Impact of Knowledge and Financial Personality Traits on Financial Behavior – A Study of Middle-Class Families in Pakistan

Ifra Khan

Research Scholar, Karachi University Business School

Dr. Danish Ahmed Siddique

Chairman, Karachi University Business School University of Karachi, Pakistan daanish79@hotmail.com

Abstract

Pakistan, like many other third world agrarian countries. is in the process of strengthening itself on social, political, economic and financial fronts. Role of educated individuals belonging to middle class families and their importance in this effort cannot be denied. Following the path of many other financial researchers from different parts of the world, this study is also an effort to study the financial Behavior of such individuals and to assess the impact of various cognitive and contextual factors on their Behavior. Various financial personality traits and attributes are included in the model to study their direct and mediating impact on individuals' financial Behavior. A sample of 400 representative individuals was drawn and data was collected to assess the impact of various factors. Our results show that along with objective and subjective financial knowledge, which make a strong impact on financial Behaviors, the other financial personality traits like numeric ability, cognitive reflection, self-control and selfefficacy also very significantly impact the financial Behavior. The mediating impact of financial anxiety and financial security on the financial Behavior is also studied. Since all these variables were taken from previous studies already carried out in different parts of the world so results are more in line with those of previous studies and no significant exception was noticed except for the difference in strength and intensity of their impact.

Keywords: Objective financial knowledge, Subjective financial knowledge, Numeric Ability, Cognitive reflection, self-control, self-efficacy

Introduction

People often make poor financial choices, such as purchasing items they cannot afford, getting into a life style they cannot afford, or failing to pay their bills on time. However, there is a significant degree of variation in people's tendency to partake in potentially risky financial activities (Campbell 2006). People vary in the degree to which they are concerned with financial issues, regardless of their financial conduct (Joo and Grable 2004). Despite the growing awareness of these concerns and the rapid evolution of financial markets, which forces citizens to cope with increasingly nuanced financial goods and services, our perception of human variations that influence financial activities and subjective financial well-being is minimal. This is unexpected, considering how important this expertise is in developing effective strategies and instructional services to help people improve their financial Behavior. As a result, it's important to have a better understanding of the importance of financial knowledge and literacy in dealing with financial anxiety and difficulties. In this reference the amount of expertise directly applicable to personal finance principles and goods is referred to as financial knowledge. This may be determined both objectively and subjectively through financial awareness and financial knowledge. Objective financial awareness is calculated by evaluating people's knowledge of various products and components of financial markets such as properties, debts, savings, and investments. Subjective financial knowledge is interpreted as trust in one's own financial competence. Individuals with high subjective financial knowledge but low empirical financial knowledge can be considered overconfident, which has been shown in previous case studies to contribute to poor financial results (Barber and Odean 2001; Robb et al. 2015; Statman et al. 2006), Individuals with strong objective yet low subjective financial experience, on the other hand, are underconfident, making them hesitant to make important financial decisions. Household financial Behavioral trends are determined by a combination of financial expertise and various degrees of financial personality traits like experience, fear, anxiety, security and curiosity in financial matters. In reality, there are other factors at play, such as people's differing attitudes, and therapeutic approaches, which may impair individual's and family's capacity to manage own and household finances. A person, for example, must be able to make sound decisions that are not influenced by emotions. Furthermore, this is applied to Behavioral psychology, which relates to an individual's ability to effectively manage their financial affairs based on a trust and determination to resolve obstacles and complete financial tasks; this is referred to as self-efficacy. Furthermore, not only is financial literacy widespread in households, but it varies by demographics such as

gender, education, residency, and age. Other variables that lead to a household's financial results and provide further insight into human variations in Behavioral habits and financial management skills may be considered when assessing a household's financial conduct.

Problem Statement

Despite the growing awareness of these concerns and the rapid evolution of financial markets, which forces citizens to cope with increasingly nuanced financial goods and services, our perception of human variations that influence financial activities and subjective financial well- being is minimal. When it comes to being able to deal with financial difficulties, it is critical to have a better understanding of the importance of financial literacy. Despite the importance of households to the financial sector, finance has focused almost entirely on the analysis of financial markets, non-financial companies, financial agencies, and other intermediaries for many years. Households were often relegated to the background, either as exogenous noise merchants or as a superficial representative agent. Households gained further exposure in the wider area of economics, with the emphasis mostly on their desire for goods or their savings activity in a single commodity. It's also necessary for normative purposes to thoroughly log and define the deeply nuanced and heterogeneous essence of household financial decisions. In an environment with many restrictions and imperfect economies, studies like this will help us to appreciate the effect of various economic policies and/or regulations. One of the main objectives of economics is to do this.

