FINANCIAL LITERACY, FINANCIAL WELL-BEING AND PERSONAL WELL BEING (WITH SPECIAL REFERENCE TO HOUSEHOLDS IN JAMMU PROVINCE)

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By

Mamta Sharma
41700284

SUPERVISED BY

Dr. Rupesh Roshan Singh

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DECLARATION

I declare that the thesis entitled **'Financial Literacy, Financial Well-Being and Personal Well Being (With special reference to households in Jammu Province)'** has been prepared by my under the guidance of **Dr. Rupesh Roshan Singh**, Associate Professor in Banking and Insurance, Mittal School of Business, Lovely Professional University, Phagwara. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

Date:

Mamta Sharma
Mittal School of Business,
Lovely Professional University,
Phagwara

CERTIFICATE

I certify that **Mamta Sharma** has prepared her thesis entitled **'Financial Literacy, Financial Well-Being and Personal Well Being (With special reference to households in Jammu Province)'** for the award of Ph.D. degree of the Lovely Professional University, under my guidance. She has carried out the work at the Department of Management, Mittal School of Business, Lovely Professional University, Phagwara.

Date:

Dr. Rupesh Roshan Singh
Mittal School of Business,
Lovely Professional University,
Phagwara

ABSTRACT

It has been more than 74 years, India got independence, but still India's people are not financially independent. After the emergence of 2008 global financial crisis a remarkable significance of financial literacy had been come forward and a noteworthy attention had been laid down on the assessment of several striking gears of financial literacy counting attitude, behavior, knowledge etc. The ability to manage money and cope with unexpected financial shocks is important for individuals, households and the economy. Money matters, it can determine where we live, how we live and what we do with our spare time, now and in the future. Among 27 Asia Pacific/Middle East/Africa (APMEA), India scores 22nd rank in context to financial literacy index, 27th rank in context to basic money management and 11th rank in financial component. India covering 17.5% of the world's population and approximately 76% of the adult population of India are lagging behind the fundamental financial literacy and cannot recognize the noteworthy and imperative basics of finance. The average financial literacy rate in India is 24% and at world level it is 33%, which is not a good sign. So, it is a matter of concern not at national level but at the world level as well.

Jammu and Kashmir is at 30th rank among all states and union territories of India, in terms of literacy rate (census, 2011). Financial literacy is imperative for improving the financial health and well-being of individuals and the economy as a whole. Financial illiteracy is one of the main causes of financial crisis and results in an unproductive financial decision. 76% of Indian adults lack basic financial concepts. India ranked at 23rd in a list of 28 countries. Despite the various initiatives taken by the government, central banks and NGOs in India the evidence have revealed that the overall impact of financial literacy is still limited.

The position of J&K in terms of insurance penetration is low and level of financial inclusion is below average (Crisil-Inclusix, 2016). The focus of this doctoral dissertation is on financial literacy of households taking financial decisions and its influence on financial behavior, financial well-being, and personal well-being. Through this dissertation, we tried achieving the following objectives. 1. To study the influence of

Financial Literacy (FL) on Financial Behavior (FB) of households in Jammu Province. 2. To examine the influence of Financial Literacy (FL) and Financial Behavior (FB) on Financial Well-Being (FWB) of households in Jammu Province. 3. To study the mediating role of Financial Behavior (FB) between Financial Literacy (FL) and Financial Well-Being (FWB). 4. To study the mediating role of Financial Well-Being (FWB) between Financial Literacy (FL) and Personal Well-Being (PWB). 5. To study the effect of Financial Well-Being (FWB) on Personal Well-Being (PWB). Descriptive research design was used and the study was cross-sectional in nature. Primary data was collected from the respondents, who are taking financial decisions at their home. Multistage sampling was used. Krejice and Morgan formula was applied to select the sample size.

The frequency method was used to analyze the results of the MCQ-based questions asked the respondents with respect to measure their level of financial literacy included both basic financial literacy and sophisticated financial literacy questions. Results of the study in context to the average score of the respondents in terms of basic financial literacy are 33.5%, including numeracy questions with 63.75%, understanding of inflation is 36%, understanding of risk diversification is 13.5%, understanding of compound interest 40.75 and understanding of time value of money is 13%. Whereas, the average score of the respondents in terms of sophisticated financial literacy is 24%, including understanding of Stock market functions 5.25%, understanding of knowledge of mutual funds 37.5% and understanding of long-term return 29%. Approximately 18% of the respondents invested in the stock market. The frequency of the responses depicts the low level of financial literacy among households and the penetration into the stock market found low.

PLS-SEM using Smart PLS3 was applied to study the structural relationship between financial literacy, financial behavior, financial well-being and personal well-being. PLS-SEM comprises of measurement model assessment and structural model assessment. Measurement model assessment comprises formative model assessment and reflective model assessment. Formative model assessment included three steps viz., redundancy analysis, Variance Inflated Factor (VIF) and bootstrapping. Similarly, reflective model assessment comprises various steps included factor loading, cross loading, average variance extracted (AVE) reliability and validity. Once all the requirements of measurement model assessment had been achieved in our study we next applied structural model assessment to perform the regression analysis, it include the measurement of the following: Variance Inflated Factor (VIF), hypotheses testing, R square, F square, Q square and PLS predict. It had been found that financial literacy affects the financial behaviour, financial well being and personal well being of the households as there is a significant direct relationship between financial literacy and other constructs of the study. The path coefficient between FL and FWB is 0.389, between FL and FB is 0.585, between FB and FWB is 0.673 and between FWB and PWB is 0.673. Further, when we study the mediating role of financial behavior between financial literacy and financial well being it had been found that financial behavior plays a full mediation role and acts as a principal factor to build connectivity between financial literacy and financial well-being. We find that financial literacy has significant direct influence on financial well-being and personal well-being. Further, when we study the mediating role of financial well being between financial literacy and personal well-being, we found that financial well being plays the role as a principal factor to build connectivity between financial literacy and personal well-being. Personal well-being can be achieved by making an extra effort to modify the financial behavior and to improve the financial well being with value-adding motive in mind rather than sharing of financial risk. In this study, we studied the mediating role of financial behavior between financial literacy and financial behavior and secondly study the mediating role of financial well-being between financial literacy and personal well-being. In the future, we can study the mediating role of financial well-being between financial behavior and personal well-being. Cross-sectional research was conducted to collect the data. In future, longitudinal and experimental research can be conducted to know about the pre and post financial behavior. In this research, households are taken as respondents in future officials of the banks can be taken as respondents with the objective to study the outcomes of financial literacy camps conducted with aim to financially literate the selected.

Our result also suggests the government, policy makers, academicians and industry to take necessary and relevant actions.

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(Mamta Sharma)

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

TABLE OF ABBREVIATIONS

OECD	Organisation for Economic Cooperation and Development
INFE	International Network on Financial Education
FLCs	Financial Literacy Centers
NGOs	Non Government Organisations
LDM	Lead District Manager
BRICS	Brazil, Russia, India, China and South Africa
RBI	Reserve Bank of India
SEBI	Securities and Exchange Board of India
NCFE	National Centre for Financial Education
FAME	Financial Awareness Messages
CERE	Centre for Environmental Research and Education
PISA	Program for International Student Assessment
PACFL	President’s Advisory Council on Financial Literacy
NABARD	National Bank for Agricultural and Rural Development
BSE	Bombay Stock Exchange
S&P	Standard & Poor
FSDC-SC	Financial Stability and Development Council Sub-Committee
NSFE	National Strategy for Financial Education
NCFE	National Centre of Financial Education
CFPB	Consumer Financial Protection Bureau
DEMATEL	Decision Making Trial and Evaluation Laboratory
FL	Financial Literacy
FB	Financial Behaviour
FWB	Financial Well Being
PWB	Personal Well Being
SEM	Structural Equation Modeling
CFA	Confirmatory Factor Analysis
VIF	Variance Inflated Factor

CR	Composite Reliability
AVE	Average Variance Explained
HTMT	Heterotrait–Monotrait
PLS-SEM	Partial Least Square
FK	Financial Knowledge
FA	Financial Awareness
GFA	General Financial awareness
GFB	General Financial Behaviour
SB	Saving Behaviour
RM	Risk Management
PM	Payment Management
MM	Money Management
SPB	Spending Behaviour
PP	Propensity to Plan
IV	Independent Variable
DV	Dependent Variable
M	Moderator
GoF	Goodness of Fit
PPF	Public Provident Fund
MHRD	Ministry of Human Resource and Development

LIST OF APPENDICES

CHAPTER-1

INTRODUCTION

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INTRODUCTION

1.1 INTRODUCTION

After the emergence of 2008 global financial crisis a remarkable significance of Financial Literacy (FL) had been come forward (OECD, 2013), and a noteworthy attention had been laid down on the assessment of several striking gears of financial literacy counting attitude, behavior, personality, etc. (Nemeth & Zsoter, 2017).

G20 leaders legitimated, Foundation of International Network on Financial Education (INFE) (G20, 2012), presently, two hundred twenty or more government organizations and hundred countries are the participants of INFE (OECD, 2013; OECD INFE, 2012). With the rising convolution of financial management, FL becomes an imperative skill.

Administrating the finance in a productive (Bhushan, 2014) way is the inevitability of each nation to ensure short-range liquidity as well as long-standing solvency. Besides liquidity provision it is critical to manage the personal finance. Financial literacy is the capability to efficiently use and manage the finance and to take informed decisions (Bhushan & Medury, 2013). Managing personal finance is concerned with everyday expenditure included expenses of grocery, power, health overheads, income tax, reserves (if done) etc. (Ali et al., 2015). It is also the fact that everyone is not a good manger of finance and one of the pertinent causes behind this is lack of financial literacy (Bhushan, 2014). Financial literacy found low around the world (OECD, 2013; Visa, 2012). At initial stage, financial education provided for increasing financial literacy might results in improving the outlook toward financial products and awareness of financial concepts latter on which will result in modified and improved financial behavior (Carpena et al. 2011). Financial literacy is vital for humanizing the financial health of the nation, leading toward the improved financial well-being of people and the nation as a whole. Financial illiteracy one of the chief causes of monetary catastrophe results in unproductive financial decision that can adversely affect the financial well-being

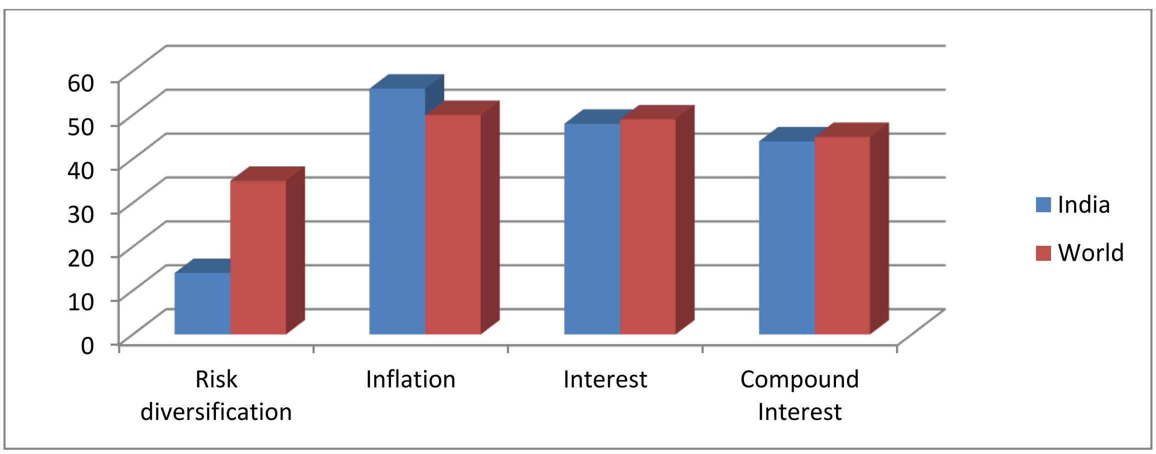
(Ambarkhane et al. 2015; Naidu, 2017). Compare to the world, financial literacy rate found poor in India (standard and poor, 2014).

The Financial Literacy Centers (FLCs) are formed to instruct monetary knowledge via simple messages, like need to save early in Life, how to make productive borrowing, importance of insurance and retirement planning. The help of experienced NGOs and rural branches of banks may be taken. It is the responsibility of the Lead District Manager (LDM) to ensure that mis-selling of financial products and services does not take place.

Financial Inclusion Index (FI-Index) launched by Reserve Bank of India (RBI). The FI-Index stood at 43.4 for the year ending March 2017 whereas, the year ending March 2021 recorded it at 53.9. Continuous effort had been made to improve the financial literacy level of an individual by RBI. "Project Financial Literacy" was implemented by RBI and directed the lead banks to establish Financial Literacy Centers (FLCs) in each of the Lead District Manager (LDM) Offices in a time bound manner (THE HINDU, 2017). RBI has also earmarked one week in a year as a financial literacy week since 2017 during 4th-8th, June every year with special focus on consumer protection (RBI, 2017). Numerous initiatives taken by Reserve Bank of India, Non Government Organisations and government to promote financial literacy but results are not that much satisfactory. Initiatives are essential to restore the intensity of monetary literacy (Chidambara, 2016). Mind map to attain the financial goal is lacking among majority of Indians and lack firmness to create vigorous financial plans for their life objectives (Aviva Life Insurance, Survey 2017). SEBI puts investor's financial literacy at the forefront (SEBI, 2017). A global survey ranks India among least financially literate. India ranked at 23rd in a list of 28 countries on the financial literacy front (Visa, 2012). On an average, 28% of the youth are financial literate in the major rising nations (BRICS). India contributes 17.5% of the total world's population and about 76% of its adult population does not understand even basic financial concepts according to the survey (S&P, 2014). India contributes 55% of the total bank accounts in the world, however, 48 per cent of bank accounts have seen no transactions (https://www.thehindu businessline.com/opinion/financial-literacy-is-key-to-financial-inclusion/article257269

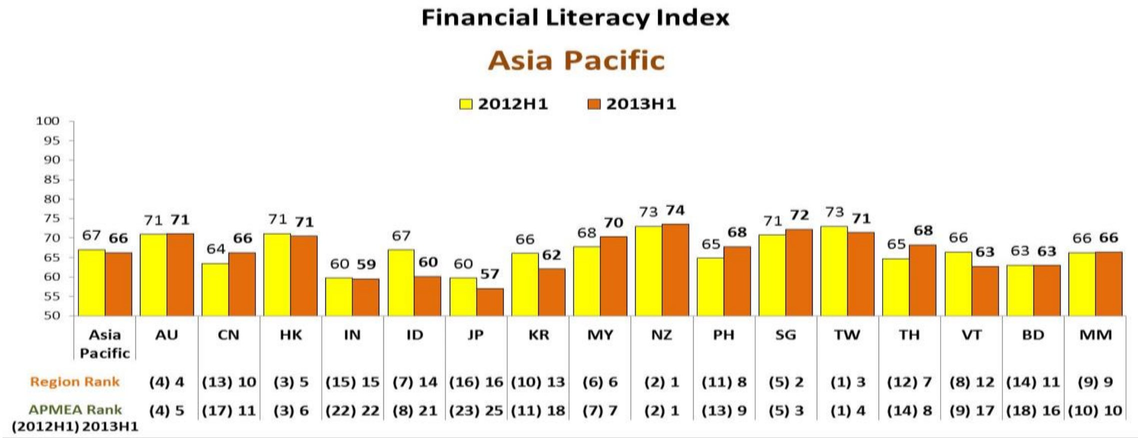
91.ece). India is standing at 15th rank in terms of overall financial literacy among 27 countries (Master Card index of financial literacy, 2013). The survey was conducted for assessing the state of financial inclusion to compare with the states and global level (NCFE, 2014).

FL is considered as a procedure through which awareness of financial markets, products, concepts and risks can be improved and build up an attitude of an individual to act proficiently (Kumari, 2017) awareness and ability to deal with personal finance effectively ensuring life span financial safety (Hastings et al. 2012), assist in informed and effective decisions (Vieira, 2012) leads toward financial freedom (Kumari, 2017). Set of thoughts pertinent for financial behavior, knowledge and decision making, including budgeting, saving, spending, etc. Persons well-being determined by the spending decision of individuals or households, affects not only their budget but their social and emotional status also (Barbic et al., 2019). The status of healthy, happy, and free from worry is considered as well-being. Maximum portion of the household's income goes to housing, food, household equipment, and transportation. In a common term well-being is related to happiness and satisfaction. Usually the term well-being is used in physical health, the six main interrelated spheres that makes well-being are employment, finance, possession of home, physical fitness, leisure and surroundings satisfaction (Fletcher & Lorenz, 1985) financial literacy rate in India and at global level is not so high, that reflects the need for improving the financial literacy at national and world level (shown in fig. 1.1).



Source: S&P FinLit Survey, 2014

Figure 1.1



Source: Master Card index of financial literacy, 2013

Fig. 1.2

Fig. 1.2 depicts the comparative statement of two years regarding the financial literacy score. With context to India it was 67 in 2012 and reduced to 60 in 2013. And table 1.1 shows no change in the score financial literacy for India, it remains 60 even in 2016. It is really a matter of concern and requires a necessary action to be taken at ground level. The highest financial literacy score for the year 2012 is 73 and 2013 is 74.

Table 1.1: Financial Literacy Score

Rank	Country	Score
1	Singapore	71
2	Taiwan	71
3	New Zealand	71
4	Hong Kong	69
5	Australia	68
6	Malaysia	67
7	China	67
8	Thailand	67
9	Sri Lanka	67
10	Indonesia	62
11	Philippines	62
12	South Korea	61
13	India	60
14	Myanmar	60
15	Bangladesh	60
16	Vietnam	58
17	Japan	56

Source: Master Card index of financial literacy, 2016

Table 1.2: Overall Financial Literacy Score in India

Basic concepts	**India**
Overall Financial Literacy Score	60
Basic Money Management (Overall)	53
Budgeting ability	95
Keeping up with bills	40
Saving for big purchases	37
Tracking expenditure	74
Save regularly	80
Emergency savings	78
Concept of diversification	23
Concept of inflation	16

Source: Master Card index of financial literacy, 2016

(https://newsroom.mastercard.com/asia-pacific/press-releases/singapore-tops-financial-literacy-index-in-asia-pacific/)

Indian scores high in their budgeting ability followed by regular savings then emergency savings but found very poor in context to concept of inflation and risk diversification. The basic financial literacy messages in the renowned booklet FAME (Financial Awareness Messages) include documents required to open a bank account (KYC), relevance of budgeting, savings, productive borrowing, credit score, timely repayment of loan, banking at vicinity, awareness of banking ombudsperson, use of e-transfer, responsible investment etc with the aim to awake the community (https://rbi.org.in/financialeducation/Home.aspx). To understand the basics of money management, people need to be literate enough to make effective use of financial services. Regular use of the bank accounts is an appropriate measure of financial inclusion rather than access to the bank account (https://www.thehindubusinessline.com/opinion/financial-literacy-is-key-to-financial-inclusion/article25726991.ece)

‘Financial Literacy Week 2019 from 3rd June to 7th June was organized by the Reserve Bank of India (RBI) and the main theme was ‘Farmers’ with the objective to make them aware of how they can be benefitted by the formal financial system. More than 60% of India’s population employed in agriculture, for overall growth of an economy it is necessary to grow the agricultural sector and financial assistance plays a pivotal role in it. Toward of the same RBI is keenly concerned in making policies that augmenting the flow of financial assistance to farming communities (https://www.news.civilserviceindia.com/financial-literacy-week-2019-organised-by-rbi/). Various programs for enhancing the level of financial literacy focusing on students of secondary education being organized by Tata Capital in collaboration with Centre for Environmental Research and Education (CERE). Widespread study in the specific area of financial literacy and teaching had been undertaken to build up a vigorous web-based platform to expand monetary literacy throughout educational institutions in India. The following areas covered under the course: smart financial goals, budgeting, insurance investments, banking, borrowing, stock market, investment options and retirement (https://cere-india.org/financial-literacy-for-schools/).

Even both developed and developing country policymakers recognize the magnitude of monetary literacy and focus on spending on monetary education events. It is necessary to evaluate to check the improvement in financial literacy (Xu and Zia, 2012). Even in developed countries, awareness of basic financial concepts is low. Financial literacy is allied with improved financial choices such as retirement planning, stock market participation and higher savings (Lusardi and Mitchell, 2014). The low level of financial literacy results high balances, inappropriate payment, or sustained delayed fee (Mottola, 2013; Lusardi and Tufano, 2015). Governments, international organizations, non-profits organisations and financial associations encompass instigated assorted programs and planned a range of policies with the endeavor to offer financial education throughout the world (Fernandes et al. 2013; Miller et al. 2014). Even after the occurrence of Covid-19 pandemic various online program had been initiated by SEBI in collaboration with various institutes to provide financial knowledge and make the people aware about various financial instruments, their pros and cons.

During 2021 various online programs including webinars on various topics focusing on enhancing the financial literacy level among the community had been initiated by SEBI in collaboration with many institutes.

Table 1.3: Definitions

Theme	Definition	Source
FINANCIAL LITERACY	Financial literacy is "a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being".	(OECD, 2013)
	Financial literacy can be defined as "providing familiarity with and understanding of financial market products, especially rewards and risks, in order to make informed choices".	(RBI)
	It is an essential component of the empowerment of the consumer as it gives them an understanding of how to manage their finances in the real economy in order to avoid unnecessary risks, excessive debt and possible financial exclusion.	(European Banking Federation, 2009).
	Knowledge and understanding of basic financial concepts is necessary to take informed financial decisions that will ultimately leads towards improving the financial well-being.	(PISA, 2015)
	Defined by the US President's Advisory Council on Financial Literacy as "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being"	(PACFL, 2008)
HOUSEHOLD	Usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. Persons in a household may be related (blood relation) or unrelated or a mix of both	(Census, 2011, p.37)
HEAD OF THE	The person who has, direct or indirect, control over the resources and earning potential of the household and this control is recognized openly by other members	(Hossain & Huda, 1995)

1.2 STATEMENT OF THE PROBLEM

Financial literacy is one of the important components to bring financial awareness and improve the graph of financial inclusion in qualitative terms (RBI). India is one of the least financially literate countries, it is a matter of concern that accelerates the pace for increasing the level of financial literacy (Visa, 2012; S&P 2014). Low status of financial literacy around the globe (OECD, 2013; Visa, 2012; Lusardi,2008). To support the financial literacy, Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), National Bank for Agricultural and Rural Development (NABARD), Bombay Stock Exchange (BSE) and Central Government of India outlined assorted schemes. Even after such initiative, there is low level of financial literacy (Pramahender, et al. 2020). According to (Lusardi, 2019b) low level of financial literacy found even in some of the world's most advanced countries, is of keen apprehension and desires immediate attention. Low status of financial literacy among youth is a matter of concern worldwide. (Garg & Singh, 2018).

Low financial literacy throughout the world contributes negatively toward personal financial well-being and the economy as well.

1.3 FINANCIAL LITERACY

Financial literacy refers to the competence of a person to ensure effectual financial decisions, where "capacity" specifically comprises knowledge, skill, and self-efficacy (Warmath and Zimmerman, 2019).

Financial literacy is important to make an individual capable of taking better financial decisions and handles the various financial issues like use of various financial services. Financial literacy linked to the set of monetary attitudes and awareness necessary to have financial understanding and considered as a imperative support for developing a sound financial system (Campbell, 2006; Vieira, 2012; Jariwala, 2013). In comparison to financial capability, financial literacy is narrow concept as it is part of it. Countries where there are less incentives to promote savings, invest less in financial literacy (Taylor, 2011; Jappelli and Padula ,2013).

There is no established description for financial literacy, whereas some terms had been proposed including financial literacy, financial capacity and financial capability (Financial Services Authority, 2006; Remund, 2010; OECD-INFE, 2011; Finke and Huston, 2014; Lusardi and Mitchell, 2014). Alternatively, (Huston, 2010) summaries the measures of financial literacy and define it by classifying into five categories consisting awareness of financial concepts; capability to commune financial concepts; skill to administer personal finance; expertise in financial decisions and self-reliance to plan successfully for monetary requirements (Remund, 2010; Huston, 2010). Monetary literacy is a human capital (Huston, 2010) and is a choice of an individual (Lusardi and Mitchell, 2014). Financial literacy is an independent construct of human capital and conceptually differentiated from monetary decision-making, financial behavior, financial well-being (Finke & Huston, 2014). Financial literacy affects individuals saving behavior. Financial risk highly faced by the young generation (Tezel, 2015; Murendo & Mutsonziwab, 2017). The financial capability, literacy, knowledge, education, and competence are some of the terms that can be used interchangeably with financial literacy (Zait & Bertea 2014).

Japan conducted the first Financial Literacy Survey in the year 2011 targeting individuals over the age of 17 to know about their knowledge, understanding and behavior about financial issues (Central Council for Financial Services Information, 2012). Reserve Bank of India (RBI) deputed a technical group headed by the deputy governor, represented by all regulatory authorities of financial sector in order to coordinate their efforts toward financial education. The financial Stability and Development Council Sub-Committee (FSDC-SC) contributed to the whole process. The National Strategy for Financial Education (NSFE) for India, established under the regulation of this Group. For the implementation of a strategy for financial education, National Centre of Financial Education (NCFE) has been established with the objective of creating standard financial education material for different segments of the financial sector, build up and uphold a website entirely for financial education and will also a single end repository of all financial education activities by all financial sector regulators

(file:///F:/FINANCIAL%20LITERACY%20QUESTIONARRIE/Handbook%20of%20surveys%20financial%20literacy.pdf)

Low financial literacy had been found worldwide (Xu & Zia, 2012), even in countries included Australia, Italy, Poland, US and the Netherlands. It had been found that students are not even familiar with simple budget terms. The outcomes of PISA 2015 depict that financially literate student more competent to be acquainted with the value of their human and financial capital. It shed light on the imperative requirement for all countries and economies to improve the monetary literacy of the students, irrespective of their financial and economic development (OECD, 2017).

Students belong to rich families considerably highly financially literate in comparison to poor that exhibits the disparity of monetary well-being. Besides, financial classes in schools concerning personal wealth management not confirmed to be thriving in uplifting the level of financial literacy (Mandell, 2008).

Training regarding financial literacy increase financial knowledge, understanding and improved behavior and results in switching the financial risk (Gibson, 2012). Outputs of the survey conducted in India in 2006 shown that 59% of the respondents rightly answer the question related to compound interest and 25% of the respondents rightly answer for the questions related to inflation, whereas 31% rightly respond the questions related to understanding of risk diversification (Cole et al. 2010).

Financial literacy comprises of financial concepts, financial skills, financial awareness and capability (Xu & Zia, 2012). The intensity of financial literacy is lower among the women. Financial literacy is linked with levels of income and educational attainment.

(Cordero, et al. 2019) assessed that monetary literacy of the students is significantly related to the quality and availability of financial education. Further it had been found that lecture on financial literacy delivered by specialists is more effective than teachers of financial institutes. (Jiang, et al. 2018) found a low intensity of financial literacy among women. Further it had been found that the level of financial literacy is high among highly literate investors. In addition, it had been accessed that sophisticated literacy has a considerably greater impact on investment performance compared to basic literacy (Shimizutani & Yamada, 2019) conducted a study in Japan and US, accessed that educational qualification, teaching of commerce and economics subjects, level of income and wealth of an individual have great influence on financial literacy. Further, it had been found that investment in the stock market is more by highly financially literate.

(Lopus, et al. 2019) accessed that former knowledge, working experience, soft skills, training these are responsible factors to boost the intensity of financial literacy. In addition to this it had been found that increase in the intensity of financial literacy results in improved productivity, reduced absenteeism and promote entrepreneurial achievement. (Feng, et al. 2019) examined that the intensity of financial literacy amongst Chinese households is low. Further it had been accessed that financial education is necessary to develop positive financial behavior and to ensure informed decision making. (Adetunji & David-West, 2019) found that demand for formal financial instruments significantly influenced by financial literacy. Further it had been also found that amplified access to saving accounts and financial services as a product of financial literacy. In addition found that formal savings are more among older people and high level of financial exclusion among younger people and women. (Klapper & Lusardi, 2019) examined the global ratio of financial literacy is 1:3. Further it had been also found that wealthy, highly educated people possess a high intensity of financial literacy and are also willing to take high risk. Financial literacy and is more used for financial services. In addition it had been examined that lack of financial literacy results into high indebtedness. (Mahdzan et al. 2019) accessed a constructive association between subjective financial wellbeing and behavior.

(Xue, et al. 2019) examined financial well-being of retirees significantly affected by their spending behavior and intensity of financial literacy. Further it had been found that older people having positive attitude toward their financial position and those who are highly educated and financially sound possess a high level of financial literacy. (Preston & Wright, 2019) conducted their study in Australia, used data from households and found that labour market variables are more significant in explaining then gender gap in financial literacy rather than human capital variables. (Cucinelli et al. 2019) examined that residence has a noteworthy control on financial literacy along with socio-economic and demographic circumstances. (Kalwij et al. 2019) accessed because of controlled field experiment that saving behavior of the students get influenced by financial education program promoting financial literacy.

(Cumurovic & Hyll, 2018) examined that financial literacy to some extent plays a significant role in entrepreneurial activities. (Hasler, et al. 2018). Financial literacy is connected to monetary fragility and the competence to manage unpredicted shocks. Adults possess superior knowledge that has family discussions on financial matters and the initiative for financial education strengthened because of family socialization (Hanson & Olson, 2018). According to (Skagerlund et al. 2018) numeracy plays a significant role and makes a noteworthy contribution in measuring financial literacy. (Hsiao & Tsai 2018) found that individual's with high levels of financial literacy purchase more derivative products. Additionaly income, gender and urban residence also uplift the level of participation in derivative market. (Clark, et al. 2018) examined that financial knowledge and behavior of girls can be improved by organizing saving programs at micro-level. (Moreno-Herrer, et al. 2018) functioning of educational system is an important predictor of financial literacy. Mathematical ability, value of savings, family discussion on financial matters improves the financial knowledge of the students. (Kim & Yuh, 2018) examined that awareness of financial concepts, including both perceived and objective significantly affects the saving behavior of an individual. Financial literacy plays a significant role in promoting domestic savings, prerequisite for investment and subsequently sustainable economic growth (Baidoo et al. 2018).

(Potrich et al. 2017) found that the overall status of monetary literacy is low. However, the ratio of women is high compared to men. It had been concluded that financial education is a significant base to ensure consumer protection and financial inclusion. (Stolper, 2017) found level of confidence and financial decision making as an outcome of financial literacy whereas, nonpayment of credit, quick access to high-cost debt, suffering from income shocks, unnecessary expenses and over indebtedness is an outcome of financial illiteracy and short of self-control (Gatherhood, et al. 2012). (Mitchell, 2017) examined the low intensity of monetary literacy in developed countries.

Further it had been also concluded that financial awareness not only assists in savings but also assist in retirement planning.

Women and residence of rural area possessing low level of financial literacy and saving behavior (Murendo & Mutsonziwa, 2016; Lusardi, 2008). (Henager & Mauldin, 2015) accessed that perceived financial planning and knowledge are the best indicators for saving decisions.

(Gallery et al., 2011) found that demographic aspects play a pivotal role in measuring financial literacy. Financial advice from the experts also influences the financial decisions of an individual by uplifting their level of financial literacy.

1.4 FINANCIAL BEHAVIOR

It is difficult to define and measure but, important to understand the financial behavior. Behavior can be judged through the activities performed, that is manifest to others and can be easily observed (Chaulagain, 2017). Individual choices to risk intriguing play an imperative function in monetary economic behavior. Workplace, school, and family play an indirect role in determining the intensity of financial knowledge and affect financial behavior and attitude. Better financial knowledge results effective financial behavior (Borden et al. 2008; Shim et al. 2010; Pfeifer & Leon, 2017).

Objective and subjective financial knowledge have combined concern on financial behavior but subjective financial knowledge comparatively has a greater impact and there is a positive association between risky credit behavior and financial knowledge (Robb and Sharpe, 2009; Robb & Woodyard, 2011; Xiao, et al. 2014; Vaganov et al., 2018). A scale had been also developed to measure the financial management behavior (Dew & Xiao, 2010). There is a positive affiliation linking financial planning and behavior (Ameriks et al., 2003). In context to developing countries, financial literacy of the middle class is an important component as it results efficient mobilization and better risk management of financial resources that will lead to the development of an economy as a whole (Levine, 2005; Grohmann, 2018). Age, education, occupation and income level of the individual affects the investment behavior (Grable, & Lytton, 2001; Chaturvedi & Khare, 2012). Financial literacy, financial attitude and behavioral/self control are positively related to responsible financial behavior (Barbic et al., 2019). On the other hand (Pfeifer & Leon, 2017) has also found that person's investment behavior affected by religion and found that because of diverse attitudes of different religions for risk taking, it must to control the risk taking preferences. Thematic area examples of current behaviors and desired behaviors are budgeting, savings, debt management, financial discussions and services (Kefela, 2011). Social interaction and caste affiliation do not encompass a direct effect on investment behavior (Bonte & Filipiak, 2012).

Inflation has a negative whereas income has a positive influence for approximately all financial assets. Long-term investment positively gets influenced by monetary wealth and tax measures also influence investment behavior (Schalck, 2017).

Self-esteem and self-evaluation significantly relate to money management and persons financial behavior. The association between self-esteem and financial behavior established through subjective monetary knowledge and understanding. It highlight the significance of psychosomatic character like self-esteem in describing financial behavior differences (Tang & Baker, 2016).

Habits of filling tax and financial behavior offer prolific base for segmenting process of individuals and groups makes possible answerability, responsibility and transparency (Politou et al. 2019). Financial attitude and response of the young population affected by parental control focusing on financial socialization (Jorgensen &Savla, 2010; Gudmunson & Danes, 2011). Real spending behavior and frequent use of credit cards lead toward financial stress (Hojman et al., 2016).

Monetary education has a prospective effect on financial behavior like savings for retirement, timely payments, etc. (Hilgert et al. 2003; Lusardi & Mitchell, 2007) on the other hand (Mandell, 2008) reported an unexpectedly less association between the status of financial awareness of high school students' and financial education class they had attended. (Skimmyhorn, 2012) make uses governmental data to access the results of 8 hour compulsory financial literacy course started by the U.S military in 2007 and 2008 for all newly recruited army personnel and found that savings of the newly recruited soldiers in 401(k) plan were approximately double than those who joined before to the start of financial education classes. The researcher found that the course do not have a long-term effect on improving financial behavior such as credit card and auto loan balances, unpaid debts etc. (Cole & Shastry 2012) examined that authorization of financial education in high schools does influence at least one aspect of financial behavior i.e., wealth accumulation. But (Cole & Shastry, 2012) found that the authorization of financial education in high schools do not influence wealth accumulation but it can work if such mandates had been adopted by the state, that can be associated with monetary intensification have an autonomous outcome on wealth accumulation and savings.

(Drexler et al. 2012) conducted an experiment on the effects of two financial education programs on micro entrepreneur. One treatment group attended the lectures on more traditional while other treatment group gets lectures on simple financial management rules of thumb in a result there was no difference in the financial behavior of two groups but observe a difference in the financial behavior of both the group after the completion of the programs. Further the researcher also revealed that the success/failure and outcome of the financial education programs depends on how these programs had been structured and explains the reason why some studies found a weak affiliation connecting financial education and monetary behaviour of micro entrepreneur. (Gartner & Todd, 2005; Servon & Kaestner, 2008) makes an assessment of first-year college students concerning credit education plan and found no noteworthy variations between the control and dealing groups regarding financial behavior such as credit balances, saving money, financial planning or payment habits, and conclude that it is the result of imperfect and ineffective implementation of financial education program. (Choi et al. 2011) found that even the employer providing the considerable financial incentives for participation in saving plans, there was no momentous difference between the two groups. On the other hand, studies have found that financial behavior do not get influenced by financial education (Hastings et al. 2013; Fernandes, et al 2014). (Collins, 2010) found up gradation of self-reported knowledge and financial behaviors after assessing the results of financial education series for low and moderate income families.

1.5 FINANCIAL WELL-BEING

Influential work by Angus Deaton highlighted subjective well-being to evaluate individual happiness (Deaton 2008). Financial well-being is an emerging research area (Bruggen et al., 2017). Financial wellness is a multidimensional theory (Joo, S. 2008; Gerrans et al., 2013). Persons well-being also determined by their spending decision, it will not only affect their budget but also their social and emotional status (Barbic et al. 2019). In a common term well-being is related to happiness and satisfaction. Usually the term well-being is used in physical health, the six main interrelated spheres that makes well-being are employment, wealth, home, health, freedom and satisfaction (Fletcher & Lorenz, 1985; Praag et al. 2000). Generally, the term well-being is subjective. Basically it defines how an individual think about his/her life (Diener et al. 1998). The belief of an individual that he/she has sufficient financial resources to live their life comfortably now and in the future are to be considered as subjective financial well-being (Xiao et al. 2014). Subjective well-being determined by the quality of life, delight, feeling comfortable with life positions as a part of personal assessment specially including social, personal and professional life (Ardelt, 1997; Brod et al. 1999)**.** Income and wealth are not the only criteria to measure the financial well-being but happiness and life satisfaction gained from income earned are the best indicators. Both objectives and subjective measures are relevant to measure financial well-being. Quantifiable and universal measures of individual's financial positions are referred to as objective indicators of financial well-being. Other variables such as financial satisfaction, happiness, individual perception of current and future financial position and capacity to manage the debt highlight the subjective financial well-being (Rutherford & Fox, 2010; Delafrooz and Paim,2011; Gerrans et al., 2013; Sass et al., 2015).

Management of routine expenses and money requirement
Capability to take up a monetary distress → financial well-being
Proficiency to meet monetary goal
Economic independence to devise the preferences to enjoy life

Source: Consumer Financial Protection Bureau (CFPB, 2018)

Fig. 1.3

Happiness, financial stability and internal satisfaction derived from the use of income earned and wealth created are the best measures to calculate the financial well-being (Sass et al., 2015, Ali et al., 2015).

Liquid assets plus monthly expenses are more useful evaluator than liquid assets plus current debt (Greninger et al., 1996). Households headed by females have lesser amount of risk tolerance than male headed or a married couple. The people living in rural areas have significantly poorer domain conditions than urban, but have higher levels of well-being and the proposed profile. Measures are provided that can be further used for measuring financial wellness (Sung & Hanna, 1996; Greninger et al., 1996; Joo, 2008).

Proper debt management can reduce financial stress, reduces the habits of delay in payments and improves financial well-being. Alternatively, financial stress can be used as reinforcement for improving employees' performance by organizing financial education programs (Kim & Garman 2003, Prawitz et al., 2006).

Consumer Financial Protection Bureau (CFPB) developed a scale order to indirectly measure financial suffering and financial well-being (Prawitz et al., 2006; CFPB, 2015).

Understanding of financial instruments and associated risks and opportunities assist in taking informed and effective financial decision results in the betterment of financial well-being (OECD, 2005).

Debt management, health insurance, monetary satisfaction, spending behavior, planning prospect and approaches headed for financial hazard determines the financial well-being (Rutherford & Fox, 2010). An affirmative correlation between financial wellbeing and subjective well-being and this affirmation is more among individuals with high financial skill (Patel & Wolfe, 2019).

At an individual level, there is a noteworthy relationship between happiness and psychological well-being (Wright & Cropanzano, 2000). The income of household's correspondence is a straight measure of person's financial well-being at the time of retirement (Madero-Cabib, 2016). Frailty and wellbeing are negatively correlated (Hubbard, 2014).

Individual with the perception that material possession can attain happiness and satisfaction tend to manage less in terms of money compared to those individuals who have positive financial attitude and future direction. Money management appreciably connected to improved savings, lower debt and reduction in irrational consumption behavior (Donnelly et al. 2012). Excessive borrowing and irresponsible buying behavior end up with financial stress (Berg & Zia, 2013).

Monetary threat correlates positively with sensitive financial suffering than chronic monetary conditions and significantly associated with productive financial behavior wherever economic suffering moderates significant connection between monetary threat and productive financial behavior. Individuals with low level of financial threat and high economic hardship are willing to engage in constructive financial behavior whereas, individuals with a low level of economic hardship but with high financial threat possessing unconstructive financial behavior (Marjanovic et al. 2018). Consumer behavior has its relevance to the financial security of households (Piotrowska, 2017).

Job creation provides financial security rather than social security that will assist the economy to move towards a high income group sustainably (Holzmann, 2014).

Economist plays a pivotal role in devising such policies that reduce financial strain poorer mental and physical health is a result of financial strain (French & Vigne, 2018).

Wealth accumulation exerts a significant effect on cumulative expenditure (Barrell et al. 2015). Individual’s present and projected living standard and financial freedom and a state of being healthy, happy, and free from worry depict their financial wellbeing (Bruggen et al.2017; Zimmerman, 1995).

1.6 PERSONAL WELL-BEING

The relevance of financial literacy programs is not up to the financial behavior but also on financial satisfaction. Personal well-being of women greatly influenced by their financial status whereas personal well being of men affected by their financial knowledge (Gerrans et al. 2013). Age, marital status, children/s, own income and reference group income are found to be the major predictors of personal well-being (Smyth et al. 2009). Subjective well-being determines how an individual imagine and experience their lives that take his/her well-being to the overall evaluation of their life (Dolan et al.2008). According to (Joo, 2008), financial wellness contributes a major part in overall well-being.

