bir.2022.11.016

Alan Bryman. (2012). Social Research Methods. In *OUP Oxford*.

Ali Bare, U. A., Bani, Y., Ismail, N. W., & Rosland, A. (2022). Does financial development mediate the impact of remittances on sustainable human capital investment? New insights from SSA countries. *Cogent Economics & Finance*, *10*(1), 2078460. https://doi.org/10.1080/23322039.2022.2078460

Allen, F., Carletti, E., Cull, R., Qian, J. Q. J., Senbet, L., & Valenzuela, P. (2021). Improving Access to Banking: Evidence from Kenya. *Review of Finance*, *25*(2), 403–447. https://doi.org/10.1093/rof/rfaa024

Allen, F., Demirguc-Kunt, A., Klapper, L., Soledad Martinez Peria, M., & Peria,

M. (2012). The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts are in the Development. In *Policy Research Working Paper 6290* (Issue December).

Alliance for Financial Inclusion. (2021). Digital Financial Literacy Toolkit. In *Alliance for Financial Inclusion* (Issue July). https://www.ssrn.com/abstract=2715350%0Ahttps://www.researchgate.net/profile/Dharmendra_Yadav17/publication/313678763_EXACT_DEFINITION_OF_MATHEMATICS/links/58f4d86f458515ff23b551a0/EXACT-DEFINITION-OF-MATHEMATICS.pdf%0Ahttps://www.g20-insights.org/policy_

Amgain, P. N. (2024). Perceptions Towards Behavioral Finance Among Investors in Banking Industry : Evidence from Nepal Bank Limited. *Journal of Economics and Management*, *4*(1), 80–90.

Amnas, M. B., Selvam, M., & Parayitam, S. (2024). FinTech and Financial Inclusion: Exploring the Mediating Role of Digital Financial Literacy and the Moderating Influence of Perceived Regulatory Support. In *Journal of Risk and Financial Management* (Vol. 17, Issue 3). https://doi.org/10.3390/jrfm17030108

Anderson, J. C., & Gerbing, D. W. (1992). Assumptions and Comparative Strengths of the Two-Step Approach: Comment on Fornell and Yi. *Sociological Methods & Research*, *20*(3), 321–333. https://doi.org/10.1177/0049124192020003002

Andriamahery, A., & Qamruzzaman, M. (2022). Do Access to Finance, Technical Know-How, and Financial Literacy Offer Women Empowerment Through Women's Entrepreneurial Development? *Frontiers in Psychology*,

12(January), 1–16. https://doi.org/10.3389/fpsyg.2021.776844

Angeles, I. T. (2022). Mediating effect of entrepreneurial social identity on the MSME-owners' attitude and resilience amid COVID-19 crisis. *Journal of the International Council for Small Business*, *3*(4), 270–280. https://doi.org/10.1080/26437015.2022.2083999

Ashoer, M., Jebarajakirthy, C., Lim, X.-J., Mas'ud, M., & Sahabuddin, Z. A. (2024). Mobile fintech, digital financial inclusion, and gender gap at the bottom of the pyramid: An extension of mobile technology acceptance model. *Procedia Computer Science*, *234*, 1253–1260. https://doi.org/https://doi.org/10.1016/j.procs.2024.03.122

Bhat, S. A., Lone, U. M., SivaKumar, A., & Krishna, U. M. G. (2024). Digital financial literacy and financial well-being – evidence from India. *International Journal of Bank Marketing*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/IJBM-05-2024-0320

Bill and Melinda Gates Foundation. (2021). *The impacts of digital financial services on women's economic empowerment* (Issue August). https://docs.gatesfoundation.org/documents/the_impacts_of_digital_financial_services_on_womens_economic_empowerment_financial_services_for_the_poor.pdf

Briguglio, L., Gordon, C., Nadia, F., & and Vella, S. (2009). Economic Vulnerability and Resilience: Concepts and Measurements. *Oxford Development Studies*, *37*(3), 229–247. https://doi.org/10.1080/13600810903089893

Brooks, C., & Williams, L. (2021). The impact of personality traits on attitude to

financial risk. *Research in International Business and Finance*, *58*, 101501. https://doi.org/https://doi.org/10.1016/j.ribaf.2021.101501

Brulé, R., & Gaikwad, N. (2021). Culture, capital, and the political economy gender gap: Evidence from meghalaya's matrilineal tribes. *Journal of Politics*, *83*(3), 834–850. https://doi.org/10.1086/711176

Bui, M. T., & Luong, T. N. O. (2023). Financial inclusion for the elderly in Thailand and the role of information communication technology. *Borsa Istanbul Review*, *23*(4), 818–833. https://doi.org/https://doi.org/10.1016/j.bir.2023.02.003

Chen, S., & Guo, Q. (2023). Fintech, strategic incentives and investment to human capital, and MSEs innovation. *The North American Journal of Economics and Finance*, *68*, 101963. https://doi.org/https://doi.org/10.1016/j.najef.2023.101963

Chinenyem, C. O., & Omale, S. A. (2022). Fostering Resilience Information and Communication Technology (ICT) for Workforce Contentment and Organizational Performance. *Journal of Economics & Management Research*, *3*(3), 1–6. https://doi.org/10.47363/jesmr/2022(3)160

Choong, K. K. (2014). The Fundamentals of Performance measurement systems: A Systematic Approach to Theory and a Research Agenda. *International Journal of Productivity and Performance Management*, *63*(7), 879–922. https://doi.org/10.1108/IJPPM-01-2013-0015

Choung, Y., Chatterjee, S., & Pak, T.-Y. (2023). Digital financial literacy and financial well-being. *Finance Research Letters*, *58*, 104438. https://doi.org/https://doi.org/10.1016/j.frl.2023.104438

Clark, R. L., & Mitchell, O. S. (2022). Influencing the choice of pension distribution at retirement. *Journal of Pension Economics and Finance*, 1–17. https://doi.org/10.1017/s1474747222000130

Cochran, W. G. (1977). Sampling Techniques. In *John Wiley & Sons* (Vol. 3). https://doi.org/10.1177/0022034553032005050l

Cole, P., & Buel, S. M. (2000). Safety and Financial Security for Battered Women: Necessary Steps for Transitioning From Welfare to Work. *Georgetown Journal on Poverty Law and Policy*, *7*(2), 39.