Research Objective

In this study, it is tried to explore how individual differences in objective financial knowledge (competence) and subjective financial knowledge (confidence), numeracy, and cognitive reflection were associated with sound financial Behavior and subjective financial wellbeing. The objective of this study is:

- To examine the effect of Objective/Subjective Financial Knowledge, Numeracy, Cognitive Reflection, Self-Control, Self-Efficacy on individuals or household financial Behavior.
- To examine the mediating impact of financial Anxiety and Financial Security between all independent variables such as objective and subjective financial knowledge, numeracy, cognitive reflection, self-control, self-efficacy and the dependent variable which is financial Behavior.

Research Questions

This is study is an effort to find out the answer to the following two main questions.

- 1. Do the objective and subjective financial knowledge, numeracy, cognitive reflection, self-control, and self-efficacy affect the subjective wellbeing of household finance or their financial Behavior?
- 2. Do financial anxiety and financial security mediate the impact of above variables on financial Behavior

Literature Review

Financial Knowledge

Many studies and household surveys carried out in different countries in the current era provide comprehensive list of indicators of objective (real) and subjective (perceived) financial literacy, as well as an insight into how financial literacy influences financial practices and Behavior. The findings show that both real and perceived financial literacy have a significant effect on financial attitudes, and that perceived financial literacy may be either as critical as even more important than actual financial literacy. The chunk of data provides a complete estimate of the total effect of financial literacy on financial Behaviors, and has been used by economists in the past to explain individual differences in financial Behavior "such as retirement planning (Lusardi and Mitchell 2007; Lusardi and Mitchell 2008; van Roil et al. 2011a; Lusardi and Mitchell 2017),

In different financial environments, subjective financial experience, or trust in one's willingness to participate in a specific activity, has also been found to be a significant predictor of Behavior (e.g., Farrell, Fry, & Risse, 2016; Robb et al. 2015). Anderson, Baker and Robinson. (2017) discovered that people's subjective financial awareness (i.e., confidence) was a greater indicator of savings activity than their quantitative financial knowledge (i.e., competence). In a similar study, Allgood and Walstad (2013) discovered that subjective financial expertise was a better indicator of less expensive credit card habits than quantitative financial information. One potential mechanism is that individuals who have a high level of financial trust are less likely to avoid financial details, which could influence their Behavior (Barrafrem, Västfjäll, & Tinghög, 2020). When it comes to sound financial conduct, beliefs regarding one's own information can be just as critical (if not more so) than real knowledge.

However, subjective financial experience or self-confidence in one's own financial abilities is not necessarily ideally associated with success (Parker et al. 2012). Financial maturity is described as the degree to which one's own values are aligned with one's actual financial competence (Woodyard & Robb, 2016). Overconfident people are others that are mis calibrated and have a strong subjective financial awareness but a poor quantitative financial knowledge. Overconfidence of one's own expertise has been linked to poor financial results (Barber & Odean 2001; Camerer & Lovallo 1999; Robb et al. 2015; Statman et al. 2006), as well as a tendency to take financial guidance (Barber & Odean 2001; Camerer & Lovallo 1999; Robb et al. 2015; Statman, Thorley, & Vorkink, 2006). (Kramer 2016; Lewis 2018). Individuals with low subjective financial awareness but strong quantitative financial knowledge may be considered underconfident. Under confidence may have a detrimental impact on financial activity because people become more hesitant to make necessary active financial decisions. In addition to trust, determining the relationship between under and overconfidence and financial conduct is critical.

According to Tharp (2017) the connection between financial literacy and financial happiness has shown conflicting findings for a review of relevant empirical studies). However, recent research on financial happiness have found a favourable relationship between subjective financial understanding and financial satisfaction (Joo and Grable 2004; Xiao et al. 2014), but a negative relationship between quantitative financial knowledge and financial satisfaction (Joo & Grable 2004; Xiao et al. 2014). (Seay et al. 2015; Xiao et al. 2014).