1.7 FINANCIAL LITERACY AND FINANCIAL BEHAVIOR

Low intensity of financial literacy will affect the development of an economy and make the people unable to respond three essential questions including numeracy, inflation and diversification (Lusardi and Mitchell, 2014) and argue to establish the causality to independently recognize the impact of financial literacy on productive monetary decisions. To facilitate better consumption policy, financial literacy seen as a part of policy mix includes availing better choices, information and incentives to change the behavior of the user of financial services.

Financial literacy is an important concept that has a direct bearing on individuals' behavior and financial outcomes (Lusardi & Mitchell, 2007).

Prior knowledge regarding financial management assists in developing effective financial behavior. The survey results had shown that responsible financial behavior (debt management) is the outcome of personal financial education and knowledge (Chen and Volpe, 1998; Bernheim et al., 1997; Robb & Woodyard, 2011). Individuals with high education and high income groups has comparatively high financial literacy and are in a position to take better financial decisions whereas low investment in stock market reported by the people having low status of literacy (Lusardi and Mitchell, 2007; Christiansen et al., 2008; Van Rooij et al., 2011b; Bucher-Koenen and Lusardi, 2011).

Middle class people with advanced financial literacy avail the financial services offered to them. Individuals with low education and low income groups comparatively have low financial literacy. Basic financial education must make an individual financially literate and enable them to take better economic decision. Financial planning results in financial literacy and assist in accomplishing the goal of wealth accumulation. Financial literacy works as a mediator between financial education and sound personal finance in the high-income class (Ameriks et al., 2003; Lusardi and Mitchell, 2007; Bucher-Koenen and Lusardi, 2011; Son & Park, 2018; Grohmann, 2018).

Individual having financial knowledge and good financial behavior will save more and consume less according to their income so that such savings can be used in rainy days having less financial stress and more financial security (Tang, 2016; Stromback et al. 2017). Three concepts used to control financial behavior of an individual including freedom to make financial decision, self-control on the financial situation and having necessary resources to achieve financial success (Smyth et al. 2009).

Investment preferences of an individual affected by the level of financial knowledge (Grable & Lytton 2001; Nysveen et al., 2005). Financial literacy results in effective financial behavior by ensuring balanced decision making (Agarwalla et al., 2015; Alsemgeest, 2015). The Causal link had been found from financial literacy to planning and from planning to financial behavior (Fernandes et al. 2013; Lusardi and Mitchell 2007).

1.8 Financial Literacy and Financial Well-Being

Financial literacy is highly correlated with retirement planning, wealth, and financial well-being (Lusardi and Mitchell 2007; Lusardi 2008; Hung et al. 2009). Higher financial well-being and lower financial anxiety are the outcome of financial literacy and the result of productive monetary decisions (Kim, 2007; Schmeiser & Seligman, 2013; Taft et al., 2013).

Financial literacy plays a significant part in determining financial well-being of retirees (Adam et al. 2017). Financial well-being is a result of financial literacy (Zulfiqar, 2016).

The Wide availability of financial literacy education results in approaching more individuals. The increased level of financial literacy, improves financial wellbeing. With the aim of improving the level of financial, literacy it had been introduced as a part of primary and high school curriculum in Australia and elsewhere and in a future proposed to be introduced in the tertiary sector (Blue et al. 2014).

The short-term financial behavior of an individual gets influenced by financial literacy that may positively influence the person's wellbeing by reducing financial strain (Boehnke, 2018).

According to (Lusardi, 2019b) Millennial (ages 23-37 in 2018) represents lower levels of financial well-being than the elder population (ages 38-61 in 2018. Women, unmarried, individuals without a college degree, low income group and unemployed exhibit lower monetary well-being. Individuals having little financial literacy show low financial well-being.

1.9 FINANCIAL BEHAVIOR AND FINANCIAL WELL-BEING

Financial behavior and talent are sturdily linked with financial situation whereas financial situation linked with financial well-being (CFPB, 2018).

Healthy financial decision and protection against future risk assist in the efficient and effective management of household budget along with their social and mental status and beneficial to society as a whole (Barbic et al. 2019). Individual's choice with respect to risk seeking performs an imperative part in economic behavior and financial markets (Pfeifer & Leon, 2017). Control on personal and consumption expenditure results in saving more, reduces the level of financial stress and ensures present and future financial security (Stromback et al., 2017).

Financial well-being affected by use of credit cards, which is affected by financial self-confidence and social comparison (Santos et al. 2016). Financial well-being can be defined as a person's ability to meet present and future monetary requirements, secure them financially and ability to ensure financial preferences for the enjoyment of life (CFPB, 2015). Financial well-being is the result of financial behavior and practices, including financial decisions, saving habits, management of debts and better management of finance (Yin-fah et al., 2010; Gutter & Copur, 2011). Generally, the term, well-being is subjective because it defines how people and individual think about his/her life (Diener et al. 1998).

Individual's perception about present financial condition is an outcome of financial practices. Individual's financial behavior can be a relevant constituent in explaining the financial well-being and depicts their economic condition. Ineffective financial well-being adversely affects mental, social, physical well-being and has a negative effect on productivity (Joo, 1998; Rutherford and Fox 2010; Ali et al., 2015).

1.10 FINANCIAL WELL-BEING AND PERSONAL WELL-BEING

Financial wellness is considered an important element of personal well-being comprising monetary satisfaction, status, behavior, attitudes and knowledge (Joo, 2008).

Personal financial wellness is a broad concept included objective status of financial situation, satisfaction, financial attitude and behavior measurement of which is not possible with single computation (Joo, 1998). Efficiency and prosperity of an economy can be promoted by improving the Personal financial well-being. One of the important aspects of financial well-being is financial satisfaction (Campbell et al. 1976). Special focus had been given in studies on wellness-associated stressors such as monetary strain, risk management, locus of control and unemployment (Porter & Garman, 1993).

The eminence of communication between parents and children concerning financial topics demonstrated to be the most effective forecaster of children's financial, psychological, and personal well-being. Parent's outlook had a considerable indirect control on their children's well-being (Serido et al. 2010).

1.11 FINANCIAL LITERACY, FINANCIAL BEHAVIOR AND FINANCIAL WELL-BEING

Financial literacy (FL) is described as information and perceptive of the fundamental notions essential to manage the money and using it to take informed financial decisions (Hogarth & Hilgert, 2002; Priyadharshini, 2017). People with low self-control and short of monetary management spend more and accumulate less wealth, results into over-indebtedness and experience high financial stress (Choi et al. 2011;Gathergood 2012; Achtziger et al. 2015; Biljanovska & Palligkinis, 2015). People with high self-control mechanism save more and experience low financial anxiety (Rha et al. 2006). In a situation when cognitive abilities are taken into consideration self-control does not have an effect on financial behavior (Ballinger et al. 2011).

FL is a mixture of awareness, outlook, performance and ability so as to influence the monetary decision making and the financial well-being (OECD-INFE, 2011). Monetary choices and demographic features are playing the function of moderator between financial literacy and financial well-being and exposed a constructive affiliation between financial literacy and well-being (Kamakia, 2017).

1.12 FINANCIAL LITERACY, FINANCIAL WELL-BEING AND PERSONAL WELL-BEING

The level of financial literacy is low and it is necessary to improve the education system in order get better financial literacy. Indian govt. withdraws the pension schemes that results in financial insecurity. Therefore, it is necessary to plan for retirement in terms of some financial savings that materialize the relevance of financial literacy, which is indispensable for financial well-being of a person and the nation as a whole (Ambarkhane et al. 2015).

1.13 RESEARCH TOPIC

Financial Literacy, Financial Well-Being and Personal Well Being (With special reference to selected households in Jammu Province)

1.14 THEORETICAL AND OPERATIONAL DEFINITION OF THE CONSTRUCTS (EXPLAIN WHAT IS THEORETICAL AND OPERATIONAL)

Table 1.4: Theoretical and Operational Definition of the Constructs

Concept	**Theoretical Definition**	**Operational Definition**
Financial Literacy	Financial literacy refers to the use of awareness and ability to manage personal finance effectively for life span financial safety and to make informed and effective decisions through their understanding of finances (Vieira, 2012; Hastings et al. 2012)	To measure the financial literacy three basic financial concepts are used i.e Numeracy, Risk Diversification and Inflation (Gupta,2017; Lusardi & Mitchel, 2009; World bank) , time value of money (Zulfiqar, 2016; Gupta, 2017;Lusardi & Mitchel, 2009). Financial knowledge, Financial attitude and General financial awareness used as a fortmative measures.
Financial Behavior	Behavior can be judged through the activities performed, that is manifest to others and can be easily observed (Chaulagain, 2017). Thematic area examples of current behaviors and desired behaviors are budgeting, savings, debt management, financial negotiations and bank services (Kefela, 2011)	Saving, spending (Gupta, 2017; Devi, 2017 ()reference need to be find out for gupta and devi; Joseph, 2012) investment (Gupta, 2017;Joseph, 2012; Dew & Xiao, 2010; Masud,2004 (reference need to be added) debt management and Budgeting (Dew & Xiao, 2010) general questions (Vidya; Sharma) retirement planning (Bender)
Financial well-being	One of the main components of personal wellbeing is considered to be financial wellbeing (Praag et al. 2000) others are employment, shelter, physical fitness, comfort and surroundings. Theoretically, financial wellbeing falls into the wider range of biased and objective magnitude, but has consistently been operationalized as a subjective measure only, and with the main focus on financial contentment.	Management of routine expenses and money requirement, Capability to take up a monetary distress, Proficiency to meet monetary goal, Economic independence to devise the preferences to enjoy life [Consumer Financial Protection Bureau (CFPB, 2018)]
Personal well being	How an individual feels about their life took them toward an assessment of their life as a whole, which is greatly affected by subjective measure (Dolan et al. 2008).	Personal wellbeing index-adult (International Wellbeing Group 2006: Gerrans et al., 2013) applied to estimate personal wellbeing containing 8 items: life as a whole; standard of living; health; achievements in life; personal relationships; present safety; feeling part of a community; future security; spirituality or religion; and an overall well-being.

1.15 Operational Dimensions of the Constructs

1.15.1 Operational Dimensions of Financial Literacy

Table 1.5: Operational Dimensions of Financial Literacy

Operational Dimension (Financial Literacy)			
Dimension	**Source**	**Expected Outcome**	**Whether the statement matches/ relevance to the operational definition (Yes/No)**
Numeracy	Gupta,2017; Lusardi & Mitchel, 2009; World bank	There is a positive and significant relationship between understanding of numeracy and financial literacy	Yes
Understanding of inflation	Gupta,2017; Lusardi & Mitchel, 2009; World bank	There is a positive and significant relationship between understanding of inflation and financial literacy	Yes
Risk diversification	Gupta,2017; Lusardi & Mitchel, 2009; World bank	There is a positive and significant relationship between understanding of risk diversification and financial literacy	Yes
Time value of money	Zulfiqar, 2016; Gupta,2017;Lusardi & Mitchel, 2009	There is a positive and significant relationship between understanding of time value of money and financial literacy	Yes
Financial Knowledge	(Dewi, et al., 2020)	Financial literacy is a systematic way of perceiving the financial knowledge and applying it in the financial decision	Yes
Financial Attitude	(Santini and Ladeira, 2019)	Financial attitude financial literacy leading toward healthy credit and investment behavior	Yes

1.15.2 Operational dimensions of financial behaviour

Table 1.6: Operational dimensions of financial behaviour

Financial behavior			
Dimension	**Source**	**Expected Outcome**	**Whether the statement matches/ relevance to the operational definition (Yes/No)**
Savings	Gupta, 2017; Devi, 2017; Joseph, 2012	There is a positive and significant relationship between financial behaviour and savings.	Yes
Spending	Gupta, 2017; Devi, 2017; Joseph, 2012	There is a positive and significant relationship between financial behaviour and spending.	Yes
Investment	Gupta, 2017;Joseph, 2012; Dew & Xiao, 2010; Masud,2004; Khan	There is a positive and significant relationship between financial behaviour and Investment decisions.	Yes
Money management	Masud,2004; Dew & Xiao, 2010	There is a positive and significant relationship between financial behaviour and money management	Yes
Propensity to plan	Masud,2004; Dew & Xiao, 2010	There is a positive and significant relationship between financial behaviour and propensity to plan.	Yes

1.15.3 Operational dimensions of financial well-being

Table 1.7 Operational dimensions of financial well-being

Financial wellbeing			
Dimension	**Source**	**Expected Outcome**	**Whether the statement matches/relevance to the operational definition (Yes/No)**
Control over day-to-day, month-to-month finances Capacity to absorb a financial shock Competence to meet your financial goals Financial freedom to make the choices to enjoy life	(CFPB, 2018)	All these indicators represent the financial well-being	Yes

1.15.4 Operational dimensions of personal well being

Table 1.8: Operational dimensions of personal well being

Personal wellbeing				
Dimension	**Statement**	**Source**	**Expected Outcome**	**Whether the statement matches/relevance to the operational definition (Yes/No)**
PWB1	Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?	International Wellbeing Group (2013). Personal Wellbeing Index: 5th Edition. Melbourne: Australian Centre on Quality of Life, Deakin University (http://www.deakin.edu.au/research/acqol/instruments/wellbeing-index/index.php); Gerrans et al. 2013	All these indicators represent the personal well-being	Yes
PWB2	How satisfied are you with your standard of living?			Yes
PWB3	How satisfied are you with your health?			Yes
PWB4	How satisfied are you with what you are achieving in life?			Yes
PWB5	How satisfied are you with your personal relationships?			Yes
PWB6	How satisfied are you with how safe you feel?			Yes
PWB8	How satisfied are you with your future security?			Yes
PWB9	How satisfied are you with your spirituality or religion?			Yes

1.16 RELEVANCE OF THE STUDY

The present study focused on studying the influence of financial literacy on the personal well being of the households in the Jammu province. The results of the present study will have great relevance for the policy makers, banks, educational institutions and general society. The present study provides various suggestions that need to be incorporated to get the effective results to improve the intensity of financial literacy surrounded by the households a pathway towards financial independence by making them aware about the various financial products and develop an appropriate financial behaviour that will assists in multiplying their income and accumulation of wealth. Once the state of financial independence had been achieved as a result of sound financial behaviour including saving behaviour, spending behaviour, risk management, money management, payment management and propensity to plan, it will result in ensuring the financial well-being i.e. the state if being financially healthy and happy which will leads to ensure the personal well being of the households. Hence it will contributes not only toward the financial independence and security of an individual but of an economy as a whole.

1.17 SCOPE OF THE STUDY

The present study carried out in the Jammu Province, Jammu and Kashmir, India. The respondents of the study are the households who are taking the financial decisions at their home. Multistage sampling was used. Out of ten districts, six districts had been selected based on stratified sampling. Primary data collected from the households, who are taking financial decisions (respondents) using structured questionnaire.

1.18 ORGANIZATION OF THE STUDY

First chapter is the introduction and background. It focused on the relevance and scope of the study. This chapter describes financial literacy and its variables such as financial attitude and financial knowledge and other constructs including financial behaviour, financial well-being and personal well-being.

Second chapter is the literature review. The extensive literature undertakes to develop the conceptual model. This chapter gives the brief about the research work already done in context to the constructs that have been chosen for the present study and also shows the linkage between these constructs. It shed light on present status of financial literacy and on various initiatives taken by the Government.

Third chapter describes the research methodology. This chapter explains the objectives of the study, research questions, hypothesis, research design, population and sampling frame, sample design and sampling unit. Then after the procedure for data collection, the process of finalization of the research instrument, procedure for selection of sample size and conceptual framework of the study based on the literature had been explained. It highlights the number of targeted households taking financial decisions.

Chapter IV explain the steps followed for measurement and validation included scale development process**,** construct definition**,** generation of items, sample size and data collection**,** multivariate normality and reliability**,** dimensionality of the construct, methods of estimation**,** validity of individual construct**,** multicolinearity**,** first order CFA**,** second order CFA, **,** Structural Equation Modelling (SEM)**,** descriptive statistics**,** reliability statistics.

Chapter V describe the results of the conceptual model tested by the researcher. The present chapter sum up the findings, conclusion, implications and suggestion for future work.

It also provides evidence concerning the significance of the current research on financial literacy among households and need to benefit the future generations.

Chapter VI explains the findings, conclusion, implications and suggestions.

1.19 NEED AND SIGNIFICANCE OF THE STUDY

Among 29 states and 7 union territories J & K having 30th rank in literacy (Census, 2011). Average literacy rate of India is 74.04 and of J&K is 67.16 and of Jammu province is 67.46 (Census, 2011). The position of J&K in terms of Insurance penetration is low, Branch penetration is above average whereas level of financial inclusion is below average (Crisil-Inclusix, 2016)

Not only a particular nation but almost all the countries around the world either developed or developing are facing the problem of low level of financial literacy (OECD, 2013; Visa, 2012; Lusardi,2008). Raising the level of financial literacy is imperative for improving the financial health and financial well-being of individuals and economy as a whole (Carpena et al. 2011). Financial illiteracy is one of the main causes of financial crisis (Ambarkhane et al. 2015) and results unproductive financial decision (Naidu, 2017). 76% of Indian adult do not have an understanding of the basic financial concepts (standard and poor, 2014). India ranked at 23rd in a list of 28 Asian countries (Visa, 2012). Smart financial choices project on financial literacy and education had been initiated with the aim to promote the financial awareness and knowledge (World Bank). People found with weak basic skills to manage personal finance (Master Card index of financial literacy, 2013). Level of financial literacy found low among Indians (Jayaraman & Jambunathan, 2018).

Despite the various initiatives taken by the government, central banks and NGOs in India the evidences have revealed that the overall impact of financial literacy is still limited (Ghosh, 2019). In line to these statements, it is the need of the hour to find out the status of financial literacy among those who are taking the financial decisions and its influence on the financial behavior, financial well-being and personal well-being of the households.

1.20 CHAPTER SUMMARY

Chapter I starts with the introduction included the background and current position of financial literacy in India and around the globe. Then after definitions of all the constructs including financial literacy, financial behaviour, financial well being and personal well being had been explained and relationship between all these constructs with the support of literature. Next to these operational definitions of all the constructs mentioned. Importance of the study, scope of the study, organisation of the study explained in the chapter I.

To make an effective financial decision and eventually attain financial well being by an individual awareness, knowledge, skills, attitudes and behaviour are essential.

CHAPTER-2

REVIEW
OF
LITERATURE

CHAPTER-2

REVIEW OF LITERATURE

Over a time the literature on the aspect of financial literacy has gained momentum. The rising importance of financial literacy and its emerging role to augment economic development encourage researchers to write voluminous literature on various facets of financial literacy from different countries. In this chapter an attempt has been made to present a brief review of the earlier available studies on various dimensions of financial literacy. Thematic literature review is presented in this chapter. The key words used during the research were financial literacy, financial behaviour, financial well-being, personal well being and households. Research conducted for all relevant database for journal articles, working papers, dissertations and others included Wiley Online Library, Scopus, Science Direct, Google Scholar, JSTOR, Shodhganga, conference proceedings, books, newspapers were used as a research database. Keeping in view the objective of this study, literature review has been divided into the following categories:

2.1 Review of literature on financial literacy

2.2 Review of literature on financial behavior

2.3 Review of literature on financial well-being

2.4 Review of literature on personal well-being

2.5 Review of literature on financial literacy and financial behavior

2.6 Review of literature on financial literacy and financial well-being

2.7 Review of literature on financial behavior and financial well-being

2.8 Review of literature on financial well-being and personal well-being

2.9 Review of literature on financial literacy, financial well-being and personal well-being

2.10 Review of literature on financial literacy, financial behavior and financial well-being

2.11 Research Gap and Summary of the Chapter

2.1 REVIEW OF LITERATURE ON FINANCIAL LITERACY (FL)

(Pramahender et al. 2020) conducted qualitative research applied Decision Making Trial and Evaluation Laboratory (DEMATEL) found the main measures of financial literacy include financial knowledge, financial sustainability and financial attitude out of which financial knowledge is on the top precedence. Energetic contribution of the people and stakeholders, along with government involvement required to promote financial literacy, particularly women, minorities, vulnerable groups, and outreach areas (Chakrabarty, 2012). Poor financial decisions are the outcome of financial illiteracy (Hastings et al., 2013; Lusardi & Mitchell, 2014; Van Rooij et al., 2012, 2011a). (Goyal & Kumar, 2020) identified the emerging themes under financial literacy i.e. financial capability, financial inclusion, gender gap, tax & insurance literacy, and digital financial education.

(Hamid & Loke, 2020) explained that sound financial behavior directed by socio-demographic factors, financial education and behavioral intervention and credit card repayment decision positively affected by financial literacy. Financial literacy comprises monetary knowledge, market awareness, and technical Know-how (Prasad et al. 2020). (Rostamkalaei & Riding, 2020) readiness for retirement and long-term investment is low among people who can be addressed through financial education. Status of financial satisfaction can be developed through improved financial knowledge, developing sound financial behaviors and inculcating financial confidence via financial education (Xiao and Porto, 2017; Xiao and O'Neill 2016).

Regular discussions with parents regarding financial matters and monetary attitude influence financial well-being (Utkarsh et al., 2020). The relationship between financial literacy and well-being is not significant. Females have lower financial literacy than males (Utkarsh et al., 2020). According to (Magistro, 2020) short-term and long-term cost-benefit of a policy on economic well-being can be accurately measured by financial literate person. (Beckker et al., 2020) examined that uncertainty avoidance, positively affects financial literacy whereas, negatively influenced by individualism. Countries with an uncertainty-avoiding culture prefer to take less risk, invest more in financial literacy whereas countries with individualistic behavior are less inclined to seek financial advice because they are overconfident. The importance of financial literacy for individual's financial well-being has been well established.

Prejudiced financial knowledge, financial behavior, financial experience, financial awareness, financial skills, financial capability, financial goal, and financial decisions, are important variables to measure financial literacy (Dewi et al., 2020). Gender, education, income, household investments, financial knowledge, financial attitude and financial behavior are important aspects formatting financial literacy (Santini and Ladeira, 2019).

Measures of financial literacy

According to (Cao-Alvira et al., 2020; Skagerlund et al., 2018) financial numeracy and money management skills of the heads of households used to evaluate the financial literacy. Economic stratification and the gender of the head of household play a catalytic role in wealth accumulation. Numeracy, understanding of inflation and understanding of risk diversification used to measure the financial literacy of an individual or household (Lusardi and Mitchell, 2014). Lusardi and Mitchell used the term well-being for the first time in 2004, in the US health and retirement survey, which have become standard in the literature (Lusardi and Mitchell, 2011a). (Ranyard et al., 2020) financial literacy predicted key indicators of financial well-being. (Angrisani et al., 2020) stated that the level of financial literacy in both developed and developing economies is low. According to (Swiecka, et al., 2020) long lasting financial development of an individual and society can be ensured with improved status of financial literacy. The financial capability is a proxy for financial literacy (Kempson, Collard, & Moore, 2006).

(Vivek, 2019) given conceptual definitions of financial literacy. (Batsaikhan & Maria, 2018) concluded that financial illiteracy can become a serious threat to their life-time welfare. Under the demographic group young people are found among the least financially literate (Arceo-Gome & Villagóme, 2016). (Toosi et al., 2020) financial literacy training programs improve financial planning and budgeting habits, contributing toward amplified savings and financially literate people are much capable of taking the financial risk and are therefore are aware of risk-return trade off therefore, investing more in the financial market (Klapper & Lusardi, 2019)

Financial literacy survey results conducted by S&P's authenticate the low level of financial literacy throughout the world (Klapper & Lusardi, 2019). Financial literacy is a vital instrument to develop capability of making sound financial decisions (Lusardi, 2019; Rai, et al., 2019). Financial attitude and behavior are strongly correlated with financial literacy than financial knowledge (Rai, et al., 2019). The combined skills of economics, statistics and numeracy make the people financially literate and capable of making healthy financial decisions including healthier saving, borrowing, retirement planning and portfolio investment (Batsaikhan & Maria , 2018; Bianchi, 2017; Bhushan, 2014; Christiansen et al., 2008).

Highly literate households practiced higher annual returns and ready to take more risky investments (Bianchi, 2017). To develop the saving habits necessary for investment, leading toward sustainable economic growth, improving the level of financial literacy is much important (Baidoo, et al., 2018). Diversified socio-economic and demographic aspects affect the level of financial literacy among youth (Garg & Singh, 2018). Students who are male, conducting research, lives in a rental house, parents have more income, get financial advice, took a financial course, and get financial information found more aware regarding personal finance (Ergun, 2017). (Shusha, 2016) applied multiple regression analysis and assessed knowledge and behavioral determinants of financial well-being including financial literacy and rational buying whereas rational buying partially mediates the connection between financial literacy and well-being. Financial literacy affects portfolio diversification and investment decisions (Guiso & Jappeli, 2009; Christelis et al., 2006). Meta-analysis found improved financial results are the outcome of financial education (Kaiser & Menkhoff, 2017; Miller et al. 2014) and rather than manipulated financial literacy, measured financial literacy has more impact in receiving these results (Fernandes et al. 2013).

More financially literate individuals face less financial struggle and possess better well-being (https://www.thehindubusinessline.com/opinion/financial-literacy-is-key-to-financial-inclusion/article25726991.ece).

Financial decision-making get influenced by financial literacy (Disney and Gathergood, 2013; Lusardi and Mitchell, 2011b & Son and Park, 2019) as it forms the cognitive and behavioral skills (French & McKillop, 2016). Financial well-being and financial security can be enhanced via informed and timely financial decisions, awareness of which can be gained through financial education (OECD, 2005).

Individual can be strengthened economically with increased levels of financial knowledge (Vieira, 2012). The usability of financial instruments and services get adversely affected by fee charges and insufficient financial knowledge. Financial attitude and literacy are formative indicators of Financial planning (Hastings and Tejeda-Ashton, 2008; Cole et al., 2011; Bhushan, 2014; Ali et al., 2015; Lusardi and Tufano, 2015). Among backward people found a low level of awareness regarding financial instruments, whereas social dealings optimistically control financial literacy (Bonte & Filipiak, 2012).

Enhanced financial awareness results better returns on the savings (Lusardi and Mitchell, 2014).

2.1.1 Numeracy

The credit worthiness and risk associated with the borrower measured more accurately with a high level of numeracy skills (Brown et al, 2020) and helps an individual in debt management (Cao-Alvira et al. 2020). Money illusion and numeracy are not related to each other (Darriet et al., 2020).

Travel distance also gets affected by mathematical calculations. People with high numeracy possess high financial skills tend to be more socially (Hong, et al., 2020). Mathematical ability plays a significant role in financial literacy and a corresponding subject (Indefenso & Yazon, 2020; Demakis et al., 2019; Eberhardt et al., 2019; Garcia-Retamero et al., 2019; Skagerlund et al., 2018) is an aptitude to understand, apply, and connect sense to figures (Nelson et al., 2008).

Numeracy is essential to make well-versed financial decisions and considerably contribute toward financial literacy (Garcia-Retamero et al., 2019; Ayaraman et al., 2018; Skagerlund et al. 2018; OECD, 2017) therefore required to consider under educational policy boosting financial literacy. Financial education spread the financial awareness but not the only solution to make the people financially literate (Carpena et al. 2011).

The low level of numeracy skills, education, and financial literacy results in inappropriate financial decisions (Armantier et al. 2015). Numeracy and financial literacy recognized as a key factor of the 2008 subprime mortgage crisis (President's Advisory Council on Financial Literacy, 2009). Various financial decisions including saving, spending, investing, and borrowing positively associated with the level of financial literacy and numeracy skills (Lusardi, 2012).

2.1.2 Inflation

People having low financial literacy and low income expect more inflation and possess petite financial planning prospects (Bruin et al., 2010). According to (Bruin et al., 2011) ambiguity concerning potential inflation is associated with price forecasting. Financial literacy contributes in forecasting inflation more accurately (Burke & Manz, 2011).

2.1.3 Risk diversification

The degree of portfolio diversification and measures of financial literacy are significantly associated with each other. Individuals who are risk avoider, elders, low education and income, possess low level of sophisticated financial literacy. Perceived knowledge of financial matters is weakly correlated with financial literacy (Guiso & Jappelli, 2009). Awareness regarding various financial aspects seems low among the people such as risk diversification, share market, mutual fund and investment related information (Lusardi et al., 2009).

Risk aversion has negative, whereas locus of control and emotional intelligence has positive influence on risk taking (Aydemir & Aren, 2017).

People with high financial literacy trust on professional advice on financial matters results in favorable outcomes through diversification (Gaudecker, 2013). Experience of the investors, their literacy level, familiarity and heuristic and familiarity bias have a noteworthy influence on portfolio diversification (Mouna and Jarboui, 2015). Financial literacy has a noteworthy effect on investment and saving decisions (Beckmann, 2013). According to (Lusardi and Tufano 2009) frequency over indebtedness found low among households who are financially literate.

2.1.4 Compound Interest

(Song, 2020) with the help of financial education concepts of compound interest can be developed. (Hubbard et al., 2016) found that monetary content is more successful for understanding compound interest. Knowledge of compound interest plays an imperative role in financial planning and to plan more for effectively retirement (Lusardi and Mitchell 2011b).

2.1.5 Time value of money

Purchasing power is determined by the value of money that is attributed by time factor (Ahmad and Hassan, 2006

2.1.6 Stock market

(Rooij et al., 2007) people having a low level of financial literacy and have financial knowledge are comparatively preferred to invest in the stock market. Level of sophisticated financial knowledge found in older people having negative effect on responsible retirement planning (Lusardi et al., 2014)

2.1.7 Mutual funds

Sophisticated financial literacy and return on mutual funds are significantly correlated with each other (Jianjun et al., 2020).

There is a significant correlation between financial literacy and investment skills. Regarding mutual fund investment found moderately mixed influence of financial literacy. We present evidence that financial literacy improves the accuracy of past return recollections and leads to more realistic volatility assessments that higher levels of financial literacy are not universally positive. (Muller and Weber, 2008)

2.1.8 Investment decision

(Prasad et al. 2020) found a significant positive relationship between financial literacy and investment decisions. The factors of Investment decisions are return analytics, risk analytics and market. The risk and return analytics have stronger impact on investor's decision than market analytics. Young households and individuals, fall under the low-income groups having low financial literacy. Financial literacy is associated with involvement in financial market, retirement savings and mortgage borrowing (Brown and Graf, 2013)

Socio-economic and demographic factors along with financial literacy have significant impact on investment decisions (Janor et al. 2016). With the improved level of financial literacy among households probability of investment in financial marked can be enhanced (Zou and Deng, 2019).

2.1.9 Financial knowledge

Due to the volatility in financial markets, financial knowledge and digital awareness become an important aspect (Philippas and Avdoulas, 2019). (Dewi, et al., 2020) examined that financial knowledge represented as a literacy of financial issue. Researcher explains the relationship between financial literacy with its variable including, financial knowledge, awareness, experience, capability, goals and decisions.

Gender is not a significant predictor in financial knowledge, attitudes, and behaviors (Robson & Peetz, 2020). Tendency to plan plays a significant moderating role linking financial knowledge and well-being (Lee et al., 2019). Financial knowledge is measured as a key to evaluate the requirement for associated education and define differences in monetary results (Huston, 2010). (Rostamkalaei and Riding, 2020) study suggests that immigrants are less likely to show high levels of financial knowledge compared to born citizens.

(Kim and Yuh, 2018) saving habits of households significantly affected by financial knowledge. Throughout the world, exists a low level of financial knowledge (Atkinson and Messy 2012; Clark 2014; Lusardi 2008; Lusardi and Mitchell 2007, 2009;

Lusardi and Tufano 2015; OECD/INFE 2011). Noteworthy linking between financial knowledge and education was found (Lusardi and Mitchell 2007) and low levels of financial knowledge exhibits among women (Lusardi and Mitchell 2008; Lusardi et al. 2010)

Prior studies have shown that financial knowledge influences financial behavior (Babiarz and Robb, 2014; Woodyard et al., 2017), monetary goal (Priyadharshini, 2017) and economic decisions (Asaad, 2015; Parker et al., 2012). (Warmath and Zimmerman, 2019) blend of knowledge, skill, and self-efficacy develop financial literacy and define it as the ability to make effectual monetary decisions. Financial literacy connecting financial knowledge and financial behaviour (Lusardi & Mitchell, 2014).

Financial literacy is a systematic way of perceiving the financial knowledge and applying it in the financial decision (Dewi, et al., 2020). The rationality of financial decisions is affected by the level of financial literacy (Dewi, et al., 2020).

Financial knowledge and awareness are linked with retirement planning and investment decisions (Behrman et al., 2012; Bucher-Koenen and Lusardi, 2011; Lusardi and Mitchell, 2011b, 2007); saving resolution, managing portfolio (Abreu and Mendes, 2010) funding in equities (Van Rooij, et al., 2011a; Christelis, et al., 2010) debt management and contentment (Akin et al., 2012) and credit management (Gerardi, et al., 2010; Quercia and Spader, 2008; Ding, et al., 2008).

(Bhushan and Medury, 2014) explained, to facilitate financial literacy levels evaluation of financial attitude and behavior is required along with financial knowledge and awareness. Financial illiteracy negatively affects the financial health of people (Huston, 2012). According to (Warmath and Zimmerman, 2019) financial knowledge is a pathway to financial literacy but not the only one to take an effective and appropriate financial decisions. Individuals possessing high financial knowledge have less frequency to money illusion, whereas no proof of affect of numeracy on money illusion (Darriet, et al. 2020).

2.1.10 Financial Attitude

The status of financial well-being affected by financial attitude and parental discussion on financial matters develop sound financial habits (Utkarsh et al., 2020; Philippas and Avdoulas, 2019). Level of schooling, attitude and behavior towards money, financial knowledge, income, gender, affects financial literacy leading toward healthy credit and investment behavior (Santini and Ladeira, 2019). The low status of financial literacy and weak attitude toward money results lack of risk diversification and unsuitable pension selection (Halilovic, et al. 2019).

Along with financial knowledge, financial attitudes and behavior also have a significant influence on financial literacy and therefore focusing on enhancing financial knowledge proper attention needs to be given on shaping sound financial behavior and positive attitude toward finance (Bhushan and Medury, 2014).

2.2 REVIEW OF LITERATURE ON FINANCIAL BEHAVIOR (FB)

Objective and subjective financial knowledge is noteworthy connected with financial behaviors (Walsh and Lim, 2020).

(Bialowolski et al. 2020) found that consumer’s under-confidence enhanced possibility of saving for consumption and preventive motive. Household financial behavior is steady in requisites of liability and saving purposes. Socio-economic factors affect debt and saving habits. Weak financial behavior has fatal consequences not only for individuals but also for the global economy, as observed in the U.S. mortgage bubble (Klapper & Lusardi, 2019).

Income, education, financial literacy and financial attitude has a positive effect on financial behavior, whereas financial knowledge and locus of control have no significant influence on financial behaviour. Therefore it is suggested to conduct seminars on financial literacy by government institutions (Prihartono and Asandimitra, 2018). In line to this (Compen, et al. 2019) focused that rather than only focusing on improving financial knowledge, it is more important to inculcate the healthy financial behavior and attitude. Financial knowledge, financial attitude and financial behavior are interrelated with each other (Garg & Singh, 2018). Result of Meta-analysis shown financial education has a substantial control on financial behavior and larger on financial literacy. Whereas, not found much effectual for handling debt, low-income group and lower-middle income economy (Kaiser & Menkhoff, 2017).

It is necessary to advance the standard of financial education. Financial behaviors measured as actions, responses, or conduct concerning money management (Gorham et al. 1998).

2.2.1 Saving behavior

(Kalwij et al., 2019) financial education plays a significant role in developing saving behavior. (Ranyard et al., 2020) assumed that holding debts and savings for security get significantly affected by age and income factors, whereas between financial literacy and savings there is a positive and between financial literacy and debts establish a negative relationship. (Kim and Yuh, 2018) stated objective and supposed financial knowledge are significantly associated with probability of saving and sensibility of handling the money affected by the differences in attitude, knowledge and motive for saving (Nyhus, 2017).

(Murendo and Mutsonziwa, 2016) in context to both rural and urban saving habits (formal and informal) influenced by financial literacy, urban people have higher financial literacy than rural. Financial literacy is related to financial behaviors and as a result to borrowing, saving and investment decisions (Lusardi and Mitchell, 2014; Jappelli and Padula, 2013; Van Rooij et al., 2011b). (Roszkiewicz, 2014) income estimation and monetary situation are important factors in savings and reserves creation. Whereas, values of independence and consumerism promote the outlook of living for the moment, confirmed that hierarchical representation of monetary actions enclosed in the theory of psychological economics is shown in the behaviour of high standard households.

Neo-classical assumption of household savings typically relies upon the Keynesian, reproducing balanced decisions regarding family finances and reserves (Keynes, 1936). (Baidoo et al., 2018) reported that enhancing financial literacy is necessary for increasing savings an ultimate requirement for investment leading an economy toward sustainability. Financial behavior defined as saving behavior, shopping behavior, short-term and long-term financial planning (Zulaihati, et al., 2020).

According to (Lusardi, 2015) lack of awareness and literacy of financial concepts leading toward inadequate retirement plans, less involvement in financial markets, unhealthy borrowing habits. So it must add in school curriculum to ensure effective communication of financial concepts.

Saving behavior ensures wellbeing of individuals. Whereas inappropriate savings for retirement may have an adverse result in quality of life (Lowe & Meers, 2015).

2.2.2 Spending behavior

Self-control in spending, planning for the future, seeking information, education, rational decision -making and solvency is defined as formative constructs of sound financial behaviour that determines person’s well-being along with social and emotional state. On the other hand irresponsive financial behaviour results negatively (Barbic et al., 2019). To help consumers in improving financial decision -making, it is essential to deeply understand their financial behavior (Van Raaij, 2016).

Financial education develops the ability to take informed financial decisions results effective financial performance (Rutledge, 2010). Timely payment of liability can also result from financial education but may not result in reducing the expenditure (Ibarra et al. 2017).

2.2.3 Payment management

(Walsh and Lim, 2020) found that sound financial behaviour inculcate the habits of holding emergency funds, savings for retirement, own property and payment of any dues on time. Such individuals have the habit of spending more than they earn and took proper advantage of overdraft facility.

2.2.4 Money management

According to (Cao-Alvira et al., 2020) probability of using a variety of debts is negatively associated with money management skills, but positively associated with the increase in wealth. Credit card holder's decisions got positively affected by the skill of money management, including regular checking of monetary statements, payment on time, budgeting and level of financial literacy on the other hand personality traits do not have a significant impact on credit card settlement, whereas behavioral intrusion and financial education developing sound management behavior and effective money management skills are relevant (Hamid and Loke, 2020).

In line to maintain the wealth, survival, income, timely payment of bills, spending under budget, maintenance of emergency funds, possession and non-possession of these habits creates a difference between affluent and less affluent households (Fallaw et al., 2020)**.** The low level of liability and high level of net worth related to money management (French & McKillop, 2016).

2.2.5 Risk management

Practice of risk management focused on hedging and comparative advantage to take or accept the risk (Stulz, 1996).

2.2.6 Propensity to plan

Financial well-being cannot be improved only with the help of financial knowledge, it is required to work for financial goals through proper financial planning results in sufficient wealth accumulation and improved standard of living ensuring financial independence concluding that propensity to plan plays a significant role in the present and future well-being (Lee et al., 2019).

Budgeting habits found more among the people who had health insurance, credit card are married, working, higher qualification, female, and having dependent children. Budgeting plays a significant role to develop the desirable behavior, financial satisfaction and ensuring financial well-being (Xiao and O'Neill, 2018a). Planning behavior is related to elevated economic status and financial capability, ensuring financial well-being (Xiao & O'Neill, 2018b).

The degree of retirement planning exhibits financial planning for the financial security of an individual. The lack of financial planning negatively affects the propensity to plan and financial results as well (Lusardi, 1999). (Ameriks et al., 2003) reported that people having high propensity to plan, give more time for retirement planning, properly evaluate their spending pattern and look for the necessary skills and attitudes required for saving and wealth accumulation. (Xiao and O'Neill, 2018) found that propensity to plan significantly correlated with financial competence and its affect on financial decisions. Households with an elevated propensity to plan, exhibit the improved planning for retirement (Lee and Kim, 2016). People planned financially accumulated and save more money (Lusardi and Beeler, 2007)

Propensity to plan greatly contributes towards financial well being and is a noteworthy reflection of financial behaviour.

2.3 REVIEW OF LITERATURE ON FINANCIAL WELL-BEING (FWB)

Person ability to meet expenses, having some surplus at the end of every month, feeling under the control of their finance and secured in terms of finance, depict their financial well-being (Muir et al., 2017).

Financial well-being plays a partial mediating role between job insecurity and financial stress; however the relationship between higher financial well-being and lower financial stress moderated by income level. Moreover, the study concluded that high level of financial stress was found among employed compared to unemployed (Choi et al., 2020). Keeping demographic variables constant, financial literacy expected an important predictor of financial well-being. Less difficulty in managing monthly expenses found among the individuals, possessing a high financial well-being (Ranyard et al., 2020).

(Mahendru et al., 2020) to predict the financial well-being, objective, and prejudiced financial evaluators found significant. Moreover, financial behavior mediated the aforesaid relationship, which is the formative outcome of financial knowledge, personality traits, and finance planning.

Found positive affiliation between financial literacy and well-being (Warmath and Zimmerman, 2019). (Ponchio et al., 2019) mentioned that present stress of managing money and ensuring financial security are important dimensions affecting financial well-being.