Cox, Robin S, & Hamlen, Marti. (2014). Community Disaster Resilience and the Rural Resilience Index. *American Behavioral Scientist*, *59*(2), 220–237. https://doi.org/10.1177/0002764214550297

Creswell, J. W., L., V., & Clark, P. (2011). *Designing and conducting mixed methods research*. SAGE Publications, Los Angeles.

Das, P. (2022). Dimensions of women empowerment: A structural equation modelling approach. *Journal of Statistics and Management Systems*, *25*(5), 1059–1072. https://doi.org/10.1080/09720510.2022.2040858

Demirguc-Kunt, A., & Klapper, L. (2013). Measuring Financial Inclusion: Explaining Variation in Use of Financial Services across and within Countries. *Brookings Papers on Economic Activity*, 279–321. https://doi.org/10.1353/eca.2013.0002

Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018a). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. https://doi.org/10.1596/978-1-4648-1259-0

Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018b). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. In *International Bank for Reconstruction and Development/The World Bank*. https://doi.org/10.1596/978-1-4648-1259-0

Dhanamalar, M., Preethi, S., & Yuvashree, S. (2020). Impact of digitization on women's empowerment: A study of rural and urban regions in India. *Journal of International Women's Studies*, *21*(5), 107–112.

Doepke, M., Tertilt, M., & Voena, A. (2011). The Economics and Politics of Women's Rights. *Annual Review of Economics*, *4*(1), 339–372. https://doi.org/10.1146/annurev-economics-061109-080201

Dupas, P., & Robinson, J. (2013). Why Don't the Poor Save More? Evidence from Health Savings Experiments. *The American Economic Review*, *103*(4), 1138–1171. http://www.jstor.org/stable/23469615

Efobi, U., Beecroft, I., & Osabuohien, E. (2014). Access to and use of bank services in Nigeria: Micro-econometric evidence. *Review of Development Finance*, *4*(2), 104–114. https://doi.org/https://doi.org/10.1016/j.rdf.2014.05.002

Fletschner, D., & Kenney, L. (2014). Rural Women's Access to Financial Services: Credit, Savings, and Insurance. In A. R. Quisumbing, R. Meinzen-Dick, T. L. Raney, A. Croppenstedt, J. A. Behrman, & A. Peterman (Eds.), *Gender in Agriculture: Closing the Knowledge Gap* (pp. 187–208). Springer Netherlands. https://doi.org/10.1007/978-94-017-8616-4_8

Ghosh, S. (2022). Political empowerment of women and financial inclusion: Is there a link? *Social Sciences and Humanities Open*, *5*(1), 100267. https://doi.org/10.1016/j.ssaho.2022.100267

Gumilar, Desy Wulan Ayuning, K. B. S., & Totalia, S. A. (2024). Digital Financial Literacy and Digital Financial Inclusion in the Era of Digital Disruption: Systematic Literature Review. *Formosa Journal of Multidisciplinary Research*, *3*(5), 1563–1576. https://doi.org/10.55927/fjmr.v3i5.9213

Gutter, M., & Copur, Z. (2011). Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey. *Journal of Family and Economic Issues*, *32*(4), 699–714. https://doi.org/10.1007/s10834-011-9255-2

Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling*.

Haque, A., & Zulfiqar, M. (2016). Women's Economic Empowerment through Financial Literacy, Financial Attitude and Financial Wellbeing. *International Journal of Business and Social Science*, *7*(3), 78–88.

Hassan, N. C., Abdul-Rahman, A., Hamid, S. N. A., & Amin, S. I. M. (2024). What factors affecting investment decision? The moderating role of fintech self-efficacy. *PLoS ONE*, *19*(4 April), 1–25. https://doi.org/10.1371/journal.pone.0299004

Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. In *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Press.

Hendriks, S. (2019). The role of financial inclusion in driving women's economic empowerment. *Development in Practice*, *29*(8), 1029–1038. https://doi.org/10.1080/09614524.2019.1660308

Holloway, K., Niazi, Z., & Rouse, R. (2017). Women's Economic Empowerment Through Financial Inclusion. In *Financial Inclusion Program Innovations for Poverty Action* (Issue Innovations for Poverty Action). https://www.poverty-action.org/sites/default/files/publications/Womens-Economic-Empowerment-Through-Financial-Inclusion.pdf

Huang, W., Gu, X., Lin, L., Alharthi, M., & Usman, M. (2023). Do financial inclusion and income inequality matter for human capital? Evidence from sub-Saharan economies. *Borsa Istanbul Review*, *23*(1), 22–33. https://doi.org/https://doi.org/10.1016/j.bir.2022.09.002

Hung, A., Yoong, J., & Brown, E. (2012). Empowering Women Through Financial Awareness and Education. In *OECD Working Papers on Finance, Insurance and Private Pensions* (Issue 14). http://www.finlitedu.org/team-downloads/evaluation/hung-yoong-brown-2012pdf.pdf

Islam, M. S., & Alhamad, I. A. (2022). Impact of financial development and institutional quality on remittance-growth nexus: evidence from the topmost remittance-earning economies. *Heliyon*, *8*(12), e11860. https://doi.org/https://doi.org/10.1016/j.heliyon.2022.e11860

Jose, J., & Ghosh, N. (2024). Digital Financial Literacy and Its Impact on Financial Behaviors: A Systematic Review. In *Contemporary Research and Practices for Promoting Financial Literacy and Sustainability* (p. 33). IGI Global. https://doi.org/10.4018/979-8-3693-0863-9.ch006

Kabeer, N. (2005). Is Microfinance a "Magic Bullet" for Women's Empowerment? Analysis of Findings from South Asia. *Economic and Political Weekly*, *40*, 4709–4718. https://doi.org/10.2307/4417357

Kabeer, N. (2011). Contextualising the Economic Pathways of Women's Empowerment. In *Pathways Policy Paper* (Issue October).