It is concluded that increased financial awareness is associated with a reduction in risky financial habits such as in risky credit card habits such as not paying credit cards in full; rolling over a balance and thereby incurring interest; being paid a late fee for late payment; and being charged a fee for breaching credit cap. People with high perceived and actual financial literacy are more capable of accumulating wealth by investments in stocks, bonds, mutual funds, and other securities. Om the other hand, lack of financial knowledge prevents people from participating in stock ownership (Cocco, Gomes, and Maenhout. 2005).

Other Financial Traits

There are many other traits of a financial personality which various studies discussed. The following four major traits extracted from various studies are discussed here. These traits were included and studied in research conducted by Lind et al. (2020), on Swedish

population. Following the footsteps, this research is also carried out on the same pattern for the middle-class educated urban population of Pakistan.

- 1. Numeric Ability
- 2. Cognitive Reflection
- 3. Self-Control
- 4. Self-Efficacy

Numeric ability. It is different than financial literacy. It is characterized as reasoning abilities or the ability to process numerical information and do calculations, while financial literacy is defined as awareness of financial principles and goods. Financial literacy may be thought of as a support for numeracy. Many people lack basic numeracy and financial literacy skills, with significant differences within age, education and environment they live in. Numeracy skill is positively correlated with investment in stocks, property and other industrial investments. Some findings support the notion that non-participation is a popular reaction to a lack of numeracy and financial literacy, as well as highlighting significant differences between the equity and housing markets. Lind et al. (2020 in their study measured numeracy using three items adopted from Schwartz et al. (1997) and Cokely et al. (2012) and this study followed the same path.

Cognitive reflection. As far as cognitive reflection is concerned it is in its raw sense the intellectual level of individuals or level of intelligence. The level of intellectual ability differs from people with lower intellectual capacity in a variety of respects, both major and insignificant. On average, they live longer, acquire more, have larger functioning memories, faster reaction times, and are increasingly susceptible to sensory fantasies (Jensen, 1998). In the wide range of wonders associated with intelligence, few have attempted to comprehend—or even portray—its effects on judgement and Behavior. Schedule tendency, chance inclination, probability weighting, vagueness aversion, gift impacts, binding down, and other widely researched themes sometimes offer some connection to the possible impacts of intellectual capacities (or psychological attributes).

Self-control. Self-control is a recent indicator of personality variations that has an indirect impact on household financial practices. Better self-control was linked to a higher-grade point average, reduced substance misuse, stronger and happier partnerships and Behavioral skills, stable commitment, and more optimal emotional reactions, according to a report. As a result, research results show that a lack of self-control is linked to a number of personal

issues. Individual disparities in people's abilities to exercise self-control occur, as certain people have a greater handle on themselves by controlling their lives, keeping their tempers in check, eating well and not giving in to cravings, retaining relationships with their families, keeping commitments, achieving targets, saving money, and keeping secrets, among other things. The findings show that differences in self-control have implications in a multitude of life contexts, including the workplace and, most notably, at home. Better self-control will help you live a happier and healthier existence. Self-control does, in fact, have a clear negative relationship with important psychiatric symptoms such as anxiety, phobia, panic, depression, and disorders. Additionally, individuals with high self-regulation have less impulse control issues, greater social adjustment, stronger self-esteem, more motivation, and hence better mental wellbeing.

Self-efficacy. Self-efficacy is a related term that stems from a person's understanding of his or her financial knowledge; financial counsellors agree that clients will only change their Behavior once they gain trust in their ability to make good financial choices in the first place. Their ability to participate in good financial conduct is hampered by a lack of self-efficacy. As a result, financial planners who wish their clients to make wise choices about themselves do not overlook the strength of self-efficacy, which encourages clients to trust in their own abilities to make better decisions. First and foremost, all of this reduces financial anxiety and increases financial stability, resulting in improved financial Behavior. as an illustration understand that prospects for saving and investing should be taken advantage of when they contribute to a stable retirement package. However, we must first "believe" that we can manage to spend less in the present and save money for the future, because mere awareness of the advantages of saving and spending can have no impact on our actual actions. 'As one would predict, higher levels of financial self-efficacy were associated with a higher probability of engaging in healthy financial Behaviors."