(Mahdzan et al., 2019) subjective financial well-being gets significantly affected by financial behavior and locus of control, whereas financial knowledge and stress are negatively correlated with financial well-being. Households with the low income group possessing a low level of subjective financial well-being, behavior, knowledge, and locus of control. According to (Rui, 2019) financial gratification improves with an improved level of financial literacy. Whereas, people with poor financially literacy found more stressed and likely to cut their consumption, seek more employment opportunities, have more liability and sell their property. In addition, financial literate people are prone to seek professional financial advice, purchase a life annuity, contribute more to superannuation and invest in more conservative assets regardless of their financial concerns.

(Kabadayi and O'Connor, 2019) found various antecedents of the financial well-being including subjective and objective financial knowledge, financial literacy, financial behavior, financial security, bank transparency, financial self-efficacy.

According to (Riitsalu and Murakas, 2019) prejudiced knowledge and healthy monetary behavior are good interpreter of financial well-being compared to objective knowledge. Likewise, (Bayuk and Altobello, 2019) revealed that prejudiced financial knowledge, financial self-efficacy and long-term financial literacy are good evaluator of financial well-being than objective financial knowledge or short-term financial literacy. (Kuntze et al. 2019) found that financial well-being strongly affected by credit card literacy. Financial knowledge is a significant measure of financial well-being (Ponchio et al., 2019). Readiness for financial emergency, credit control and risky indebtedness behavior affects financial well-being (Abrantes-Braga and Veludo-de-Oliviera's, 2019).

(Lee et al., 2019) link between financial knowledge and well-being moderated by propensity to plan.

(Muir et al., 2017) factors including, individual, household, community and societal status affects the financial wellbeing. In addition to this financial capability, financial inclusion, social capital and income are stronger predictor of financial well-being. According to (Shusha, 2016) demographic and knowledge of personal financial management determine the financial well-being. The results of Baron and Kenny approach to test the mediating role show that rational buying partially mediates the relationship between financial literacy and well-being. (Shusha, 2016) investigate the demographic and personal financial knowledge determinants of financial well-being among Egyptians. Results of the multiple regression analysis using sample of 386 respondents displays that gender, age, educational level, income and marital status are demographic determinants of financial well-being.

(Mokhtar, 2016) stated that rational buying partially mediates the relationship between financial literacy and financial well-being. According to (Rajola et al., 2014) active elders consider the ability to manage personal wealth as one of the core determinant of well-being, although the economic and financial literacy found limited among the individuals. Financial efficacy and well-being are significantly related to each other (Vosloo, 2014).

The capability to apply knowledge and talent to deal with monetary resources successfully for long-term financial well-being is a great measure of financial literacy (Hung et al. 2009)

It can be concluded that long-term financial literacy and sound financial behaviour are an effective evaluator/predictor of financial well-being.

2.4 REVIEW OF LITERATURE ON PERSONAL WELL-BEING (PWB)

According to (Dittmar et al., 2014) materialism associates negatively with well-being individual lives in cultures less focused on pleasure experience lesser levels of well-being. Personal well-being improved by an elevated level of satisfaction of psychological needs. Behavior mediate the relationship between neighbourhood stability and personal well-being (Farrell et al., 2004).

Subjective well-being comprises an evaluation of feeling about life and other aspects of life, i.e., family, job, spirituality, education, etc., are satisfactory) of people's lives. Personal well-being enhanced with income. The relationship of satisfaction with spirituality and religion with personal well-being found significant. Spirituality makes addition toward life satisfaction. Females encompass superior personal well-being compared to men but the gender difference was found insignificant. Personal well-being increases with age. People who are unemployed have lower than normal well-being for all domains except safety. Number of children per house and the satisfaction with spirituality are positively correlated (Wills, 2009). Ethnic identification significantly correlated with personal well-being and self-esteem (Smith and Sylva, 2011). Married men and women are happier and less stressed than unmarried (Coombs, 1991). Overall well-being gets affected by present stress of money management and expected future financial security drive the consumer's assessment of (Netemeyer et al., 2018).

Personal well being of an individual determined by number of factors including money management, expected future financial security, feeling about life and other aspects of life, i.e., family, job, spirituality, education etc.

2.5 REVIEW OF LITERATURE ON FINANCIAL LITERACY AND FINANCIAL BEHAVIOR

In comparison to the individual's who participated in the formal financial literacy program, those who participated in semi-formal financial literacy training probably borrow more, do subscribe to insurance facilities and are highly contented with their present financial position (Bhandare et al., 2021). Financial behavior got affected considerably by financial literacy in context to saving & shopping behavior, short and long-term planning (Zulaihati et al., 2020). (Widyastuti et al., 2020) found positive and noteworthy association linking financial literacy and behavior. Whereas, examined an irrelevant control of financial education on financial behavior and literacy.

Found strong association connecting financial literacy and behavior, financial literacy and degree of portfolio diversification, financial literacy and retirement planning, financial planning and literacy, mediating role of financial literacy linking financial education and vigorous personal finance, financial literacy and good monetary decisions encouraging involvement in stock market (Ameriks et al., 2003; Lusardi and Mitchell, 2007a; Guiso and Jappelli, 2009; Christiansen et al., 2008; Abreu and Mendes, 2010; Bucher-Koenen and Lusardi, 2011; Cole et al., 2011; Van Rooij et al., 2011a ; 2011b; Lusardi and Tufano, 2015; Grohmann, 2018; Son & Park, 2018). Best possible debt management and borrowing decisions preferred by financially literate people (Stango and Zinman, 2009; Disney and Gathergood, 2013).

The level of financial literacy has noteworthy effect on financial behavior (Mahdzan & Tabiani, 2013). Wealth accumulation (Van Rooij et al.,2011b) retirement planning (Van Rooij et al., 2011b; Lusardi & Mitchell, 2014) investment in the stock market (Van Rooij et al., 2011a) and savings for financial security directly affected by financial literacy (Klapper & Panos, 2013). People with better financial behavior save and secure more in terms of finance and less monetary anxiety (Stromback et al.2017).

Financial knowledge promotes financial literacy of the farmers, plays a noteworthy role in healthy saving and borrowing. Moreover, it has a positive role in new start ups (Sayinzoga et al., 2015). Investors with a high level of financial literacy tend to spend in the portfolio and have effectual trading sense (Bellofatto et al. 2018). The lack of financial literacy results the tendency of not availing the monetary services (Bajo & Barbi, 2018).

2.6 REVIEW OF LITERATURE ON FINANCIAL LITERACY AND FINANCIAL WELL-BEING

(Ranyard et al., 2020; Philippas and Avdoulas, 2019; Xue, 2019) financial literacy predicted key indicators of financial well-being. Discussions on the financial matter with children significantly control their financial well-being (Utkarsh 2020). According to (Netemeyer, et al., 2018; CFPB, 2015) financial literacy should be aimed at ensuring financial well-being. (Prawitz et al., 2006) financial well being measured through the self-judgment of present state, financial situation and response towards own present state of financial situation.

(Xue et al., 2019) found comparatively older, highly educated, healthy and possessing home ownership tend to depict better financial well-being. The financial well-being of a person improved with the improved level of financial literacy, whereas financially illiterate person prefers less to have financial advice in comparison to literate and do not take responsible investment decisions (Xue, 2019). Noteworthy affiliation connecting financial literacy and well-being (Osman et al., 2018; Grohmann, 2018).

Financially literate people are effective not only in managing finance formally but in informal sectors as well, this assists people in maintaining their day-to-day routine, financial planning, savings, investment and wealth accumulation. It will not only help the individual but economy as a whole in its development (Sebstad and Cohen, 2003).

According to (Xue et al., 2019) expenditure behavior and financial literacy are prime aspects in forming the financial well-being of people.

2.7 REVIEW OF LITERATURE ON FINANCIAL BEHAVIOR AND FINANCIAL WELL-BEING

(Osman et al., 2018) found noteworthy association linking financial literacy, financial stress, and financial well-being.

Financial literacy is highly correlated with retirement planning, wealth, and financial well-being (Lusardi and Mitchell 2007b; Lusardi 2008; Hung et al. 2009). Higher financial well-being and lower financial anxiety are the outcome of financial literacy and the result of sound financial decision making (Kim, 2007; Schmeiser & Seligman, 2013; Taft et al., 2013).

Financial literacy plays a significant role in determining financial well-being of retirees (Adam et al. 2017). Financial well-being is an outcome of financial literacy (Zulfiqar, 2016).

The Wide availability of financial literacy education results in approaching more individuals. The increased level of financial literacy, improves financial wellbeing. With the aim of improving the level of financial, literacy it had been introduced as a part of primary and high school curriculum in Australia and elsewhere and in a future proposed to be introduced in the tertiary sector (Blue et al. 2014).

The short-term financial behavior of an individual gets influenced by financial literacy that may positively influence the person's wellbeing by reducing financial strain (Boehnke, 2018).

According to (Lusardi, 2019b) Millennial (ages 23-37 in 2018) display lower level of financial well-being than the older working population (ages 38-61 in 2018. Women, single individuals, those without a college degree, those with low income, and those who are unemployed display lower financial well-being. Individuals having low financial literacy also display low financial well-being.

2.8 REVIEW OF LITERATURE ON FINANCIAL WELL-BEING AND PERSONAL WELL BEING

Financial wellness is considered an important element of personal well-being comprising monetary satisfaction, status, behavior, attitudes and knowledge (Joo, 2008).

Personal financial wellness is a broad concept included objective status of financial situation, satisfaction, financial attitude and behavior measurement of which is not possible with single computation (Joo, 1998). Efficiency and prosperity of an economy can be promoted by improving the Personal financial well-being. One of the important components of financial well-being is financial satisfaction (Campbell et al. 1976). Special focus had been given in studies on wellness-associated stressors such as financial strain, risk management issues, locus of control and employment issues (Porter & Garman, 1993).

The eminence of communication between parents and children concerning financial topics demonstrated to be the most effective forecaster of children's financial, psychological, and personal well-being. Parent's expectations had a considerable indirect control on their children's well-being (Serido et al. 2010).

On the whole, well-being of an individual gets affected by personal money management skill (Netemeyer, et al., 2018).

2.9 REVIEW OF LITERATURE ON FINANCIAL LITERACY, FINANCIAL BEHAVIOR AND FINANCIAL WELL-BEING

Financial wellness got directly and indirectly affected by financial behaviors, stress, literacy, income, gender, marital status, home ownership, financial knowledge, financial solvency, credit management, health insurance, financial satisfaction, usage expenditure, financial planning, financial risk tolerance and education. However, age, ethnicity, financial status and knowledge have insignificant concern on financial satisfaction (Campbell et al.1976; Joo & Grable 2004; Rutherford & Fox, 2010; Delafrooz & Paim, 2011; Gerrans et al., 2013).

Financial literacy is defined as knowledge and understanding of the basic concepts underlying the management of money and using it to take financial decisions (Hogarth & Hilgert, 2002; Priyadharshini, 2017). Individuals with low self-control and lack of financial management, will spend more and save less, results into over-indebtedness , lower wealth accumulation, and face more financial stress (Choi et al. 2011;Gathergood 2012; Achtziger et al. 2015; Biljanovska & Palligkinis, 2015). Individuals with high self control mechanism will save more and are free from financial anxiety (Rha et al. 2006). Contrast to this self-control does not affect financial behavior when cognitive abilities are taken into consideration (Ballinger et al. 2011).

Financial literacy is a combination of knowledge, attitude, awareness, behavior and skill that will affect the financial decision making and the financial well-being (OECD-INFE, 2011). Financial decisions and demographic factors are found to be playing the role of moderator between financial literacy and financial well-being and it also revealed a positive relationship between financial literacy and well-being (Kamakia, 2017).

Level of financial satisfaction got positively affected by enviable financial behavior and improved status of financial literacy increase whereas, adversely affected by the risky behavior (Xiao et al., 2014).

2.10 REVIEW OF LITERATURE ON FINANCIAL LITERACY, FINANCIAL WELL-BEING AND PERSONAL WELL BEING

(Netemeyer et al., 2018) overall well-being affected by perceived financial well-being and study the qualities, behaviors, and conditions that generate better or inferior levels of perceived financial wellbeing and overall well-being. The level of financial literacy is low and it is necessary to improve the education system in order get better financial literacy. Indian govt. withdraws the pension schemes that results in financial insecurity. Therefore, it is necessary to plan for retirement in terms of some financial savings that materialize the relevance of financial literacy, which is essential for financial well-being of an individual and the economy as a whole (Ambarkhane et al. 2015).

2.11 RESEARCH HYPOTHESES

Based on the extensive literature review the following hypotheses had been framed:

$H0_1$: There is no significant influence of Financial Literacy on Financial Behavior.

HA_1: There is significant influence of Financial Literacy on Financial Behavior.

$H0_2$: There is no significant influence of Financial Literacy on Financial Well–being.

HA_2: There is significant influence of Financial Literacy on Financial Well–being.

$H0_3$: There is no significant influence of Financial Behavior on Financial Well-being.

HA_3: There is significant influence of Financial Behavior on Financial Well-being.

$H0_4$: There is no significant role of financial behavior between financial literacy and financial well-being.

HA_4: There is significant role of financial behavior between financial literacy and financial well-being.

$H0_5$: There is no significant role of financial well-being between financial literacy and personal well-being.

HA_5: There is significant role of financial well-being between financial literacy and personal well-being.

$H0_6$: There is no significant relationship between financial well-being and personal well-being.

HA_6: There is significant relationship between financial well-being and personal well-being.

2.12 Conceptual Framework of the Study

The conceptual model is framed on the basis of the extensive literature and the same is tested in the present study.

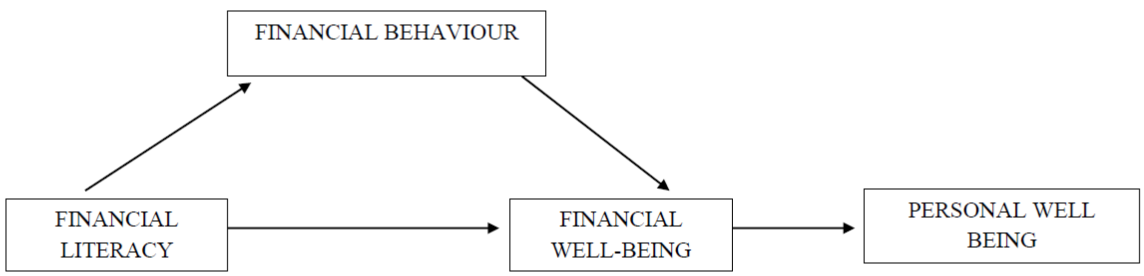


Figure 2.1: Conceptual Framework

2.13 RESEARCH GAP AND SUMMARY OF THE CHAPTER

There is an immense literature that studied the influence of financial literacy on financial behaviour and financial well being. The detailed review of the available literature mentioned above in this study, provide adequate support to develop a conceptual model. From the literature review it had been found that that there are studies on financial literacy that examine a positive and significant relationship between financial literacy & financial behavior, financial literacy &financial well-being, financial behavior & financial well-being and financial well-being & personal well-being (Bucher-Koenen and Lusardi, 2011; Son & Park, 2018; Grohmann, 2018; Cole et al., 2011; Ameriks et al., 2003) but very few studies study the role of financial behavior as a mediator between financial literacy and financial well-being of people and the influence of financial well-being on personal well-being of households. Further the present research also studies the mediating role of financial well being between financial literacy and personal well being.

Studies conducted in India focused on married women, pension schemes, PMJDY, retirement planning, risk attitude, investment intentions among youth etc. but there is dearth of studies conducted for studying the influence of financial literacy on personal well-being of the households, who are taking financial decisions. Most of the studies were based on secondary data (Akhter, 2016).

Despite the various initiatives taken by the government, central banks and NGOs in India, evidence has revealed that the overall impact of financial literacy is still limited. Therefore focuses on the need for addressing and taking various initiatives by policy makers, academicians, industrialists and other institutions to strengthen the financial skills and level of financial literacy of the individuals (Ghosh, 2019).

In line to this, the purpose of the study is to test the conceptual model developed for examining the influence of financial literacy on personal well-being of households in Jammu province. The present study examined the influence of financial literacy and financial behaviour on financial well-being of the households. Secondly, to study the influence of financial well-being on the personal well-being. Thirdly, to study the mediating role of financial behaviour between financial literacy and financial well being. Finally, to study the mediating role of financial well being between financial literacy and personal well being of the household. In Jammu and Kashmir few studies had been conducted regarding financial literacy but not related to this model.

To make an effective use of available financial resources and to take an informed financial decision, it is essential to have an appropriate knowledge and positive attitude toward money. Therefore, from the view point of general public and policy maker's interest, it is extremely important to analyse the influence of financial literacy on financial behaviour, financial well being and personal well being and to understand the important parameters to measure the financial literacy and what are the important variables affecting the financial behaviour, financial well being and personal well being. The present study provide suggestions with empirical results regarding the current status of level of financial literacy among households and what are the initiatives need to be taken by the government, policy makers, academicians, industry and general public to accelerate the level of financial literacy, develop the sound financial behaviour, to promote the financial well being and to ensure the personal well being. This will results in improving the level of financial literacy among the people and make them capable and confident enough and develop the sound financial behaviour leading toward the state of financially healthy and happy ensuring their personal well being.

This study has both academic and non academic relevance.

CHAPTER-3

RESEARCH METHODOLOGY

CHAPTER-3

RESEARCH METHODOLOGY

The present chapter highlights the research methodology for the present study. It highlights the procedure of data collection, measures used in data collection, research design and sampling frame. The chapter has been systematically arranged in different sections for more clarity viz. section

3.1 Need and significance of study
3.2 Research Gap
3.3 Scope of the Study
3.4 Research objectives
3.5 Research Hypothesis
3.6 Research questions
3.7 Research Methodology
3.8 Population/Sampling Frame
3.9 Sample Design and Sampling Unit
3.10 Data Collection

3.1 NEED AND SIGNIFICANCE OF STUDY

Among 29 states and 7 union territories J & K having 30th rank in literacy (Census, 2011). Average literacy rate of India is 74.04 and of J&K is 67.16 and of Jammu province is 67.46 (Census, 2011). The position of J&K in terms of Insurance penetration is low, Branch penetration is above average whereas level of financial inclusion is below average (Crisil-Inclusix, 2016)

Not only a particular nation but almost all the countries around the world either developed or developing are facing the problem of low level of financial literacy (OECD, 2013; Visa, 2012; Lusardi,2008). Raising the level of financial literacy is imperative for improving the financial health and financial well-being of individuals and economy as a whole (Carpena et al. 2011). Financial illiteracy is one of the main causes of financial crisis (Ambarkhane et al. 2015) and results unproductive financial decision (Naidu, 2017). 76% of Indian adult do not have an understanding of the basic financial concepts (standard and poor, 2014). India ranked at 23rd in a list of 28 Asian countries (Visa, 2012). Smart financial choices project on financial literacy and education had been initiated with the aim to promote the financial awareness and knowledge (World Bank). People found with weak basic skills to manage personal finance (Master Card index of financial literacy, 2013). Level of financial literacy found low among Indians (Jayaraman & Jambunathan, 2018). Despite the various initiatives taken by the government, central banks and NGOs in India the evidences have revealed that the overall impact of financial literacy is still limited (Ghosh, 2019). In line to these statements, it is the need of the hour to find out the status of financial literacy among those who are taking the financial decisions and its influence on the financial behavior, financial well-being and personal well-being of the households.

3.2 RESEARCH GAP

The existing literature supported that there is a significant relationship between FL and FB (Lusardi & Mitchell, 2007; Agarwalla et al., 2015; Alsemgeest, 2015), there is a noteworthy relationship between FL and FWB (Lusardi and Mitchell 2007; Lusardi 2008; Hung et al. 2009), there is a significant relationship between FB and FWB (CFPB, 2018; Barbic et al. 2019), there is a significant correlation between FWB and PWB (Campbell et al. 1976; Joo, 2008). In a result of an extensive literature review it had been found that in spite of various initiatives taken by government, banks, financial institutions, NGOS still the level of financial literacy is very low not only at national level but at international level as well supported by the results of the survey conducted by S&P, 2014. In line to this a conceptual model had been framed and tested to study the structural relationship between FL, FB, FWB and PWB households in Jammu province. So that study can come up with the revenant results that can be focused to frame such policies by the govt. that assists in promoting the level of financial literacy and overall personal well being of the households with special focus on the role of financial behaviour and financial well-being. The study in the different states especially in Jammu and Kashmir was not done earlier in context to the respective conceptual model framed in this study. There are limited empirical studies that show the influence of financial literacy on personal well-being with special focus on the mediating role of financial behaviour and financial well-being.

3.3 SCOPE OF THE STUDY

The present research aimed to study the influence of financial literacy on financial behaviour, financial well being and personal well being including the examination of mediating role of financial behaviour and financial well being. This study focused on households of Jammu province who are taking the financial decisions in their home, with the objectives mentioned below.

3.4 RESEARCH OBJECTIVES

The specific objectives of the study are:

- To study the influence of financial literacy on financial behavior of households in Jammu Province.
- To examine the influence of financial literacy and financial behavior on financial well-being of households in Jammu Province.
- To study the mediating role of financial behavior between financial literacy and financial well-being.
- To study the mediating role of financial well-being between financial literacy and personal well being.
- To study the effect of financial well-being on personal well being.

3.5 RESEARCH HYPOTHESES

$H0_1$: There is no significant influence of Financial Literacy on Financial Behavior.

HA_1: There is significant influence of Financial Literacy on Financial Behavior.

$H0_2$: There is no significant influence of Financial Literacy on Financial Well–being.

HA_2: There is significant influence of Financial Literacy on Financial Well–being.

$H0_3$: There is no significant influence of Financial Behavior on Financial Well-being.

HA_3: There is significant influence of Financial Behavior on Financial Well-being.

$H0_4$: There is no significant role of financial behavior between financial literacy and financial well-being.

HA_4: There is significant role of financial behavior between financial literacy and financial well-being.

$H0_5$: There is no significant role of financial well-being between financial literacy and personal well-being.

HA_5: There is significant role of financial well-being between financial literacy and personal well-being.

$H0_6$: There is no significant relationship between financial well-being and personal well-being.

HA_6: There is significant relationship between financial well-being and personal well-being.

3.6 RESEARCH QUESTIONS

Based on the above objectives, the following research questions will guide the study:

- Whether financial literacy improves the financial behavior of the people in Jammu region?
- Whether financial literacy influences the financial well-being of the people in Jammu region?
- Whether financial well-being is influenced by financial literacy?
- Whether there exists a role of financial behavior between financial literacy and financial well-being?

- Whether there exists a role of financial well-being between financial literacy and personal well-being?
- Whether the financial well-being improves the personal well-being?

3.7 RESEARCH METHODOLOGY

Research methodology provides a road map to conduct the research in a systematic way.

3.7.1 Research design

Research design is the master plan which specifies the methods and procedures for collecting and analyzing the required information and data. It outlines the roadmap in which the study has to be conducted. It is an arrangement & collection of data, so that it can be properly and rightly analyzed to achieve the desired objectives of the study. This describes from where the data was collected, arranged & presented and analyzed to arrive at results. It provides a framework within which the research work can be done in a smooth manner. It helps in reducing wastage by saving time and money. The method and procedure followed for conducting the study are outlined.

Descriptive research design is used. It describes the characteristics and functions. Descriptive research often based on previous exploratory research. It is used when we have some idea how we should measure the construct. It is used to describe the present status of the respondents for whom research is conducted.

3.7.2 Sampling techniques

Multi stage sampling techniques is used. In the first stage stratified sampling is used. Stratified sampling is where the population is divided into mutually exclusive strata (or subgroups) and a random sample is taken from each subgroup (Taherdoost, 2016). The combination of the stratum is called as strata. The first step was to find out the districts falling under Jammu Province. Districts for the survey are identified based on literacy rate of 2011 census report. Two strata were created on the basis of literacy rate, one is above average literacy rate and the second is below average literacy rate. There are total numbers of ten districts in the Jammu Province. Each stratum comprises of five districts. Three districts are selected from each strata.

Table 3.1: Strata of districts based on literacy rate

	Strata I (below average)	**Strata II (above average)**
1.	Punch (66.74)	Jammu (83.45)
2.	Doda (64.68)	Samba (81.41)
3.	Reasi (58.15)	Kathua (73.09)
4.	Kishtwar (56.20)	Udhampur (68.49)
5.	Ramban (54.27)	Rajouri (68.17)

Note: *average literacy rate of Jammu Province is 67.46*
Source: *Census, 2011*

Random sampling technique was used in the second stage. Under random sampling each member of the population has an equal chance of being selected as subject. Every area selected independently of the other in the population (Sharma, 2017).In the second stage, list of all the towns and villages falling under the respective districts collected from 2011, census. One town and one village randomly selected from each district. One town and one village randomly selected from each districts. Total no. of 6 villages and 6 towns had been selected, as we have total six districts selected for the study.

In the third stage final sample of respondents had been selected i.e. household who is taking financial decision. For this purpose purposive sampling technique had been used. Purposive or judgmental sampling is a strategy in which particular settings persons or events are selected deliberately in order to provide important information that cannot be obtained from other choices (Maxwell, 1996).

3.8 POPULATION/SAMPLING FRAME

Out of ten districts of Jammu province six districts had been selected based on the literacy level of these districts. Two strata had been framed, a first strata consists of the districts (total in five) having below average literacy rate and the second strata consists of districts (total in five) having above average literacy rate. From every district one village and one town had been randomly selected. Sample size from each village and town is proportionately selected based on its respective population. In the final stage purposive sampling had been used to select the final respondent.

550 questionnaires were distributed out of which 455 have been returned by the respondents whereas 400 Reponses remain valid for data analysis. The present work examines financial literacy, financial behaviour, financial well-being and personal well-being among the households who are taking financial decisions. Using questionnaire of 66 items focuses primarily on financial literacy, financial behaviour, financial well-being and personal well-being.

3.9 SAMPLE DESIGN AND SAMPLING UNIT

Sampling involves any procedure that uses a small number of items or a portion of a population to make a conclusion regarding the whole population. A sample size of 400 households was chosen for the present study. The total no. of 550 questionnaires had been distributed to the respondents. The questionnaires were administered through snowball sampling as it is a descriptive and cross sectional research. The sample was chosen keeping into consideration the respondents i.e. households who are taking financial decisions. The focus is on measuring the level of financial literacy, financial behaviour, financial well being of households and its overall influence on their personal well-being. The survey makes a study to measure the different variables of financial literacy such as financial attitudes, financial knowledge and general financial awareness; variables of financial behaviour comprises of saving behaviour, spending behaviour, risk management, payment management and propensity to plan; financial well being and personal well being.

Table 3.2: Sampling Frame

Stage	Categorization	Sampling Technique	Sampling Criteria
First	Districts	Stratified	Selection of 6 districts out of 10 (3 districts from each strata)
Second	Village and Town	Random	One town and one village from each districts
Third	Final Respondents	Purposive/ snow ball	Sample size proportionate to the population

3.10 DATA COLLECTION

Once the sample is decided the process of collection of data from respondents begins. The study is based on primary data. As the study requires primary data to be collected, help of questionnaires was taken. 550 questionnaires were administered comprising of households.

The process under which the research instrument was developed is presented below:

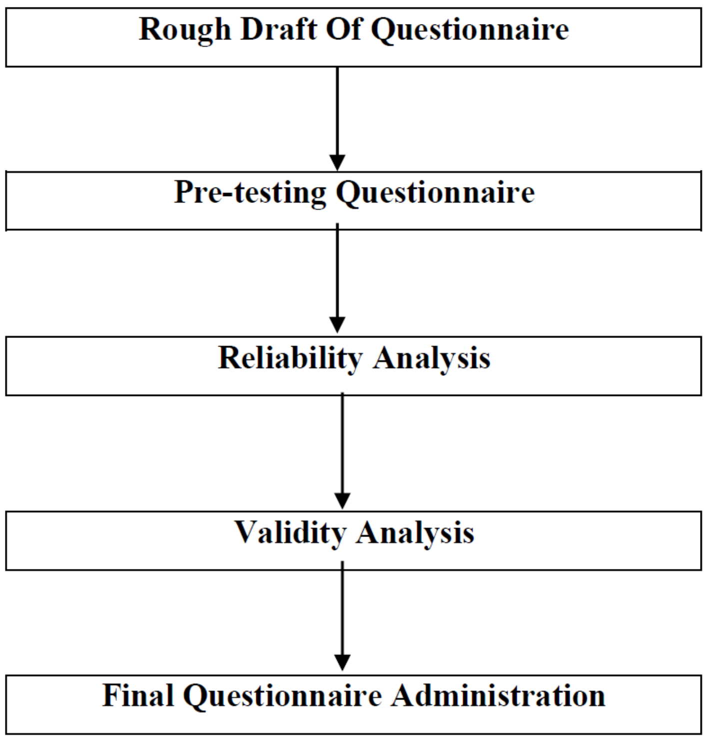


Figure 3.1: Data collection procedure

3.10.1 Rough Draft

In a rough draft various aspects were taken into consideration. To construct the questionnaire a comprehensive literature review was done. From the literature various aspects and variables related to financial literacy, financial behavior, financial well-being and personal well being came out and were closely analyzed. Major part of the questionnaire contained the statements based on financial literacy. Researchers agree that financial literacy is one of the major determinants of the financial behavior and financial well-being. Thus, an effort has been made to find out the level of financial literacy among the households in terms of demographic factors also. Therefore, the instrument had to be modified as per the requirement.

The dimensions used under all the constructs were as follows:

Table 3.3: Demographic and Social Variable Description

S.NO.	VARIABLES	MEASUREMENT SCALE	MEASUREMENT TYPE
1.	Name of district	Nominal	Multiple Choice questions
2.	Location	Dichotomus	Multiple Choice questions
3.	Gender	Dichotomus	Multiple Choice questions
4.	Earning members of the family	Nominal	Multiple Choice questions
5.	Who is taking financial decision	Nominal	Multiple Choice questions
6.	Religion	Nominal	Multiple Choice questions
7.	Age	Nominal	Multiple Choice questions
8.	Education	Nominal	Multiple Choice questions
9.	Marital status	Nominal	Multiple Choice questions
10.	Monthly income	Nominal	Multiple Choice questions
11.	Occupation	Nominal	Multiple Choice questions
12.	Total no. of earning members	Nominal	Multiple Choice questions
13.	Type of family	Dichotomus	Multiple Choice questions
14.	No. of dependent person	Nominal	Multiple Choice questions
15.	Total no. of family members	Nominal	Multiple Choice questions
16.	Type of present house	Nominal	Multiple Choice questions
17.	Possession of the house	Nominal	Multiple Choice questions
18.	Education of children	Nominal	Multiple Choice questions
19.	Employment of a domestic servant	Nominal	Multiple Choice questions
20.	Possession of agricultural land	Nominal	Multiple Choice questions
21.	Income tax paid	Nominal	Multiple Choice questions

Along with socio-demographic variables questionnaire consists five sections viz: Section B comprises of:

Table 3.4: Constructs description

S.NO.	CONSTRUCT	DIMENSIONS	MEASUREMENT SCALE	MEASUREMENT TYPE
1.	FINANCIAL LITERACY	Basic Financial Literacy Questions	Nominal scale	MCQs
		Sophisticated Financial Literacy Questions	Nominal scale	MCQs
		Financial Knowledge	Ordinal scale	Seven Pont Likert Scale
		Financial Attitude	Ordinal scale	Seven Pont Likert Scale
		General Financial Awareness	Ordinal scale	Seven Pont Likert Scale
2.	FINANCIAL BEHAVIOR	General financial behavior	Ordinal scale	Seven Pont Likert Scale
		Saving behavior	Ordinal scale	Seven Pont Likert Scale
		Spending behavior	Ordinal scale	Seven Pont Likert Scale
		Payment management	Ordinal scale	Seven Pont Likert Scale
		Risk management	Ordinal scale	Seven Pont Likert Scale
		Money management	Ordinal scale	Seven Pont Likert Scale
		Propensity to plan	Ordinal scale	Seven Pont Likert Scale
3.	FINANCIAL WELL-BEING		Ordinal scale	Seven Pont Likert Scale
4.	PERSONAL WELL BEING		Ordinal scale	Seven Pont Likert Scale

Following things were considered while constructing the questionnaire:

1. Only those statements were included which are related to variables.
2. Double-barreled statements were avoided.
3. Conversational language was used and statements were kept simple.
4. Statements that may put burden on respondent's memory were avoided.
5. Assumptive questions were also avoided.
6. The statements were kept as specific as possible.
7. Leading and loaded questions were also avoided.

3.10.2 Pre-testing of the Questionnaire

Pre-testing is done to know how well the questionnaire works. It helps in eliminating the potential problems that might be faced by the respondents while reading or answering the questionnaire. The pilot study was conducted on 80 households to pre-test the questionnaire.

The good internal consistency of the measurement is indicated by the Cronbach Alpha. Hence, the scale is considered reliable with the sample.

Table 3.5: Consolidated Inference of Pilot Study

S.No.	Name of the Item	Number of Items	Cronbach's α	Result
1	Financial Literacy	28	0.89	Internal consistency
2	Financial Behaviour	25	0.88	Internal consistency
3	Financial well-being	5	0.762	Internal consistency
4	Personal Well-Being	8	0.864	Internal consistency

Table 3.6: Reliability Statistics

Item Total Statistics						
Dimensions Item	**Item code**	**Item Correlation**	**Cronbach's Alpha if Item Deleted**	**Cronbach's Alpha for the Construct**	**Composite Reliability**	**AVE**
FINANCIAL KNOWLEDGE	FK1	0.578	0.938	0.93	0.94	0.529
	FK2	0.722	0.939			
	FK3	0.651	0.939			
	FK4	0.783	0.939			
	FK5	0.633	0.939			
	FK7	0.801	0.938			
	FK8	0.647	0.939			
	FK9	0.712	0.939			
	FK10	0.745	0.939			
	FK11	0.771	0.938			
	FK12	0.777	0.939			
	FK13	0.792	0.938			
	FK14	0.797	0.938			
	FK15	0.728	0.939			
FINANCIAL ATTITUDE	FA1	0.891	0.938	0.864	0.909	0.718
	FA2	0.910	0.938			
	FA3	0.911	0.938			
	FA4	0.648	0.939			
GENERAL FINANCIAL AWARENESS	GFA3	0.594	0.939	0.902	0.919	0.538
	GFA4	0.543	0.939			
	GFA5	0.576	0.939			
	GFA6	0.833	0.938			
	GFA7	0.667	0.939			
	GFA8	0.755	0.939			
	GFA9	0.844	0.938			
	GFA10	0.838	0.939			
	GFA11	0.848	0.939			
	GFA12	0.749	0.939			
GENERAL FINANCIAL BEHAVIOR	GFB1	0.766	0.938	0.858	0.894	0.586
	GFB2	0.810	0.938			
	GFB3	0.781	0.939			
	GFB4	0.760	0.938			
	GFB5	0.722	0.943			
	GFB6	0.751	0.943			

SAVING BEHAVIOR	SB1	0.769	0.938	0.818	0.873	0.579
	SB3	0.760	0.939			
	SB4	0.760	0.939			
	SB5	0.735	0.939			
	SB6	0.781	0.938			
SPENDING BEHAVIOR	SPB1	0.796	0.938	0.807	0.873	0.632
	SPB2	0.795	0.938			
	SPB3	0.752	0.939			
	SPB4	0.835	0.939			
PAYMENT MANAGEMENT	PM1	1	0.939	1	1	1
RISK MANAGEMENT	RM1	0.808	0.939	0.784	0.874	0.698
	RM2	0.842	0.939			
	RM3	0.896	0.938			
MONEY MANAGEMENT	MM1	1	0.939	1	1	1
PROPENSITY TO PLAN	PP1	0.725	0.939	0.905	0.93	0.728
	PP2	0.844	0.938			
	PP3	0.922	0.938			
	PP4	0.887	0.938			
	PP5	0.874	0.938			
FINANCIAL WELL-BEING	FWB1	0.754	0.939	0.762	0.839	0.513
	FWB2	0.797	0.939			
	FWB4	0.751	0.939			
	FWB6	0.643	0.939			
	FWB11	0.623	0.939			

PERSONAL WELL-BEING	PWB1	0.782	0.939	0.864	0.893	0.512
	PWB2	0.769	0.939			
	PWB3	0.680	0.939			
	PWB4	0.705	0.939			
	PWB5	0.706	0.939			
	PWB6	0.678	0.939			
	PWB8	0.670	0.939			
	PWB9	0.725	0.939			

3.10.3 Reliability Analysis of the Questionnaire

Reliability applies to a measure when similar results are obtained over time and across situations. Reliability is the degree to which measures are free from error and therefore yield consistent results. In other words reliability means that findings would be consistently the same if the study were done over again and again. For checking the reliability Cronbach Alpha was applied. Any value above 0.70 is considered to be good indicator of appropriateness of the research instrument. Cronbach Alpha was found to be fairly high with the value of 0.93 for household's responses.

Reliability means that when respondents repeatedly measures with same research instrument than the instrument yield same result. On the other hand reliability is the ability of the questionnaire to produce similar result and prevailing conditions remain same. Reliability depicts the internal consistency of the questionnaire. It describes to what extent the different items of a same construct correlate with one another. Reliability of the questionnaire is checked through Cronbach alpha and Cronbach alpha is one of the most popular methods for assessing the internal consistency (Churchill, 1979). If the Cronbach alpha is greater than 0.7 than the internal consistency is higher. In this study, the reliability of the various construct has been assessed through Cronbach's alpha and the value of Cronbach's alpha of all the constructs were above 0.70 which reflects that the instrument is free from random error.

3.10.4 Validity Analysis of the Questionnaire

Validity is the ability of a scale or measuring instrument to measure what it is in intended to measure. Face/Content Validity was performed for the purpose, which refers to the subjective agreement among households that a scale logically appears to reflect accurately what it claims to measure. It is the mere appearance that a measure is valid. In face validity one looks at the measure and sees whether "on its face" it seems a good reflection of the construct. Reviews from experts had been collected mentioning the appropriateness and validity of the items used to measure the specific construct. As the various constructs of the questionnaire have been adapted from literature reviewed, the questionnaire appeared to be valid. In order to finalise the items of the constructs Confirmatory Factor Analysis (CFA) using JAMOVI was performed and the indicators with the factor loading of above 0.5 had been considered for final data collection.

3.10.5 Final Questionnaire Administration

After confirming the reliability & validity of the questionnaire it was administered to 550 households. The questionnaires were distributed to the households using both online and offline mode. The selection of mode of distribution of questionnaire depends on the consent of the respondents.

1. Statistical techniques used: Data itself does not tell anything until and unless it is transformed into some useful information and make it ready to further analyze, so that some understandable results can be made out of it. Following statistical tools were used for the present study by making the extensive use of JAMOVI, SPSS and PLS-SEM software packages.

2. Descriptive analysis: It is used to describe characteristics of a population or phenomenon. Under the descriptive analysis measures of central tendency like mean and standard deviation were worked out.

3. Correlation Analysis: It is a measure of the strength of some relationship between dependent and independent variables. Pearson correlation was used for the present study.

4. Measurement model assessment (CFA) using smart PLS 3

5. Structural model assessment (Multiple regressions)

Correlation does not mean causation, thus to know the causal factors multiple Regression analysis was used and to determine the extent of impact of each independent variable on personal well being.

Table 3.7: Research tool and sampling techniques

Objective	**Tool/Sampling**	**Technique**
1. To study the influence of financial literacy on financial behaviour of households in Jammu Province.	Tool: Questionnaire (online and offline) Sampling: multistage stratified purposive sampling	correlation, regression, Descriptive Statistics and PLS-SEM
2. To examine the influence of financial literacy and financial behaviour on financial well-being of households in Jammu Province.	Tool: questionnaire Sampling: multistage stratified purposive sampling	correlation, regression, Descriptive Statistics and PLS-SEM
3. To study the mediating role of financial behaviour on financial literacy and financial well-being.	Tool: questionnaire Sampling: multistage stratified purposive sampling	correlation, regression, Descriptive Statistics, PLS-SEM
4. To study the mediating role of financial well-being on financial literacy and personal well being.	Tool: questionnaire Sampling: multistage stratified purposive sampling	correlation, regression, Descriptive Statistics, PLS-SEM
5. To study the influence of financial well-being on personal well being.	Tool: questionnaire Sampling: multistage stratified purposive sampling	correlation, regression, Descriptive Statistics and PLS-SEM

Table 3.8: Sampling Procedure

Criteria	Districts	Area	Number of Households	Sample size	Percentage
Household taking the financial decisions	Jammu	Village	3,02,016	Village-	47%
		Town		Town-	(188)
	Samba	Village	62817	Village-	10%
		Town		Town-	(40)
	Udhampur	Village	93562	Village-	15%
		Town		Town-	(60)
	Kishtwar	Village	45209	Village-	7%
		Town		Town-	(28)
	Reasi	Village	54792	Village-	9%
		Town		Town-	(36)
	Doda	Village	78620	Village-	12%
		Town		Town-	(48)
Total	**6**	**12**	**637016**		**100% (400)**

Source: Census, 2011

CHAPTER-4

MEASUREMENT AND VALIDATION

CHAPTER-4

MEAUREMENT AND VALIDATION

In this chapter we discussed about the following in the given sections. Section 4.1 discusses the scale development process. Sections 4.2 describe the results of the Structural Equation Modelling (SEM). Section 4.3 describe mediation analysis and section 4.4 describe the PLS Predict.