Kajol, K., Singh, R., & Paul, J. (2022). Adoption of digital financial transactions: A review of literature and future research agenda. *Technological Forecasting and Social Change*, *184*, 121991. https://doi.org/https://doi.org/10.1016/j.techfore.2022.121991

Kakde, H. S. (2024). Fostering Financial Resilience: A Pathway Through Financial Wellness. *Educational Administration: Theory and Practice*, *30*(5), 5777–5783. https://doi.org/10.53555/kuey.v30i5.3854

Kakinuma, Y. (2022). Financial literacy and quality of life: a moderated mediation approach of fintech adoption and leisure. *International Journal of Social Economics*, *49*(12), 1713–1726. https://doi.org/10.1108/IJSE-10-2021-0633

Kamble, P. A., Mehta, A., & Rani, N. (2024). Financial Inclusion and Digital Financial Literacy: Do they Matter for Financial Well-being? *Social Indicators Research*, *171*(3), 777–807. https://doi.org/10.1007/s11205-023-03264-w

KANAPICKIENĖ, R., VASILIAUSKAITĖ, D., KELIUOTYTĖ-STANIULĖNIENĖ, G., ŠPICAS, R., OMEIR, A. K., & KANAPICKAS, T. (2024). A COMPREHENSIVE REVIEW OF BEHAVIORAL BIASES IN FINANCIAL DECISION-MAKING: FROM CLASSICAL FINANCE TO BEHAVIORAL FINANCE PERSPECTIVES. *JOURNAL of BUSINESS ECONOMICS & MANAGEMENT*, *25*(5), 1006–1029.

Kang, G.-L., Park, C.-W., & Jang, S.-H. (2024). A Study on the Impact of Financial Literacy and Digital Capabilities on Entrepreneurial Intention: Mediating

Effect of Entrepreneurship. In *Behavioral Sciences* (Vol. 14, Issue 2). https://doi.org/10.3390/bs14020121

Kapiga, S., Harvey, S., Mshana, G., Hansen, C. H., Mtolela, G. J., Madaha, F., Hashim, R., Kapinga, I., Mosha, N., Abramsky, T., Lees, S., & Watts, C. (2019). A social empowerment intervention to prevent intimate partner violence against women in a microfinance scheme in Tanzania: findings from the MAISHA cluster randomised controlled trial. *The Lancet Global Health*, *7*(10), e1423–e1434. https://doi.org/https://doi.org/10.1016/S2214-109X(19)30316-X

Kass-Hanna, J., Lyons, A. C., & Liu, F. (2022a). Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa. *Emerging Markets Review*, *51*(PA), 100846. https://doi.org/10.1016/j.ememar.2021.100846

Kass-Hanna, J., Lyons, A. C., & Liu, F. (2022b). Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa. *Emerging Markets Review*, *51*, 100846. https://doi.org/https://doi.org/10.1016/j.ememar.2021.100846

Kaur, S., & Kapuria, C. (2020). Determinants of financial inclusion in rural India: does gender matter? *International Journal of Social Economics*, *47*(6), 747–767. https://doi.org/10.1108/IJSE-07-2019-0439

Kazembe, L. N. (2020). Women empowerment in Namibia: Measurement, determinants and geographical disparities. *World Development Perspectives*, *19*, 100211. https://doi.org/https://doi.org/10.1016/j.wdp.2020.100211

Khaw, K. W., Alnoor, A., AL-Abrrow, H., Tiberius, V., Ganesan, Y., & Atshan, N.

A. (2023). Reactions towards organizational change: a systematic literature review. *Current Psychology*, *42*(22), 19137–19160. https://doi.org/10.1007/s12144-022-03070-6

Khursheed, A. (2022). Exploring the role of microfinance in women's empowerment and entrepreneurial development: a qualitative study. *Future Business Journal*, *8*(1), 57. https://doi.org/10.1186/s43093-022-00172-2

Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, *49*(3), 589–614. https://doi.org/https://doi.org/10.1111/fima.12283

Klapper, L., & Miller, M. (2021). The impact of COVID-19 on digital financial inclusion. In *Global Partnership for Financial Inclusion (GPFI) - the World Bank* (Issue November). https://www.gpfi.org/news/gpfi-reports

Koomson, I., Ansong, D., Okumu, M., & Achulo, S. (2023). Effect of Financial Literacy on Poverty Reduction Across Kenya, Tanzania, and Uganda. *Global Social Welfare*, *10*(1), 93–103. https://doi.org/10.1007/s40609-022-00259-2

Koomson, I., Villano, R. A., & Hadley, D. (2021). Accelerating the impact of financial literacy training programmes on household consumption by empowering women. *Applied Economics*, 1–18. https://doi.org/10.1080/00036846.2021.1878093

Kumar, N., Raghunathan, K., Arrieta, A., Jilani, A., & Pandey, S. (2021). The power of the collective empowers women: Evidence from self-help groups in India. *World Development*, *146*, 105579. https://doi.org/https://doi.org/10.1016/j.worlddev.2021.105579

Kumar, P., Islam, M. A., Pillai, R., & Sharif, T. (2023). Analysing the behavioural,

psychological, and demographic determinants of financial decision making of household investors. *Heliyon*, *9*(2), e13085. https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e13085

Kumar, P., Pillai, R., Kumar, N., & Tabash, M. I. (2023). The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being. *Borsa Istanbul Review*, *23*(1), 169–183. https://doi.org/10.1016/j.bir.2022.09.012

Ladrón de Guevara Cortés, R., Tolosa, L. E., & Rojo, M. P. (2023). Prospect theory in the financial decision-making process: an empirical study of two Argentine universities. *Journal of Economics, Finance and Administrative Science*, *28*(55), 116–133. https://doi.org/10.1108/JEFAS-12-2021-0272

Lee, C.-W., & Huruta, A. D. (2022). Green Microfinance and Women's Empowerment: Why Does Financial Literacy Matter? In *Sustainability* (Vol. 14, Issue 5). https://doi.org/10.3390/su14053130

Lontchi, C. B., Yang, B., & Su, Y. (2022). The Mediating Effect of Financial Literacy and the Moderating Role of Social Capital in the Relationship between Financial Inclusion and Sustainable Development in Cameroon. In *Sustainability* (Vol. 14, Issue 22). https://doi.org/10.3390/su142215093

Luo, S., Sun, Y., Yang, F., & Zhou, G. (2022). Does fintech innovation promote enterprise transformation? Evidence from China. *Technology in Society*, *68*, 101821. https://doi.org/https://doi.org/10.1016/j.techsoc.2021.101821