The definition of self-efficacy is described in Behavioral psychology as a person's confidence in their own ability to complete tasks and solve life's challenges (Bandura, 1994; Gecas, 1989). Which is entirely reliant on an individual's ability to persevere in the face of adversity, as well as their positive or negative outlook. Indeed, the connection between self-efficacy and personal finance management is that individuals with a higher sense of self-confidence see financial problems as healthy obstacles rather than risks to be prevented.' (Bandura, 1994, p. 71) This will result in positive results. Individuals were evaluated in the management of bank accounts, and it was discovered that not only are adolescents more apt to develop the thinking

abilities needed to handle their finances in adulthood, acquiring this ability through watching their parents and recognizing the value of money management, but their emotional preference for risk has influenced their Behavior (Grable, 2000). Individuals with a risk-averse mentality resulting from a lack of self-efficacy were more likely to invest and buy insurance, whereas people with a risk-averse attitude resulting from a lack of self-efficacy were more likely to save and purchase insurance.

Financial Anxiety and Security

Sages, Britt, and Cumbie (2013), referring Klontz and Klontz (2009), in their study on the correlation between anxiety and money management stated that when individuals are stressed and feel anxiety, fear, or shame, they feel off-balance and the human brain will attempt to repair or rebalance it by seeking out substances or Behaviors, which may include food, nicotine, alcohol or a wide range of human Behaviors, including financial Behaviors.

Research shows a clear relationship between economic distress and reduced mental health status (Voydanoff & Donnelly, 1989; Irwin, LaGory, Ritchey, & Fitzpatrick, 2008), although surprisingly little research has been conducted on the relationship among anxiety and financial Behaviors in more recent years

The primary goal of most monetary education initiatives is to promote sound financial Behavior; nevertheless, another, perhaps equally important goal is to increase abstract financial prosperity. The Consumer Financial Protection Bureau (CFPB) of the United States emphasizes this point, stating that "... for budgetary education, a definite proportion of achievement. Individual financial stability should be the aim of all endeavours ". Financial fulfilment has also been shown to play an important role in overall life satisfaction (Diener et al. 2010; Easterlin, 2006; Hojman et al. 2016; Johnson and Krueger 2006; Woodyard also, Robb 2016). As a result, it's crucial to figure out whether the same abilities that affect monetary Behavior often influence emotional monetary prosperity in similar ways.

Previous inquiries into the relationship between budgetary facts and budgetary fulfilment have discovered mixed results (see Tharp 2017 for an audit of significant experimental examinations). Regardless, the general example from previous budgetary fulfilment inquiries is that abstract money-related knowledge has a favourable association (Joo and Grable 2004; Xiao et al. 2014), while objective money-related information has a negative affiliation (Joo and Grable 2004; Xiao et al. 2014). (Seay et al. 2015; Xiao et al. 2014). In several previous studies, single-thing proportions of budgetary satisfaction were used, effectively asking

respondents to rate how satisfied they are with their current financial situation. This will result in a skewed proportion of budgetary prosperity in the abstract. We used separate item proportions of two facets of emotional money related prosperity in this investigation: budgetary protection and money related anxiety. As a result, emotional budgetary prosperity was described as (a) a feeling that all is well with one's own financial situation and (b) the absence of unpleasant feelings (such as uneasiness or stress) brought about by money-related issues. To the point that they have a cumulative effect on a person's health and financial well-being, the factors of financial capacity, financial experience, and financial hardship are also associated.

Financial Behavior

The definition of financial Behavior is rather complex. Financial Behavior is a study of the influence of psychology that focuses on fact that investors are not always rational, have limits to their self-control, and are influenced by biases. According to Sudindra and Naidu, (2018), financial Behavior mainly encompasses four broad areas, which are saving, spending, borrowing and investment. All individuals differ in their habits and this Behavior is mostly influenced by a different cognitive factors and contextual influences which include family advise, knowledge about finance, peer groups, advertisements, economic status, marital status, outlook towards the future, income levels, etc.

Financial Behavior is the acquisition, allocation, and use of financial resources oriented toward some goal. Empirical evidences from previous research support that, if families achieve effective financial management, both their economic well-being and their financial satisfaction improve in the long term (Consumer Financial Protection Bureau, 2015). However, financial management Behavior is complex and difficult to implement. The supervision of money and expenditure, which includes frugal and careful spending of money, is a useful protection against risky financial practices.

Moreover, financial management Behavior may vary between different individuals, younger and older, highly educated and less educated, poor and affluent and between different segments of population. Although the repeated experience and practice of financial activities influence people's skills to manage their finances, empirical evidence seems to support that young people practice fewer basic financial tasks, such as budgeting or regularly planning their long-term savings (Jorgensen & Savla, 2010).