4.1 SCALE DEVELOPMENT PROCESS

Following scale development process was used, for the development of Financial Literacy (FL), Financial Behavior (FB), Financial Well-Being (FWB) and Personal Well Being (PWB).

4.1.1 Construct Definition

Construct should be defined, based on the theory. The initial step was to define the construct evidently and clearly by using existing literature and theory. A construct cannot be measured directly it can be measured through the pool of items. In this study four constructs are used. A bunch of items was generated on the basis of the literature available.

4.1.2 Generation of Items

Items used in the questionnaire to collect the data from the respondents are adapted from the standardised questionnaire. Selected item that had been operationalised to measure the constructs of the model i.e. financial literacy, financial behaviour, financial well-being and personal well being are mentioned below (see table no. 4.1, 4.2, 4.3 and 4.4)

Table 4.1: Items Selected to Measure Financial Literacy (FL)

Item Code	Statement	Source
BFL1	**Numeracy** Assume you have Rs. 100 in your saving bank account. It gives you 2% per annum simple rate of interest. After five years, what will be the amount in your account if you have never withdrawn money or interest from that account? (i) Exactly Rs.102 (ii) Less then Rs.102 (iii) More the Rs.102 (iv) None of above (v) Don‘t Know	**(**Lusardi & Mitchel, 2009**)**
BFL2	**Understanding of Inflation** Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? (i) More than today (ii) Exactly the same (iii) Less than today (iv) Don't Know (v) Refuse	**(**Lusardi & Mitchel, 2009**)**
BFL3	**Understanding of risk diversification** On investing the money by an investor among different assets and schemes, his risk of losing money (i) Stays the same (ii) Decreases (iii) Increases (iv) Don‘t know (v) Refuse	(Lusardi & Mitchel, 2009)

Item Code	Statement	Source
BFL4	**Understanding of Compound Interest** Suppose you had Rs. 100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest. After 5 years, how much would you have in this account in total? (i) More than Rs. 200 (ii) Exactly Rs. 200 (iii) Less than Rs. 200 (iv) Don't Know (v) Refuse	**(**Lusardi & Mitchel, 2009**)**
BFL5	**Understanding of Time value of money** Assume a friend inherits Rs. 10,000 today and his brother inherits Rs. 10,000 3 years from now. Who is richer because of the inheritance? (i) My friend (ii) Friend's Brother (iii) They are equally rich (iv) Don't Know (v) Refuse	**(**Lusardi & Mitchel, 2009**)**
SFL1	**Did you invested in the stock market** i) Yes ii) No	
SFL2	**Stock market function** 1. Which of the following statements describes the main function of the stock market? (i) The stock market helps to predict stock earnings (ii) The stock market results in an increase in the price of stocks (iii) The stock market brings people who want to buy stocks together with those who want to sell stocks (iv) None of the above (v) Don't Know (vi) Refuse	**(**Lusardi & Mitchel, 2009**)**

Item Code	Statement	Source
SFL3	**Knowledge of mutual funds** 1. Which of the following statements is correct about mutual funds? (i) Once one invests in a mutual fund, cannot withdraw the money in the first year (ii) Mutual funds can invest in several assets, for example invest in both stocks and bonds (iii) Mutual funds pay a guaranteed rate of return which depends on their past performance (iv) None of the above (v) Don't Know (vi) Refuse	**(**Lusardi & Mitchel, 2009**)**
SFL4	**Higher LR return: stocks or bonds (returns based on time)** 1. Considering a long time period (for example 10 or 20 years), which asset normally gives the highest return? (i) Savings accounts (ii) Bonds (iii) Stocks (iv) Don't Know (v) Refuse	(Lusardi & Mitchel, 2009)
FK	**Financial Knowledge (Measured on seven point likert scale)**	(Devi, 2017)
FK1	I know the concept of disposable income and understand it.	
FK2	I am acquainted with various available financial apps which support to take investment decisions.	
FK3	I have an idea over tax saving investment avenues.	
FK4	I have the ability to differentiate high risk and low risk investments	
FK5	I have inclusive knowledge in time value of money (present & future money)	
FK7	I have better understanding of the conce pt of Net worth.	

Item Code	Statement	Source
FK8	I frequently observe the effects of inflation on cost of living and investment.	
FK9	I am able to understand the power of compound interest.	
FK10	I am familiar with online trading (Buy & Sell shares).	
FK11	I know the rights and responsibilities of an investor	
FK12	I access investment related news/updates through personalized market watch websites/channels.	
FK13	I observe the index movements of Sensex and Nifty and use the same for making investment.	
FK14	I have knowledge in investment analysis software and investment management software	
FK15	I know what is demat account	
FA	**Financial Attitude**	(Sharma, 2018)
FA1	I have complete knowledge of available financial instruments	
FA2	I have complete knowledge of interest available on various financial instruments	
FA3	I am confident of my ability to select financial instruments for investment	
FA4	I take full responsibility for the result of my investment decisions	
GFA	**General Financial Awareness**	(Joseph, 2012)
GFA3	Tax Saving Schemes	
GFA4	Life Insurance Policies	
GFA5	Other Post Office Products	
GFA6	Mutual Funds	
GFA7	PPF	
GFA8	Real Estate	
GFA9	Equity Shares	
GFA10	Govt. Bonds / Debentures/ NCDs	
GFA11	Money Market (Call, T Bill, Liquid Funds)	
GFA12	Derivatives (Futures and Options Markets) / Commodity Market/ Currency Market	

Table 4.2: Items Selected to Measure Financial Behavior (FB)

Item Code	Statement	Source
GFB	**General financial behavior**	
GFB1	I set financial goals and objectives in my life.	**(Devi, 2017)**
GFB2	I make plans on how to reach financial goals.	
GFB3	I regularly discuss financial goals with my spouse/Family.	
GFB4	I have developed a budget for this year.	
GFB5	I set aside money for special events.	
GFB6	I maintain my financial records in detail.	
SB	**Saving behavior**	**(Devi, 2017)**
SB1	I save as per planned schedule.	
SB2	I save money for each specific objective.	
SB3	I save at least 10% of my gross monthly income.	
SB4	I increase my savings when my salary increases.	
SB5	I contribute annually to a retirement savings plan.	
SB6	I save money to get tax deductions.	
SP	**Spending behavior**	**(Devi, 2017)**
SPB1	I have definite spending pattern for regular monthly expenses.	
SPB2	Carefully plan my big purchases in advance.	
SPB3	I compare prices while Purchasing the products.	
SPB4	I review and evaluate my spending habits.	
PM	**Payment management**	**(Devi, 2017)**
PM1	I always pay my bills on time to avoid finance charges.	
RM	**Risk management**	**(Devi, 2017)**
RM1	I adequately set money aside for possible unexpected expenses.	
RM2	I adequately insured my personal property.	
RM3	Regularly I review the adequacy of the insurance coverage.	
MM	**Money management**	**(CFPB, 2018)**
MM1	Stayed within budget or spending plan.	
PP	**Propensity to plan**	**(CFPB, 2018)**
PP1	I know what is budget?	
PP2	I consult my budget to see how much money I have left.	
PP3	I actively consider the steps I need to take to stick to my budget.	
PP4	I set financial goals for what I want to achieve with my money.	
PP5	I prepare a clear plan of action w/ detailed steps to achieve my financial goals.	

Table 4.3: Items Selected to Measure Financial Well-Being (FWB)

Item Code	Statement	Source
FWB1	I could handle a major unexpected expense	(CFPB, 2018)
FWB2	I am securing my financial future	
FWB4	I can enjoy life because of the way I'm managing my money	
FWB11	I achieved the financial goals that I have set for myself.	(Netemeyer 2018)
FWB16	I am not able to meet normal monthly living expenses.	

Table 4.4: Items Selected to Operationalised/Measure Personal Well-Being (PWB)

Item Code	Statement	Source
PWB1	Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?	International Wellbeing Group (2013). Personal Wellbeing Index: 5th Edition. Melbourne: Australian Centre on Quality of Life, Deakin University (http://www.deakin.edu.au/research/acqol/instruments/wellbeing-index/index.php) Gerrans et al. 2013
PWB2	How satisfied are you with your standard of living?	
PWB3	How satisfied are you with your health?	
PWB4	How satisfied are you with what you are achieving in life?	
PWB5	How satisfied are you with your personal relationships?	
PWB6	How satisfied are you with how safe you feel?	
PWB8	How satisfied are you with your future security?	
PWB9	How satisfied are you with your spirituality or religion?	

4.1.3 Sample size and Data Collection

After scale development it is required to collect the data from the determined sample. Proper sample size needs to be determined for data collection. The questionnaire has been the biggest challenge for both researchers and academicians. The length of the questionnaire is inversely related to response rate, if the questionnaire is too lengthy than it will lead to low response rate. Therefore, to avoid the response and non-response bias researchers need to be effective in their approach. To avoid the non response bias a pilot testing has been conducted. The present research work focused on measuring the influence of financial literacy and financial behaviour on financial well-being and study the mediating role of financial behaviour (FB) between financial literacy (FL) and financial well-being (FWB), then to study the influence of financial literacy on personal well being by studying the mediating role of financial well-being between financial literacy and personal well being, 400 sample size was determined. A (Krejcie & Morgan, 1970) formula was used to determine the sample size. For checking respondent's response a pilot testing was conducted. It helps to evaluate the construct and avoid non-response bias. A pilot testing was done on 20% of the samples for checking the reliability and validity of the scale. Pretesting is one of the standard procedures for appropriateness and clarity of the items in the scale.

4.1.4 Data Purification

In order to clean and purify the data and make it ready for use, outliers had been identified using SPSS software and Shapiro wilk test had been applied using JAMOVI software to check the normality of the data. All the significance values using Shapiro wilk test are above 0.05, that proven the normality of the data.

4.1.5 Reliability and Validity

Reliability is about the consistency of a measure and validity is about the accuracy of a measure. It means how effective the results are in the real world. Reliability can be checked with the help of cronbach alpha. Convergent validity is shown when all the items of the construct shared high proportion of variance in common on the other hand discriminant validity means to what extent which group of items representing a specific construct and differentiate the construct from another set of items representing other construct. The convergent validity is measured between the construct and its items and often assessed by looking at the standardized factor loadings, composite reliability (CR) and Average of Variance Extracted (AVE). The AVE of various constructs should be above 0.50 and CR value above 0.7 is recommended (Hair et al., 2010; Fornell and Larcker, 1981). Composite reliability (CR) refers to the internal consistency of the scale, which assess the degree to which the items are uniform. The internal reliability of the models was measured by using "Fornells composite reliability". High factor loadings support the appropriateness of the indicators for the measurement of the construct. All the standardize regression weights were found above 0.5, CR above 0.7, AVE score are above 0.5 and CFA model satisfy all the conditions.

Table 4.5: Threshold Values of Validity and Reliability

Reliability	**Cronbach alpha > 0.7**
Convergent Validity (CR)	Composite Reliability > 0.7 AVE > 0.5
Discriminant Validity	MSV< AVE ASV< AVE

Source: Hair et al., 2010

Discriminant validity is done by comparing the AVE (Average Variance Explained) with the MSV (Maximum Shared Variance) of each constructs. The AVE of latent variable should be higher than the MSV between the constructs (Fornell and Larcker, 1981). The diagonal items represent the square root of AVE, which measures the variance between construct and its indicators. The off diagonal items represent squared correlation between construct. During the validation of measurement models the convergent and discriminant validity of different constructs have been examined. CFA has been utilized to measure adequacy of the construct.

4.1.6 Auto collinearity and Multicolinearity

Auto collinearity means indicators of a particular construct are highly correlated with each other. Multicolinearity means two independent variables are highly correlated with each other. High Modification Indices and low standardized factors loading are the sign of multicolinearity. If the construct satisfy discriminant validity than it means construct is free from multicolinearity. The best way is to check the multicolinearity in SEM is to test the Discriminant Validity (Shadfar and Malekmohammadi, 2013). If the construct satisfy the discriminant validity it means construct is free from multicolinearity. In this research all the constructs including financial literacy, financial behaviour, financial well-being and personal well-being fulfill the conditions of discriminant validity. Hence, resolve the issue of multicolinearity.

4.2 STRUCTURAL EQUATION MODELLING (SEM)

SEM is multivariate technique including multiple regression and factor analysis. SEM is use to analyze the complex relations statistically. Structural Equation Modeling is the collection of hypotheses, procedure, networks and path relations. To measure the direct and indirect effect or mediation analysis, SEM is to be performed. Structural Equation Modeling is a multivariate statistical analysis technique that is used to analyse structural relationship. It is a combination of factor analysis and multiple regression analysis.

PLS-SEM is a concept and smart PLS is software. SEM refers to the combination of measurement model i.e. called as Confirmatory Factor Analysis (CFA) and structural model i.e. path analysis or regression. PLS-SEM is based on the following assumptions (Hair et al, 2014).

- PLS-SEM is a non-parametric method, so no distributional assumptions are needed to be considered.
- It handled single item construct also.
- Easily incorporate reflective and formative measurement model.
- Handled complex model with many structural model relations

PLS-SEM is a second generation statistical method. It is also called PLS path modeling, principally exercised to build up theories in exploratory research. It explains the variance in the dependent variables while examining the model. PLS path model consist of measurement model (outer model) assessment and structural model (inner model) assessment. The estimation procedure for PLS-SEM is an ordinary least square (OLS) regression based.

PLS-SEM is therefore the preferred method when the research objective is theory development and explanation of variance. PLS-SEM is regarded as a variance-based approach to SEM. PLS-SEM is another popular multivariate data analysis technique. It can easily handle reflective and formative measurement models, as well as single-item constructs, with no identification problems. Before proceeding with the structural model assessment, it is necessary to validate all the steps under measurement model assessment. In order to empirically determine and confirm the theory, results of structural model assessment provide a strong support.

The process of confirmatory factor analysis (CFA) starts with the validation of individual construct. Before applying SEM there was need to check the psychometric properties of the each factor in the construct for item purification. CFA is widely used statistical method to confirm the relationship between various constructs. CFA is use to determine the dimensional structure. In this study CFA was used to check the model fit indices of each factor. Each and every factor of the construct was validated through the CFA. The psychometric model fit indices of financial literacy, financial behaviour, financial well being and personal well being scale was checked through CFA. In scale development process issues regarding number of indicators, types of construct specification must be thoroughly examined. The problem like measurement error and model identification is common in SEM. If measurement items are not representing the construct perfectly then it is measurement error. Therefore researcher need to check the model fit indices criteria (shown in table 4.5) of each construct, on the basis of that construct is refined.

Validity is the process of evaluating the observed empirical indicators which represent the underlying theoretical construct. The purpose of validation is to minimize the difference between the observed score of an object and its true score. The validity of the various constructs has been examined through convergent and discriminant validity. (Campbell and Fiske, 1959) purposed two aspects of construct validity that is convergent and discriminant validity. In the context of present study model fit indices criteria have been adopted for the measurement and validation of various constructs. In order to test the model we need to evaluate the measurement model. Once, all the conditions of the measurement model assessment are satisfied then we have to proceed further for structural model assessment.

4.2.1 Measurement model assessment

Measurement Model Assessment also called as Confirmatory Factor Analysis (CFA) (Hair et al, 2019)

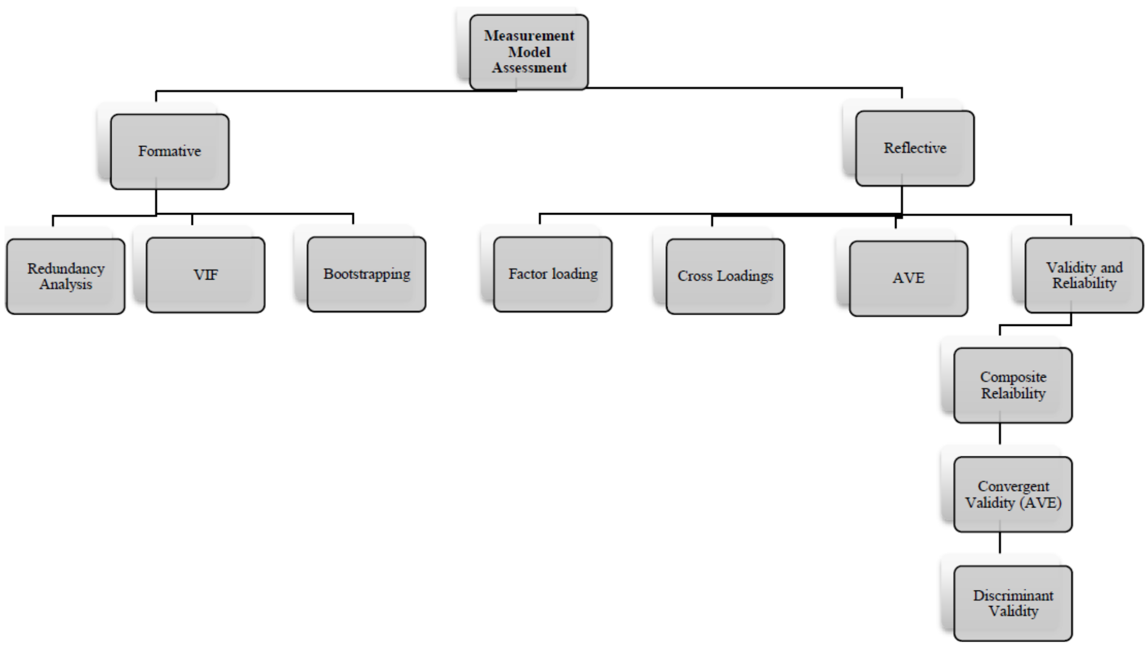


Figure: 4.1 Source: Hair et al, 2013

As in case of present study we do have formative exogenous construct and the other constructs are reflective in nature. To assess and measure the measurement model it is required to follow and satisfy the various steps. All the steps required to evaluate the formative measurement model and reflective measurement model are shown above (shown in fig. 4.1).

4.2.1.1 Formative measurement model

Formative construct is a combination of indicators loadings and outer weights get the R^2 value of 1, indicates that 100% of the formative construct is explained by its indicators. As in case of financial literacy the path correlation between financial knowledge and financial literacy is 0.537, between financial attitude and financial literacy is 0.207 and between general financial awareness and financial literacy is 0.357. The R^2 value of the financial literacy construct is 1, it confirms that 100% of the formative construct i.e. financial literacy is explained by its indicators i.e. financial knowledge, financial attitude and general financial awareness. In comparison to financial attitude and general financial awareness, financial knowledge having great influence on financial literacy Tolerance value of 0.20 or higher and VIF value of 5 or lower solves the issue of collinearity (Hair et al., 2011). Indicators with loading greater than 0.50 supposed to be retained (Hair et al, 2013). Factor loading of all the reflective indicators under financial knowledge, financial attitude and financial literacy are above 0.5.

4.2.1.1.1 Step 1: Redundancy analysis

While assessing the formatively measured model, it is required to test the convergent validity of the formative construct. It is called as redundancy analysis (Chin, 1998). The term redundancy analysis stated that the model is redundant in the sense that, it is included in the formative construct and again in the reflective one. Means all the constructs used to measure in the formative way and have been used in reflective way. Redundancy analysis confirmed about the correlation between the formatively measured construct and an alternative measure of the same construct (Cheah et al., 2018). Here the correlation is 0.999 which is considered good.

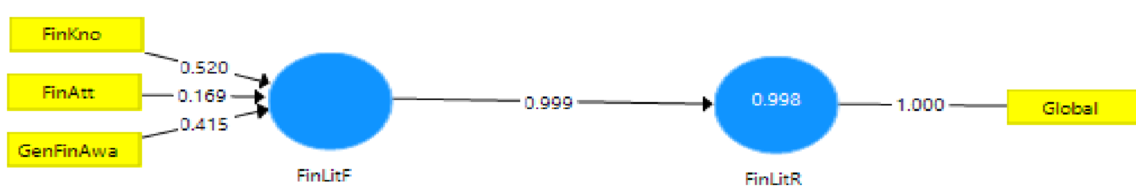


Figure 4.2: Redundancy analysis for convergent validity assessment

4.2.1.1.2 Step 2 VIF

Variance Inflation Factor (VIF) is measured to validate that regression outcomes are not biased. Collinearity between the exogenous variables checked using latent variable scores. VIF values above 5 point leads to collinearity problem among predictor variables (Kock and Lynn, 2012). The values of the VIF range from 1.939 to 3.574 (shown in Table 4.6) for the formative construct financial literacy, it resolves the problem of collinearity.

Table 4.6: Variance Inflation Factor (VIF)

	Financial literacy
Financial attitude	3.327
Financial knowledge	3.574
General financial awareness	1.939

4.2.1.1.3 Step 3: Bootstrapping

In order to assess the significance and relevance of the formative indicator it is required to run the bootstrapping. The results of bootstrapping with the confidence interval bias corrected (shown in table 4.7). In the results it had been found that there is no zero lies in between, that confirms the significance of all the formative indicators i.e. financial knowledge, financial attitude and general financial awareness.

Table 4.7: Reliability and Discriminant & Convergent Validity

	Cronbach's Alpha	**rho_A**	**Composite Reliability (CR)**	**Average Variance Extracted (AVE)**	**CONFIDENCE INTERVAL BIAS CORRECTED (HTMT)**		
					Sample Mean (M)	**Lower Limit (2.50%)**	**Upper Limit (97.50%)**
Financial Knowledge	0.93	0.934	0.94	0.529	1.001	0.989	1.011
Financial Attitude	0.864	0.891	0.909	0.718	0.957	0.931	0.98
General Financial Awareness	0.902	0.92	0.919	0.538	0.923	0.888	0.951

4.2.1.2 Reflective model assessment

To apply the PLS-SEM technique it is required to evaluate the measurement model and to find out whether the variables satisfied the required criteria for reliability and validity to access the financial literacy, financial behaviour, financial well-being and personal well being. Various steps are followed to examine the measurement model including factor loadings, Average Variance Explained (AVE), Composite Reliability, Cross Loadings and Discriminant Validity (Hair et al., 2017, shown in figure 4.1).

The first step in reflective measurement model assessment involves examining the indicator loadings. Loadings above 0.708 are recommended, since they indicate that the construct explains more than 50 percent of the indicator's variance, thus providing acceptable item reliability. The second step is assessing internal consistency reliability, most often using Joreskog's, 1971 composite reliability. Higher values generally indicate higher levels of reliability. For example, reliability values between 0.60 and 0.70 are considered "acceptable in exploratory research," values 0.70 and 0.90 range from "satisfactory to good." But values of 0.95 and higher are problematic, since they indicate that the items are redundant, thereby reducing construct validity (Drolet and Morrison, 2001). Reliability values of 0.95 and above also suggest the possibility of undesirable response patterns (e.g., straight lining), thereby triggering inflated correlations among the indicators' error terms. Cronbach's alpha is another measure of internal consistency reliability that assumes similar thresholds, but produces lower values than composite reliability. Specifically, Cronbach's alpha is a less precise measure of reliability since the items are underweighted. In contrast, with composite reliability, the items are weighted based on the construct indicators' individual loadings and reliability is higher than Cronbach's alpha. While Cronbach's alpha may be too conservative, the composite reliability give more accurate results.

4.2.1.2.1 Step 1: Factor loadings

The reliability, which means the consistency of measurement, first examined using the PLS indicator loadings. The results of the PLS indicator loadings assessments for financial literacy, financial behaviour, financial well-being and personal well being are shown in Figure 4.3. Generally, the variables with indicator loadings above 0.50 are recommended, thus providing acceptable indicator reliability (Hair et al., 2017). The indicator loadings of the items below the value of 0.50 were deleted, as such in the case of general financial awareness, GFA1 i.e. general awareness of saving account and GFA2 i.e. general awareness of fixed deposit (with factor loading 0.346 and 0.439) were deleted. In case of financial knowledge FK6 i.e. I have knowledge to diversify my investments to maximize returns (with factor loading 0.817) was dropped from the final analysis as it was highly loaded under other variable.

Further sub constructs of financial behaviour i.e. saving behaviour, SB2 i.e. I save money for each specific objective with factor loading of 0.610, spending behaviour, SPB5 i.e. when I like something, I will buy it without hesitation even if I have already overspent, with factor loading of 0.208 were deleted. Under payment management PM2 and PM3 i.e. I get myself into more debt each year to pay off the previous year's debts (with factor loading of .0818 and 0.459) are deleted similarly, PM2 was deleted even though the factor loading is above the threshold but this item was highly under another construct.

Under Money Management, MM2 i.e. Stayed within budget or spending plan and MM3 i.e. Paid off credit card balance in full each month (highly loaded under another construct, need to check the results in the excel sheet (with factor loading of 0.808 and 0.843) were dropped from the final analysis as it affects the value of Average of Variance Explained (AVE).

Under financial well-being FWB3 i.e. Because of my money situation, I feel like I will never have the things I want in life, FWB5 i.e. I feel that the money I have or will save won't last, FWB6 i.e. Giving a gift for a wedding, birthday or other occasion would put a strain on my finances for the month, FWB7 i.e. Very often I have money left over at the end of the month , FWB8 i.e My finances control my life, FWB9 i.e. I achieved/will achieve the financial goals that I have set for myself, FWB10 i.e. I have saved (or will be able to save) enough money to last me to the end of my life, FWB12 i.e. Whenever I feel of control on my finances, something happens that sets me back., FWB13 i.e. I am unable to enjoy life because I obsess too much about money, FWB14 I am not able to meet normal monthly living expenses and FWB15 I have sufficient assets to pay off my liabilities were deleted are deleted as it affects AVE score.

Under personal well being, PWB7 i.e. how satisfied are you with feeling part of your community was deleted (with factor loading of 0.634) as it was affecting the AVE values. The indicator loadings of the items between 0.50 and 0.70 were not deleted, if do not affects the composite reliability and the average variance extracted (AVE) above the threshold value (Hair et al., 2017). Therefore, in the case of financial knowledge, and general financial awareness, GFA3 i.e. awareness of Tax Saving Schemes, GFA4, GFA5 (with factor loading 0.624. 0.686 and 0.599) were not dropped from the final analysis. All other indicator loadings in our study were well above the recommended benchmarks of 0.70 (Hairet al., 2017). Indicators with loading greater than 0.50 supposed to be retained if it does not affect the results (Hair et al, 2013).

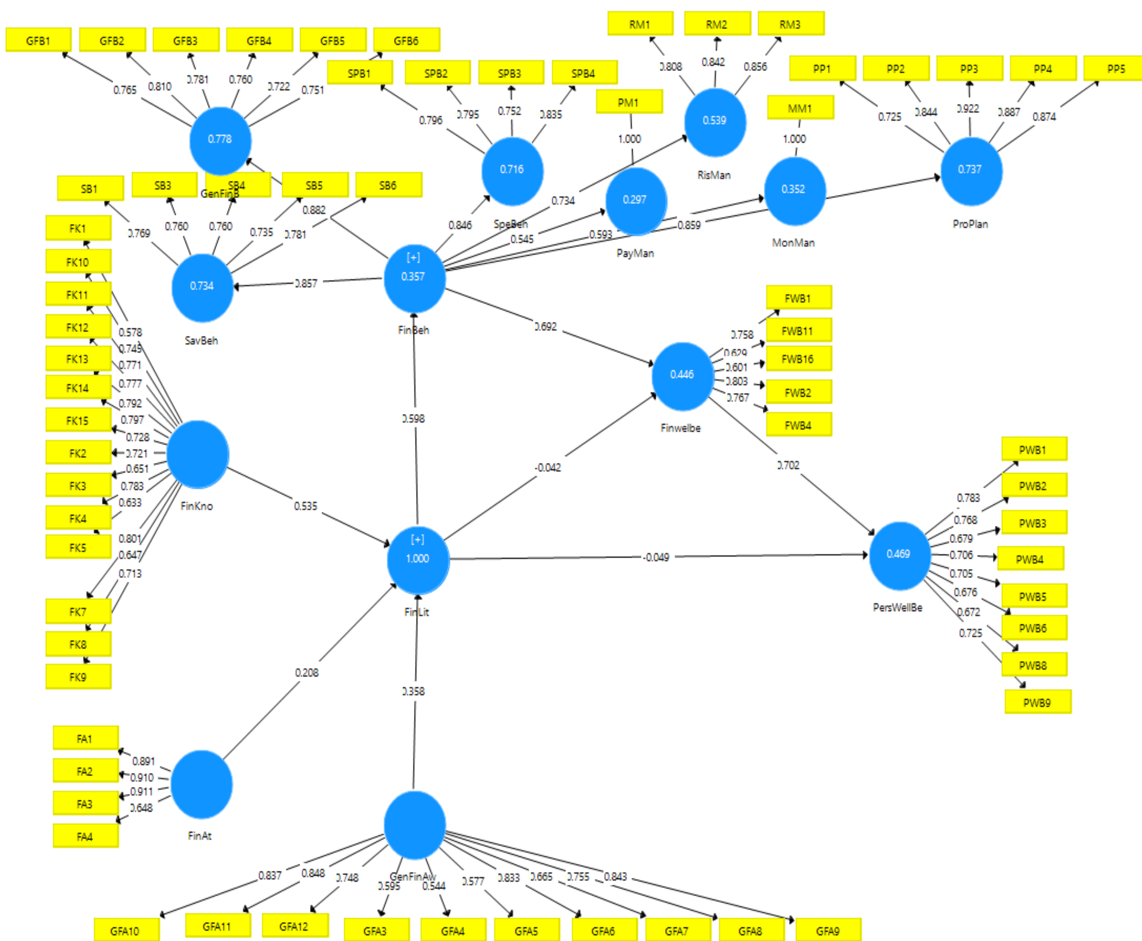


Figure: 4.3 Factor Loadings

4.2.1.2.2 Step 2: Average variance explained (AVE) and Composite reliability (CR)

The results of the PLS cronbach's alpha and composite reliability assessments are shown in table 4.8. The composite reliability values between 0.70 and 0.90 are considered good. However, the composite reliability values of 0.95 and above suggest the possibility of undesirable response patterns and high correlations among the dimensions. All the cronbach's alpha and composite reliability values in our study for financial literacy, financial behaviour, financial well-being and personal well being falls between 0.70 and 0.95, confirming the internal consistency of the indicators used for measurement. Convergent validity is calculated between the indicators, it tells about how close the variables are there in a particular latent variable. The convergent validity was measured by the Average Variance Explained (AVE) values (Hair et al., 2017). An AVE should be minimum 0.50 (Hair et al., 2017). AVE values for all the constructs in our study are above 0.50 (shown in Figure 4.8).

Table 4.8: Reliability and Convergent Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Financial Attitude	0.864	0.891	0.909	0.718
Financial Knowledge	0.93	0.934	0.94	0.529
Financial well-being	0.762	0.781	0.839	0.513
General Financial Awareness	0.902	0.919	0.919	0.538
General Financial Behaviour	0.858	0.86	0.894	0.586
Money Management	1	1	1	1
Payment Management	1	1	1	1
Personal Well Being	0.864	0.872	0.893	0.512
Propensity to Plan	0.905	0.913	0.93	0.728
Risk Management	0.784	0.784	0.874	0.698
Saving Behaviour	0.818	0.82	0.873	0.579
Spending Behaviour	0.807	0.813	0.873	0.632

4.2.1.2.3 Step 3: Cross loadings

The next step is to check the cross loading, which ensures that the items of a particular construct are highly loaded in its own construct. This resolves the issue of multicolinearity. In our study except FK6, SPB5, PM2 and MM2 and MM3, all the indicators are highly loaded in their respective construct (Shown in table 4.9).

Table 4.9: Cross Loadings

Item Code	FA	FK	FWB	GFA	GFB	MM	PM	PWB	PP	RM	SB	SPB
FA1	**0.891**	0.744	0.29	0.583	0.593	0.307	0.206	0.182	0.518	0.426	0.427	0.472
FA2	**0.91**	0.767	0.283	0.583	0.528	0.306	0.197	0.164	0.482	0.421	0.411	0.398
FA3	**0.911**	0.772	0.286	0.587	0.515	0.256	0.238	0.21	0.474	0.39	0.42	0.363
FA4	**0.648**	0.48	0.23	0.429	0.237	0.164	0.12	0.144	0.246	0.243	0.254	0.293
FK1	0.535	**0.578**	0.363	0.434	0.464	0.317	0.269	0.333	0.412	0.437	0.381	0.358
FK10	0.673	**0.745**	0.135	0.536	0.379	0.265	0.163	0.05	0.383	0.283	0.277	0.341
FK11	0.713	**0.771**	0.247	0.551	0.443	0.253	0.155	0.099	0.371	0.376	0.302	0.342
FK12	0.644	**0.777**	0.228	0.465	0.415	0.334	0.136	0.079	0.346	0.374	0.316	0.288
FK13	0.634	**0.792**	0.241	0.553	0.423	0.38	0.195	0.091	0.386	0.454	0.302	0.317
FK14	0.682	**0.797**	0.242	0.541	0.416	0.354	0.116	0.09	0.356	0.388	0.321	0.346
FK15	0.557	**0.728**	0.274	0.493	0.346	0.357	0.154	0.124	0.288	0.387	0.328	0.313
FK2	0.561	**0.721**	0.19	0.381	0.375	0.24	0.136	0.117	0.25	0.326	0.284	0.184
FK3	0.505	**0.651**	0.389	0.418	0.326	0.401	0.15	0.284	0.174	0.342	0.357	0.187
FK4	0.623	**0.783**	0.29	0.48	0.39	0.275	0.205	0.149	0.312	0.376	0.322	0.201
FK5	0.503	**0.633**	0.2	0.467	0.395	0.338	0.188	0.136	0.29	0.196	0.271	0.274
FK7	0.652	**0.801**	0.303	0.585	0.43	0.316	0.228	0.207	0.334	0.357	0.328	0.259
FK8	0.601	**0.647**	0.234	0.444	0.417	0.216	0.228	0.157	0.377	0.251	0.278	0.365
FK9	0.506	**0.713**	0.245	0.525	0.365	0.332	0.208	0.154	0.31	0.324	0.265	0.275
FWB1	0.34	0.342	**0.758**	0.317	0.458	0.371	0.265	0.512	0.427	0.549	0.53	0.364

Item Code	FA	FK	FWB	GFA	GFB	MM	PM	PWB	PP	RM	SB	SPB
FWB11	0.202	0.204	**0.629**	0.198	0.225	0.271	0.259	0.451	0.316	0.359	0.407	0.295
FWB16	0.096	0.112	**0.601**	0.119	0.128	0.172	0.206	0.424	0.235	0.356	0.233	0.191
FWB2	0.164	0.214	**0.803**	0.178	0.432	0.367	0.342	0.597	0.443	0.445	0.535	0.386
FWB4	0.307	0.326	**0.767**	0.278	0.479	0.451	0.361	0.455	0.446	0.538	0.472	0.398
GFA10	0.543	0.548	0.125	**0.837**	0.278	0.083	0.057	-0.002	0.268	0.222	0.189	0.252
GFA11	0.549	0.547	0.177	**0.848**	0.291	0.109	0.082	0.044	0.28	0.228	0.184	0.278
GFA12	0.532	0.559	0.175	**0.748**	0.346	0.227	0.079	0.068	0.316	0.287	0.233	0.289
GFA3	0.348	0.389	0.431	**0.595**	0.405	0.342	0.146	0.28	0.327	0.357	0.437	0.336
GFA4	0.287	0.238	0.336	**0.544**	0.435	0.234	0.232	0.276	0.43	0.281	0.355	0.327
GFA5	0.213	0.204	0.18	**0.577**	0.245	0.208	0.094	0.112	0.278	0.156	0.251	0.279
GFA6	0.586	0.589	0.286	**0.833**	0.457	0.349	0.214	0.163	0.396	0.394	0.343	0.307
GFA7	0.407	0.463	0.323	**0.665**	0.345	0.357	0.202	0.228	0.347	0.375	0.405	0.348
GFA8	0.531	0.581	0.187	**0.755**	0.374	0.387	0.13	0.078	0.315	0.307	0.289	0.256
GFA9	0.578	0.644	0.217	**0.843**	0.441	0.255	0.1	0.085	0.387	0.307	0.305	0.333
GFB1	0.44	0.446	0.42	0.429	**0.765**	0.455	0.243	0.442	0.525	0.384	0.597	0.515
GFB2	0.448	0.452	0.462	0.404	**0.81**	0.447	0.309	0.457	0.585	0.445	0.617	0.556
GFB3	0.333	0.315	0.439	0.269	**0.781**	0.474	0.342	0.4	0.483	0.454	0.568	0.458
GFB4	0.487	0.459	0.364	0.418	**0.76**	0.323	0.379	0.281	0.598	0.505	0.595	0.56
GFB5	0.451	0.44	0.31	0.37	**0.722**	0.399	0.251	0.255	0.426	0.399	0.513	0.503
GFB6	0.453	0.401	0.332	0.338	**0.751**	0.392	0.32	0.303	0.48	0.439	0.55	0.547
MM1	0.311	0.428	0.472	0.339	0.541	**1**	0.282	0.349	0.411	0.487	0.498	0.375
PM1	0.229	0.246	0.406	0.173	0.403	0.282	**1**	0.356	0.457	0.365	0.434	0.43
PP1	0.399	0.353	0.469	0.383	0.509	0.303	0.315	0.408	**0.725**	0.318	0.43	0.525
PP2	0.428	0.355	0.358	0.375	0.511	0.339	0.349	0.345	**0.844**	0.438	0.492	0.634
PP3	0.449	0.372	0.445	0.371	0.593	0.365	0.404	0.433	**0.922**	0.476	0.535	0.674

Item Code	FA	FK	FWB	GFA	GFB	MM	PM	PWB	PP	RM	SB	SPB
PP4	0.449	0.394	0.518	0.369	0.606	0.362	0.431	0.457	**0.887**	0.453	0.571	0.675
PP5	0.491	0.447	0.494	0.406	0.659	0.379	0.438	0.394	**0.874**	0.531	0.557	0.673
PWB1	0.249	0.205	0.616	0.185	0.326	0.267	0.32	**0.783**	0.358	0.424	0.482	0.386
PWB2	0.189	0.18	0.501	0.098	0.357	0.253	0.227	**0.768**	0.364	0.462	0.469	0.332
PWB3	0.155	0.13	0.472	0.09	0.311	0.288	0.244	**0.679**	0.274	0.365	0.384	0.216
PWB4	0.125	0.131	0.485	0.208	0.409	0.284	0.293	**0.706**	0.405	0.396	0.447	0.368
PWB5	0.04	0.047	0.372	0.061	0.256	0.187	0.142	**0.705**	0.258	0.321	0.365	0.308
PWB6	0.069	0.037	0.382	0.043	0.269	0.093	0.212	**0.676**	0.317	0.217	0.278	0.328
PWB8	0.175	0.201	0.485	0.135	0.416	0.32	0.253	**0.672**	0.443	0.316	0.437	0.356
PWB9	0.111	0.127	0.52	0.051	0.305	0.25	0.293	**0.725**	0.288	0.3	0.34	0.327
RM1	0.374	0.385	0.527	0.296	0.443	0.388	0.392	0.45	0.482	**0.808**	0.495	0.442
RM2	0.322	0.38	0.573	0.332	0.474	0.458	0.272	0.411	0.374	**0.842**	0.552	0.406
RM3	0.417	0.435	0.498	0.363	0.519	0.377	0.252	0.389	0.459	**0.856**	0.512	0.466
SB1	0.4	0.368	0.462	0.315	0.648	0.411	0.349	0.4	0.54	0.446	**0.769**	0.514
SB3	0.319	0.308	0.479	0.279	0.582	0.417	0.34	0.426	0.389	0.424	**0.76**	0.436
SB4	0.277	0.248	0.495	0.274	0.574	0.367	0.394	0.47	0.509	0.413	**0.76**	0.481
SB5	0.354	0.33	0.427	0.272	0.531	0.344	0.249	0.405	0.444	0.537	**0.735**	0.485
SB6	0.371	0.353	0.523	0.343	0.515	0.355	0.313	0.465	0.428	0.547	**0.781**	0.535
SPB1	0.486	0.45	0.39	0.401	0.695	0.4	0.329	0.311	0.569	0.451	0.591	**0.796**
SPB2	0.345	0.32	0.503	0.264	0.518	0.358	0.345	0.459	0.608	0.555	0.584	**0.795**
SPB3	0.241	0.181	0.264	0.263	0.389	0.186	0.336	0.325	0.543	0.237	0.369	**0.752**
SPB4	0.341	0.279	0.309	0.326	0.538	0.218	0.36	0.365	0.659	0.385	0.473	**0.835**

***Note: FA= Financial Attitude, FK= Financial Knowledge, FWB= Financial Well-Being, GFA= General Financial Awareness, GFB= General Financial Behaviour, MM= Money Management, PM= Payment Management, PWB= Personal Well-Being, PP= Propensity to Plan, RM= Risk Management, SB= Saving Behaviour and SPB= spending Behaviour**

4.2.1.2.4 Step 4: Discriminant Validity

Next and the final step under measurement model is to examine and assure the discriminant validity, solves the problem of multi-correlation if falls within the acceptable limits. It explains that a construct is empirically distinct from other constructs in the structural model (Fornell and Larcker, 1981). Recent research indicates that this assessment of the discriminant validity may not perform well, especially when the indicator loadings on a construct differ only slightly (Henseler et al., 2016). Instead, (Voorhees et al. 2016) proposed to check the Heterotrait–Monotrait (HTMT) ratio of the correlations, which is defined as the mean value of the correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct. The HTMT criterion is considered to be a more conservative method for assessing the discriminant validity in case of reflective constructs (Henseler et al., 2016; Voorhees et al., 2016). The results of the PLS-HTMT ratio assessment for financial literacy, financial behaviour, financial well-being and personal well being are shown in Table 4.10.