Lusardi, A., Hasler, A., & Yakoboski, P. J. (2021). Building up financial literacy and financial resilience. *Mind & Society*, *20*(2), 181–187. https://doi.org/10.1007/s11299-020-00246-0

Lusardi, A., & Mitchell, O. (2014a). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, *52*, 5–44. https://doi.org/10.2139/ssrn.2243635

Lusardi, A., & Mitchell, O. S. (2014b). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Lyons, A. C., & Kass-Hanna, J. (2021). A methodological overview to defining and measuring "digital" financial literacy. *FINANCIAL PLANNING REVIEW*, *4*(2), e1113. https://doi.org/https://doi.org/10.1002/cfp2.1113

Lyons, A. C., Kass-hanna, J., Liu, F., & Greenlee, A. J. (2020). *Building Financial Resilience Through Financial and Digital Literacy in South Asia and Sub-Saharan African* (1098; ADBI Working Paper Series, Issue 1098). https://www.adb.org/sites/default/files/publication/574821/adbi-wp1098.pdf

Mackie, J., & Allwood, G. (2022). *The implementation of the 2030 Agenda's principles of 'leaving-no-one-behind' and 'addressing the needs of those furthest behind first' in the EU's development policy* (Issue January). https://www.europarl.europa.eu/RegData/etudes/STUD/2022/653657/EXPO_STU(2022)653657_EN.pdf

Maheshwari, H., Samantaray, A. K., Panigrahi, R. R., & Jena, L. K. (2024). Financial literacy in predicting investment decisions: do attitude and overconfidence influence? *International Journal of Social Economics*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/IJSE-05-2023-0370

Maldonado-Castro, J., Gallego-Losada, R., & Montero-Navarro, A. (2024). Mapping the intellectual structure of microfinance and women's

empowerment: A bibliometric analysis. *Heliyon*, *10*(20), e39563. https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e39563

Malhotra, A., & Schuler, S. (2005). Measuring Women's Empowerment as a Variable in International Development. *Measuring Empowerment: Cross Disciplinary Perspectives*.

Martin, A. (2008). Digital literacy and the "digital society." *Digital Literacies: Concepts, Policies and Practices*, *30*(2008), 151–176.

Massaro, M., Dumay, J., & Guthrie, J. (2016). On the shoulders of giants: undertaking a structured literature review in accounting. *Accounting, Auditing & Accountability Journal*, *29*(5), 767–801. https://doi.org/10.1108/AAAJ-01-2015-1939

Mazumdar, R., & Chaudhary, A. (2022). *90% of Women in India Are Shut Out of the Workforce*. Bloomberg. https://www.bloomberg.com/news/features/2022-06-02/covid-cut-india-s-women-out-of-the-job-market-now-90-aren-t-in-the-workforce

Md Kassim, A. A., Tamsir, F., Azim, Z. A. Z., Mohamed, J., & Nordin, H. N. M. (2018). Determinants of Saving Behavior: An Empirical Study among Private Universities Students in Selangor. *Asia Proceedings of Social Sciences*, *2*(2), 84–88. https://doi.org/10.31580/apss.v2i2.345

Mejía, S. H., García-Santillán, A., & Moreno-García, E. (2022). Financial Literacy and Its Relationship With Sociodemographic Variables. *Economics and Sociology*, *15*(1), 40–55. https://doi.org/10.14254/2071-789X.2022/15-1/3

Méndez Prado, S. M., Zambrano Franco, M. J., Zambrano Zapata, S. G., Chiluiza García, K. M., Everaert, P., & Valcke, M. (2022). A Systematic Review of

Financial Literacy Research in Latin America and The Caribbean. In *Sustainability* (Vol. 14, Issue 7, p. 3814). https://doi.org/10.3390/su14073814

Mishra, D., Agarwal, N., Sharahiley, S., & Kandpal, V. (2024). Digital Financial Literacy and Its Impact on Financial Decision-Making of Women: Evidence from India. In *Journal of Risk and Financial Management* (Vol. 17, Issue 10). https://doi.org/10.3390/jrfm17100468

Mishra, D., Kandpal, V., Agarwal, N., Kumar, R., Priyadarshi, N., & Twala, B. (2025). Digital and Financial Literacy for Uplifting Women and Achieving Sustainable Development Goals. *F1000 Research Journal*, 1–15.

Mishra, D., Kandpal, V., Agarwal, N., & Srivastava, B. (2024). Financial Inclusion and Its Ripple Effects on Socio-Economic Development: A Comprehensive Review. In *Journal of Risk and Financial Management* (Vol. 17, Issue 3). https://doi.org/10.3390/jrfm17030105

Morgan, P. J., Huang, B., & L, T. (2019). The Need to Promote Digital Financial Literacy for the Digital Age-G20 Insights. In *T 20 Japan (Policy Brief)*. https://t20japan.org/policy-brief-need-promote-digital-financial-literacy/

Mukherjee, S., Dhingra, T., & Sengupta, A. (2017). Status of Electricity Act, 2003: A systematic review of literature. *Energy Policy*, *102*, 237–248. https://doi.org/10.1016/j.enpol.2016.12.001

Neacșu, M., & Georgescu, I. E. (2024). Positions and Delimitations Regarding the Financial Performance -Sustainability Relationship in the Context of Organizational Resilience. *Scientific Annals of Economics and Business*, *71*(2), 241–263. https://doi.org/10.47743/saeb-2024-0017

Nedopil, C. (2023). Integrating biodiversity into financial decision-making:

Challenges and four principles. *Business Strategy and the Environment*, *32*(4), 1619–1633. https://doi.org/https://doi.org/10.1002/bse.3208

Nguyen, T. T., Tran, T. N. H., Do, T. H. M., Dinh, T. K. L., Nguyen, T. U. N., & Dang, T. M. K. (2024). Digital literacy, online security behaviors and E-payment intention. *Journal of Open Innovation: Technology, Market, and Complexity*, *10*(2), 100292. https://doi.org/https://doi.org/10.1016/j.joitmc.2024.100292

Niankara, I. (2023). The impact of financial inclusion on digital payment solution uptake within the Gulf Cooperation Council Economies. *International Journal of Innovation Studies*, *7*(1), 1–17. https://doi.org/https://doi.org/10.1016/j.ijis.2022.09.004

Niankara, I., & Traoret, R. I. (2023). Towards an encompassing concept of remittance in the digital era: Assessing the role of formal banking and mobile money accounting in its spatial flow. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(3), 100107. https://doi.org/https://doi.org/10.1016/j.joitmc.2023.100107

Nino-Zarazua, M. M., & Copestake, J. (2008). Financial inclusion, vulnerability, and mental models: From physical access to effective use of financial services in a low income area of Mexico City. *Savings and Development*, *32*(4), 353–379. http://www.jstor.org/stable/41406477

Nisar, M., Ullah, D. S., Zahid, M., Amin, B., Ali, I., & Rasool, H. (2022). Economic Empowerment and Women Decision Making: An analysis of the Impact of Financial Autonomy on the use of Contraceptives among Pakhtun Women. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, *13*(1), 1329–1338.