As stated by Baker, Kumar, Goyal, and Gaur (2019, mainly there are five basic concepts which cover the concept of individuals financial Behavior

- 1. Mental Accounting: It is the tendency or inclination for a specific investment purpose.
- 2. Herd Behavior: It is when an investor or spender imitates the investment or spending decisions of a majority the majority.
- 3. Emotional Gap: Decisions taken under extreme emotional duress such as fear, anxiety, etc.
- 4. Anchoring: It refers to budgeting. This is when investment decisions are based on the liquidity available after factoring in miscellaneous needs.
- 5. Self-Attribution: Decisions made based on excessive dependency on the investor's knowledge leads to self-attribution. Objectivity takes a back seat and overconfidence in one's expertise facilitates decision making. This can often lead to losses or a profit in a few cases.

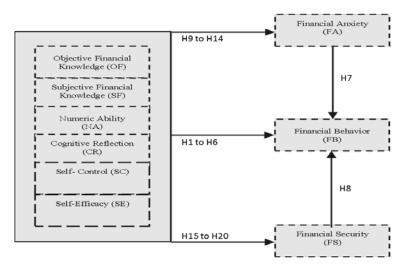
Conceptual Framework and Research Hypotheses

Based on the above review of available research literature on the topic and to get the answer for the gap identified, the following hypotheses were developed.

- HI. There is positive relationship between Objective Financial Knowledge and Financial Behavior.
- H2. There is positive relationship between Subjective Financial Knowledge and Financial Behavior.
- H3. There is positive relationship between Numeracy and Financial Behavior.
- H4. There is positive relationship between Cognitive Reflection and Financial Behavior.
- H5. There is positive relationship between Self-Control and Financial Behavior.
- H6. There is positive relationship between Self-Efficacy and Financial Behavior
- H7. There is positive relationship between Financial Anxiety and Financial Behavior.
- H8. There is positive relationship between Financial Security and Financial Behavior.
- H9. There is positive relationship between Objective Financial Knowledge and Financial Behavior measured by Financial Anxiety.
- H10. There is positive relationship between Subjective Financial Knowledge and Financial Behavior measured by Financial Anxiety.
- HII. There is positive relationship between Numeracy and Financial Behavior measured by Financial Anxiety.

- H12. There is positive relationship between Cognitive Reflection and Financial Behavior measured by Financial Anxiety.
- H13. There is positive relationship between Self-Control and Financial Behavior measured by Financial Anxiety.
- H14. There is positive relationship between Self-Efficacy and Financial Behavior measured by Financial Anxiety.
- H15. There is positive relationship between Objective Financial Knowledge and Financial Behavior measured by Financial Security.
- H16. There is positive relationship between Subjective Financial Knowledge and Financial Behavior measured by Financial Security.
- H17. There is positive relationship between Numeracy and Financial Behavior measured by Financial Security.
- H18. There is positive relationship between Cognitive Reflection and Financial Behavior measured by Financial Security.
- H₁₉. There is positive relationship between Self-Control and Financial Behavior measured by Financial Security.
- H20. There is positive relationship between Self-Efficacy and Financial Behavior measured by Financial Security.

The following diagram depicts the conceptual framework of this research

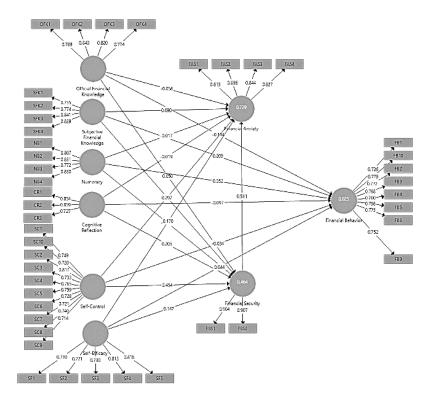


Independent Variables: Objective Financial Knowledge (OF), Subjective Financial Knowledge (SF), Numeric Ability (NA), Cognitive Reflection (CR), Self-Control (SC), Self-Efficacy (SC),

Moderating Variables: Financial Anxiety (FA), Financial Security (FS),

Dependent Variable: Financial Behavior (FB).