Bootstrapping performed using smart PLS-SEM to get the HTMT confidence interval bias corrected. In the results discriminant validity had been proven because there is no zero in between upper limit and lower limit with respect to any indicator.

Table 4.10: Discriminant Validity {Heterotrait-Monotrait Ratio(HTMT) Confidence Interval Bias Corrected}

	Original Sample (O)	Sample Mean (M)	Bias	2.50%	97.5%
Financial Attitude -> Financial Literacy	0.956	0.956	0	0.93	0.98
Financial Behaviour -> Financial Literacy	0.636	0.636	0	0.561	0.694
Financial Behaviour -> Financial Attitude	0.627	0.628	0.001	0.548	0.693
Financial Knowledge -> Financial Literacy	1.001	1.001	0	0.99	1.011
Financial Knowledge -> Financial Attitude	0.915	0.915	0	0.872	0.951
Financial Knowledge ->Financial Behaviour	0.592	0.592	0	0.511	0.658
Financial wellbeing -> Financial Literacy	0.434	0.441	0.006	0.331	0.526
Financial wellbeing -> Financial Attitude	0.386	0.391	0.005	0.263	0.491

	Original Sample (O)	Sample Mean (M)	Bias	2.50%	97.5%
Financial wellbeing -> Financial Behaviour	0.766	0.767	0.001	0.693	0.828
Financial wellbeing -> Financial Knowledge	0.411	0.414	0.003	0.306	0.511
General Financial Awareness -> Financial Literacy	0.923	0.922	0	0.89	0.952
General Financial Awareness ->Financial Attitude	0.711	0.71	-0.001	0.629	0.786
General Financial Awareness -> Financial Behaviour	0.56	0.561	0	0.473	0.639
General Financial Awareness ->Financial Knowledge	0.713	0.713	0	0.635	0.782
General Financial Awareness -> Financial wellbeing	0.392	0.403	0.01	0.285	0.484
General Financial Behaviour -> Financial Literacy	0.653	0.653	0	0.581	0.714
General Financial Behaviour -> Financial Attitude	0.646	0.647	0.001	0.551	0.721
General Financial Behaviour -> Financial Behaviour	0.972	0.972	0	0.943	0.997
General Financial Behaviour -> Financial Knowledge	0.616	0.616	0	0.528	0.69
General Financial Behaviour -> Financial wellbeing	0.593	0.597	0.004	0.492	0.677
General Financial Behaviour -> General Financial Awareness	0.563	0.563	0.001	0.471	0.644
Money Management -> Financial Literacy	0.435	0.436	0.001	0.342	0.514
Money Management -> Financial Attitude	0.33	0.331	0.001	0.217	0.431
Money Management -> Financial Behaviour	0.611	0.612	0	0.531	0.682
Money Management -> Financial Knowledge	0.448	0.448	0	0.351	0.535
Money Management -> Financial wellbeing	0.523	0.522	0	0.418	0.614
Money Management -> General Financial Awareness	0.368	0.37	0.001	0.272	0.459
Money Management -> General Financial Behaviour	0.586	0.586	0	0.487	0.671
Payment Management -> Financial Literacy	0.253	0.255	0.002	0.164	0.343
Payment Management -> Financial Attitude	0.243	0.244	0.001	0.126	0.349

	Original Sample (O)	Sample Mean (M)	Bias	2.50%	97.5%
Payment Management -> Financial Behaviour	0.564	0.564	-0.001	0.473	0.638
Payment Management -> Financial Knowledge	0.259	0.26	0.001	0.168	0.347
Payment Management -> Financial wellbeing	0.459	0.46	0.001	0.353	0.559
Payment Management -> General Financial Awareness	0.193	0.196	0.003	0.102	0.294
Payment Management -> General Financial Behaviour	0.433	0.434	0	0.317	0.532
Payment Management -> Money Management	0.282	0.282	0	0.162	0.389
Personal Well Being -> Financial Literacy	0.244	0.262	0.018	0.176	0.311
Personal Well Being -> Financial Attitude	0.227	0.237	0.01	0.132	0.322
Personal Well Being -> Financial Behaviour	0.643	0.643	0.001	0.567	0.705
Personal Well Being -> Financial Knowledge	0.225	0.24	0.015	0.152	0.302
Personal Well Being -> Financial wellbeing	0.825	0.826	0	0.751	0.887
Personal Well Being -> General Financial Awareness	0.225	0.245	0.02	0.16	0.281
Personal Well Being -> General Financial Behaviour	0.535	0.535	0	0.439	0.618
Personal Well Being -> Money Management	0.365	0.365	0	0.268	0.453
Personal Well Being -> Payment Management	0.373	0.374	0.001	0.267	0.469
Propensity to Plan -> Financial Literacy	0.556	0.556	0	0.467	0.632
Propensity to Plan -> Financial Attitude	0.579	0.579	0	0.483	0.662
Propensity to Plan -> Financial Behaviour	0.914	0.915	0.001	0.872	0.947
Propensity to Plan -> Financial Knowledge	0.493	0.493	0	0.397	0.575
Propensity to Plan -> Financial wellbeing	0.631	0.632	0.001	0.517	0.729
Propensity to Plan -> General Financial Awareness	0.512	0.511	-0.001	0.417	0.597
Propensity to Plan -> General Financial Behaviour	0.764	0.765	0.001	0.675	0.833
Propensity to Plan -> Money Management	0.432	0.433	0.001	0.314	0.533
Propensity to Plan -> Payment Management	0.479	0.48	0.001	0.377	0.569

	Original Sample (O)	Sample Mean (M)	Bias	2.50%	97.5%
Propensity to Plan -> Personal Well Being	0.536	0.538	0.001	0.435	0.626
Risk Management -> Financial Literacy	0.572	0.573	0.001	0.465	0.665
Risk Management -> Financial Attitude	0.533	0.535	0.001	0.423	0.628
Risk Management -> Financial Behaviour	0.855	0.855	0	0.797	0.909
Risk Management -> Financial Knowledge	0.562	0.562	0	0.457	0.653
Risk Management -> Financial wellbeing	0.814	0.815	0.001	0.727	0.887
Risk Management -> General Financial Awareness	0.475	0.477	0.002	0.356	0.589
Risk Management -> General Financial Behaviour	0.697	0.698	0	0.6	0.781
Risk Management -> Money Management	0.551	0.552	0	0.454	0.634
Risk Management -> Payment Management	0.413	0.413	0	0.305	0.504
Risk Management -> Personal Well Being	0.594	0.594	0	0.498	0.68
Risk Management -> Propensity to Plan	0.618	0.619	0.001	0.504	0.714
Saving Behaviour -> Financial Literacy	0.533	0.534	0.001	0.425	0.626
Saving Behaviour -> Financial Attitude	0.532	0.533	0.001	0.425	0.632
Saving Behaviour -> Financial Behaviour	0.969	0.969	0	0.938	1
Saving Behaviour -> Financial Knowledge	0.489	0.489	0.001	0.378	0.585
Saving Behaviour -> Financial wellbeing	0.771	0.772	0.001	0.687	0.849
Saving Behaviour -> General Financial Awareness	0.477	0.478	0.002	0.352	0.586
Saving Behaviour -> General Financial Behaviour	0.892	0.893	0.001	0.835	0.941
Saving Behaviour -> Money Management	0.55	0.552	0.002	0.446	0.645
Saving Behaviour -> Payment Management	0.478	0.478	0	0.367	0.577
Saving Behaviour -> Personal Well Being	0.665	0.665	0	0.573	0.745
Saving Behaviour -> Propensity to Plan	0.704	0.705	0.001	0.607	0.791
Saving Behaviour -> Risk Management	0.777	0.778	0.001	0.678	0.865
Spending Behaviour -> Financial Literacy	0.513	0.515	0.002	0.428	0.594
Spending Behaviour -> Financial Attitude	0.532	0.532	0.001	0.434	0.623
Spending Behaviour -> Financial Behaviour	0.955	0.956	0.001	0.918	0.989
Spending Behaviour -> Financial Knowledge	0.45	0.453	0.003	0.355	0.534
Spending Behaviour -> Financial	0.574	0.576	0.002	0.448	0.684

	Original Sample (O)	Sample Mean (M)	Bias	2.50%	97.5%
wellbeing					
Spending Behaviour -> General Financial Awareness	0.48	0.48	0	0.383	0.571
Spending Behaviour -> General Financial Behaviour	0.807	0.808	0.001	0.735	0.87
Spending Behaviour -> Money Management	0.407	0.408	0.001	0.29	0.518
Spending Behaviour -> Payment Management	0.479	0.48	0	0.356	0.589
Spending Behaviour -> Personal Well Being	0.547	0.549	0.001	0.441	0.64
Spending Behaviour -> Propensity to Plan	0.874	0.874	0	0.807	0.932
Spending Behaviour -> Risk Management	0.643	0.645	0.001	0.539	0.735
Spending Behaviour -> Saving Behaviour	0.78	0.781	0.001	0.704	0.85

There were total 87 indicators at the initial stage. For final data analysis we left with total no. of 66 indicators.

4.2.2 STRUCTURAL MODEL ASSESSMENT

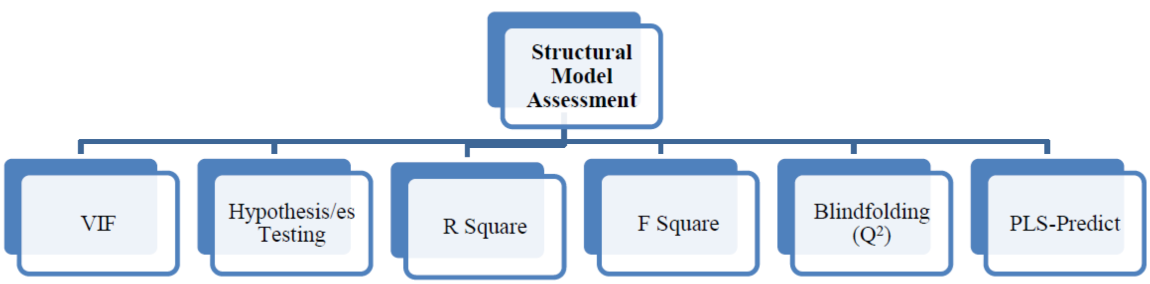


Figure 4.10: Hair et al, 2013

After the measurement model confirmation, the next step in the PLS-SEM analysis is to evaluate the structural model. The following steps need to be measured und structural model assessment (shown in figure 4.10).

4.2.2.1 Step 1: Measurement of collinearity

First, the Variance Inflation Factor (VIF) is calculated to confirm that regression results are not biased. Here latent variable scores are used to check collinearity between the exogenous variables. Any values of VIF above 5 indicate collinearity issues among predictor variables (Kock and Lynn, 2012). The values of the VIF range from 1 to 3.5 (shown in Table 4.12) in our study for financial literacy, financial behaviour, financial well-being and personal well being VIF below the threshold value of 5). It resolves the issue of collinearity. VIF value of 5 and higher respectively indicates a potential collinearity problem (Hair et al., 2011).

Table 4.11: Threshold Values for Structural Model Assessment

	Threshold values	Source
Factor loading	0.708	(Hair et al., 2017)
Composite Relaibility	0.70- 0.95	(Hair et al. 2019)
Average Variance Extracted	0.50	(Hair et al., 2017)
Variance Inflated Factor (VIF)	<5	(Hair et al., 2011)
Coefficient of determination/ R^2	>0.20	(Hair et al, 2013)
Effect size/F^2	between 0.02-0.15 (Weak effect), 0.15-0.35 (Moderate effect) and above 0.35 (Strong effect).	(Geisser, S. 1974)
Blindfolding/Q^2	0.02-0.15 (Weak effect), 0.15-0.35 (Moderate effect) and above 0.35 (Strong effect)	(Geisser, S. 1974., Stone, M. 1974)

Table 4.12: Inner VIF

	Financial literacy	**Financial behaviour**	**General Financial behaviour**	**Money management**	**Payment management**	**Propensity to plan**	**Risk management**	**Saving behaviour**	**Spending behaviour**	**Financial well-being**	**Personal well being**
Financial literacy		1								1.556	1.16
Financial attitude	3.327										
Financial behaviour			1	1	1	1	1	1	1	1.556	
Financial knowledge	3.574										
Financial well-being											1.16
General financial awareness	1.939										

4.2.2.2 Step 2: Structural model path coefficient

Path coefficients had been obtained representing the hypothesized correlation among the constructs, having the standardized values between -1 and +1. Values closed to 1 represent the strong positive relationship and vice-versa. Bootstrapping method can be used to determine whether the coefficient is significant or not (shown in table 4.10). In case when the t-value is greater than the critical value, it can be concluded that coefficient is significant at a particular significance level. 1 .65 (significance level= 10%), 1.96 (significance level = 5%), and 2.57 (significance level = 1 %), these are the commonly used critical values for two tailed tests. As in our case we have applied 5% significance level, therefore here the accepted critical value is 1.96. So, in this case t-value should be greater than 1.96 to show the significant results. T value can be determined by using the following formula:

$$\text{T value} = \text{path value}/\text{Standard error}$$

The original estimate of the structural model path coefficient with a value is significant if zero does not fall within the confidence interval at the given significance level. The path coefficient with greater value, have higher effect on the dependent variable. The path coefficient explains the changes in the dependent variable due to a unit change in the independent variable. With the help of PLS-SEM significant path coefficient with its relevant effect can be identified in the structural model.

Both direct and indirect effects can be measured and the total effect can be calculated.

Hypotheses testing

$H0_1$: There is no significant influence of Financial Literacy on Financial Behavior.

HA_1: There is a significant influence of Financial Literacy on Financial Behavior

The results shown that there is a significant relationship between financial literacy and financial behaviour. The path coefficient between financial literacy and financial behaviour is 0.595 and p value of significance is <0.05. It depicts that financial behaviour of the households get strongly affected by financial literacy. So, it is very much important and relevant to accelerate the level of financial literacy in order to boost the sound financial behaviour.

Finally we do have 14 indicators under Financial Knowledge (FK), 4 indicators under Financial Attitude (FA) and 10 indicators under General Financial Awareness (GFA). FK, FA and GFA are the formative constructs of Financial Literacy (FL). Under Financial Knowledge, FK7 (i.e. I have better understanding of the concept of Net worth) having the highest loading. Under Financial Attitude, FA3 (i.e. I am confident of my ability to select financial instruments for investment) is highly loaded in comparison to rest of the three indicators. Under General Financial Awareness, GFA 9 (i.e. General Awareness of equity shares) is highly loaded. Financial Behaviour is a reflective construct under the present study. The formative variables included are General Financial Behaviour (GFB), Saving Behaviour (SB), Risk Management (RM), Money Management (MM), Payment Management (PM), Spending Behaviour (SPB) and Propensity to Plan (PP). GFB2 (i.e. I make plans on how to reach financial goals), SB6 (i.e. I save money to get tax deductions) is highly loaded, RM2 (i.e. I adequately insured my personal property), SPB4 (i.e. I review and evaluate my spending habits), PP3 (i.e. I actively consider the steps I need to take to stick to my budget) Money Management and Payment Management are single item construct.

$H0_2$: there is no significant influence of Financial Literacy on Financial Well–being.

HA_2: there is a significant influence of Financial Literacy on Financial Well–being.

The null hypothesis stated that there is no significant influence of financial literacy on financial well-being. The analysis report shows that there is a significant positive relationship between financial literacy and financial well-being. The path coefficient between financial literacy and financial well-being is 0.389 (shown in Fig. 4.12) and p value of significance is <0.05. This depicts that financial well-being of the households get positively affected by their level of financial literacy but the correlation is moderate not very high. On the basis of the results the null hypothesis had been rejected. This shed light that there are some other factors that are affecting the financial behaviour of the households. FWB1 i.e. I can handle a major unexpected expense highly loaded construct.

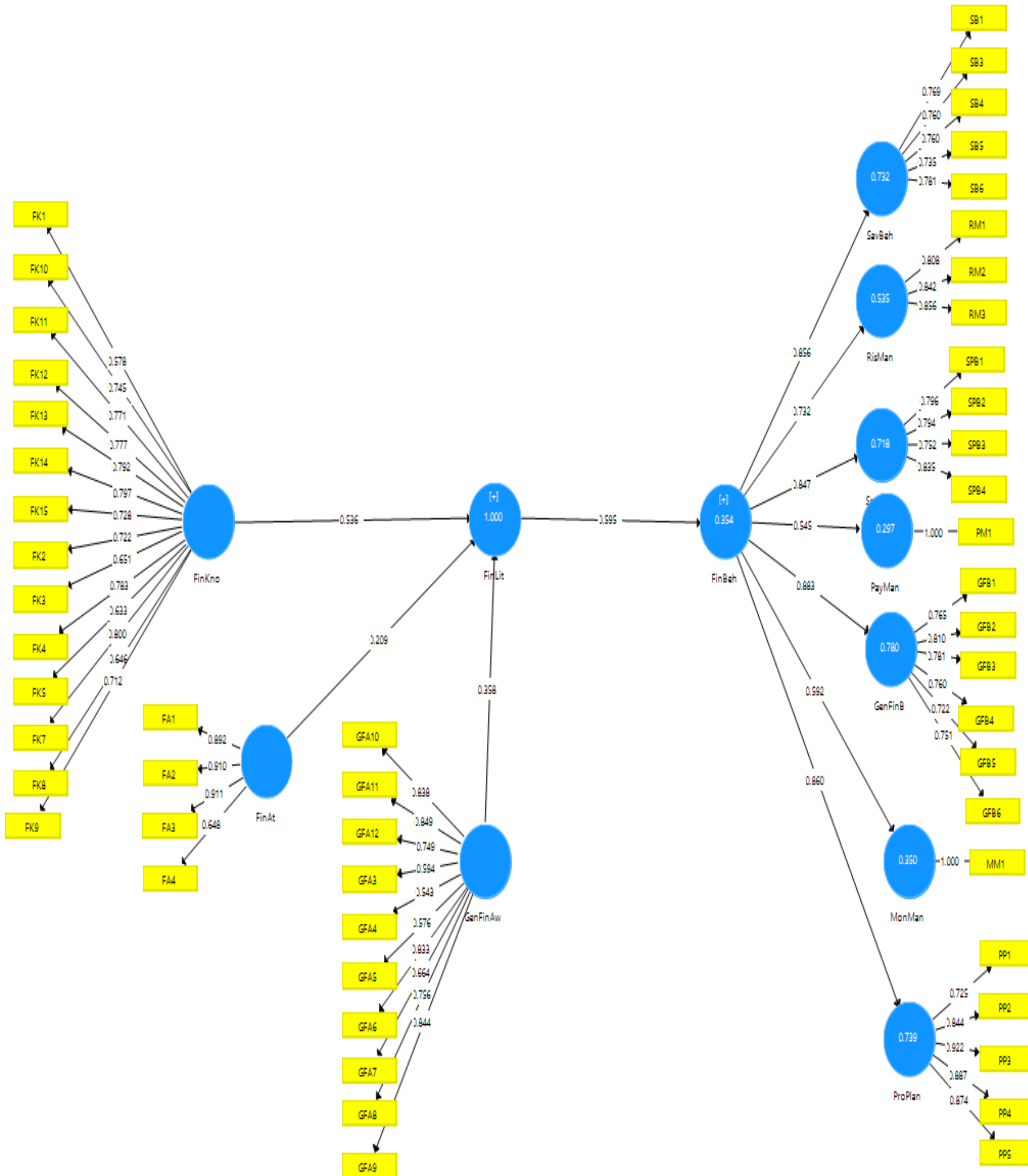


Figure: 4.11 Path coefficient between Financial Literacy and Financial Behavior

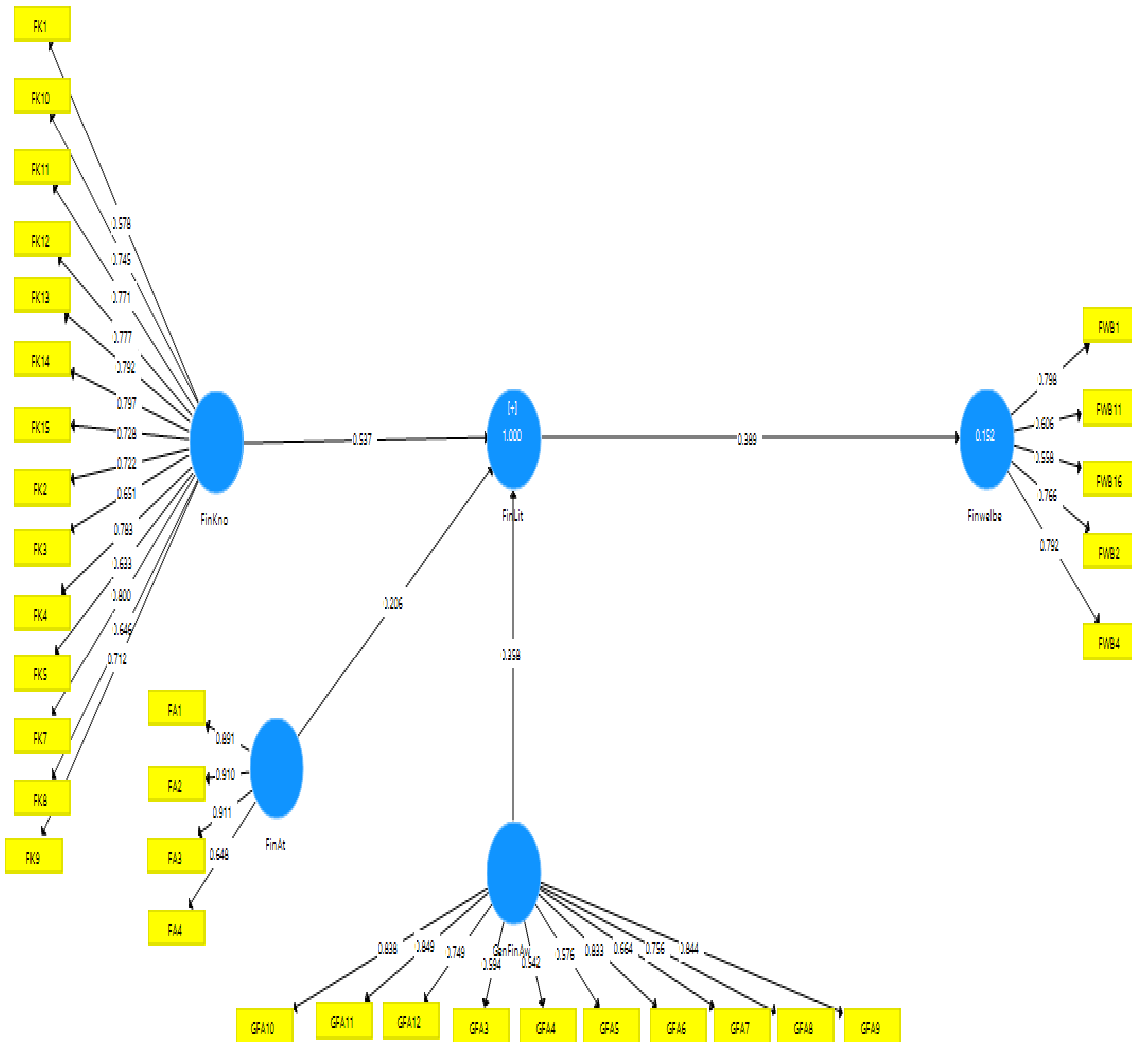


Figure: 4.12 Path coefficient between Financial Literacy and Financial Well–being

H0₃: There is no significant influence of Financial Behavior on Financial Well-being.

HA₃: There is a significant influence of Financial Behavior on Financial Well-being.

The path coefficient between financial behaviour and financial well-being is 0.673 and p value of significance is <0.05. It shows that there is significant positive correlation between financial behaviour and financial well-being. On the basis of the results $H0_3$ stated that there is no significant influence of financial behavior on financial well-being had been rejected and the alternative hypothesis had been accepted. Here the R^2 value of financial well-being is 0.453, it reflects that 45.3 percent of the dependent variable is predicted by the independent variable.

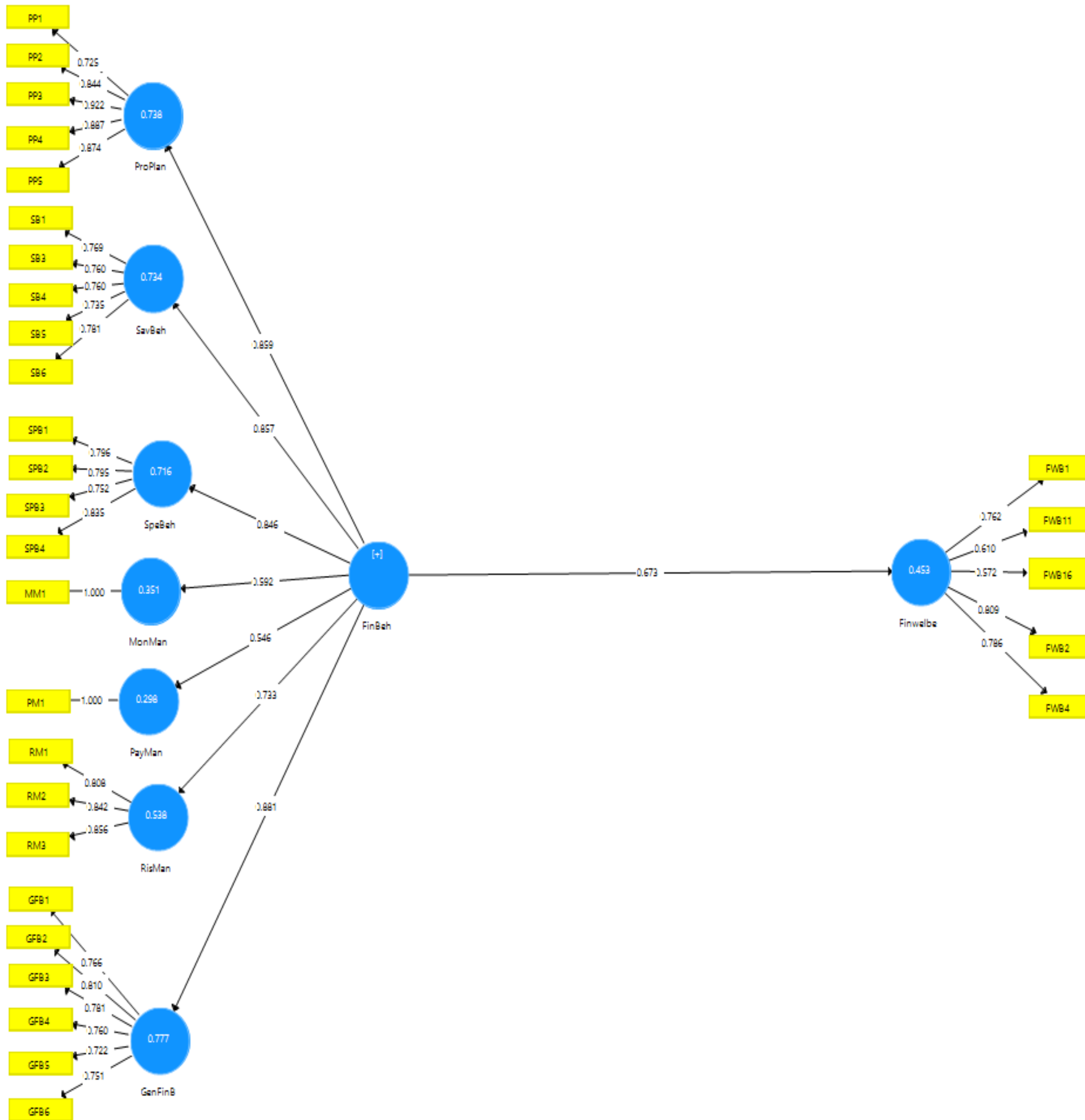


Figure: 4.13 Path coefficient between Financial Behavior and Financial Well-being

H0₄: there is no significant role of financial behaviour between financial literacy and financial well-being

HA₄: there is a significant role of financial behaviour between financial literacy and financial well-being

Barron and Kenny, 1986 approach had been applied for mediation analysis. It comprises of four stages. Researcher need to qualify all the stages one by one.

Stage 1: The IV (Financial Literacy) significantly affects the DV ((Financial well-being)) in the absence of the mediator (Financial Behaviour).

Under the first stage researcher needs to confirm that independent variable (IV) have significant affect on the dependent variable (DV). The path coefficient between financial literacy and financial well-being is 0.389 (shown in Fig. 4.14). The results of the study evaluated with the help of PLS-SEM, mentioned that there is significant positive correlation between financial literacy and financial well-being. This shows that financial literacy have direct influence on the financial well-being of the households.

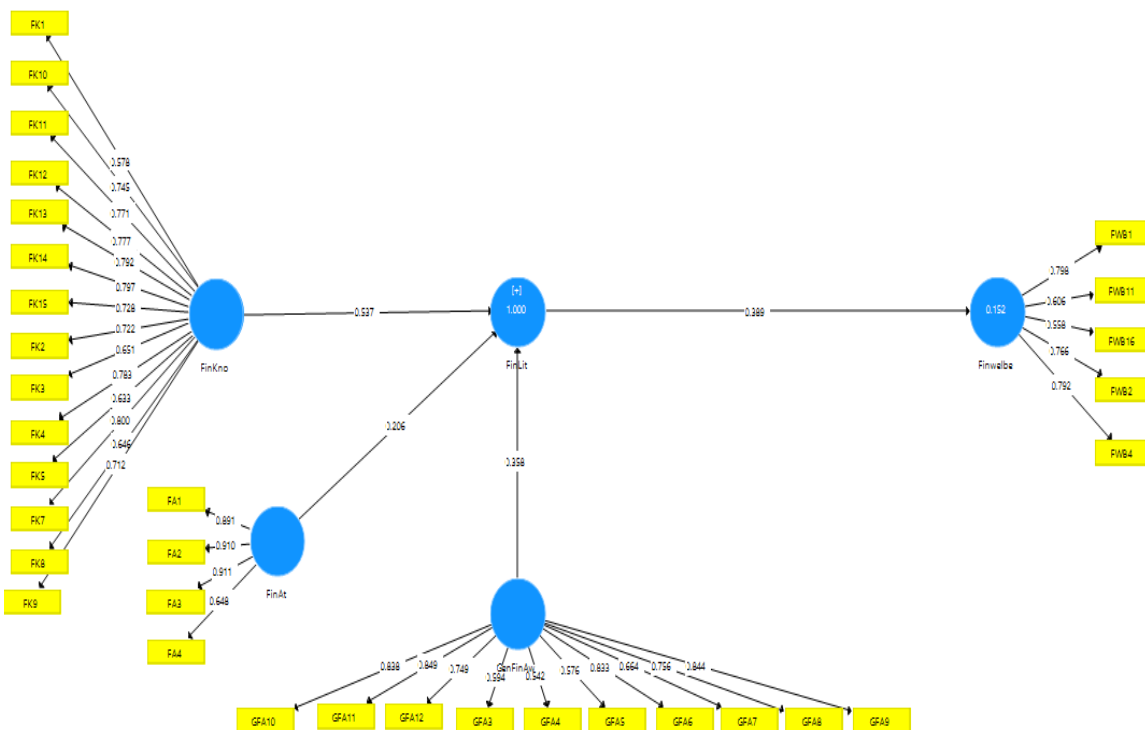


Figure 4.14: Path Coefficient between Financial Literacy and Financial Well-Being

Stage 2: The IV (Financial Literacy) significantly affects the mediator (Financial Behaviour)

The second stage under the Barron and Kenny, approach demands to check the relationship between independent variable (IV) and the moderator (M). If it is found to be significant then only the researcher can proceed towards the next step. In the results it had been found that there is significant positive relationship between financial literacy (IV) and financial behaviour (M). The path coefficient between financial literacy and financial behaviour is 0.595 (shown in Fig. 4.15) with these results the second stage had been qualified. It depicts that financial behaviour of the households get strongly affected by financial literacy. So, it is very much important and relevant to accelerate the level of financial literacy in order to boost the sound financial behaviour.

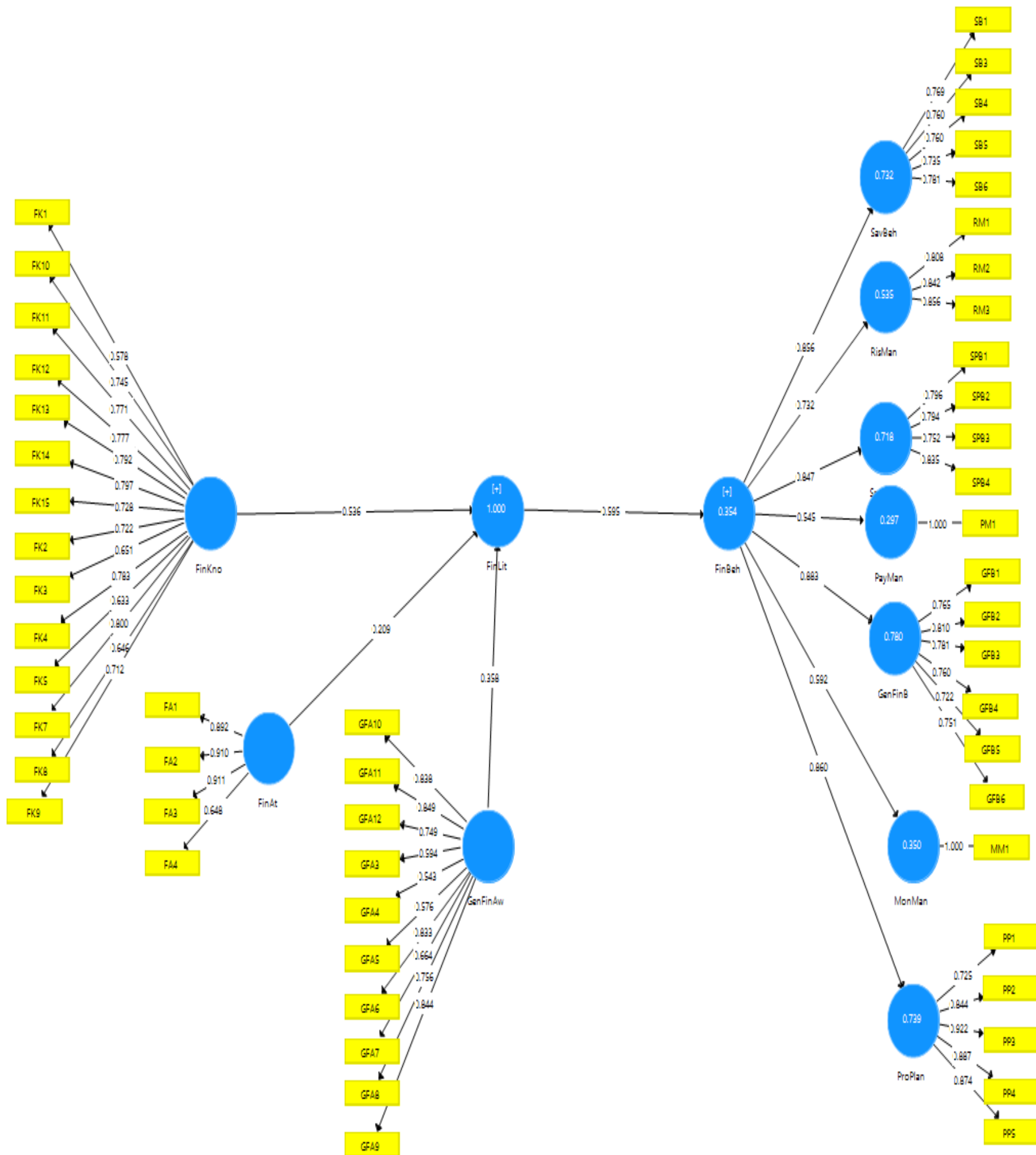


Figure 4.15: Path coefficient between Financial Literacy (IV) and Financial Behaviour (M)

Stage 3: The mediator (Financial Behaviour) has a significant unique effect on the DV (Financial well-being)

Under the third stage of Barron and Kenny's approach it is required to found the significant relationship between mediator (M) and the dependent variable (DV). It is required to confirm whether the financial behaviour influence the financial well-being or not. As per the results it had been found that there is a significant relationship between financial behaviour and financial well-being. The path coefficient between financial behaviour and financial well-being is 0.673 (shown in Fig. 4.16). Hence, the stage 3 had been qualified. This depicts that financial behaviour have significant positive correlation with financial well-being. In other words we can conclude that financial well being of the households gets strongly affected by their financial behaviour.

Stage 4: The effect of the independent variable (financial literacy) on the dependent variable (financial well-being) shrinks upon the addition of the mediator (financial behaviour) to the model.

The final stage of the Barron and Kenny's approach is to make it confirm whether the effect of independent variable (IV) on the dependent variable (DV) get shrinks upon the addition of the mediator (M). If it happens, it confirms that there is a case of full mediation. In the results it had been found that there is a significant positive direct relationship between financial literacy and financial well-being. There is a significant relationship between financial literacy and financial behaviour. Further, it had been found that there is a significant direct relationship between financial behaviour and financial well-being. But, in a situation when financial behaviour introduced as a mediator the results get changed, the direct relationship between financial literacy and financial well-being get insignificant i.e. it shifts from 0.389 (shown in Fig. 4.14) to -0.036 (shown in Fig. 4.18). It explains that the indirect relationship with the inclusion of financial behaviour (mediator) plays more significant role to influence the financial well-being of the households, it supports that financial behaviour plays the role of full mediation between financial literacy and financial well-being. This also concludes that financial behaviour is acting as a principal constructs that influencing the state of being financial stability and happiness, that ultimately leads toward financial well-being of the households. These results focused on building the sound financial behaviour that is a base for financial happiness and well being. The results compared from stage 1 to stage 4 clearly explain that in the absence of mediator there is a significant positive relationship between financial literacy and financial well-being (shown in Fig. 4.14). But with the inclusion of financial behaviour as a mediator between financial literacy and financial well-being the direct relationship between financial literacy and financial well-being become insignificant (shown in Fig. 4.18).