Nunnally, J. C. (1978). *Psychometric theory*. McGraw-Hill.

OECD. (2021). *G20 / OECD-INFE Report on s upporting financial resilience and transformation through digital financial literacy*. https://www.bancaditalia.it/focus/g20-2021/temi-gruppi/gpfi/5_Report_Supporting_resilience_through_digital_financial_literacy.pdf

Ogunola, A. A., Sonubi, T., Toromade, R. O., Ajayi, O. O., & Maduakor, A. H. (2024). The intersection of digital safety and financial literacy : Mitigating financial risks in the digital economy. *International Journal of Science and Research Archive*, *13*(2), 673–691.

Okoi, O. N., Ogar, J. A., Ubi, L. O., Ubi, L. B., & Okpa, J. T. (2022). Economic empowerment, financial security and the well-being of women in Nigeria. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, *6*(3), 612–622.

Pal, M., Gupta, H., & Joshi, Y. C. (2022). Social and economic empowerment of women through financial inclusion: empirical evidence from India. *Equality, Diversity and Inclusion: An International Journal*, *41*(2), 294–305. https://doi.org/10.1108/EDI-04-2021-0113

Park, C.-Y., & Mercado, R. J. (2015). Financial Inclusion, Poverty, and Income Inequality in Developing Asia. In *ADB Economiics Working Paper Series No 426* (Issue January 2015). https://doi.org/10.2139/ssrn.2558936

Park, C. M., Kraus, A. D., Dai, Y., Fantry, C., Block, T., Kelder, B., Howard, K. A. S., & Solberg, V. S. H. (2021). Empowering Women in Finance through Developing Girls' Financial Literacy Skills in the United States. In *Behavioral*

Sciences (Vol. 11, Issue 12). https://doi.org/10.3390/bs11120176

Parvathy, V. K., & Kumar, J. (2022). Financial capability and financial wellbeing of women in community-based organizations: mediating role of decision-making ability. *Managerial Finance*, *48*(9/10), 1513–1529. https://doi.org/10.1108/MF-05-2021-0234

Pathak, P., & Pant, V. (2018). An assessment of bank credit literacy, accessibility and service quality among women self help groups. *Academy of Entrepreneurship Journal*, *24*(1), 1–13.

Patton, M. Q. (2002). Two Decades of Developments in Qualitative Inquiry: A Personal, Experiential Perspective. *Qualitative Social Work*, *1*(3), 261–283. https://doi.org/10.1177/1473325002001003636

Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, *27*, 327–342. https://doi.org/10.1016/j.jwb.2017.01.003

Pearson, B., & Korankye, T. (2023). The association between financial literacy confidence and financial satisfaction. *Review of Behavioral Finance*, *15*(6), 935–946. https://doi.org/10.1108/RBF-03-2022-0090

Podsakoff, P., MacKenzie, S., Lee, J.-Y., & Podsakoff, N. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *The Journal of Applied Psychology*, *88*, 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Prina, S. (2015). Banking the poor via savings accounts: Evidence from a field experiment. *Journal of Development Economics*, *115*, 16–31. https://doi.org/https://doi.org/10.1016/j.jdeveco.2015.01.004

Quisumbing, A., Meinzen-Dick, R., & Malapit, H. (2022). Women's empowerment and gender equality in South Asian agriculture: Measuring progress using the project-level Women's Empowerment in Agriculture Index (pro-WEAI) in Bangladesh and India. *World Development*, *151*, 105396. https://doi.org/https://doi.org/10.1016/j.worlddev.2021.105396

Rahayu, S. M., Worokinasih, S., Damayanti, C. R., Rachmatika, A. G., Normawati, R. A., & Aprilian, Y. A. (2023). Conceptualizing of Financial Resilient: Building Money Management Behavior. *Proceedings of the Fifth Annual International Conference on Business and Public Administration (AICoBPA 2022)*, 709–721. https://doi.org/10.2991/978-2-38476-090-9_56

Rahayu, S., Worokinasih, S., Damayanti, C., Normawati, R., Rachmatika, A., & Aprilian, Y. (2024). The Road to Financial Resilient: Testing Digital Financial Literacy and Saving Behavior. *Finance: Theory and Practice*, *28*, 218–230. https://doi.org/10.26794/2587-5671-2024-28-3-218-230

Rahman, M. R., & Rahman, M. M. (2023). Impact of Digital Financial Services on Customers' Choice of Financial Institutions: A Modified UTAUT Study in Bangladesh. *International Journal of Safety and Security Engineering*, *13*(3), 409–421. https://doi.org/10.18280/ijsse.130304

Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach. *FIIB Business Review*, *8*(1), 51–60. https://doi.org/10.1177/2319714519826651

RASHID, S., BOWRA, Z. A., & HUSSAIN, A. (2022). AN EMPIRICAL INVESTIGATION OF FINANCIAL INCLUSION ON FINANCIAL WELLBEING OF WORKING WOMEN: A MEDIATING ROLE OF

FINANCIAL CAPABILITY. *Bulletin of Business and Economics (BBE)*, *11*(1), 14–23.