All independent, independent and mediating variables used in our conceptual framework are discussed and defined above



Methodology

Sample and Data Instrument

The current study has aimed to use purposive sampling for data collection. The reasons for using purposive sampling were that it allowed the researcher to gather knowledge via certain experts from the specific targeted population or domain. It also helped in directly communicating to the participants and generates required knowledge and results regarding research objective. The sample size of this research is 400. A questionnaire was adopted in order to gather in depth information for the measurement of the conceptual models constructs: The items or elements used to operationalize constructs are based on some previous research studies referred in literature review which include van Rooij et al. (2012), Schwartz et al. (1997), Cokely et al. (2012), Lindskog et al. (2015), Frederick (2005), Tangney et al. (2004), Fünfgeld and Wang (2009), Strömbäck et al. (2017), Dew and Xiao (2011). All items were measured on five-point likert scale from strongly disagree to strongly agree. This was done through web-based questionnaire adopted by previous researches.

Data Analysis

Descriptive Statistics and Confirmatory Factor Analysis results are shown below.

	Г	Г	Γ		T	
37 11	τ.		Descriptive		CFA	
Variable	Item	3.6	Statistics		. g 1	
		Mean	Std. Dev	Outer	t-Stat	<i>p</i> -Value
01: "	1	2.00	1.00	Loading	20.77	
Objective Financial	2	3.99 4.50	1.69	0.78	28.77	0.00
Knowledge	3			0.84	42.73	0.00
(OF)	4	4.45	1.62	0.82	34.27 25.25	0.00
Subjective Financial	2	4.36	1.49	0.75	22.20 16.27	0.00
Knowledge	3	4.19 3.93	1.64	0.67	41.72	0.00
(SF)	4	3.93	1.63	0.84	38.75	0.00
(51)			111			
Numeric	2	3.90	1.50	0.80	34.67	0.00
Ability	3	3.69	1.62	0.85	46.45	0.00
(NA)		3.74	1.49	0.77	25.69	0.00
G	4	4.08	1.44	0.83	37.07	0.00
Cognitive	1	3.76	1.70	0.85	40.32	0.00
Reflection (CR)	3	3.70	1.75	0.85	47.47	0.00
(CR)			1.63	0.62	11.90	0.00
	1	3.62	1.71	0.74	28.29	0.00
	3	3.41	1.68	0.62	15.26	0.00
		4.18	1.61	0.81	49.06	0.00
Self-	4	3.51	1.57	0.53	10.21	0.00
Control	5	3.69	1.61	0.76	29.27	0.00
(SC)	7	3.41	1.64	0.75	28.03	0.00
	8	3.54	1.60	0.72	23.00	0.00
	9	3.44	1.61	0.72	22.44	0.00
	10	3.80	1.66	0.74	21.98	0.00
Self-	2	3.73	1.65	0.77	26.40	0.00
Efficacy	3	3.45 4.64	1.76	0.72	21.56	0.00
(SE)	4	4.04	1.73	0.73	37.62	0.00
	5			0.81	36.20	
		4.11	1.81		0 0.1	0.00
Financial	1	3.64	1.71	0.81	35.95	0.00
Anxiety	3	3.43	1.57	0.85	55.05	0.00
(FA)	4	3.61	1.71	0.84	47.05 34.24	0.00
Einenei-1						
Financial Security	2	3.50	1.64	0.90	74.43	0.00
(FS)	3	3.42	1.63	0.90	75.43 35.95	0.00
Financial Behavior (FB)				<u> </u>		
	2	3.75	1.61	0.72	2.966	0.00
	3	3.69	1.56	0.67	2.541	0.01
	4	3.74 4.18	1.69	0.67	2.837	0.00
	5			0.66	2.653	0.00
	6	3.75	1.65 1.62	0.50	1.777 2.144	0.07
	7	3.72	1.52	0.59	2.700	0.03
	8	3.83	1.58	0.67	2.700	0.00
	9	4.01	1.57	0.33	26.40	0.03
	10	3.65	1.54	0.77	21.56	0.00
	10	3.03	1.34	0.72	21.30	0.00

Average of all constructs is around 4, which implies that most of the respondents agreed or strongly agreed with the statements of each construct which is also supported by standard deviation. In this research PLS regression analysis was done to check the impact of independent variable on dependent variable. In this study frequency analysis is also done to analyse the number of occurrences of each response chosen by the respondent.

Results And Findings

The Cronbach's Alpha value for all variables is within acceptable range. Instruments' reliability was assessed using composite reliability. All results of reliability tests including Average Variance Extracted (AVE) are given in Table below. AVE value for all variables, being higher than 0.5 is within acceptable range.