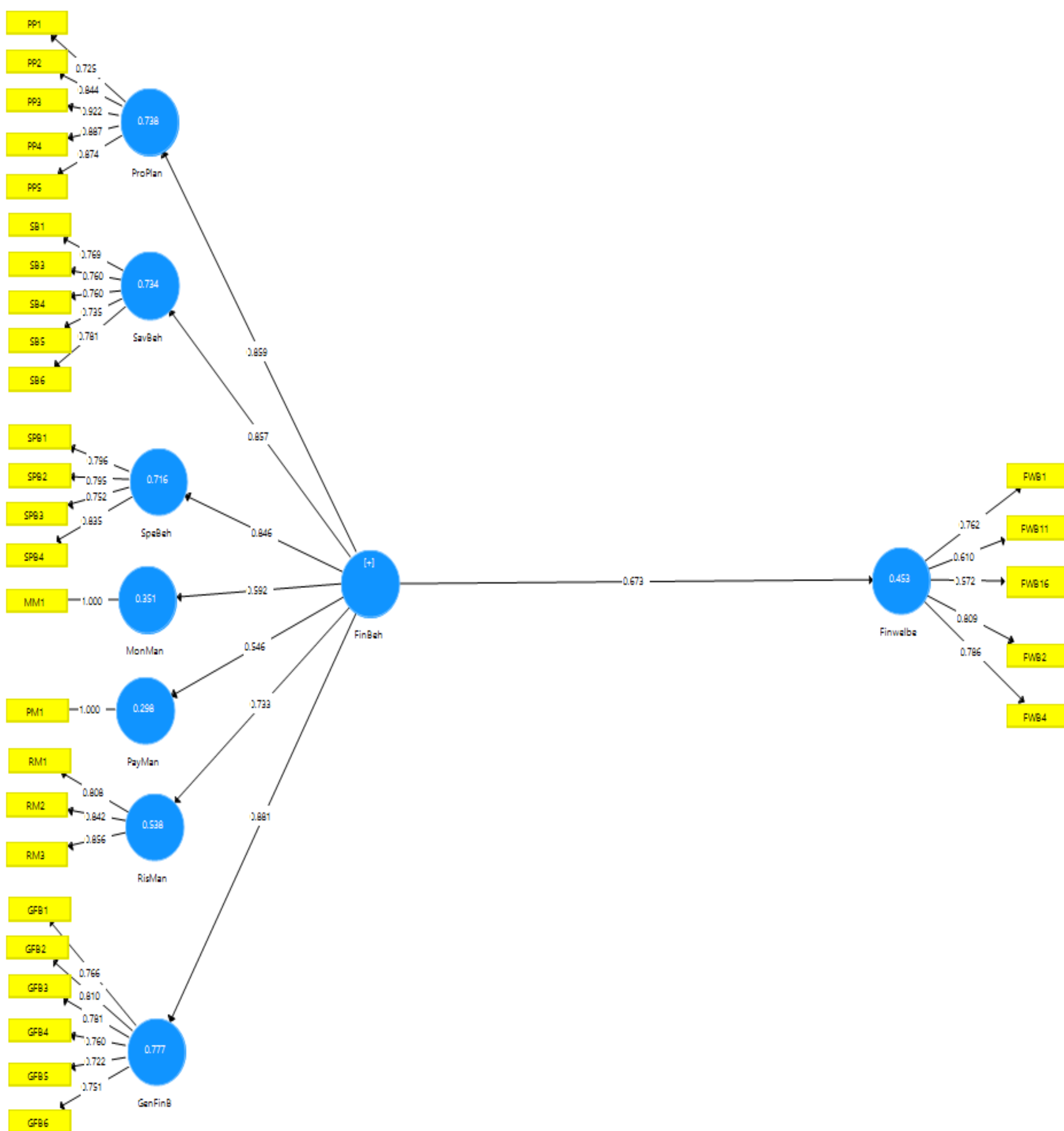


Figure 4.16: Path coefficient between Financial Behaviour (M) and Financial well-being (DV)

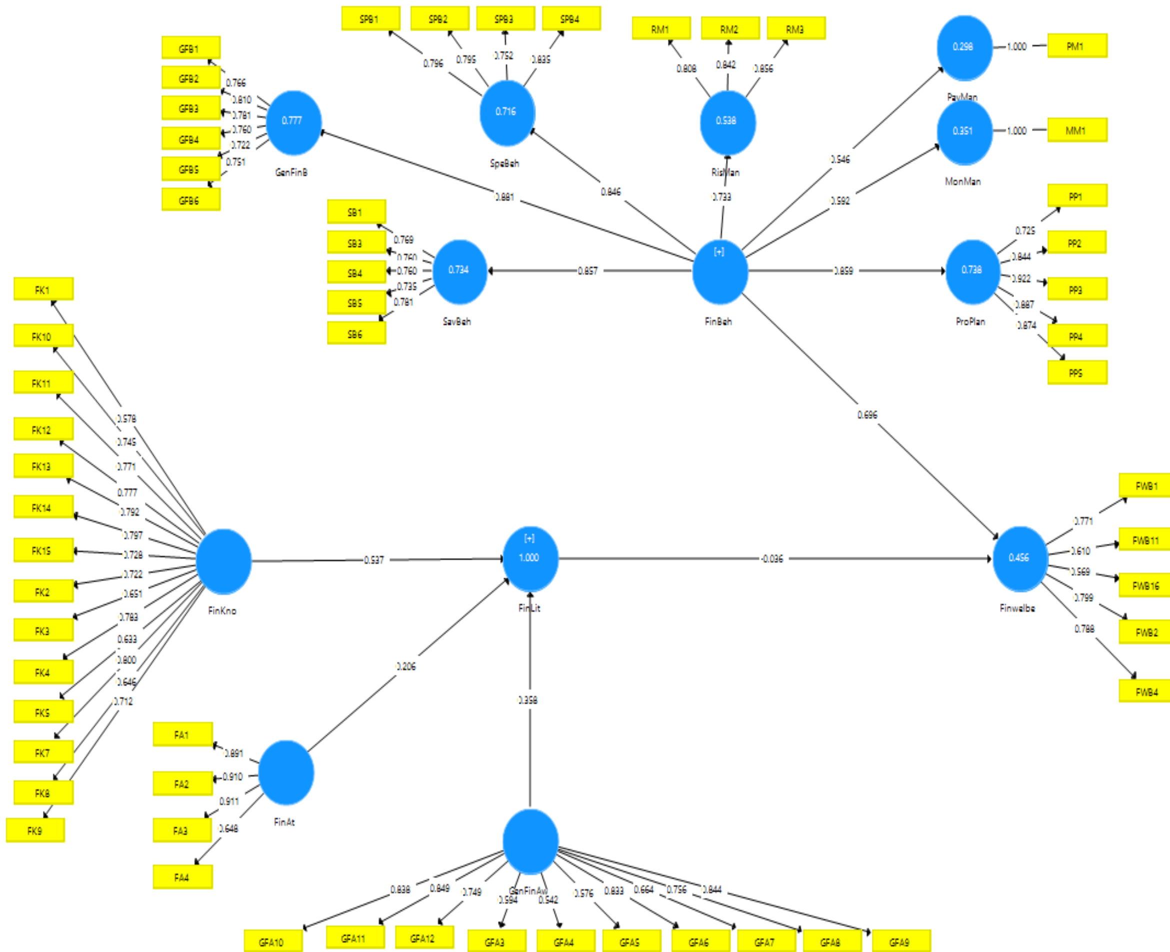


Figure 4.17: Path Coefficient between financial literacy, financial well-being and financial behaviour

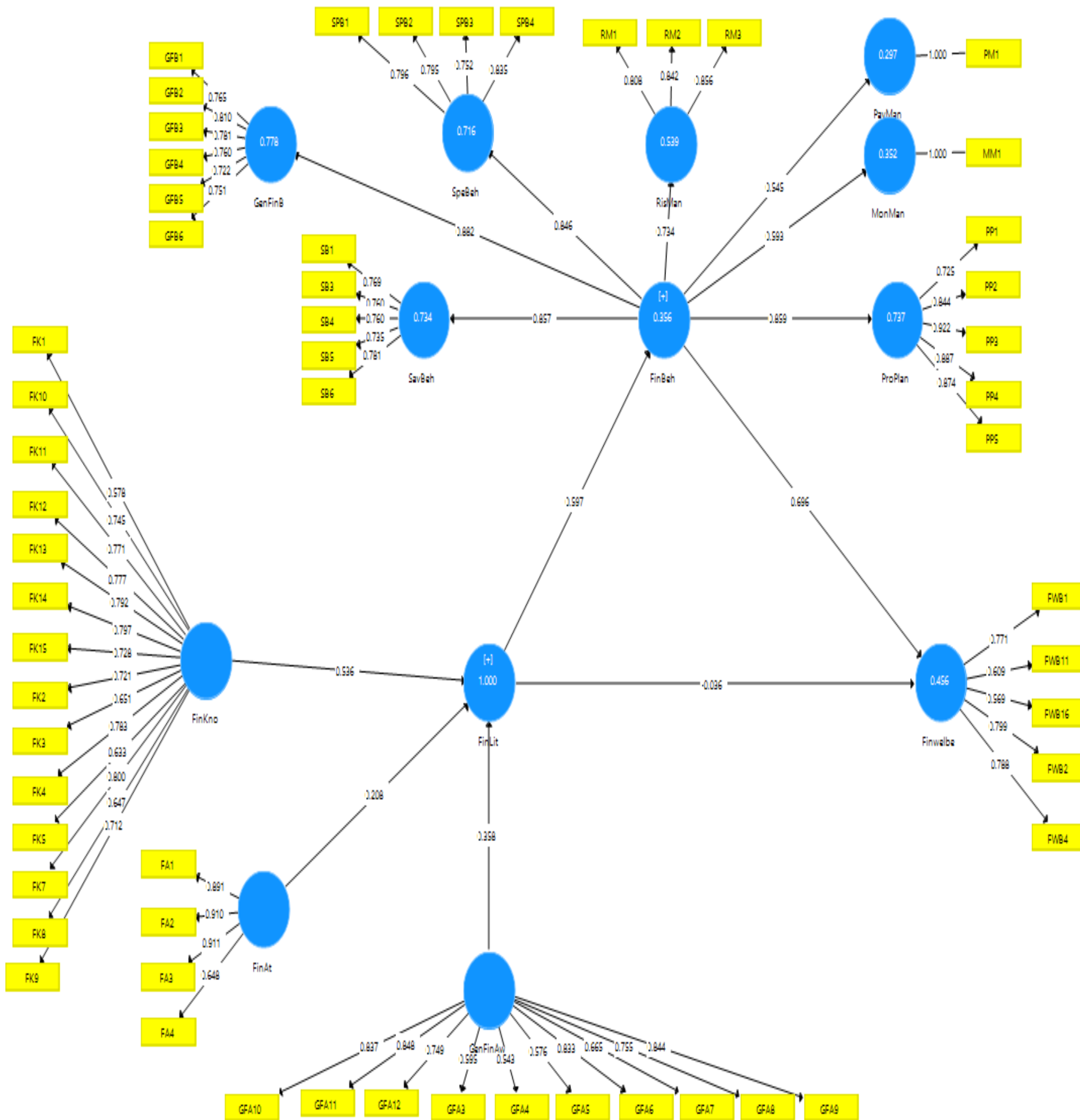


Figure 4.18: Path coefficient between financial literacy, financial behaviour and financial well-being

$H0_5$: there is no significant role of financial well-being between financial literacy and personal well being

HA_5: there is a significant role of financial well-being between financial literacy and personal well being

Barron and Kenny, 1986 approach had been applied for mediation analysis. It comprises of four stages. Researcher need to qualify all the stages one by one.

Stage 1: The IV (Financial Literacy) significantly affects the DV (Personal Well Being) in the absence of the mediator (Financial well-being)

Under the first stage researcher needs to confirm that independent variable (IV) have significant affect on the dependent variable (DV). The path coefficient between financial literacy and personal well being is 0.227 (shown in Fig. 4.19). The results mentioned that there is significant positive correlation between financial literacy and personal well being. This shows that financial literacy directly influence the personal well being of the households.

Stage 2: The IV (Financial Literacy) significantly affects the mediator (Financial well-being)

The second stage under the Barron and Kenny, approach demands to check the relationship between independent variable (IV) and the moderator (M). If it is found to be significant then only the researcher can proceed towards the next step. In the results it had been shown that there is significant positive relationship between financial literacy (IV) and financial well-being (M). The path coefficient between financial literacy and financial behaviour is 0.595 (shown in Fig. 4.20). With these results the second stage had been qualified.

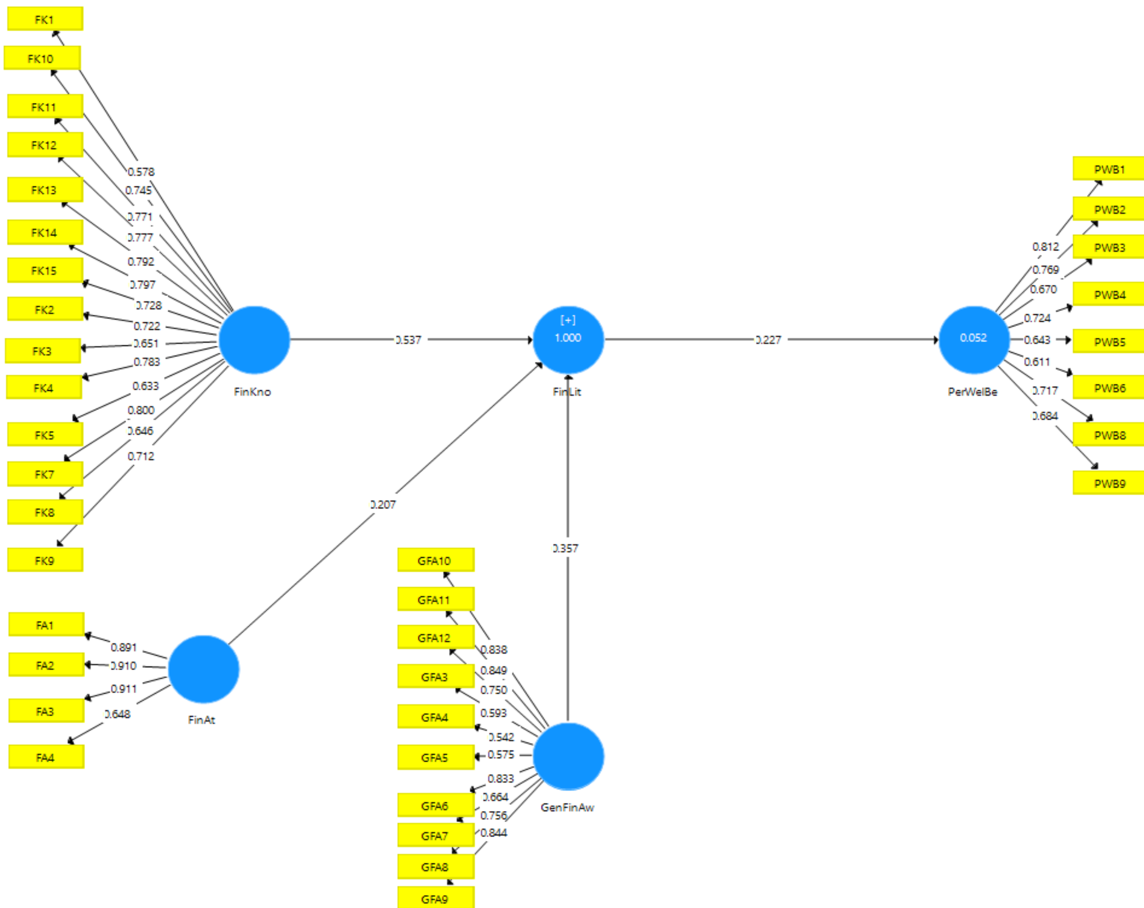


Figure 4.19: Path Coefficient of Financial Literacy (IV) and Personal Well Being (DV) in the absence of the financial well-being (M)

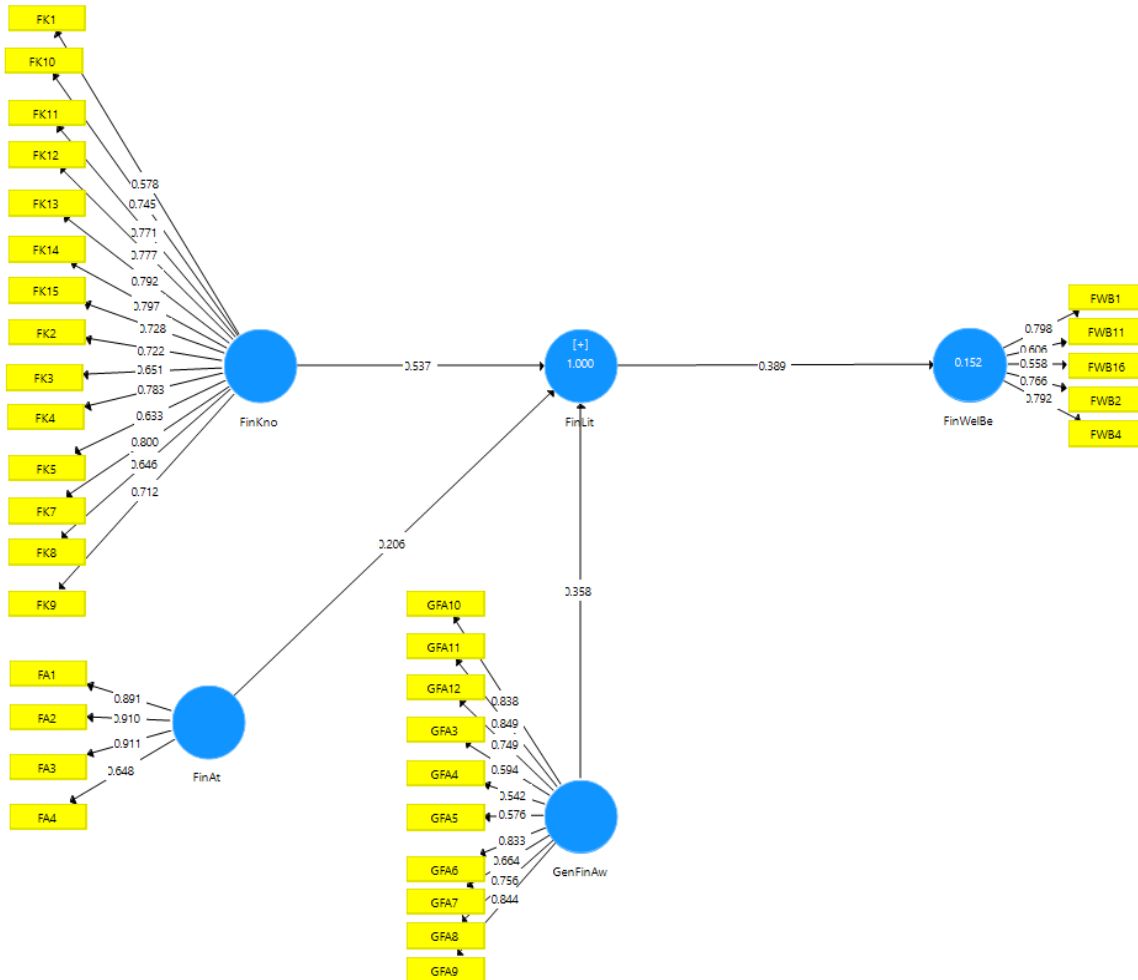


Figure 4.20: Path Coefficient of Financial Literacy (IV) and Financial Well-Being (M)

Stage 3: The mediator (Financial well-being) has a significant unique effect on the DV (Personal well Being), and

Under the third stage of Barron and Kenny's approach it is required to found the significant relationship between mediator (M) and the dependent variable (DV). It will confirm whether the financial well-being influence the personal well being or not. As per the results it had been found that there is a significant relationship between financial behaviour and financial well-being. The path coefficient between financial behaviour and financial well-being is 0.673 (shown in Fig. 4.21). Hence, the stage 3 had been also qualified. This depicts that financial behaviour have significant positive correlation with the financial well-being.

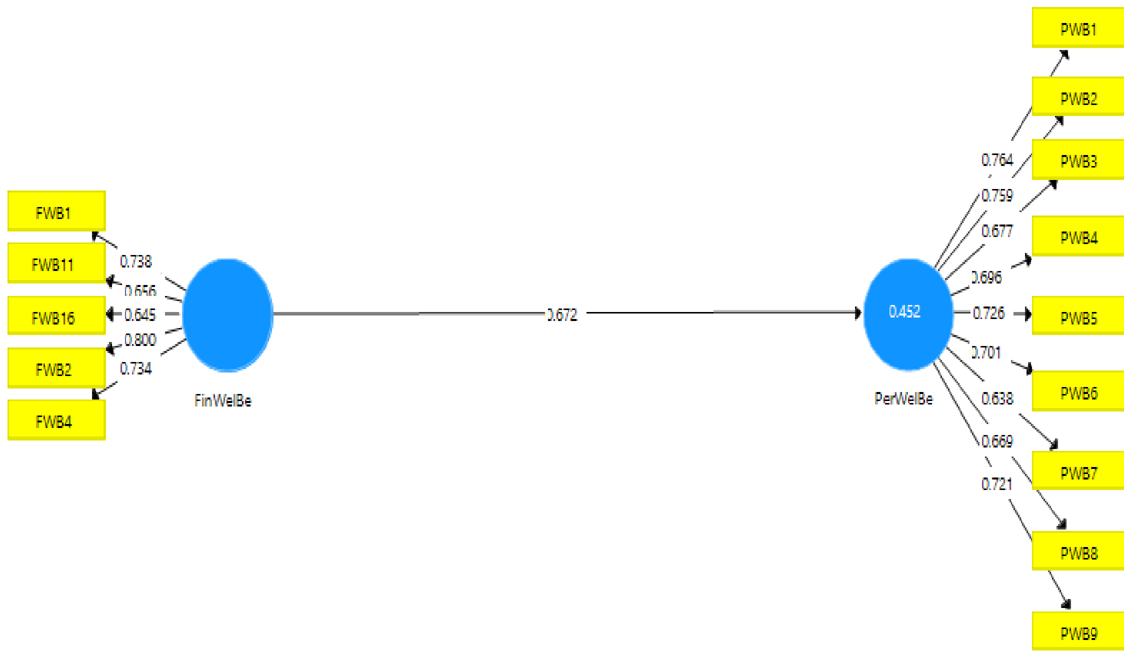


Figure 4.21: Path Coefficient of Financial well-being (M) and Personal well-Being (DV)

Stage 4: The effect of the IV (Financial Literacy) on the DV (Personal Well-Being) shrinks upon the addition of the mediator (Financial well-being) to the model

The final stage of the Barron and Kenny's approach is to make it confirm whether the effect of independent variable (IV) on the dependent variable (DV) get shrinks upon the addition of the mediator (M). If it happens, it confirms that it is a case of mediation. In the results it had been found that there is a significant positive direct relationship between financial literacy and personal well being i.e. 0.227. There is a significant relationship between financial well-being and personal well being i.e. 0.672. Further, it had been found that there is a significant direct relationship between financial literacy and financial well-being i.e. 0.389. But, in a situation when financial well-being introduced as a mediator the results get changed, the direct relationship between financial literacy and personal well being get insignificant i.e. it shifts from 0.227 (shown in Fig. 4.19) to -0.048 (shown in Fig. 4.22). It explains that the indirect relationship with the inclusion of financial well-being plays more significant role to influence the personal well-being of the households. It supports that financial well-being plays the role of full mediation between financial literacy and personal well being. This also concludes that financial well-being is acting as a principal constructs that affects the personal well being of the households. These results focused on the need for ensuring the state of being financially stable and happy that will lead toward personal well being.

The results compared from stage 1 to stage 4 clearly explain that in the absence of mediator there is a significant positive relationship between financial literacy and personal well-being (shown in Fig. 4.1). But with the inclusion of financial well-being as a mediator between financial literacy and financial well-being the direct relationship between financial literacy and personal well-being become insignificant (shown in Fig. 4.22).

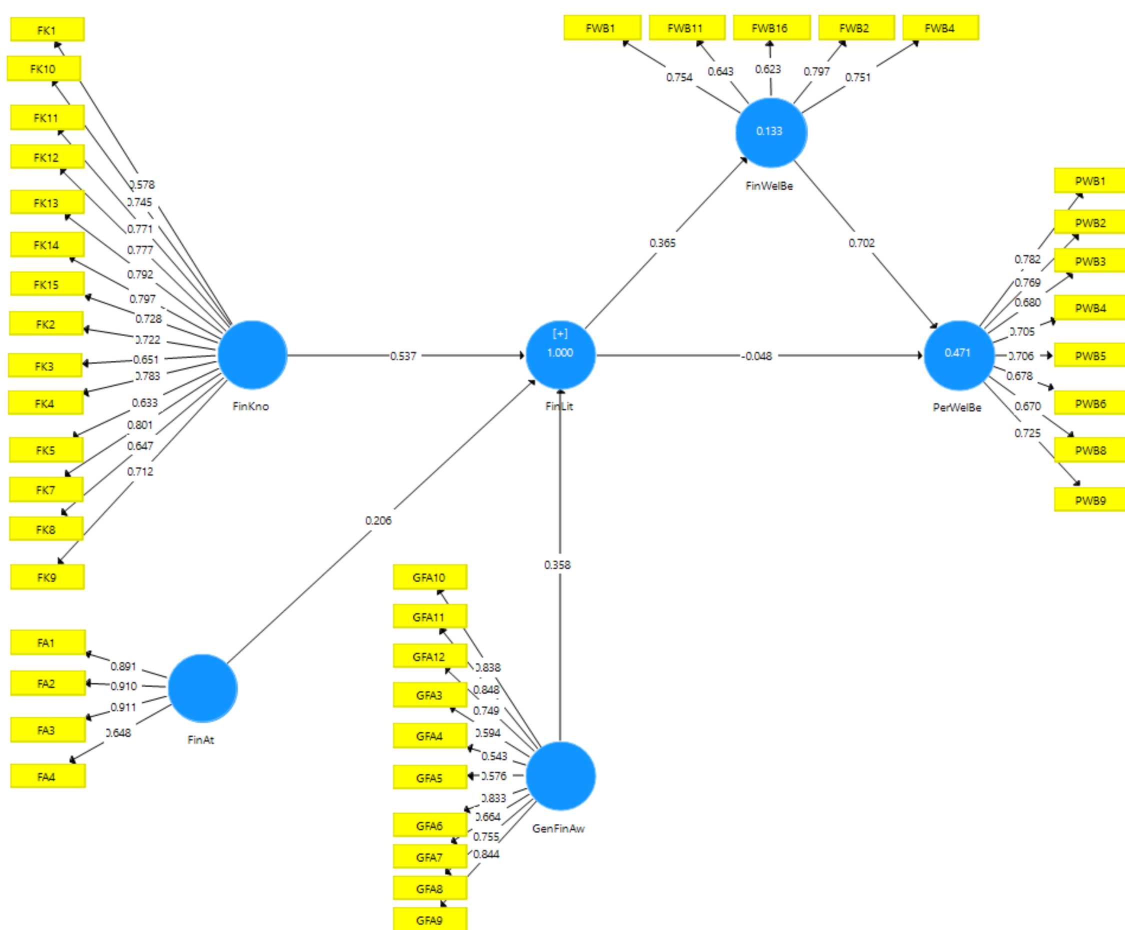


Figure 4.22: Path Coefficients of Financial Literacy (IV), Personal Well-Being (DV) and Financial Well-Being (M)

H0$_6$: There is no significant relationship between financial well-being and personal well-being.

HA$_6$: There is a significant relationship between financial well-being and personal well-being.

The results of the hypothesis shown that there is a significant positive relationship between financial well-being and personal well being. The path coefficient value between financial well-being and personal well being is 0.672. On the basis of the results H0$_{6,}$ stated that there is no significant influence of financial well-being and personal well being had been rejected and the alternative hypothesis had been accepted. Here the R^2 value of personal well being is 0.471, it reflects the. The R^2 is a measure of explanatory power of the model is examined (Hairet al., 2017). Here kit is concluded that 47% of the PWB determine by all the three constructs and financial well being has a major contribution in defining the personal well being whereas financial behaviour contributes majorly in defining the financial well being. Under the personal well being construct PWB1 with factor loading of 0.764 (Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?) followed by PWB2 with factor loading of 0.759, PWB9 with factor loading of 0.721 respectively and so on (shown in Figure 4.22)

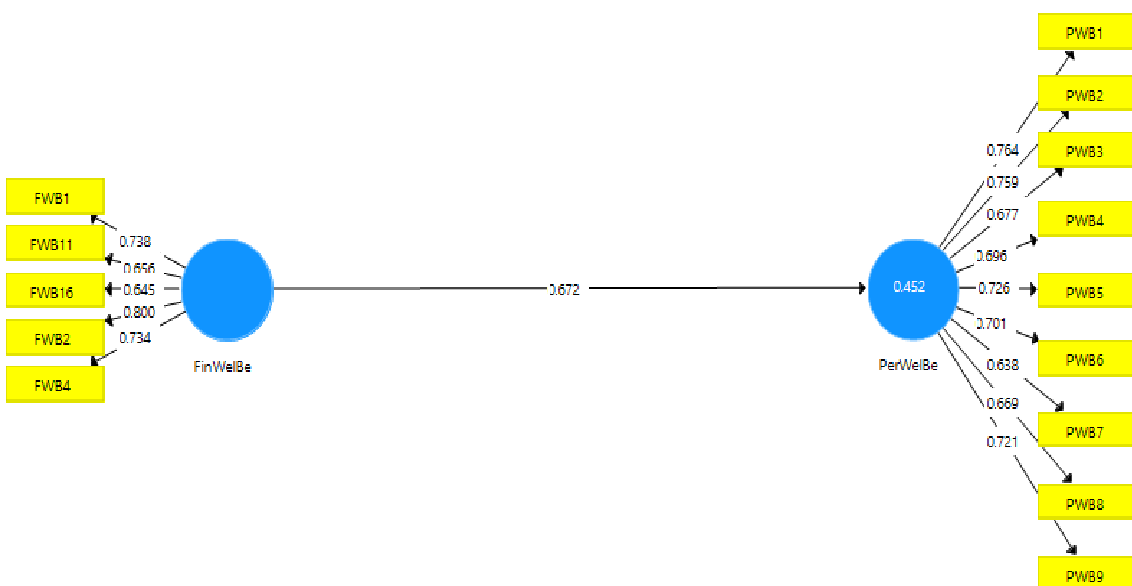


Figure 4.23: Path coefficient between financial well-being and personal well-being

4.2.2.3 Step 3: Coefficient of Determination (R^2)

Coefficient of determination (R^2) is used to assess the structural model. Model's predictive accuracy is measured with the help of R^2 value, it is calculated as a squared correlation between a particular dependent variable's actual and predicted values. The combined effect of the independent variables on the dependent variable is explained by the coefficient and also explains the amount of variance in the independent variable. There is no such rule of thumb for acceptable R^2 values whereas, R^2 values of 0.20 in the field such as consumer behaviour are considered high (Hair et al., 2017).

The R^2 for each regression equation in the structural equation model is measured. The R^2 is a measure of explanatory power of the model is examined (Hair et al., 2017). The R^2 values in our study ranged from 0.357 to 1, which is considered good (shown in table 4.13).

Table 4.13: R Square

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Financial Literacy	**1**	**1**	**0**	**13237.009**	**0**
Financial Behaviour	**0.357**	**0.36**	**0.042**	**8.418**	**0**
Financial well-being	**0.446**	**0.451**	**0.043**	**10.362**	**0**
General Financial Behaviour	0.778	0.779	0.027	29.088	0
Money Management	0.352	0.354	0.048	7.262	0
Payment Management	0.297	0.299	0.049	6.095	0
Personal Well Being	**0.469**	**0.476**	**0.037**	**12.529**	**0**
Propensity to Plan	0.737	0.738	0.031	24.008	0
Risk Management	0.539	0.54	0.042	12.819	0
Saving Behaviour	0.734	0.736	0.024	31.132	0
Spending Behaviour	0.716	0.717	0.027	26.845	0

*Note: the main constructs of the study are highlighted

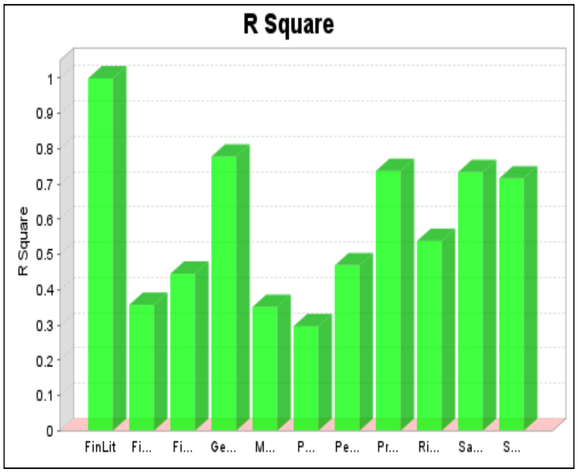


Figure 4.24: R Square

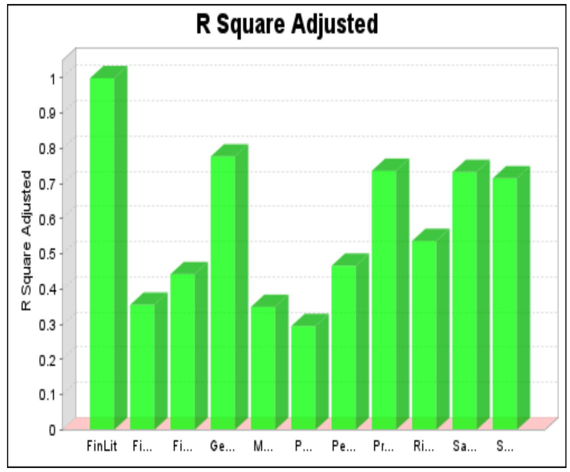


Figure 4.25: R Square Adjusted

4.2.2.4 Step 4: Effect size/F^2

Along with an evaluation of coefficient of determination (R^2), the values of F^2 are calculated to measure the effect size of omission of particular independent variable. Omission of an independent construct result changes in the R^2 value, have a significant effect on dependent variable. This effect can be measured with the help of F^2 effect size. F^2 tells about the importance of indicators. The process followed under this as follows: calculate the R^2 value of the construct including all the indicators. Then after delete one of the indicators and then again calculate the value of R^2 of the construct. If the value gets reduced it means that particular indicator is worth more and is an important. Value of F^2 between depicts 0.02-0.15 (Weak effect), 0.15-0.35 (Moderate effect) and above 0.35 (Strong effect). Strong effect depicts it is a mandatory construct. F^2 tells about more important predictor variable. F^2 values (shown in table 4.14) found weak to strong effect.

The value of F^2 between financial literacy and financial behaviour is 0.556, between financial behaviour and financial well-being is 0.555, between financial literacy and financial well-being is 0.002, between financial literacy and personal well being is 0.004, between financial well-being and personal well being is 0.800.

On the basis of the results it is concluded that financial literacy has a strong effect on financial behaviour. Secondly financial literacy has a weak effect on financial well being and personal well being. Thirdly, financial behaviour has strong effect on financial well being. Fourthly, financial wellbeing has a strong effect on personal well being of the households. So, a chain is being created here, that concludes that to ensure the personal well being of the households it is necessary to improve their financial well-being and the financial well-being strongly affected by their financial behaviour and finally the sound and effective financial behaviour can be ensured by increasing the level of financial literacy among the people.

Table 4.14: Effect size/F^2

	Financial behaviour	**General Financial behaviour**	**Money management**	**Payment management**	**Propensity to plan**	**Risk management**	**Saving behaviour**	**Spending behaviour**	**Financial well-being**	**Personal well being**
Financial literacy	0.556								0.002	0.004
Financial behaviour		3.506	0.542	0.423	2.808	1.167	2.756	2.52	0.555	
Financial well-being										1.16

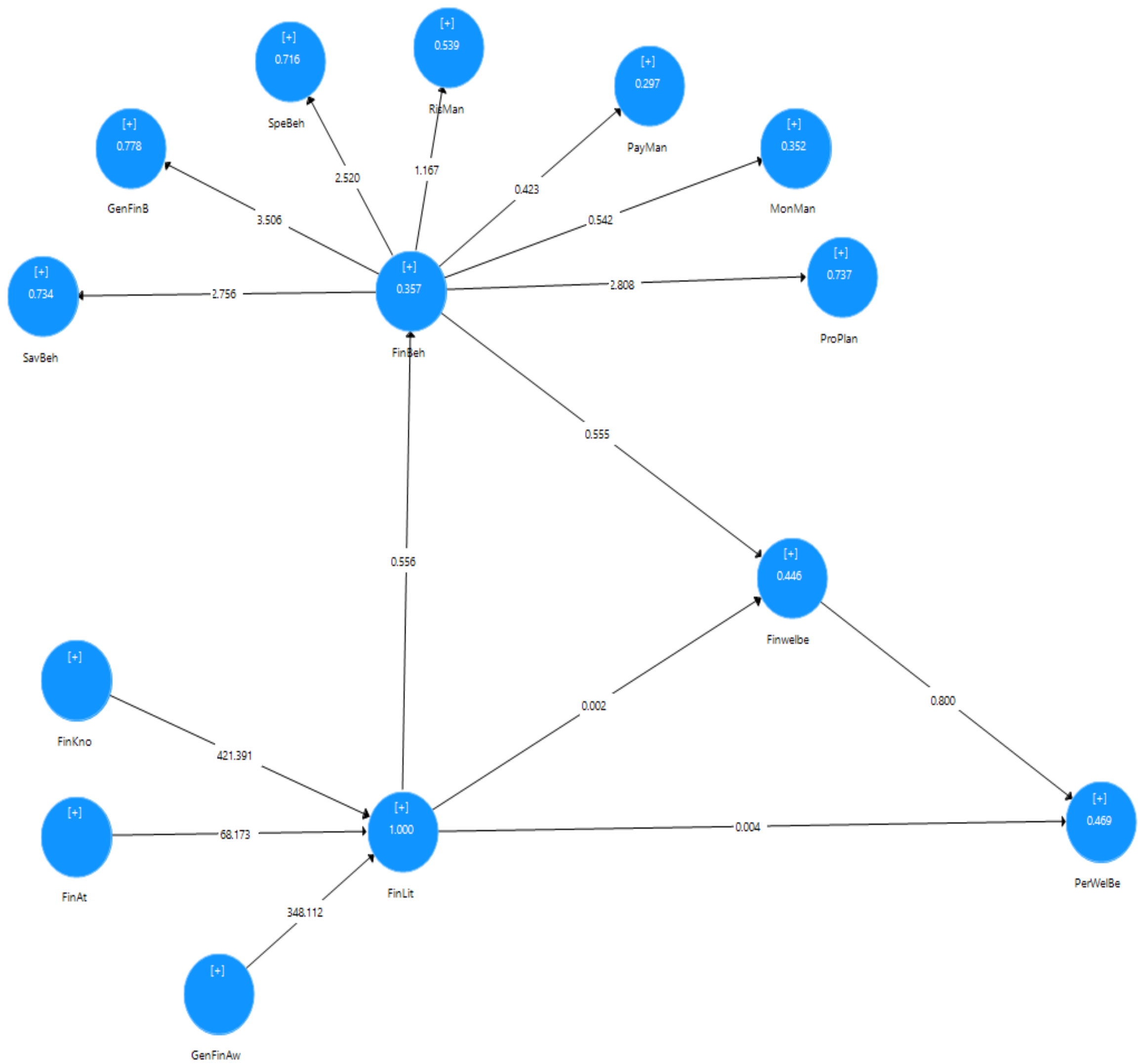


Figure: 4.26 (F Square)

4.2.2.5 Step 5: Blindfolding and Predictive Relevance Q^2

To evaluate the predictive accuracy along with R^2, Stone-Geisser's Q^2 value also examined (Geisser, 1974; Stone, 1974). Q^2 indicates the predictive relevance of the model. Predictive relevance using PLS-SEM applied in case of reflective dependent construct. Q^2 values larger than zero depicts and predicts the relevance of the model and dependent/endogenous construct. Blindfolding procedure is applied to estimate the Q^2 values represent a measure of how sound the originally observed values are predicted by the path model. Instead of applying measures of goodness of fit, the structural model in PLS-SEM assessed on the basis of heuristic criteria that are determined by the model's predictive capabilities. With the help of Q Square we can calculate to what extent study can be generalized. Criteria 0.02-0.15 (Weak effect), between 0.15-0.35 (Moderate effect) and above 0.35 (Strong effect) (Stone and Geisser, 1994).

In case the values get low, it can be interpreted that some other variable/s or construct/s can be added to generalize this study. In our study the Q^2 values range between moderate to strong effect.

Q^2 Value for financial literacy is 0.454 (strong effect), for financial behavior is 0.152 (moderate effect), for financial well-being 0.219 (moderate effect) and for personal well being is 0.23 (moderate effect). On the basis of the Q^2 values, it can be interpreted that there is need to explore some other variables that affects the financial behaviour, financial well being and personal well being. As the results of the study shows the moderate effect of these constructs.

Table: 4.15: Blindfolding/Q^2

	SSO	**SSE**	**Q^2 (=1-SSE/SSO)**
Financial Literacy	**11200**	**6109.886**	**0.454**
Financial Attitude	1600	1600	
Financial Behaviour	**12000**	**0172.58**	**0.152**
Financial Knowledge	5600	5600	
Financial well-being	**2000**	**1561.1**	**0.219**
General Financial Awareness	4000	4000	
General Financial Behaviour	2400	1318.772	0.451
Money Management	400	261.081	0.347
Payment Managent	400	283.721	0.291
Personal well being	**3200**	**2464.644**	**0.23**
Propensity to Plan	2000	937.714	0.531
Risk Management	1200	753.514	0.372
Saving Behaviour	2000	1160.582	0.42
Spending Behaviour	1600	891.219	0.443

4.3 MEDIATION ANALYSIS

If the indirect effect is significant but does not absorb any of the exogenous latent variable's effect on the endogenous variable, the Variance Accounted For (VAF) is rather low. This occurs when the direct effect is high and declines only very slightly after a mediator variable with a significant but very small indirect effect is included. In this situation, the VAF would be less than 20%, and one can conclude that (almost) no mediation takes place. In contrast, when the VAF has very large outcomes of above 80%, one can assume a full mediation. A situation in which the VAF is larger than 20% and less than 80% can be characterized as partial mediation. A suppressor effect, which characterizes the sign change of the direct relationship after the mediator variables have been included, is an exception to the VAF-based assessment of mediating effects. For example, when a significant positive path relationship without the mediator variable becomes significantly negative after the inclusion of the mediator variable, a suppressor effect occurs. The VAF becomes larger than one or, in some instances, even negative with suppressor effects and can no longer be interpreted. This kind of situation always represents full mediation (Sai, 2021).

4.3.1 Assessment of mediation analysis

Mediation models encompass substantial implementation amongst social science researchers. According to (Baron and Kenny, 1986) a mediating variable is, "The generative mechanism through which the focal independent variable is able to influence the dependent variable of interest and Mediation is best done in the case of a strong relation between the predictor and criterion variable". Mediation is the, "existence of a significant intervening mechanism between antecedent and the consequent variables" (Venkatraman, 1989). Mediator also describes the occurrence of indirect effect based on sound theoretical support, essential to explore meaningful mediation effects (Hair et al., 2017).

To test the mediation effect in social science research, Baron and Kenny's approach, 1986 of has been greatly used, based on the novel procedure given by (Judd and Kenny, 1981). This fundamental procedure comprises numerous steps to validate a mediation effect. The application of bootstrapping for mediation analysis has recently been advocated by (Hair et al., 2013).