Rastogi, S., & Ragabiruntha, E. (2018). Financial inclusion and socioeconomic development: gaps and solution. *International Journal of Social Economics*, *45*(7), 1122–1140. https://doi.org/10.1108/IJSE-08-2017-0324

Ravikumar, T., Suresha, B., Prakash, N., Vazirani, K., & Krishna, T. A. (2022). Digital financial literacy among adults in India: measurement and validation. *Cogent Economics & Finance*, *10*(1), 2132631. https://doi.org/10.1080/23322039.2022.2132631

Roy, P., & Patro, B. (2022). Financial Inclusion of Women and Gender Gap in Access to Finance: A Systematic Literature Review. *Vision*, *26*(3), 282–299. https://doi.org/10.1177/09722629221104205

Rozo, B. J. G., Crook, J., & Andreeva, G. (2023). The role of web browsing in credit risk prediction. *Decision Support Systems*, *164*, 113879. https://doi.org/https://doi.org/10.1016/j.dss.2022.113879

Sayulu, K., Sardar, G., & Sridevi, B. (2005). Impact of Self-Help Groups on Women Empowerment- An Empirical Study. *Management Researcher*, *XI*(3 & 4), 22.

Schöllhorn, J., Liu, Y. K., Piao, J. P. Z., Piccillo, G., Hung, T. W. T., & Comes, T. (2023). Economic, Financial, and Business Resilience (WoS). *SearchRxiv*. https://doi.org/10.1079/searchRxiv.2023.00393

Seldal, M. M. N., & Nyhus, E. K. (2022). Financial Vulnerability, Financial Literacy, and the Use of Digital Payment Technologies. *Journal of Consumer Policy*, *45*(2), 281–306. https://doi.org/10.1007/s10603-022-09512-9

Seraj, A. H. A., Alzain, E., & Alshebami, A. S. (2022). The roles of financial literacy and overconfidence in investment decisions in Saudi Arabia. *Frontiers in Psychology*, *13*(September), 1–12. https://doi.org/10.3389/fpsyg.2022.1005075

Setiawan, B., Phan, T. D., Medina, J., Wieriks, M., Nathan, R. J., & Fekete-Farkas, M. (2024). Quest for financial inclusion via digital financial services (Fintech) during COVID-19 pandemic: case study of women in Indonesia. *Journal of Financial Services Marketing*, *29*(2), 459–473. https://doi.org/10.1057/s41264-023-00217-9

Shaikh, A., Glavee-Geo, R., Karjaluoto, H., & Hinson, R. (2022). Mobile money as a driver of digital financial inclusion. *Technological Forecasting*, *186*. https://doi.org/10.1016/j.techfore.2022.122158

Sharahiley, S. M. (2020). Examining Entrepreneurial Intention of the Saudi Arabia's University Students: Analyzing Alternative Integrated Research Model of TPB and EEM. *Global Journal of Flexible Systems Management*, *21*(1), 67–84. https://doi.org/10.1007/s40171-019-00231-8

She, L., Rasiah, R., Weissmann, M. A., & Kaur, H. (2023). Using the Theory of Planned Behaviour to Explore Predictors of Financial Behaviour Among Working Adults in Malaysia. *FIIB Business Review*, *13*(1), 118–135. https://doi.org/10.1177/23197145231169336

Sherwani, F. K., Shaikh, S. Z., Behal, S., & Siddiqui, M. S. (2023). Determinants of financial inclusion among women-owned enterprises: a case study of the informal sector. *Arab Gulf Journal of Scientific Research*, 19. https://doi.org/10.1108/AGJSR-05-2023-0193

Showkat, M., Nagina, R., Baba, M. A., & Yahya, A. T. (2025). The impact of financial literacy on women's economic empowerment: exploring the mediating role of digital financial services. *Cogent Economics & Finance*, *13*(1), 2440444. https://doi.org/10.1080/23322039.2024.2440444

Simone Lombardini, K. B. and R. G. (n.d.). *A ' How To ' Guide to Measuring Women ' s Empowerment, May 2017*. p 28-30.

Sinha, M., Mahapatra, S. S., Dutta, A., & Sengupta, P. P. (2019). Microfinance and Women Empowerment: An Empirical Analysis. In R. C. Das (Ed.), *Handbook of Research on Microfinancial Impacts on Women Empowerment, Poverty, and Inequality* (pp. 52–64). IGI Global. https://doi.org/10.4018/978-1-5225-5240-6.ch003

Sobha, K., & Ijmtst, E. (2021). A Study on Women Empowerment in India. *International Journal for Modern Trends in Science and Technology*, *7*, 120–124. https://doi.org/10.46501/IJMTST0711021

Statisticstimes. (2021). *Demographics of India*. https://statisticstimes.com/demographics/country/india-demographics.php

Stevenson, C., Wakefield, J. R. H., Bowe, M., Kellezi, B., Jones, B., & McNamara, N. (2022). Weathering the economic storm together: Family identification predicts future well-being during COVID-19 via enhanced financial resilience. *Journal of Family Psychology*, *36*(3), 337–345. https://doi.org/10.1037/fam0000951

Stewart, H., & Jürjens, J. (2018). Data security and consumer trust in FinTech innovation in Germany. *Information and Computer Security*, *26*(1), 109–128. https://doi.org/10.1108/ICS-06-2017-0039

Sultana, A. M. (2011). Factors effect on women autonomy and decision-making power within the household in rural communities. *Journal of Applied Sciences Research*, *7*(1), 18–22.

Sundarasen, S., Rajagopalan, U., Kanapathy, M., & Kamaludin, K. (2023). Women's financial literacy: A bibliometric study on current research and future directions. *Heliyon*, *9*(12), e21379. https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e21379

Sutomo, D. A. (2024). Community-led Economic Resilience: Fostering SME Growth through Financial Education . *Golden Ratio of Data in Summary*, *4*(2 SE-Accounting, Management, Business, Economic), 361–371. https://doi.org/10.52970/grdis.v4i2.657

Sutton, J., Arcidiacono, A., Torrisi, G., & Arku, R. N. (2023). Regional economic resilience: A scoping review. *Progress in Human Geography*, *47*(4), 500–532. https://doi.org/10.1177/03091325231174183

Sylvia, Maarif, M., Hermadi, I., & Asikin, Z. (2024). Efficiency, Competitiveness And Resilience Of Banking: A Systematic Literature Review. *Jurnal Reviu Akuntansi Dan Keuangan*, *14*. https://doi.org/10.22219/jrak.v14i4.36352

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Tanzile, R., Domapielle, M. K., & Fielmua, N. (2023). Empowering women for sustainable development through semi-mechanized sheabutter processing in rural North-Western Ghana. *Scientific African*, *21*, e01790. https://doi.org/10.1016/j.sciaf.2023.e01790

Trivelli, C., Villanueva, C., Marincioni, M., Pels, J., Sachetti, F. C., Robino, C., Walbey, H., Martinez, L., & Magnelli, M. (2018). *Financial Inclusion for Women: A Way Forward*. https://www.g20-insights.org/wp-content/uploads/2019/10/Financial-Inclusion-for-Women-Final.pdf

UN WOMEN. (2020). *Women's Economic Empowernment in the Indian Ocean Rim: Progress and Challenges*.