Variables	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE
Cognitive Reflection	0.870	0.728	0.828	0.620
Financial Anxiety	0.855	0.857	0.902	0.698
Financial Behavior	0.822	0.717	0.844	0.507
Financial Security	0.781	0.781	0.901	0.820
Numeracy	0.832	0.835	0.888	0.665
Objective Financial Knowledge	0.821	0.821	0.882	0.651
Self-Control	0.894	0.902	0.914	0.517
Self-Efficacy	0.828	0.829	0.880	0.594
Subjective Financial Knowledge	0.783	0.804	0.859	0.605

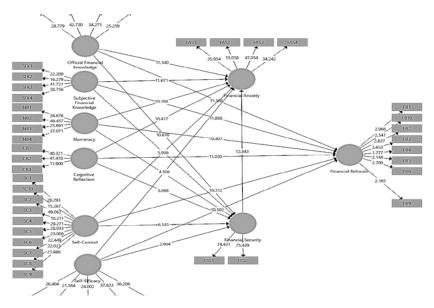
The fitness of the model in SEM-PLS is defined by various measures such as standardized root-mean-square residual (SRMR), and the exact model fits like d_ULS and d_G, Normed Fit Index (NFI), and $\chi 2$ (Chi-square). All values are mentioned in the table below.

	Saturated	Estimated Model
SRMR	0.063	0.063
d_ULS	3.880	3.895
d_G	1.294	1.295
Chi-Square	2810.103	2813.262
NFI	0.724	0.723

Hypotheses Testing

Smart PLS displays the t-values for structural model estimates derived from the bootstrapping procedure after the bootstrap routine has been run. The following table shows the path coefficient results for all of the hypotheses. The relationship is significant at the 95 percent

confidence level (= 0.05) when the t-value is greater than 1.96 (p.005). Paths indicating whether or not there is a significant relationship between measured and latent variables. Figure 2 represents a path diagram.



Hypotheses	Original Sample (O)	T Statistic s	P Values
Impact of Cognitive Reflection on Financial Anxiety	-0.019	10.417	0.007
Impact of Cognitive Reflection on Financial Behavior	-0.097	11.030	0.030
Impact of Cognitive Reflection on Financial Security	0.205	3.699	0.000
Impact of Financial Security on Financial Anxiety	0.511	12.843	0.000
Impact of Numeracy on Financial Anxiety	-0.017	10.298	0.008
Impact of Numeracy Ability on Financial Behavior	0.052	10.407	0.007
Impact of Numeracy Ability on Financial Security	-0.051	10.601	0.015
Impact of Objective Financial Knowledge on Financial Anxiety	-0.058	11.540	0.012
Impact of Objective Financial Knowledge on Financial Behavior	-0.114	11.368	0.017
Impact of Objective Financial Knowledge on Financial Security	0.050	10.816	0.041
Impact of Self-Control on Financial Anxiety	0.297	5.936	0.000
Impact of Self-Control on Financial Behavior	-0.034	10.312	0.075
Impact of Self-Control on Financial Security	0.454	6.545	0.000
Impact of Self-Efficacy on Financial Anxiety	0.170	4.506	0.000
Impact of Self-Efficacy on Financial Behavior	0.044	10.502	0.006
Impact of Self-Efficacy on Financial Security	0.147	2.604	0.009
Impact of Subjective Financial Knowledge on Financial Anxiety	0.090	11.671	0.010
Impact of Subjective Financial Knowledge on Financial	0.209	11.868	0.006
Behavior Impact of Subjective Financial Knowledge on Financial Security	-0.044	10.555	0.006

Hypotheses Assessment Summary

In this study it was hypothesized that there is positive relationship between all independent variables and financial behavior which mean the all the direct hypothesis H1 to H9 are accepted as result shows that hypotheses are statistically significant as their p values are less than 0.05.

Hypothesis#	Sig Value	Accept/Reject
H_1	0.017	Accepted
H_2	0.006	Accepted
H_3	0.007	Accepted
H_4	0.030	Accepted
H_5	0.005	Accepted
H_6	0.006	Accepted
H ₇	0.000	Accepted
H_8	0.006	Accepted
H ₉	0.006	Accepted
H_{10}	0.004	Accepted
H_{11}	0.006	Accepted
H ₁₂	0.006	Accepted
H ₁₃	0.005	Accepted
H_{14}	0.000	Accepted
H ₁₅	0.010	Accepted
H_{16}	0.004	Accepted
H_{17}	0.006	Accepted
H_{18}	0.010	Accepted
H ₁₉	0.001	Accepted
H_{20}	0.000	Accepted
H_{21}	0.010	Accepted

Whereas H₇ shows the relationship between two mediating variables which are financial Anxiety and Financial Security is also statistically significant as the P value is 0.000 which is less than 0.05. Furthermore, all the hypothesis which represent the mediating impact of Financial Anxiety are also statistically significant.