One of the most precise and influential methods for testing the mediating test is bootstrapping. Bootstrapping is a nonparametric re-sampling method (Shrout and Bolger, 2002). Several bootstrapping methods can be applied to carry out mediation effect namely, Percentile Bootstrap, Standardized Bootstrap, Bias Corrected and Accelerated (BCA) Bootstrap, Davidson and Hinkley's Double Bootstrap, and Shi's Double Bootstrap. Bias-corrected bootstrap confidence interval is the greatest approach for identifying mediating effects (Hayes and Scharkow, 2013). In case Type-I error is the case, on the other hand the percentile bootstrap confidence interval, which is not bias corrected is a good choice (Hayes & Scharkow, 2013). The various steps that need to be followed are mentioned below:

Step1: Assess the factor loadings

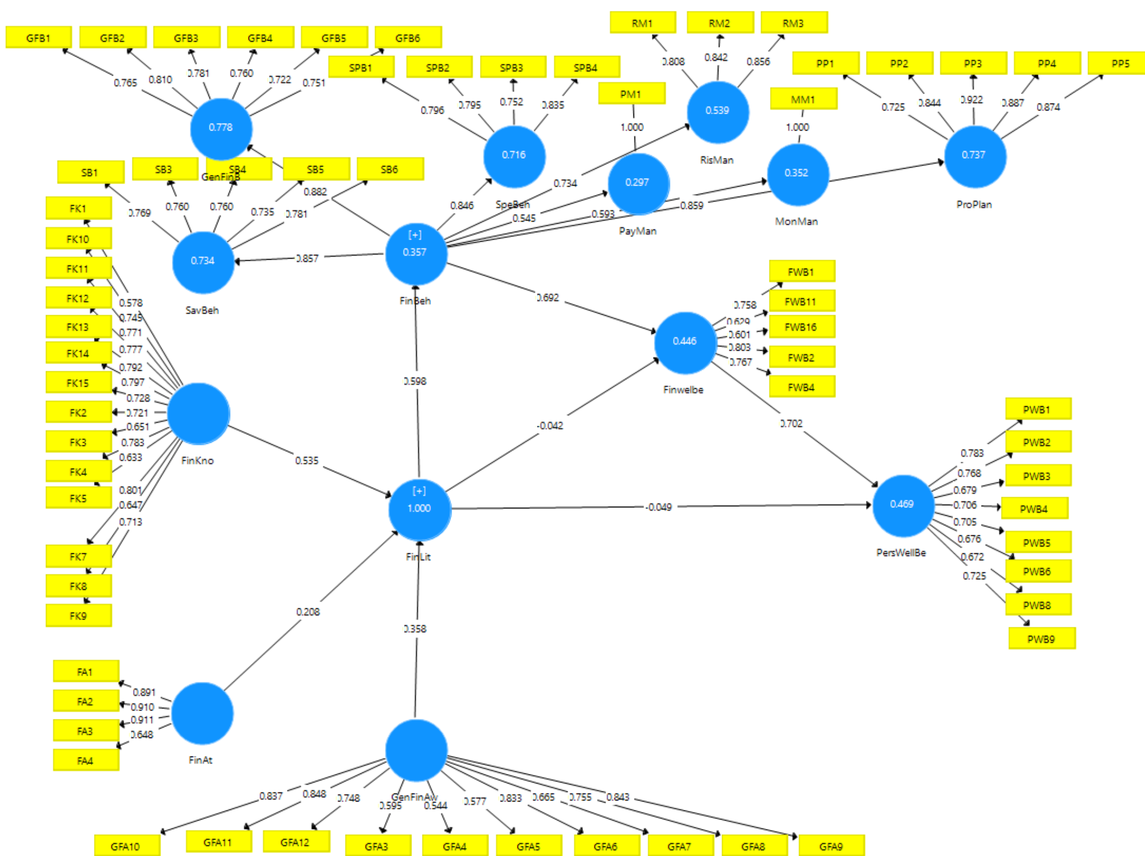


Figure 4.27: Factor Loading

Under the step 1 where it is required to access the factor loading all the indicators loading are above the threshold value (Shown in Fig. 4.27).

Step 2: Assess the composite reliability (CR) and Average Variance Explained AVE for confirming convergent validity.

Table 4.16: Average Variance Explained (AVE) and Composite Reliability (CR)

	Cronbach's Alpha	**rho_A**	**Composite Reliability**	**Average Variance Extracted (AVE)**
Financial Attitude	0.864	0.891	0.909	0.718
Financial Knowledge	0.93	0.934	0.94	0.529
Financial well-being	0.762	0.781	0.839	0.513
General Financial Awareness	0.902	0.919	0.919	0.538
General Financial Behaviour	0.858	0.86	0.894	0.586
Money Management	1	1	1	1
Payment Management	1	1	1	1
Personal Well-Being	0.864	0.872	0.893	0.512
Propensity to Plan	0.905	0.913	0.93	0.728
Risk Management	0.784	0.784	0.874	0.698
Saving Behaviour	0.818	0.82	0.873	0.579
Spending Behaviour	0.807	0.813	0.873	0.632

The result exhibits that the Composite Reliability (CR) of all the constructs and indicators is more than 0.7, and the AVE's score are more than 0.5. It proved the reliability and convergent validity. Once this has been done we will move on to test the mediating effect through the use of the bootstrapping technique. But first, let us write down the hypotheses for the two mediating effects. The two mediation hypotheses can be written as follows:

H0₄: there is no significant role of financial well-being between financial literacy and personal well being

H0₅: there is no significant role of financial behaviour between financial literacy and financial well-being

Step 3: Run the bootstrapping to get the t-values to assess if the direct relationships are significant before testing the mediating effects.

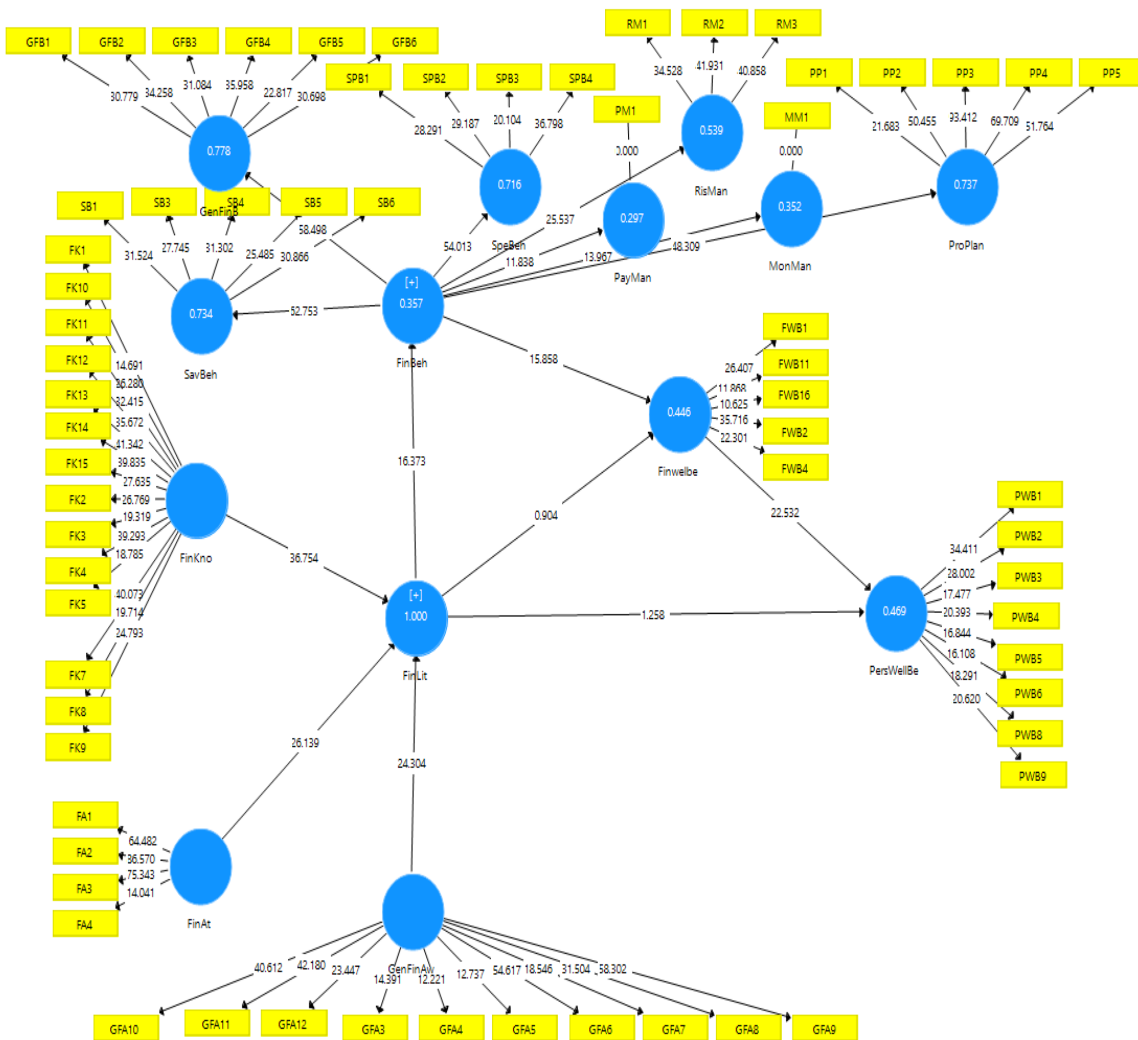


Figure 4.28: Indirect Effect after Bootstrapping

Table 4.17: Bootstrapping

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Financial Literacy-> Financial well-being	0.414	0.414	0.038	10.996	0.000
Financial Literacy-> Personal Well-Being	0.261	0.262	0.039	6.66	0.000

Note: *t value > 1.96*

Based on the result, we can conclude that both of the two mediations are significant at t-values >1.96 and p-value < 0.05. Next, we also need to calculate the 95% bootstrapped confidence interval bias using the following formula:

Lower Limit (LL) a*b – z (SE) (z value, for 0.05 level is 1.96) Upper Limit (UL) a*b + z (SE) (check the formula again)

Table 4.18: Indirect Effect after Bootstrapping (Confidence Interval Bias)

Path	Original Sample (O)	Sample Mean (M)	Bias	2.50 %	97.50 %
Financial Literacy-> Financial well-being	0.414	0.414	0	0.34	0.489
Financial Literacy-> Personal Well-Being	0.261	0.262	0.001	0.182	0.337

The bootstrapping analysis has shown that both the indirect effects, β =0.414 and β = 0.262, are significant with t-values of 10.996 and 6.66. The indirect effects 95% Boot CI Bias Corrected: [LL = 0.345, UL = 0.489] and [LL = 0.182, UL = 0.337] do not straddle a 0 in between indicating there is mediation (Preacher and Hayes, 2004, 2008).

Thus, we can conclude that the mediation effects are statistically significant. The results of mediation analysis are presented in Table 4.19.

Table 4.19: Hypotheses Testing on Mediation

No.	Relationship	Std. beta	Std. Error	t-value	Confidence interval (BC)		Decision
					LL	UL	
$H0_5$	FL->FB->FWB	0.414	0.038	10.996	0.345	0.489	Full mediation supported
$H0_6$	FL->FWB->PWB	0.261	0.039	6.66	0.182	0.337	Full mediation supported

Note: *p< 0.05, **p< 0.01, BC = Bias Corrected, UL = Upper Level, LL = Lower Level

In order to test the five hypotheses, this study conducted a Structural Equation Modeling (PLS-SEM) analysis (shown in Figure 4.27). The hypotheses testing used the (resample n 5000) bootstrapping method (shown in table 4.10). To find out the significance of the hypotheses, results of the PLS structural model calculated by using confidence interval. On the basis of which null Hypothesis are rejected or fail to reject. The results of the structural equation modeling shows that all the items used for formatting the financial literacy have significant correlation and explaining the formative construct (financial literacy) with R^2 value of 1.00. All the reflecting Indicators of financial behaviour are significantly associated. All the indicators of financial well-being and personal well being shown the significant high level of positive correlation.

Overall structural equation model shows that while evaluating direct relationship between financial literacy and financial well-being found significant i.e. 0.389, moreover with the inclusion of financial behaviour as a mediator direct relationship become insignificant, this shows that financial behaviour of the households is a principal construct and act as a full mediator between financial literacy and financial well-being. On the other side, financial literacy has a significant positive influence on personal well being i.e. 0.27. Whereas, with the inclusion of financial well-being as a mediator direct relationship between financial literacy and personal well being also become insignificant, this shows that financial well-being of the households act as a full mediation role between financial literacy and personal well-being.

4.4 PLS PREDICT

Prior to instigate the PLS predict method, it is required to make certain that all the construct's measurement models get done the pertinent threshold requirements (Shmueli et al. 2019). PLS-SEM does not have a standard goodness-of-fit (GoF) statistic and efforts to establish a corresponding statistics have proven highly problematic (Hensler and Sarstedt, 2013). The following criteria facilitate this assessment: Coefficient of determination (R^2), Cross Validated Redundancy (Q^2) and the path coefficients (Sarstedt et al. 2013). Instead of applying measures of goodness of fit, the structural model in PLS-SEM is assessed on the basis of heuristic criteria that are determined by the model's predictive capabilities. GoF is also not applicable, researchers are advised not to use this measure (Hair et al. 2013). The results of Q^2 predict depicts that all the indicators having a predictive relevance towards the model. All the values of Q^2 should be above zero this is one of the pre-requisite to test the model fit and this criteria has been achieved in our study (shown in table 4.20). The values of Q^2 (PLS PREDICT) for all the indicators are greater than 0.

Table 4.20: Q^2 (PLS PREDICT)

Item code	Q^2_predict	Item code	Q^2_predict
FK2	0.408	SB4	0.07
FK1	0.329	SPB3	0.049
GFA4	0.14	SB6	0.148
GFA7	0.322	GFB3	0.105
FA2	0.653	PP4	0.186
FK5	0.371	RM1	0.149
FK4	0.519	PP3	0.176
FK7	0.598	GFB4	0.24
FK15	0.464	SB5	0.119
FA3	0.66	PM1	0.047
GFA11	0.503	FWB1	0.123
FK9	0.454	FWB11	0.047

FK12	0.513	FWB16	0.003
GFA5	0.125	FWB2	0.033
GFA6	0.54	FWB4	0.106
GFA3	0.239	GFB4	0.236
FK14	0.58	GFB1	0.225
GFA12	0.457	GFB2	0.224
FK3	0.362	GFB5	0.204
FK10	0.532	GFB6	0.182
FK8	0.395	GFB3	0.103
FK13	0.568	MM1	0.166
GFA8	0.477	PM1	0.047
FA1	0.627	PWB8	0.03
FK11	0.574	PWB2	0.024
FA4	0.294	PWB1	0.044
GFA10	0.497	PWB9	0.005
GFA9	0.587	PWB5	0.009
MM2	0.136	PWB3	0.015
RM2	0.147	PWB4	0.024
SPB1	0.231	PWB6	0.009
SPB4	0.105	PP2	0.168
GFB6	0.182	PP5	0.232
SPB2	0.102	PP1	0.163
MM1	0.166	PP3	0.175
PM2	0.17	PP4	0.186
GFB1	0.225	RM2	0.148
SPB5	0.045	RM1	0.148
GFB5	0.202	RM3	0.194
SB2	0.107	SB5	0.119
MM3	0.107	SB1	0.152
SB3	0.106	SB6	0.148
GFB2	0.225	SB3	0.104
RM3	0.194	SB4	0.07
SB1	0.151	SPB2	0.106
PP1	0.163	SPB1	0.227
PP5	0.233	SPB4	0.103
PP2	0.169	SPB3	0.037

Table 4.21: Complex Model

COMPLEX MODEL			
	RMSE	**MAE**	**Q²_predict**
Financial Behaviour	0.809	0.66	0.349
Financial well-being	0.937	0.74	0.128
General Financial Behaviour	0.818	**0.664**	0.338
Money Management	**0.918**	**0.692**	0.166
Payment Management	0.981	0.783	0.05
Propensity to Plan	0.866	**0.704**	0.257
Risk Management	**0.878**	**0.681**	0.236
Saving Behaviour	**0.894**	**0.695**	0.207
Spending Behaviour	0.9	**0.728**	0.197
Personal Well Being	0.986	0.806	0.037

Table 4.22: Simple Model

SIMPLE MODEL			
	RMSE	**MAE**	**Q²_predict**
Financial Behaviour	0.809	0.66	0.35
Financial wellbeing	**0.933**	0.74	0.135
General Financial Behaviour	0.818	0.665	0.338
Money Management	0.919	0.693	0.166
Payment Management	0.981	0.783	0.05
Propensity to Plan	0.866	0.705	0.258
Risk Management	0.879	0.682	0.236
Saving Behaviour	0.895	0.696	0.207
Spending Behaviour	0.9	0.729	0.197

The results depicts that the complex model or the expanded model is the improved one.

CHAPTER-5

DATA ANALYSIS

CHAPTER-5

DATA ANALYSIS

5.1 DESCRIPTIVE STATISTICS

For measurement and validation of research instrument descriptive statistics has been used to measure the accuracy of the data entry process. Descriptive statistics help to measure the variability of responses. In descriptive statistics the data was analyzed by the frequency tables, mean, Standard deviation, Kurtosis, Skewness and Standard error.

Table 5.1: Socio-Demographic Profile of the Respondents

Variables	Options	Frequencies	Percentage (%)
District	Jammu	189	47.25
	Kathua	36	9
	Udhampur	62	15.5
	Doda	29	7.25
	Reasi	40	10
	Kishtwar	44	11
	Total	400	100
Location	Village	195	48.8
	Town	205	51.2
	Total	400	100.0
Gender	Male	264	66
	Female	135	33.75
	Not prefer to say	1	0.25
	Total	400	100

Earning Member/S Of The Family	Husband	28	7.0
	Wife	8	2.0
	both husband and wife	38	9.5
	Mother	23	5.8
	Father	11	2.8
	Children	16	4.0
	mother, father and me	9	2.3
	me and my father	16	4.0
	me, father and wife	1	.3
	mother, father, wife and children	2	.5
	me and my children	3	.8
	me, my wife and children	2	.5
	me, my husband and children	4	1.0
	only me	231	57.8
	all of us	8	2.0
Who Is Taking Financial Decision	Husband	24	6.0
	Wife	30	7.5
	both husband and wife	11	2.75
	Mother	15	3.75
	Father	83	20.75
	Children	34	8.5
	mother, father and me	3	.75
	me and my father	1	.25
	me, father and wife	7	1.75
	mother, father, wife and children	13	3.25
	me and my children	1	.25

	me, my wife and children	67	16.75
	me, my husband and children	50	12.5
	only me	42	10.5
	all of us	19	4.75
Religion	Hindu	345	86.3
	Muslim	40	10.0
	Sikh	7	1.8
	Others	8	2.0
Age	Less than 25	55	13.8
	26-35	83	20.8
	36-45	63	15.8
	46-55	127	31.8
	55 and above	72	18.0
Educational Qualification	No formal education	22	5.5
	Below 10th grade	38	9.5
	10th	54	13.5
	12th	67	16.8
	Graduate	93	23.3
	Post Graduate	102	25.5
	Other	24	6.0
Marital Status	Married	260	65.0
	Unmarried	125	31.3
	Widower/Widow	11	2.8
	Divorced	4	1.0

Annual Income	Below 2 lakh	147	36.8
	2-10 lakh	176	44.0
	Above 10 lakh	77	19.3
Occupation	Agriculture	27	6.8
	Dairy Farming	1	.3
	Welder	2	.5
	Carpenter	4	1.0
	Mason	1	.3
	self employed	4	1.0
	Other	34	8.5
	Government Service	159	39.8
	Semi-Government Service	41	10.3
	private job	56	14.0
	Shop Keeper/Businessman	70	17.5
	Barber	1	.3
	Total	400	100.0
Total No. Of Earning Members	Three or more members are earning	74	18.5
	Two members are earning	92	23.0
	Only one family member is earning	228	57.0
	No earning member	6	1.5
Type Of Family	Joint family	291	72.8
	Nuclear Family	109	27.3
No. Of Dependent Person	Two or less than two	34	8.5
	Three	37	9.3
	Four to five	237	59.3
	More than five	38	9.5
	No dependent member	53	13.3

Total No. Of Family Members	Two or less than two	10	2.5
	Three to five	278	69.5
	Six to seven	74	18.5
	More than seven	38	9.5
Type Of House	Pucca	341	85.3
	Semi-Pucca	41	10.3
	Kachha	14	3.5
	Any other	4	1.0
Possession Of The House	Owned	365	91.3
	Rented	35	8.8
Education Of Children	All children going/ever gone to the school/college	319	79.75
	Less than 50% going/ever gone to the school/college	32	8
	More than 50% going/ever gone to the school/college	15	3.75
	No child ever going/ever gone to the school/college	34	8.5
Employment Of A Domestic Servant	Employed two or more than two full time servants	6	1.5
	Employed one full time servants	12	3.0
	Employed two or more than three part time servants	2	.5
	Employed 1-2 part time servants	197	49.25
	Employed no servant	183	45.75
Possession Of Agricultural Land	More than 100 acres	6	1.5
	Between 51-100 acres	1	0.25
	Between 21-50 acres	10	2.5
	Between 6-20 acres	40	10.0

	Between 1-5 acres	259	64.75
	No agricultural land	84	21
Income Tax Paid	More than 10 lakh	2	.5
	Between 1-10 lakh	30	7.5
	Between 50000-100000	29	7.25
	Between 20000-50000	29	7.25
	Between 10000-20000	45	11.25
	Between 5000-10000	52	13.0
	Below 5000	68	17
	No tax paid	145	36.25

Variable Type Based Graphs and Plots

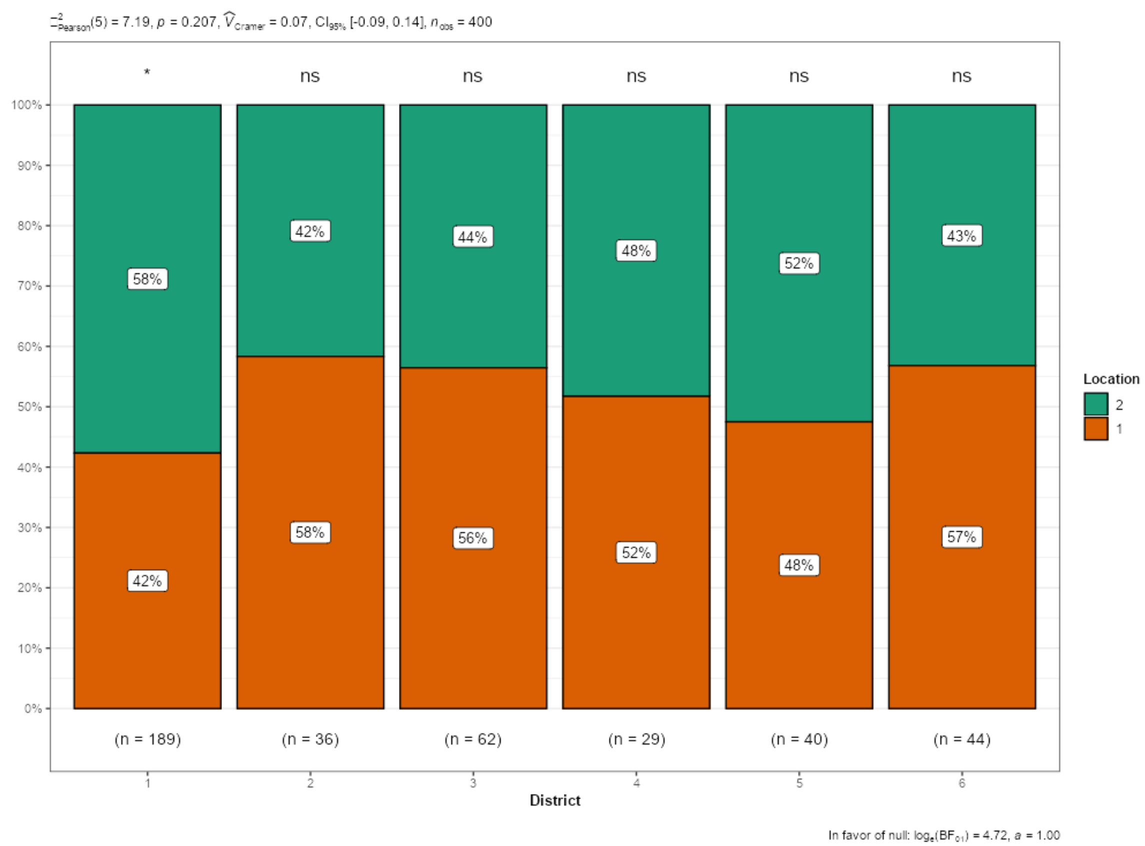


Figure: 5.1 Frequency graph of district and location of the respondents

The total no. of respondents selected from each district with respect to the location shown in figure 5.1.

Variable Type Based Graphs and Plots

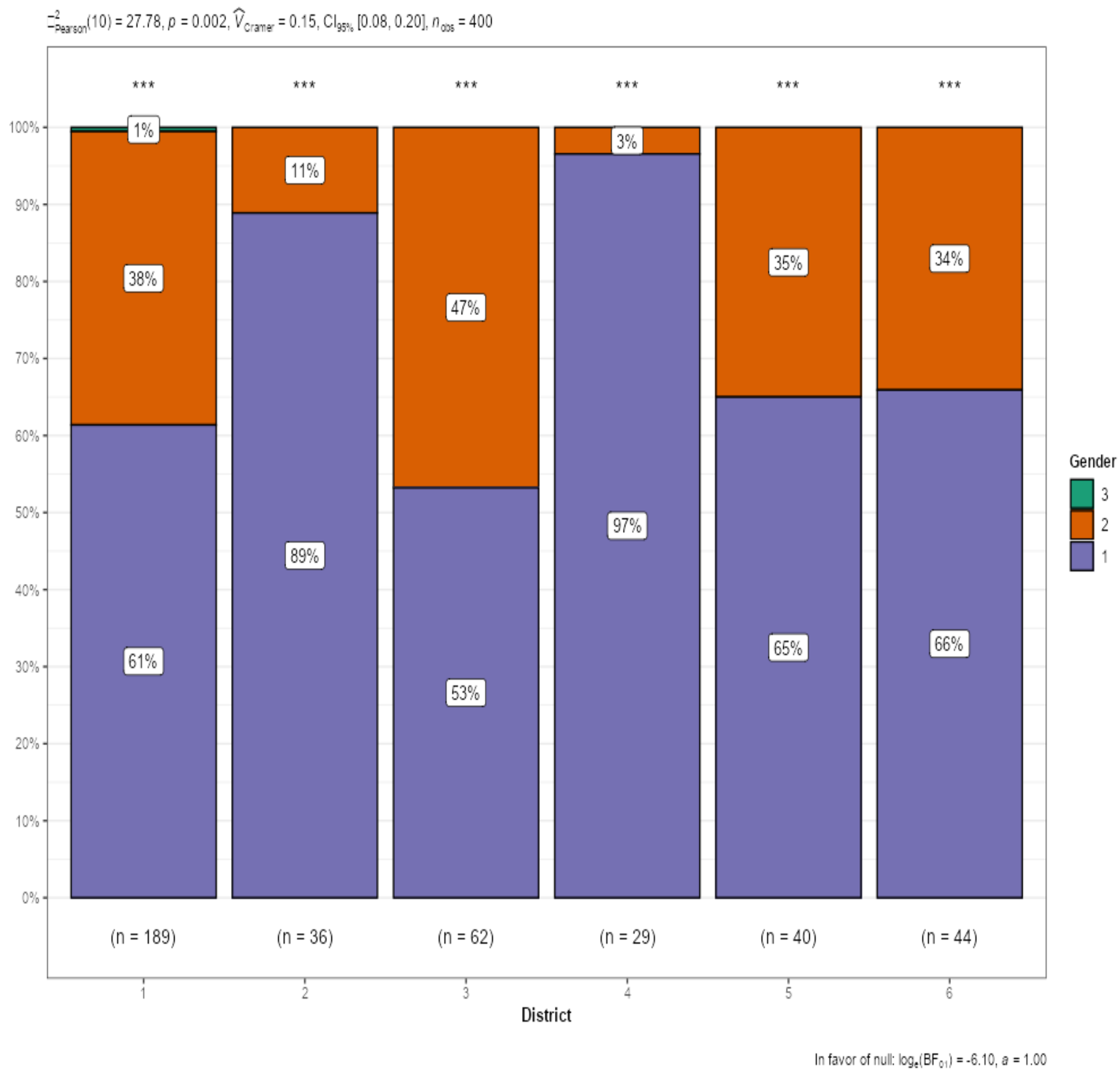


Figure: 5.2 Frequency graph of district and gender of the respondents

The total no. of respondents selected from each district with respect to the location shown in figure 5.2.

Table 5.2: Basic Financial Literacy test of Respondents-Summary of Responses

Basic financial literacy Questions				
	No. of respondents with correct answer	**Percentage of No. of respondents with correct answer**	**No. of respondents with incorrect answer**	**Percentage of No. of respondents with incorrect answer**
Numeracy	255	63.75	145	36.25
Understanding of inflation	144	36	256	64
Understanding of risk diversification	54	13.5	346	86.5
Understanding of compound interest	163	40.75	237	59.25
Understanding of time value of money	52	13	348	87
Average Results	134	33.5	266	66.5
Sophisticated financial literacy questions				
	No. of respondents with correct answer	**Percentage of No. of respondents with correct answer**	**No. of respondents with incorrect answer**	**Percentage of No. of respondents with incorrect answer**
Stock market functions	21	5.25	379	94.75
Knowledge of mutual funds	150	37.5	250	62.5
Long-term return	116	29	284	71
Average Results	96	24	304	76

Results of the basic financial literacy and sophisticated financial literacy questions asked to the respondents (shown in table 5.2) depicts that low level of financial

Table 5.3: Frequency of Households Invested in Stock Market

SFL1					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Yes	73	18.25	18.25	18.25
	No	327	81.75	81.75	100
	Total	400	100.0	100.0	

Descriptive results (shown in table 5.3) depicts that the frequency of the investment in the stock market is very low.

Table 5.4: Descriptive Statistics

No. of Cases = 400					
Dimensions	**Item Code**	**Mean**	**Std. Deviation**	**Skewness**	**Kurtosis**
Financial Knowledge	FK1	4.348	1.787	-0.654	-0.397
	FK2	3.873	1.752	-0.964	-0.017
	FK3	4.183	1.837	-0.964	-0.256
	FK4	4.235	1.782	-0.85	-0.342
	FK5	4.558	1.748	-0.702	-0.477
	FK7	4.09	1.743	-0.902	-0.216
	FK8	4.355	1.652	-0.754	-0.194
	FK9	4.265	1.917	-1.09	-0.266
	FK10	3.58	2.023	-1.3	0.2
	FK11	3.955	1.828	-1.009	-0.069
	FK12	3.66	1.892	-1.149	0.034
	FK13	3.29	1.88	-1.098	0.289
	FK14	3.245	1.843	-1.068	0.303
	FK15	3.23	1.988	-1.171	0.366
	FA1	3.783	1.736	-0.879	0.067

Financial Attitude	FA2	3.817	1.796	-1.036	0.078
	FA3	3.975	1.763	-0.898	-0.009
	FA4	4.548	1.872	-0.853	-0.446
General Financial Awareness	GFA3	4.795	1.918	-0.841	-0.56
	GFA4	5.303	1.659	-0.045	-0.872
	GFA5	4.61	1.918	-0.992	-0.393
	GFA6	3.845	2.053	-1.316	0.008
	GFA7	4.593	2.062	-1.073	-0.473
	GFA8	3.81	1.978	-1.21	-0.038
	GFA9	3.745	1.942	-1.214	-0.005
	GFA10	3.885	1.94	-1.092	-0.006
	GFA11	3.572	1.991	-1.154	0.223
	GFA12	3.607	1.894	-0.98	0.174
General Financial Behavior	GFB1	4.925	1.722	-0.223	-0.766
	GFB2	4.933	1.655	-0.038	-0.726
	GFB3	4.812	1.692	-0.372	-0.584
	GFB4	4.295	1.915	-1.136	-0.209
	GFB5	4.965	1.6	-0.384	-0.634
	GFB6	4.308	1.942	-1.117	-0.233
Saving Behavior	SB1	4.8	1.729	-0.326	-0.63
	SB2	4.763	1.66	-0.366	-0.625
	SB3	4.957	1.797	-0.591	-0.641
	SB4	5.265	1.518	-0.199	-0.683
	SB5	4.51	1.917	-0.895	-0.472
	SB6	4.322	1.953	-1.075	-0.349
Spending Behavior	SPB1	4.473	1.818	-0.901	-0.34
	SPB2	4.902	1.717	-0.32	-0.654
	SPB3	5.162	1.68	-0.113	-0.833
	SPB4	4.9	1.699	-0.619	-0.54

Payment Management	PM1	5.487	1.611	0.379	-1.078
Risk Management	RM 1	4.702	1.689	-0.36	-0.516
	RM 2	4.588	1.858	-0.871	-0.399
	RM 3	4.232	1.835	-0.997	-0.131
Money Management	MM1	4.32	1.602	-0.044	-0.253
Propensity To Plan	PP1	5.468	1.524	0.737	-1.058
	PP2	4.728	1.75	-0.785	-0.544
	PP3	4.763	1.754	-0.723	-0.519
	PP4	4.99	1.715	-0.199	-0.812
	PP5	4.81	1.695	-0.512	-0.575
Financial Well-Being	FWB1	4.522	1.606	-0.469	-0.437
	FWB2	4.997	1.465	0.519	-0.881
	FWB4	4.775	1.567	-0.038	-0.677
	FWB11	4.69	1.677	-0.612	-0.486
	FWB16	4.85	1.492	-0.032	-0.521
Personal Well-Being	PWB1	4.978	1.63	-0.209	-0.645
	PWB2	5.128	1.415	0.351	-0.732
	PWB3	5.067	1.466	0.033	-0.753
	PWB4	4.942	1.505	-0.103	-0.631
	PWB5	5.332	1.445	0.115	-0.744
	PWB6	5.582	1.461	0.832	-1.135
	PWB8	5.223	1.519	0.016	-0.754
	PWB9	5.556	1.418	0.332	-0.94

5.2 TESTING OF CONCEPTUAL MODEL

The conceptual model of the study depicts that financial literacy influences financial behaviour and financial well-being, secondly financial behaviour plays a role of mediator between financial literacy and financial well-being. Thirdly financial well-being influences the personal well-being and plays a role of a mediator connecting financial literacy and financial well-being. The conceptual model examines the following relationships:

- Linking financial literacy and financial behaviour.
- Linking financial behaviour and financial well-being.
- Linking financial literacy and financial well-being.
- Linking financial well-being and personal well-being.
- Mediating role of financial behaviour connecting financial literacy and financial well-being.
- Mediating role of financial well-being connecting financial literacy and personal well-being.

5.3 RESEARCH OBJECTIVES

5.3.1 **Objective 1**: To study the influence of financial literacy on financial behavior of households in Jammu Province.

To achieve the objective following hypothesis was framed and tested

$H0_1$: There is no significant influence of financial literacy on financial behaviour

HA_1: There is a significant influence of financial literacy on financial behavior

The results (shown in figure 4.11) it had been found that there is a significant influence of financial literacy on financial behavior. The path coefficient between financial literacy is 0.595 and the p value is less than 0.05. On the basis of the results, $H0_1$ stated that there is a no significant influence of financial literacy on financial well-being had been rejected. Hence, the study makes it clarified that financial literacy has a significant positive influence on financial behavior.

The path coefficient or correlation between financial knowledge and financial literacy is 0.536, between financial attitude and financial literacy is 0.209, between general financial awareness and literacy is 0.358. From the analysis of data collected from the respondents, it had been found that financial knowledge is at the top priority among financial knowledge, financial attitude and general financial awareness. So, it must take necessary actions with respect to impart knowledge to the public and in line to do so must organize various programs at root level, ensuring the practical implications of the imparted knowledge by the participants. Financial knowledge works as a preliminary source that will provide an awareness of the various financial concepts, available financial instruments and help in inculcating financial skills among the people. Along with financial knowledge, if there is something that gains an importance is inculcating an attitude of people to accelerate the pace of financial literacy. An individual after having knowledge and getting aware of various instruments, govt. schemes their benefits and available interest rates, be in a position to grab the benefits of the available opportunity and are ready to take the responsibility of their financial decisions. It ensures that they are confident enough with desirable attitudes. Discussing financial knowledge and its association with its indicators, found that it is need to be focused heavily on FK8 as it is highly loaded followed by FK14, FK13, FK4, FK12, FK11, FK10, FK15, FK2.

5.3.2 Objective 2: To examine the influence of financial literacy and financial behavior on financial well-being of households in Jammu Province.

To achieve the objective following hypotheses were framed and tested

$H0_2$: There is no significant influence of financial literacy on financial well-being.

HA_2: There is a significant influence of financial literacy on financial well-being.

$H0_3$: There is no significant influence of financial behavior on financial well-being.

HA_3: There is a significant influence of financial behavior on financial well-being.

Results shown that financial behaviour of the households who are taking financial decisions measured by their saving behavior, spending behaviour, risk management, payment management and propensity to plan.

The path coefficient between financial literacy and financial well-being is 0.389 (shown in fig. 4.12) and the path coefficient between financial behavior and financial well-being is 0.673 (shown in fig. 4.13).

Results of the study had shown a significant positive relationship between financial literacy & financial well-being and significant positive relationship between financial behavior and financial well-being. So, on the basis of this $H0_2$ & $H0_3$ had been rejected. In context to the degree of relationship, it is high between financial behavior and financial well-being compared to financial literacy and well-being. So, on the basis of results, it had been suggested that along with improving the level of financial literacy among households, who are taking financial decisions, it is highly recommended to develop their sound financial behavior. As financial behavior represents, how efficiently and productively they are using the available financial resources and how successfully they are taking and imparting the financial decisions. It tells about the capabilities of the people to manage their payments and risk associated with various investment options and how much talented they are to grow their money.

5.3.3 Objective 3: To study the mediating role of financial behavior between financial literacy and financial well-being.

To achieve the objective following hypothesis was framed and tested

$H0_4$: There is no significant role of financial behavior between financial literacy and financial well-being.

HA_4: There is a significant role of financial behavior between financial literacy and financial well-being.

Results of the data analysis have shown a noteworthy affiliation between financial literacy and financial behavior (shown in fig. 4.15). Secondly, there is a noteworthy affiliation between financial literacy and financial well being (shown in fig. 4.14). Thirdly, there is a noteworthy affiliation between financial behavior and financial well being (shown in fig. 4.16). Finally, at the time of applying the mediation analysis, where financial behavior acting as a mediator between financial literacy and financial well being, it had been found that the direct relationship between financial literacy and financial well-being become insignificant and financial behavior proved as a strong factor to highly affect the financial well-being of the households (shown in fig. 4.18). Financial behavior comprises of saving behavior, spending behavior, payment management, money management, risk management and propensity to plan strongly affects the financial well-being. Financial well describes the capability to handle unexpected expenses, propensity to secure financial future, managing money in such a way so that they can enjoy their life in the manner as they want and become capable enough to achieve the financial goal that they set for themselves. The ability of an individual to meet their monthly expenses represents the situation of financial stability that ensures financial well-being.

On the basis of results, it can be concluded that financial behavior acting as a strong mediator between financial literacy and financial well-being. It acts as a principal construct in this model. So, as we know that the behavior of an individual is unpredictable and uncontrollable. So it is suggested to the govt. to frame such schemes, strategies and policies that influence human behavior. Human behavior can be channelized and controlled with the help of certain incentive that is be beneficial to the individual, it means in his or her interest either through monetary or non-monetary incentives. If we talk in general human reacts rationally. So, it is essential to develop logical thinking and sound behavior among individuals and need to be focused to develop sound financial behavior among individuals. If we talk about the poor and middle income groups, mainly they are concerned with the monetary benefits and if we talk about the rich income group they are concern with their name, fame and reputation, means are concerned with non-monetary incentives. Therefore, policies should frame suitable to all income groups in society. The strongest way to control people's behavior is to provide real-world examples. Here, we should offer such personalities who have achieved financial success and now wealthy enough, financially independent because of their financial behavior, that is the result of financial knowledge, education, attitude and general financial awareness. These personalities can act as a motivating force for others by setting an example.

5.3.4 Objective 4: To study the mediating role of financial well-being between financial literacy and personal well being.

To achieve the objective following hypotheses were framed and tested

$H0_5$: There is no significant role of financial well-being between financial literacy and personal well being.

HA_5: There is a significant role of financial well-being between financial literacy and personal well being.

The results of the study show that financial literacy has significant direct effect on the financial well-being. The path coefficient between financial literacy and financial well-being is 0.389. Secondly there is a significant influence of financial well-being (FWB) on personal well-being (PWB) i.e. 0.672 (shown in figure 4.22) it shows that there is a significant relationship between FWB and PWB. The relationship between financial literacy and personal well-being found significant i.e. 0.227. There is a sudden change/shift in the results and the direct relationship between financial literacy and personal well being in a situation when financial well-being introduced as a mediator connecting financial literacy and personal well being. The direct association linking financial literacy and personal well-being becomes insignificant. Measuring the indirect relationship between financial literacy and personal well being strengthened the result of the mediation effect. The results conclude that financial well being strengthened the relationship between financial literacy and personal well-being. Hence, it is a case of full mediation as the direct relationship between financial literacy and personal well-being is becoming insignificant with the inclusion of financial well-being as a mediator between financial literacy and personal well being. These results depict that financial well-being plays the role of principal component or construct between financial literacy and financial well-being. The results revealed that an individual is thinking about its personal life, how much he/she is satisfied with their standard of living, what he/she is achieving in their life, their safety and security. The state of being financial satisfied and happy i.e., their financial well-being strongly influences the level of satisfaction from personal relationships.

5.3.5 Objective 5: To study the effect of financial well-being on personal well being.

To achieve the objective following hypotheses were framed and tested

$H0_6$: There is no significant influence of financial well-being on personal well being.

HA_6: There is a significant influence of financial well-being on personal well being.

The path coefficient between financial well-being and personal well-being is 0.672 and p value of significance <0.05. On the basis of the results of the study, $H0_6$ is rejected stated that there is no significant influence of financial well-being on personal well-being. The results of the study show that there is a significant positive relationship between financial well-being and personal well-being. Hence, it can be concluded that ability to handle major unexpected expenses, securing financial future, managing money, achieving desired financial goal and to meet normal monthly living expenses significantly affects the personal well being.