UNESCO Institute for Statistics. (2018). A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2. In *UNESCO Institute for Statistics* (Issue 51). http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf. Consultado em 05fev2023, 17:45

United Nations Sustainable Development Group. (2019). Leaving No One Behind. A UNSDG Operational Guide for UN Country Teams. *2019*, *March*, 1–24. https://unsdg.un.org/sites/default/files/Interim-Draft-Operational-Guide-on-LNOB-for-UNCTs.pdf

Uthaileang, W., & Kiattisin, S. (2023). Developing the capability of digital financial literacy in developing countries: A Case of online loan for small entrepreneurs. *Heliyon*, *9*(12), e21961. https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e21961

van Helden, J., Budding, T., Gomes, P., Hesse, M., & Smolders, C. (2024). Financial Resilience Perspective on COVID-19 Business Support: A Comparative Study of Four European Countries. *Abacus*, *n/a*(n/a). https://doi.org/https://doi.org/10.1111/abac.12331

van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock

market participation. *Journal of Financial Economics*, *101*(2), 449–472. https://doi.org/10.1016/j.jfineco.2011.03.006

Vargas-Sánchez, A., Plaza-Mejía, M. Á., & Porras-Bueno, N. (2016). Attitude. In J. Jafari & H. Xiao (Eds.), *Encyclopedia of Tourism* (pp. 58–62). Springer International Publishing. https://doi.org/10.1007/978-3-319-01384-8_11

Venugopalan, D. . (2014). Influence of Kudumbasree on Women Empowerment – a Study. *IOSR Journal of Business and Management*, *16*(10), 35–44. https://doi.org/10.9790/487x-161033544

Vieira, E. S., & Gomes, J. A. N. F. (2009). A comparison of Scopus and Web of Science for a typical university. *Scientometrics*, *81*(2), 587–600. https://doi.org/10.1007/s11192-009-2178-0

Wahyuni, R., Febriyanti, B., Laila, G., Sunaryo, D., & Adiyanto, Y. (2024). Sustainability Based Financial Risk Management Strategies For Long Term Resilience: A Systematic Review. *Indo-Fintech Intellectuals: Journal of Economics and Business*, *4*, 2625–2639. https://doi.org/10.54373/ifijeb.v4i5.2154

Wei, N. (2024). Green finance, market integration, and regional economic resilience. *Finance Research Letters*, *67*, 105777. https://doi.org/https://doi.org/10.1016/j.frl.2024.105777

White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework. *Journal of Marketing*, *83*(3), 22–49. https://doi.org/10.1177/0022242919825649

World Bank. (2022). The Global Findex Database 2021: Financial Inclusion,

Digital Payments, and Resilience in the Age of COVID-19. In *The Global Findex Database*.

Xiao, J. J., Ahn, S.-Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies*, *38*. https://doi.org/10.1111/ijcs.12122

Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer Financial Capability and Financial Satisfaction. *Social Indicators Research*, *118*(1), 415–432. https://doi.org/10.1007/s11205-013-0414-8

Xiao, J. J., & O'Neill, B. (2011). Financial Resiliency Before, During, and After the Great Recession: Results of an Online Study. *Journal of Consumer Education*, *28*, 34–43. http://www.cefe.illinois.edu/JCE/archives/2011_vol_28/2011_vol_28_pg34-43_O'Neill%0Aand%0Axiao.pdfavailableat:http://www.cefe.illinois.edu/JCE/archives/2011_vol_28/2011_vol_28_pg34-43_O'Neill%0AXiao.pdf%0Ahttp://www.cefe.illinois.edu/JCE/archives/2011_vol

Xu, G., Feng, L., Wang, W., & Liang, Q. (2024). Digital Financial Literacy and Rural Income Inequality. *Sage Open*, *14*(3), 21582440241275640. https://doi.org/10.1177/21582440241275642

Xu, S., Yang, Z., Ali, S. T., Li, Y., & Cui, J. (2022). Does Financial Literacy Affect Household Financial Behavior? The Role of Limited Attention. *Frontiers in Psychology*, *13*(June), 1–23. https://doi.org/10.3389/fpsyg.2022.906153

Y. Gitaharie, B., Soelistianingsih, L., & Djutaharta, T. (2014). *Financial Inclusion: Household Access to Credit in Indonesia* (Working Papers in Economics and

Business). Faculty of Economics and Business, University of Indonesia. https://econpapers.repec.org/RePEc:lpe:wpecbs:201401

Yang, J., Wu, Y., & Huang, B. (2023). Digital finance and financial literacy: Evidence from Chinese households. *Journal of Banking & Finance*, *156*, 107005. https://doi.org/https://doi.org/10.1016/j.jbankfin.2023.107005

Yeo, K. H. K., Lim, W. M., & Yii, K.-J. (2023). Financial planning behaviour: a systematic literature review and new theory development. *Journal of Financial Services Marketing*. https://doi.org/10.1057/s41264-023-00249-1

LIST OF PUBLICATIONS:

Deepak Mishra,
School of Business – Management (Finance)
ORCID ID: 0009-0009-8695-7543

Mishra, D., Agarwal, N., Sharahiley, S., & Kandpal, V. (2024). Digital Financial Literacy and Its Impact on Financial Decision-Making of Women: Evidence from India. In *Journal of Risk and Financial Management* (Vol. 17, Issue 10). https://doi.org/10.3390/jrfm17100468

Mishra, D., Kandpal, V., Agarwal, N., Kumar, R., Priyadarshi, N., & Twala, B. (2025). Digital and Financial Literacy for Uplifting Women and Achieving Sustainable Development Goals. *F1000 Research Journal*, 1–15.