Conclusion And Discussion

Policymakers and educators have introduced a slew of programmed aimed at promoting healthy financial practices in the general population during the past few decades. While the main aim of many interventions has been to disseminate quantitative financial information, it has only lately been understood that psychological characteristics and non-cognitive abilities play a function in understanding human variations in financial habits. By studying the function

of self-esteem in forecasting financial habits, we add to the body of information. Our results further reveal a difference between empirical and subjective financial information, the latter of which is affected by one's self-esteem.

People make a wide range of choices on a daily basis, all of which take much thought and have both short and long-term financial implications. Furthermore, budgetary products and economies are getting more dynamic, and individuals are being held more accountable for making sound financial choices. The individual option maker already has a lot of clout in the finance market as a result of this. It is therefore important, both individually and culturally, to be properly prepared with the abilities and capacities to face these nuanced choices. Understanding how financial data contributes to financial habits and mental financial prosperity is important when it comes to organizing intercessions and instructional initiatives. Our results show that, considering all, there is still more to think regarding how monetary evidence influences (un)sound monetary activity and abstract budgetary prosperity, as well as how to assist citizens in achieving better goal and, more specifically, abstract prosperity. Since subjective financial knowledge (i.e., certainty) is (at least) as critical as analytical monetary information (i.e., ability), teachers of monetary issues should strive and help students blend the two to have the greatest possible effect.

While faced with the choices, households frequently lack sophistication and experience, and they could be confronted with imperfectly competitive financial commodity vendors that may leverage market influence to manipulate household decision-making errors. Conflicts of interest, poor governance, and haphazard oversight of financial intermediaries may all worsen these problems. This ambiguity has spawned a plethora of unanswered questions, resulting in a voluminous body of knowledge. This is only the beginning; the sector is expected to expand significantly and produce ground-breaking work in the coming years.

Having said that, it is critical that we expressly consider places that are critically relevant to the field of household finance but that we are unable to cover in our study. First, when we go into investing and spending in depth, these decisions are inextricably linked to household expenditure decisions. Second, it is critical to recognize that households are heterogeneous in several ways, not only in terms of their contexts and environments, but also in terms of their preferences and convictions, while attempting to explain household Behavior. Third, even when accounting for more elaborate models of portfolio preference, some of the earliest studies on household financial activity, undertaken well before the term "Household Finance"

was coined, stressed (the absence of) portfolio diversification. Finally, outside of the coverage of solely scholarly papers, we are unable to cover the outstanding work and profound knowledge uncovered every day in politics, procedure, and regulatory agencies, but we are fascinated by and beneficial for policy choices and product developments that aim to better households' financial lives and welfare. In this study, we focused primarily on work conducted in scholarly journals. We hope that in future work, both of these significant and interesting fields, as well as their connections to household finance, will be discussed in greater depth.

One of the study's most interesting results is that empirical and subjective knowledge predicts sound monetary policies, while other intellectual capacities may be not equally but are also efficient. The finding that objective monetary information is often closely connected to abstract money-related prosperity, however, compares with previous studies that found a detrimental association between objective monetary information and money-related fulfilment (Seay et al. 2015; Xiao et al. 2014). Financial guidance, in addition to financial education and default choices, is another possible approach to address disparities in financial literacy. Even financially literate individuals working in a constantly developing environment of financial innovation and expanding supply of (cross-border) financial instruments would find it useful.

Recommendation for Future research

Researchers should gather data using demographics in the future, and a moderating variable such as gender should be used in future studies, since men and women make financial choices differently. Second, data from banks and financial firms can be gathered for potential analysis.

Policymakers, students, and government departments should consider these results as part of their attempts to increase financial management performance. Financial education systems should emphasize the improvement of personality characteristics in addition to providing objective financial information in order to change people's financial habits. Financial literacy courses should include information about socio-psychological aspects of financial behaviors and raise students' awareness of potential barriers to converting financial knowledge into responsible financial behaviors (Hira & Mugenda, 1999); exploring more of the psychological needs would also improve education's effectiveness in steering people's

choices in the directions that are most beneficial to them (Hira & Mugenda, 1999). (Hira & Mugenda, 1999).

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