On the basis of the loading of the indicators we can suggest that on which aspect it is required to be focus more by the policy makers and other stakeholders.

Table 5.5: Path coefficient and p values

Path	**Coefficient**	**P values**
Financial Literacy>Financial Behaviour	0.595	0.000
Financial Literacy>Financial well being	0.389	0.000
Financial Behaviour> Financial well being	0.673	0.000
Financial well being>Personal well being	0.672	0.000

CHAPTER-6

FINDINGS, CONCLUSION, IMPLICATIONS AND SUGGESTIONS

CHAPTER-6

FINDINGS, CONCLUSION, IMPLICATIONS AND SUGGESTIONS

Financial Literacy, Financial Well-Being and Personal Well Being (With special reference to selected households in Jammu Province) is a research work explores and measures the level of financial literacy, financial behavior, financial well-being and personal well-being of households, who is taking financial decisions and signifies the voice of 400 households (respondents). The study strength is that it is the expression of households financial literacy level, Knowledge and attitude toward various financial concepts and instruments. For households who are taking financial decisions, sources of income and decision related to their, including day-to-day routine expenses, monthly savings, investments, savings for emergencies, for some occasions, for big future expenses, for education of children, for medical emergency are crucial. Sometimes having adequate income but inadequate and improper money management leads to great financial stress. Such financial disturbances and imbalances can be handled by taking right financial decisions at right time. For this purpose, the basic necessity is to have an awareness of the various financial concepts like when to save, where to invest, which is ensured by the sound financial behavior. It determines the healthy spending behavior, proper money management, payment management, risk management and propensity to plan with the focus on budgeting. Having sound and effective financial behavior is a pathway to financial well-being that ensures financial satisfaction, that can be derived when an individual is capable enough to manage their day-to-day expenses, securing their financial future, can handle any unexpected financial shock, have proper insurance, can manage the money at the time of emergency and have a surplus after meeting all the expenses. Gratitude of an individual from his or her life in terms of personal relationship, financial security, social safety, health and religious contentment that determines the overall personal well-being. For household money management is ensuring the state of financial stability and wealth accumulation. It is an important and crucial aspect that is inevitable and cannot be separated from the overall personal well-being.

The first chapter is the introduction and highlights the research area. The second chapter is a literature review, which underlines the significance and importance of this study. This chapter gives a brief about the research work already done in context to the constructs chosen for this study and shows the linkage between these constructs. It shed light on the research gap. A conceptual model had been developed based on the literature review and the same had been tested in this research work.

The third chapter classified the research methodology. This chapter explains the objectives of the study, research questions, hypothesis, research design, population and sampling frame, sample design and sampling unit. Then, after the procedure for data collection, the process of finalization of the research instrument, procedure for selection of sample size and conceptual framework of the study based on the literature had been explained. This chapter highlights the number of targeted households taking financial decisions and tools and techniques used for collecting the data and its analysis.

The fourth chapter explains the steps followed for measurement and validation, including scale development process**,** construct definition**,** the generation of items, sample size and data collection**.** This chapter focused on multivariate normality and reliability**,** dimensionality of the construct, methods of estimation**,** the validity of individual construct**,** multicolinearity**,** measurement model assessment, structural model assessment using PLS-SEM, reliability analysis and descriptive statistics.

Chapter V describes the results of the conceptual model tested by the researcher. This chapter provides suggestions to the government, policy makers, industry, academicians and general society and its influence. This chapter explains the influence of financial literacy on financial behavior, financial well being and personal well-being. It highlights the important variable that needs to be focused and strengthened.

This chapter sum up the findings, conclusion, implications and suggestions for future work. It also provides evidence concerning the importance of this research on financial literacy among households and must benefit the future generations.

6.1 FINDINGS AND DISCUSSIONS

The findings of the research on the topic financial literacy, financial well-being and personal well-being (A Study on Selected Households of Jammu Province), make a significant contribution to financial literacy, financial behavior, financial well-being and personal well-being of the households. The findings reflect the respondent's level of financial literacy, including financial knowledge, financial attitude, and general financial awareness; financial behavior including saving behavior, spending behavior, way of risk management, money management & payment management and propensity to plan; financial well-being and personal well-being.

Financial literacy is directly linked with an informed and sound financial decision (OECD, 2013, RBI, 2017). In line to the above statement, it is required on the part of the banking industry to make the public aware about various financial schemes for the upliftment of the women, farmer and other vulnerable groups and trained them. Making the public financially literate enables them to manage their personal finance efficiently. It must develop the saving habits among them to make them financially independent. Making people financially literate enables them to inculcate the habit of retirement planning, budgeting, insurance to ensure financial security.

Financial literacy questions included basic and sophisticated financial literacy questions conclude that households have a low level of financial literacy. The total number of eight questions was asked from the respondents, 5 questions based on basic financial literacy and three questions based on sophisticated financial literacy questions. The results of basic financial literacy conclude that on an average 33.5% of the respondents had given the correct answers, whereas in case of sophisticated financial literacy questions, only 24% of the respondents had given the correct answers.

Under basic financial literacy, there were 5 questions based on numeracy, inflation, risk diversification, compound interest and time value of money. 63.75% of the respondents correctly answered the numeracy question, 36% appropriately answered the inflation-based question, 13.5% correctly answered the risk diversification question, 40.75% correctly answered the compound interest question and 13% appropriately answered the time value of money question. On the basis of the results of basic financial literacy questions it can be concluded that the understanding of the respondents in context to risk diversification and time value of money is low, in context to compound interest and inflation is moderate and numeracy is comparatively high. In case of sophisticated literacy questions, 3 questions were asked from the respondents, including Stock market functions Knowledge of mutual funds Long-term return. 5.25% correctly answered the stock market question, 37.5% correctly answered the mutual fund-based question and 29% correctly respond the long-term return-based question. The ratio of investment in the stock market also found low. Only 18.25% of the respondents invested in the stock market. On the basis of these results, it can be concluded that understanding and awareness regarding stock market, mutual funds and so on is low among households. In context to socio-economic and demographic profile of the respondents, 66% are males, 33.8% are females and 0.2% are others (not prefer to say). 46% of the respondents belong to rural area and 54% belong to the urban area. In context to earning member of the family approximately 58% of the respondent replied that he/she is the only earning member of the family,9.5 respond both husband and wife are earning member, 5.8 respond mother is the only earning member, 7% respond husband is the only earning member, 2.8 respond father is the only earning member, 0.5% respond that me, my wife and child/children, 8.5% respond that only child/children is/are earning source of their family, 2% respond all of us are earning, but in context to financial decision 21% respond that father takes the financial decision, 17% respond that me, my wife and child/children takes the financial decision, 11% respond that I am the only who takes the financial decision, 8.5% respond that only child/children takes the financial decision.

Table 6.1: Percentage of earning members and financial decision maker of the family

	Who is taking financial decisions (in percentage)	Earning member of the family (in percentage)
Husband	6.0	7
Wife	7.5	2
both husband and wife	2.75	9.5
Mother	3.75	5.8
Father	20.75	2.8
Children	8.5	4
mother, father and me	.75	2.3
me and my father	.25	4
me, father and wife	1.75	.3
mother, father, wife and children	3.25	.5
me and my children	.25	.8
me, my wife and children	16.75	.5
me, my husband and children	12.5	1
only me	10.5	57.8
all of us	4.75	2
Total	**100%**	**100%**

13.8% of the respondents fall under the age group of less than 25, 20.8% in the age group of 26-35, 15.8% between the age group of 36-45, 31.8% in the age group of 46-55 and 18% at the age of 55. 5.5% of the respondents do not have formal education, 9.5% have educational qualification of below 10th class, 13.5% are matriculate, 16.8% are intermediate, 23.3% are graduate and 25.5% are post graduate. 65% of the participants are married, 31.3% are unmarried. 2.8% are widower/widow and under other category is 1%.

36.8% of the respondents comes under the income group of below 2,00,000 per annum, 44% in the category of 2,00,000-10,00,000, and 19.3% of the respondents in the income group of above 10,00,000. On the basis of these results, it is concluded that most respondents fall in the middle income group (McKinsey Global Institute, 2010). In context to the occupation majority of the respondents are in a govt. and semi-govt. service i.e. 50.2%, followed by businessperson 17.5%, private job 14%, agriculture 6.8% and others. 72.8% living in nuclear family and 27.2% have joint family. Approximately

60% of the respondents does have 4-5 dependent persons, whereas 9.5% have more than 5 dependent persons.

In terms of family size, approximately 70% of respondents have 3-5 members in their family. 85% are living in the pucci house, 10% are living in the semi-pucca house, 4% are living in the kachha house and 1% is living in any other. 91.3% have their own house, whereas, 8.7% are living in rented accommodation. Approximately 80% respond that all children are going or ever gone to school/college. 8% respond that less than 50% children ever gone/going to school/college, 3.75% respond that more than 50% children ever gone/going to school/college and 8.5% respond that no child/children ever gone/going to school/college.

Approximately 49% of the respondents employed 1-2 part-time servants on a salary basis for domestic work, whereas approximately 46% do not employ any servant at their home. 1.5% employed 12 part-time servants, 3% employed only 1 full time servant for domestic work, 0.5 employed 3 ore more than 3 part-time servants. 1.5% has more than 100 acres of land, approximately 13% of the respondents have 8-50 acres of land, 64.75% have less than 1 acre land whereas, 21% does not have any land. In context to income tax paid, 36.25% of respondents are not paying income tax, 17% are paying less than 5000, 13% are paying more than 5000 but less than 10000, 11.25% are paying more than 10000 but less than 20000, 7.25 are paying more than 20000 but less than 50000, 7.25 are paying more than 50000 but less than 100000, 7.5% are paying more than 100000 but less than 1000000, 0.5% are paying above 1000000.

The findings of this study disclose that households do not have sufficient knowledge about investments and other personal finance issues. Their knowledge is least in the areas of understanding of risk diversification and understanding of time value of money. There is a scarcity of stock market awareness. The advancement in the intensity of monetary proficiency improves the state of financial capability. It depicts that monetary awareness strengthens financial knowledge.

How did the people think and feel about money, determine their interest to learn about money. People’s capability and readiness to connect with their money can be managed by improving their attitude toward money. Conquering and managing this outlook is an important part of civilizing people's ability and keenness to administer their personal finance effectively. Most respondents facing the problems or should develop their behavior for effective management of monetary issues including dealing with credit cards, budgeting, managing debt, knowledge of insurance, investing, retirement planning, understanding rights, risk management, money management, payment management and responsibilities being an investor and securing the financial future. Most of them show their interest and optimistic attitude toward future financial goals and their accomplishment. If people do not feel that they need to be progressive and informed, they will never search for it. Thrust for learning and considering its relevance, is desirable and required for taking the right action at right time. Unawareness is not the big issue but inappropriate attitude is an actual hurdle that prevents from taking necessary action. The current research proves that financial knowledge, financial attitude and general financial awareness constitute an important part in determining financial behavior. It is noteworthy to consider that improved financial literacy supports and lead toward positive behavioral changes. Positive changes in financial behavior toward saving, spending, repayment, risk management and propensity to plan will ensure financial well-being. Ignorance and offensive attitude are the basic cause of ineffective financial behavior. Money is not the problem but the attitude is.

Most of the experts had found monetary decisions based more on emotions and desires rather than logic. People prefer to stay out of monetary trouble. The logical outcome is that individuals are made up of attitudes and actions. Day-to-day financial management skills are greatly influenced by financial literacy. Informed decisions regarding earning, spending, and the management of money and its effective management require financial knowledge. Since the complexity of financial markets is increasing day by day, awareness regarding the sophisticated financial concepts like mutual funds, its advantages, rights of investors, various investment avenues should be known and clear to the common man. Talking about inside and outside of their households it is essential to acquire financial knowledge, skills and confidence to effectively participate in monetary activities and economic decision-making.

With everyday money management issues like budgeting, saving, dealing with credit and managing debt women express confidence in their ability with money. The lack of financial knowledge and confidence affects the ability of households to reach their financial goals. Serious long-term, negative societal consequences can be outcomes of failure to manage personal finances. Insufficient income to get all needs done is the major barrier to conduct the financial goals. Fixing and achieving short-term and long-term targets are one of the crucial aspects to attain the financial goal. Individual preferences to plan affected by their knowledge and attitude. It is proven in the survey that people with a high propensity to plan, give more time to develop their financial goals and save more. Having financial goals with definite plans is always beneficial.

6.2 CONCLUSION OF THE STUDY

To perform data analysis smart PLS3, SPSS and JAMOVI software had been used. The following had been done included measurement model assessment to perform the confirmatory factor analysis and structural model assessment to perform the multiple regression analysis. Various steps had been performed under this (shown in figure 4.1) Financial literacy is measured through financial knowledge, financial attitude and financial awareness. Out of three, financial knowledge is contributing and getting more importance. This concludes that it is required to focus on imparting the financial knowledge to general public by organizing various programs at local and regional level. The results concluded the significant direct effect of financial literacy on financial well-being, but it is not that much strong. There is significant direct effect of financial literacy on personal well-being, again this is not that much strong. Further, after testing the extended model with the involvement of mediator connecting financial literacy and financial well being i.e. financial behavior and mediator connecting financial literacy and personal well being i.e. financial well being a new direction came into an existence.

Results of mediation analysis come up with a very relevant and an interesting conclusion that, if we describe the relationship between only two constructs i.e. financial literacy and well-being. Yes, the direct relationship is significant and there is a positive influence of financial literacy on financial well-being. But as the mediator i.e. financial behavior was introduced the direct relationship between financial literacy and financial well-being that was significant earlier now become insignificant. It shows that there is any other construct that have greater affect on the financial well being and faded away or lightening the direct effect of financial literacy on financial well-being. On the basis of this conclusion can be drawn that if there is something that is affecting the financial well-being or state of financial happiness more than financial awareness or literacy it is the financial behaviour of the households.

It is significant to note that financial literacy and its variables such as financial attitude, knowledge and general financial awareness are noteworthy to uplift the level of financial literacy. There is a casual relationship between the constructs of the study i.e. financial literacy, financial behaviour, financial well being and personal well being. The current research proves that there is a significant relationship between financial literacy and financial behavior.

The scores of basic financial literacy and sophisticated financial literacy depict the low level of financial literacy among households. The result proves that there is needed to boost the confidence level of the people and make them aware of the risk and benefits associated with their financial decisions regarding investments in various financial instruments. It is also very much important to understand the time value of money, which will inculcate the habits of investment rather than merely focus on the informal savings. As savings either formal or informal doesn't contribute in the wealth multiplication of an individual.

Considering about the personal well-being of the people, something which is more important and influential than financial literacy, it is financial well being. This concludes that being satisfied with life as a whole, satisfaction on the part of health, satisfaction regarding personal relationship, safety and financial security determined by the state of being financial health and soundness. It must inculcate the habit of taking financial risk among individuals, and then only they do prefer to make investment in the security market, mutual funds, and likewise investment.

Financial literacy has a significant influence on financial behaviour in terms how an individual spend, save, invest, how much they are spending , their skill to manage the risk and their personal money, habits of preparing budgets, monetary plan and efficiency of implementing and controlling it. If we are not making productive use of our personal money we are not only cheating our self, even we are cheating an economy as a whole. So, being a responsible citizen along with other responsibilities, productive use of personal finance is also a responsibility towards a country. In the end, it can be concluded that the financial literacy of people also enhances the savings and ultimately helps in the development of economy. Hence, there is a need to enhance the financial literacy among the people.

6.3 CONTRIBUTION OF THE STUDY

This research contributes to an existing literature of knowledge related to financial literacy, financial behaviour, financial well-being and personal well being. Firstly, this study examines the influence of financial literacy on financial behaviour. Secondly, examines the influence of financial literacy and financial behavior on financial well-being. Third, examine the mediating role of financial behavior between financial literacy and financial well-being. Fourth, examine the influence of financial literacy on personal well-being. Then after, examine the influence of financial well-being on personal well-being. Finally, examine the mediating role of financial well-being between financial literacy and personal well being. The study comes up with interesting results that need to be focused in order to improve the level of financial literacy, modify and develop the desirable financial behaviour, ensure the financial well being and personal well being of the households. The results of the study conclude that financial knowledge, financial attitude and general financial awareness contribute significantly in strengthening the level of financial literacy. Out of these three, financial knowledge gained more importance and the same had been proven empirically and supported by the literature (Pramahender et al., 2020).The present study used and analysed the various indicators to measure each construct/variable.

Financial knowledge ensured that the people do have the understanding of disposable income, they need to be acquainted with various available financial apps supporting them to take investment decisions, have an idea over tax saving investment, they should can differentiate high risk and low risk investments. They have inclusive knowledge in time value of money, have a better understanding of the concept of Net worth, frequently observe the effects of inflation on cost of living and investment, are able to understand the power of compound interest, familiar with online trading (buying & selling of shares), knows the rights and responsibilities being an investor, access investment related news/updates through personalized market ,websites/channels and do observe the index movements of Sensex and Nifty and use the same for making investment decisions. They have knowledge about investment analysis software and investment management software. Those who had invested and who are supposed to invest in the stock market should have an awareness of demat account and it's functioning.

Financial attitude of an individual's determined by the number of indicators. It comprises complete knowledge of available financial instruments, complete knowledge of interest available on various financial instruments and confident of their abilities to select financial instruments for investment with full responsibility for the result of their investment decisions. In short, we can conclude that financial attitude comprises of knowledge, confidence and responsibility. General financial awareness comprises awareness and knowledge about Tax Saving Schemes, Life insurance policies, Post Office Products, knowledge of mutual funds, public provident fund (PPF), awareness of real estate, equity shares, govt. bonds / debentures/ NCDs, Money Market (Call, T Bill, Liquid Funds) and awareness of Derivatives/Commodity Market/Currency Market.

Under the financial behaviour construct we do have seven reflective variables including general financial behaviour, saving behaviour, spending behaviour, payment management, money management, risk management and propensity to plan. Indicators of general financial behaviour includes, did they set financial goals and objectives in their life, make plans on how to reach financial goals, do they regularly discuss financial goals with their spouse/family, have an habit of preparing budget every year. Did they set aside money for special events and maintain their financial records in detail. Saving behavior of an individual determined by various indicators included, did they save as per the planned schedule, save at least 10% of their gross monthly income, increase their savings when their salary increases, contribute annually to a retirement savings plan and saving money to get tax deductions. Indicators of spending behavior includes, did they have a definite spending pattern for regular monthly expenses, carefully plan my big purchases in advance, comparing prices while Purchasing the products, have a habit of reviewing and evaluating their spending habits/pattern.

An indicator of Payment management determines, whether a person is always paying their bills on time to avoid finance charges. Indicators of risk management include that whether individual adequately set money aside for possible unexpected expenses, adequately insured their personal property and regularly reviewing the adequacy of the insurance coverage. Indicators of money management includes does individual checks statements, bills and receipts to make sure there were no errors and the indicators of propensity to plan includes did an individual consult their budget to see how much money he or she left with, do they actively consider the steps needed to stick to their budget, did they set financial goals for what they want to achieve with the available money. Do they prepare a clear plan of action with detailed steps to achieve their financial goals and the most important aspect above all this, did they know what is budget and did they prepare it.

Financial well being of individuals determined by various indicators including, could an individual handle a major unexpected expense, are they securing their financial future, can they enjoy life because of the way they are managing money, did they achieve the set financial goals and are they able to meet their normal monthly living expenses. How an individual thinking about his/her own life and personal circumstances? How satisfied they are with their life as a whole? How satisfied they are with their standard of living? How satisfied they are with their health? How satisfied they are with their achievements in life? How satisfied they are with their personal relationships? How satisfied they are with their spiritually, socially and financially? The above mentioned are indicators of personal well-being.

The results of the study concluded that financial literacy has a significant direct influence on the financial behavior and financial well being of the households. The study also found that financial literacy also has a direct influence on financial well being and personal well being of the households, results are in line with (Ranyard et al., 2020;

Philippas and Avdoulas, 2019; Xue, 2019). This study examined the mediating role of financial behaviour between financial literacy and financial well being and then after studied the mediating role of financial well being between financial literacy and personal well being. The results of the study concluded interesting facts and contribute to the existing literature. The results of the mediating analysis concluded that financial behavior plays a noteworthy role and acting as a principal agent and full mediation role connecting financial literacy and financial well being. On the other hand, financial well being acted as a principal agent and full mediation role between financial literacy and personal well being.

The present study provided a more comprehensive definition of financial literacy:

Financial literacy is "a combination of awareness, knowledge, skill, attitude and concerned with managing money rather than merely earning and saving money, ensuring practical implication of financial knowledge to make informed financial decision, achieve individual financial well-being and ultimately attaining personal well-being ".

6.4 SUGGESTIONS AND PRACTICAL IMPLICATIONS OF THE STUDY

S.No.	Suggestions	
1.	*For policy makers and government*	• It is suggested to the government to focus more on **capacity building** program and to introduced financial education program in every organized sector. • It is suggested to MHRD to introduce **customized courses** to promote financial education (on Swayam portal). • It is suggested to create a **digital platform** to report the feedback of the various programs conducted by the banks and any other institution. • It is suggested to **frame the policies** at the centre level, implemented by every Union territory and state govt. to encourage private employees, businessperson, daily wagers and other likewise people, who don't have a permanent source of income, for retirement planning.

		• To establish a separate **Financial Literacy Centre** (FLC) in affiliation with recognized universities, banks and other institution, headed by an expert, in all the districts of every state throughout the country and its address need to be **communicated via newspaper, local radio channels, local T.V channels, face book link, mass media** etc., so that it reach to each and every individual of that area (district). • It is suggested to the government to establish a **separate cell in the banks** to provide financial advice and counseling to customers. • It is suggested to Indian government to introduce a **separate TV channel** to promote financial education. • It is suggested to the government to arrange **workshops/seminars/ short-term training programs** to create awareness among the public. • To **reframe the education policy and incorporate the concept of finance** and financial literacy and make it mandatory in the curriculum of basic education at school level and colleges irrespective of the discipline, i.e. science, arts, humanities, social-sciences, engineering, medical etc • It is suggested to establish **a task force** to collect the data related the level of financial literacy among all the districts of the respective states and UT.
2.	*For academicians*	• It is suggested to **organize workshops, webinars, lectures, seminars** based on financial awareness and add such events in their academic activities. • It is suggested to customize various **financial education programs** and courses related to finance as per the need of the participants

		• It is suggested to the academicians to provide **assignments to University students** as a part of a project based on financial literacy. • It is suggested to all the academicians to build a team and to establish a **separate Financial Literacy Cell (FLC) in universities and colleges** headed by an expert, in all districts of every state throughout the country and its address need to be communicated via newspaper, local radio channels, local T.V channels, face book link, mass media, so that it reaches to each and every individual of that area (district).
3.	*For banking and industry*	• To provide **toll-free number for financial assistance**. It is suggested to the post offices, banks and other financial institutions to advertise the different schemes provided by them • **Real life example** should be given during the FLC to build a trust among the public related to use of various financial instruments and to facilitate the public with the accessibility of financial experts to whom they can concern for financial advice. • It is suggested to conduct **financial literacy camps** based on **hands on experience**. Short-term training programs in collaboration with NGOs, SHGs ensuring the participation of the households to familiarize the masses with various financial instruments and financial schemes. • Banks and financial institutions are suggested to organize financial **fairs and exhibitions** on special occasions like Diwali, Eid, Baisakhi etc. that inspires the general public to save and invest to grow their money and promote healthy financial behavior among the people. • Follow-up action plan should be there to report the output

		of the financial awareness programs under proper supervision.
4.	*For society*	• It is suggested to get responsible and **cooperate** with govt. and local bodies. Being a responsible citizen it is the duty of the entire educated and experienced citizen to create financial awareness among the youth and other needy person in their locality. • It is suggested to develop the habit of preparing a **budget**. For this purpose, it must do the financial awareness programs in schools, colleges, universities and other organized and unorganized sectors.
5.	For administrations	• It is suggested to local administration of each district to build a team at a block and village level to promote financial literacy and awareness through the channel of FLCs and need to be synchronized to perform in an efficient and effective manner. A team consists of financial experts, academicians, bank managers of local areas, panch and sarpanch, BDC headed and supervise by the DC can be established • It is suggested to follow the **bottom to top approach** to ensure the effectiveness of the financial literacy programs
6.	For private companies	• It is suggested to the well established private companies and institution to start their own foundations or financial literacy centres to promote financial literacy and expand their branches throughout the country (Some of the example set up by Tata Co., Reliance co., Linda foundation etc.). As a part of corporate social responsibility, providing financial education to the public is also a part of it.

Practical Implications

1. The financial literacy cells should be established in banks, schools, colleges, universities, financial institutions and organizations and government sectors to take proper measures to redress the issue. It will assist in promoting financial literacy with a degree of responsiveness. Such financial literacy cells should be recognised by the govt. and other authorities.

2. Mobile app should be created to provide all sorts of financial guidance and assistance or an online system need to be generated focused on ease of access to the general public.

3. Committee should be incorporated at state and UT level. Members of the committee should comprise of head of the committee, chairman, convener, coordinator and other members of the committee. The committee members should met after a stipulated period of time to discuss the previous progress and to discuss the future plan.

4. Task force should be established to promote the financial literacy. The members of the task force shall meet on regular basis to do the periodical reviews, to report the progress and successful implementation of the planned strategy. The task force should also provide the valuable suggestions and recommendations to the committee.

5. A nodal agency should be established to design and implement the Financial Literacy policies.

6. It is suggested to announce a best performer award to the organiser that will work as a motivational power to work with enthusiasm in the field of ensuring a maximum advantage to the attendant of various financial literacy programs.

Proposed VFL (Village Financial Literacy) Model for Villages to Promote Financial Literacy

CM/LT. GOVERNOR

*To frame the policies with a VFL vision for the respective state or UT

DEPUTY COMMISSIONER

Suggested to collect routine report and feedback frm BDC and DDC and take the necessary action.

To create and maintain a digital platform to have an interaction and discusion on regular intervals

BDC AND DDC

- To supervise all the sarpanches and do have a regular visit to overlook their actions and performance
- To provide information regarding various schemes offered by the govt. and facilitate to make productive use of it.

PANCH AND SARPANCH

*Suggested to have complete data of their villagers in soft and hard form

*Suggested to submit report of the development programs organised for the betterment of the villagers and village

* Suggested to have a proper grievance redressal mechanism

* Suggested to communicate all the programs to the villagers so that they get informed and can attend it

HOUSEHOLD

- To cooperate and coordinate with local govt. bodies, banks and other organisatons
- To get responsible

** Contribution of each hierarchy to promote financial literacy through graphical or model representation. There can be a wealthy nation only when nation have wealthy citizens and it can be possible only when every person who has income in his/her hand gets learn about how to maximize their wealth, learn about how to convert their earnings into investment/s and afterward how to maximize the returns on their investment.

6.5 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

- In context to the respondents, the current research work focused on households who are taking financial decisions. In the future, other segments that are responsible for spreading the financial awareness and playing an important role like banks, NGOs etc can be considered to know about the outcomes of policy implications.

- In future research can be conducted based on examining the performance of FLCs and its role in influencing financial literacy, promoting financial independence.

- In context to area, due to the defined time limit to complete the degree and other constraints like cost, it was not possible to cover the broader area. Therefore, the study is restricted to Jammu Province. In the future, the rest of the parts of Jammu and Kashmir and other states and union territories can also be taken into consideration.

- Theories of learning can also be applied to conduct experimental research and examine their role in influencing the financial behavior.

- This study doesn’t include any specific income group, in the future a particular income group can be studied based on the same model to get more elaborative results.

- This study is not restricted to a particular age group further study can be conducted focused on the particular age group.

- Present study is cross sectional, in future longitudinal study can be conducted.

- The penetration in the stock market found low. In line to this future research can be focused on finding the various antecedents responsible for promoting the investment in the stock market with a special focus on influence of psychology on investor’s behavior.

- On the basis of the Q^2 values, it is suggested to conduct future research to explore other variables that affect financial behavior, financial well being and personal well-being. The results of the study show the moderate effect of these constructs.

- In this study, we studied the mediating role of financial behavior between financial literacy and financial behavior and secondly study the mediating role of financial well-being between financial literacy and personal well-being. In the future, we can study the mediating role of financial well-being between financial behavior and personal well-being.

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APPENDICES
(QUESTIONNAIRE)

Annexure-I

QUESTIONNAIRE FOR HOUSEHOLDS

Financial Literacy, Financial Well-Being and Personal Well-Being
(With special reference to households in Jammu Province)

Research Scholar: Mamta Sharma

We are administering this questionnaire as a part of research (Ph.D) study on "Financial Literacy, Financial Well-Being and Personal Well Being (With special reference to households in Jammu Province)". We solicit your participation in completing this research. We shall be highly thankful to you for sparing your valuable time. We would really value your views on the concept which is aimed at measuring the outcomes of relationships by select variables in Jammu Province. The data gathered through this questionnaire would be used extensively for the purpose of academic research. We will ensure highest level of secrecy of responses.

(PART A)

GENERAL INFORMATION OF HOUSEHOLD

1. Name of Household Head (optional): ______________________________

2. Are you taking financial decision in your home (Yes) (No)

3. Name of District: ______________________________

4. Location: 1. Village 2. Town

5. Gender: Male [ ] Female [ ] not prefer to say [ ]

6. Earning member of the family

   a) Only Husband [ ] b) only Wife [ ]

   c) only Child/children [ ] d) both husband and wife [ ]

   e) All of us [ ] f) Other (Please Mention)

7. Who is taking financial decisions?

a) Only Husband [ ] b) only Wife [ ]

c) only Child/children [ ] d) both husband and wife [ ]

e) All of us [ ] f) Other (Please Mention)

8. Religion:

Hindu [ ] Muslim [ ] Christian [ ]

Sikh [ ] Others [ ]

9. Age :

Less than 25 [ ] 26 – 35 [ ] 36- 45 [ ]

46- 55 [ ] Above 55 [ ]

9. Education

a) No formal education [ ] b) below 10th Grade [ ]

c) Matriculation (10th) [ ] d) Intermediate [ ]

e) Graduate [ ] f) Post Graduate [ ]

g) Other [ ]

10. Marital Status

a) Married [ ] b) Unmarried [ ]

c) Widower/Widow [ ] d) Divorced [ ]

e) Separated [ ] f) Any other [ ]

11. Disposable Income per year

a) Below 2,00,000 [ ] b) 2,00,000-10,00,000 [ ]

c) 10,00,000 above [ ]

12. Occupation/Main Source of Income:

a) Agriculture

b) Service (Government/ Semi-Government/Private)

c)	Shop Keeper	d)	Industrial Worker
e)	Barber	f)	Potter
g)	Weaver	h)	Priest Home/Temple
i)	Dairy Farming	j)	Welder
k)	Carpenter	l)	Mason
m)	Agricultural Labour	n)	self employed
o)	Painter	p)	Other

13. No. of earning members in the family (Nuclear/Joint)

a) 3 or more members earning and income pooled [ ]

b) 2 members are earning [ ]

c) Only 1 family member earning [ ]

d) No earning member [ ]

14. No. of dependent persons

a) 1[ ] b) 2 [ ] c) 3 [ ] d) 4[ ] e) 5[ ]
f) More than 5 [ ]

15. Type of family: a) Joint Family [ ] b) Nuclear Family [ ]

16. Total no. of family members

a) 2 or less than 2 b) 3-5 c) 6-7 d) more than 7

17. Type of present house:

a) Pucca b) Semi Pucca c) Kachha d) Any other (Specify)

18. Possession of the House

a) Owned [ ] b) Rented [ ]

19. Education of children (in relation to head of the family) Note : Exclude under children below five years of age for this item.

a) All children going/ever gone to school/college

b) Less than 50% children ever gone/going to school/college

c) More than 50% children ever gone/going to school/college

d) No child ever gone/going to school/college

20. Employment of a domestic servant at home

a) Employed more than 2 full time servants on salary for domestic work

b) Employed only 1 full time servant on salary for domestic work

c) Employed more than 3 part time servants on salary for domestic work

d) Employed 1-2 part time servants on salary for domestic work

e) Employed no servants for domestic work

21. Possession of agricultural land for cultivation (I Acres is equal to 8 Kanal and one kanal equals to 20 marlas)

a) Own agricultural land more than 100 acres

b) Own agricultural land 51-100 acres

c) Own agricultural land 21-50 acres

d) Own agricultural land 6-20 acres

e) Own agricultural land 1-5 acres

f) No agricultural land

22. Total amount of income tax paid by the family (include all the earning members IT)

a) More than10 lacs

b) 1-10 lacs

c) More than 50000 but less than 1lac

d) More than 20000 but less than 50000

e) More than10000 but less than 20000

f) More than 5000 but less than10000

g) Less than5000

h) Nil

(PART B)

SECTION-1: FINANCIAL LITERACY

Financial literacy provides familiarity with and understanding of financial products and combination of awareness, numeracy skills, knowledge, and attitude necessary to make sound financial decisions.

Choose the most appropriate option

1. Basic Financial Literacy Questions

1.1 Numeracy

1. Assume you have Rs. 100 in your saving bank account. It gives you 2% per annum simple rate of interest. After five years, what will be the amount in your account if you have never withdrawn money or interest from that account?

(i) Exactly Rs.102 [ ]

(ii) Less then Rs.102 [ ]

(iii) More the Rs.102 [ ]

(iv) None of above [ ]

(v) Don‘t Know [ ]

1.2 Understanding of Inflation

1. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year.

After 1 year, how much would you be able to buy with the money in this account?

(i) More than today [ ]

(ii) Exactly the same [ ]

(iii)	Less than today	[ ]
(iv)	Don’t Know	[ ]
(v)	Refuse	[ ]

1.3 Understanding of risk diversification

1. On investing the money by an investor among different assets and schemes, his risk of losing money

(i)	Stays the same	[ ]
(ii)	Decreases	[ ]
(iii)	Increases	[ ]
(iv)	Don‘t know	[ ]
(v)	Refuse	[ ]

1.4 Understanding of Compound Interest

1. Suppose you had Rs. 100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest. After 5 years, how much would you have in this account in total?

(i)	More than Rs. 200	[ ]
(ii)	Exactly Rs. 200	[ ]
(iii)	Less than Rs. 200	[ ]
(iv)	Don’t Know	[ ]
(v)	Refuse	[ ]

1.5 Understanding of Time value of money

1. Assume a friend inherits Rs. 10,000 today and his brother inherits Rs. 10,000 3 years from now. Who is richer because of the inheritance?

(i) My friend [ ]

(ii) Friend's Brother [ ]

(iii) They are equally rich [ ]

(iv) Don't Know [ ]

(v) Refuse [ ]

2. Sophisticated Financial Literacy Questions

2.1 I invested in the stock market

a) Yes [ ] b) No [ ]

2.2 Stock market function

1. Which of the following statements describes the main function of the stock market?

(i) The stock market helps to predict stock earnings [ ]

(ii) The stock market results in an increase in the price of stocks [ ]

(iii) The stock market brings people who want to buy stocks together with those who want to sell stocks [ ]

(iv) None of the above [ ]

(v) Don't Know [ ]

(vi) Refuse [ ]

2.3 Knowledge of mutual funds

1. Which of the following statements is correct about mutual funds?

   (i) Once one invests in a mutual fund, cannot withdraw the money in the first year [ ]

   (ii) Mutual funds can invest in several assets, for example invest in both stocks and bonds [ ]

   (iii) Mutual funds pay a guaranteed rate of return which depends on their past performance [ ]

   (iv) None of the above [ ]

   (v) Don’t Know [ ]

   (vi) Refuse [ ]

2.4 Higher LR return: stocks or bonds (returns based on time)

1. Considering a long time period (for example 10 or 20 years), which asset normally gives the highest return?

   (i) Savings accounts [ ]

   (ii) Bonds [ ]

   (iii) Stocks [ ]

   (iv) Don’t Know [ ]

   (v) Refuse [ ]

3. Please rate the level of satisfaction with the given parameters

Please rate the following statement using the given scale

Key:1= Strongly Disagree, 2=Disagree, 3=somewhat disagree, 4=Neither Agree nor disagree, 5= Somewhat agree, 6= Agree and 7= Strongly Agree

FINANCIAL KNOWLEDGE

S.No.	Financial Knowledge	Response/ Rating
1	I know the concept of disposable income and understand it.	
2	I know various available financial apps which support to take investment decisions.	
3	I have an idea over tax saving investment schemes.	
4	I have the ability to differentiate high risk and low risk investments	
5	I have complete knowledge of time value of money. (present & future money)	
6	I have knowledge to diversify my investments to maximize returns.	
7	I have better understanding of the concept of Net worth or total assets.	
8	Generally I observe the effects of inflation on cost of living and investment.	
9	I am able to understand the power of compound interest.	
10	I am familiar with online trading (Buy & Sell shares).	
11	I know the rights and responsibilities of an investor	
12	I access investment related news/updates through personalized market, websites/channels.	
13	I observe the index movements of Sensex and Nifty and use the same for making investment.	
14	I have knowledge of investment analysis software and investment management software	
15	I have knowledge of Demat account.	

4. Financial Attitude

S.No.	Financial Attitude	Response/ Rating
1	I have complete knowledge of available financial instruments or tools	
2	I have complete knowledge of interest available on various financial instruments	
3	I am confident of my ability to select financial instruments for investment	
4	I take full responsibility for the result of my investment decisions	

5. General Financial Awareness

Please rate the following statement using the given scale **1= Completely Unaware , 2= unaware, 3 = Moderately aware , 4= Neutral,** **5= Moderately aware , 6= Aware, 7= Completely Aware**

S.No.	General Financial Awareness	Response/ Rating
1	Saving Account	
2	Bank FD	
3	Tax Saving Schemes	
4	Life Insurance Policies	
5	Other Post Office Products	
6	Mutual Funds	
7	PPF	
8	Real Estate	
9	Shares	
10	Govt. Bonds / Debentures/ NCDs	
11	Money Market	
12	Derivatives (Futures and Options Markets)/Commodity Market/ Currency Market	

SECTION 2: FINANCIAL BEHAVIOUR

Financial behaviour tells about the saving, spending, Investment, debt management and Budgeting and other general habits related to finance.

Please rate the following statement using the given scale **Key:1= Strongly Disagree, 2=Disagree, 3=somewhat disagree, 4=Neither Agree nor disagree, 5= Somewhat agree, 6= Agree and 7= Strongly Agree**

S.No.	Financial Behaviour	Response/ Rating
a) General financial behaviour		
1	I set financial goals and objectives in my life.	
2	I make plans on how to reach financial goals.	
3	I regularly discuss financial goals with my spouse/Family.	
4	I do prepare budget every year.	
5	I set aside money for special events.	
6	I maintain my financial records in detail.	
b) Saving behaviour		
1	I save as per planned schedule.	
2	I save money for each specific objective.	
3	I save at least 10% of my gross monthly income.	
4	I increase my savings when my salary/income increases.	
5	I contribute annually to a retirement savings plan.	
6	I save money to get tax deductions.	

c) Spending behaviour		
1	I have definite spending pattern for regular monthly expenses.	
2	I Carefully plan my big purchases/expenditure in advance.	
3	I compare prices while Purchasing the products.	
4	I review and evaluate my spending habits.	
5	When I like something, I buy it without hesitation even if I have already overspent.	
d) Payment management		
1	I always pay my bills on time to avoid late payment charges.	
e) Risk management		
1	I adequately set money aside for possible unexpected expenses.	
2	I adequately insured my personal property.	
3	Regularly I review the adequacy of the insurance coverage.	
f) Money management		
1	I Stayed within budget or spending plan.	
g) Propensity to plan		
1	I know what is budget?	
2	I consult my budget to see how much money I have left.	
3	I actively consider the steps I need to take to stick to my budget.	
4	I set financial goals for what I want to achieve with my money.	
5	I prepare a clear plan of action with detailed steps to achieve my financial goals.	

SECTION-3: FINANCIAL WELL-BEING

(Financial well-being is a subjective concept that contributes to a person's assessment of his/her current financial situation and the perception of being able to sustain current and anticipated desired living standards and financial freedom)

Please rate the following statement using the given scale **Key:1= Strongly Disagree, 2=Disagree, 3=somewhat disagree, 4=Neither Agree nor disagree, 5= Somewhat agree, 6= Agree and 7= Strongly Agree**

	FINANCIAL WELL-BEING	**Response/ Rating**
1	I can handle a major unexpected expense	
2	I am securing my financial future	
4	I can enjoy life because of the way I'm managing my money	
11	I will be financially secure until the end of my life.	
16	I am comfortable on my personal debts/loans	

(How we think and feel about our lives, takes an individual's wellbeing towards the overall assessment of their life)

Please rate the following statement using the given scale **Key:1= Highly Dissatisfied, 2=Dissatisfied, 3=Somewhat Dissatisfaied, 4=Neither Satisfied Nor Dissatisfied, 5= Somewhat Satisfied, 6= Satisfied, and 7= Highly Satisfied**		
S.No.	**Personal well being**	**Response/ Rating**
1	Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?	
2	How satisfied are you with your standard of living?	
3	How satisfied are you with your health?	
4	How satisfied are you with what you are achieving in life?	
5	How satisfied are you with your personal relationships?	
6	How satisfied are you with how safe you feel? Or I feel safe in my society	
8	How satisfied are you with your future financial security?	
9	How satisfied are you with your spirituality or religion?	