Mishra, D., Kandpal, V., Agarwal, N., & Srivastava, B. (2024). Financial Inclusion and Its Ripple Effects on Socio-Economic Development: A Comprehensive Review. In *Journal of Risk and Financial Management* (Vol. 17, Issue 3). https://doi.org/10.3390/jrfm17030105

Appendix:

SURVEY FORM OF THE STUDY

"***Exploring the Impact of Digital and Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand"***

Dear Respondent, this questionnaire has been developed to carry out my Ph.D. research work titled "Exploring the Impact of Digital and Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resilience in Uttar Pradesh & Uttarakhand."

The questionnaire has eight different parts. All the information and the responses will be used purely for academic purposes only. Kindly don't leave any questions.

PART A

PROFILE OF THE RESPONDENT

1. Name of the Interviewee (Optional):

_____

2. Where do you live

A. Village

B. City

C. Town

3. What is your marital status?

A. Married

B. Unmarried

4. "How old are you?"

A. 18-24 years old

B. 25-34 years old

C. 35-44 years old

D. 45-54 years old

E. 55-60 years old

F. 60+ years old

5. What is your level of education?

A. Illiterate

B. Matriculation

C. Intermediation

D. Graduation

E. Post-Graduation

F. Doctoral

6. No. of children

A. None

B. 1

C. 2

D. 3

E. More than 3

F. Prefer not to say

7. “What is your employment status?”

A. Full-time

B. Part-time

C. Contract or temporary

D. Unemployed

E. Unable to work

F. Other (please specify) _____

G. Prefer not to say

8. Monthly Income (In Rupees):

A. 0 to 10,000

B. 10,0001 - 20, 0000

C. 20,001- 30, 000

D. 30,0001-40,000

E. More than 40,000

F. Prefer not to say

9. No. of earning adults in the family

A. None

B. 1

C. 2

D. 3

E. More than 3

F. Prefer not to say

10. Religion

A. Hindu

B. Sikh

C. Christian

D. Muslim

E. Jain

F. Other (please specify) _____

11. Caste/Category

A. General

B. OBC

C. SC

D. ST

E. Other (please specify) _____

Part B

Digital financial literacy DFL

DFLKA (Digital financial literacy knowledge and awareness)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	I believe awareness helps in better financial management.					
II	I have a positive attitude towards saving money for future needs and emergencies.					
III	I have the knowledge of tax, savings, investment, and other important financial terms?					
IV	I am aware of the benefits and limitations of digital financial tools and services.					

DFLM (Digital financial literacy management)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	I actively seek out information and resources to improve my digital financial knowledge and skills.					
II	I believe digital financial literacy leads to better financial inclusion					
III	I feel satisfied when I initiate and complete the DFS transactions.					
IV	I can decide on the type of digital financial products or services that help in the accomplishment of my financial goals.					

DFLB (Digital financial literacy behavior)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	I would like to practice positive financial behaviors such as responsible borrowing, savings for					

	emergencies, etc.					
II	I prefer digital financial transactions as they provide rewards, incentives, cash back, and other benefits					
III	I use DFS because other people positively see me					
IV	I do not want to be rational in digital financial transactions, even though I do not have a reason for doing so.					

PART C

Questions on financial resilience

Please indicate (√) how strongly you agree or disagree with each of the following statements:

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	Do you have enough savings so that you can survive for up to 6 months					

	without regular earnings?					
II	Are you satisfied with your present source of income?					
III	Are you capable of planning long-term events such as children's education, marriage, and other important events of life?					

Part D

Women Empowerment

Women empowerment through involvement in asset management and family financial planning (WEAP)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	I am actively involved in acquiring and managing assets through the use of digital financial services (e.g., mobile banking apps and digital wallets etc.).					
II	I am involved in financial					

	planning for my family's future.					
III	I can make investments and financial decisions without relying on others.					
IV	I review my savings plan regularly and make adjustments when needed.					

Women empowerment through freedom, equality, social & cultural change (WEFEC)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	Are you free to express your opinions in family and public discussions?					
II	Are you free to decide on clothes, friends, and your career?					
III	Have you faced any gender discrimination in your family and outside family?					
IV	Do you feel that traditional gender roles					

	(e.g., women as caregivers, men as providers) are changing in your community?					

Women empowerment through financial decision making (WEFD)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	Utilizing digital financial services has empowered you to make autonomous financial decisions.					
II	Are you responsible for your short-term and long-term financial decisions about investment and expenditure?					
III	Are you responsible for your decisions related to your job, earnings, borrowing, savings, and management of your personal finances?					
IV	Digital financial services have provided me with					

	a greater sense of financial security and stability.					

Women empowerment through access to financial resources and security (WEAFRS)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I	Are you the beneficiary of government welfare schemes like Pradhan Mantri Swarozgar Yojana, Pradhan Mantri Gramin Awas Yojana, etc.					
II	Do you have access to digital banking services, like net banking, UPI transfer, debit and credit cards, etc., whether it is a government bank or a private bank?					
III	Do you believe digital payments have increased your access to financial services.					

IV	Do you have access to banks and financial institutions (whether private or government) with their facilities like the opening of savings accounts, recurring deposit accounts, fixed deposit accounts, etc., in your local area?					

Deepak Mishra

Exploring the Impact of Digital Financial Literacy on Women Empowerment and Achieving SDGs – A Study of Financial Resi...

Quick Submit

Quick Submit

UPES: University of Tomorrow

Document Details

Submission ID

trn:oid:::1:3335878344

Submission Date

Sep 11, 2025, 1:59 PM GMT+5:30

Download Date

Sep 11, 2025, 2:26 PM GMT+5:30

File Name

Deepak_Mishra_-_Thesis_26th_May_2025_v.2_1.pdf

File Size

1.3 MB

139 Pages

34,414 Words

195,968 Characters

8% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Small Matches (less than 14 words)

Exclusions

- 3 Excluded Sources

Match Groups

81 Not Cited or Quoted 6%
Matches with neither in-text citation nor quotation marks

18 Missing Quotations 2%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

4% Internet sources

5% Publications

3% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

No suspicious text manipulations found.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.