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Financial Literacy and Financial Satisfaction: A Moderated Mediation Analysis of Self-Esteem and Financial Behavior

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ABSTRACT
Recent studies suggest that domain-specific behavior contributes to domain-specific satisfaction. It is believed that finance-specific literacy brings positive financial behavior and healthy financial behavior further contributes to financial satisfaction. In general, this study has been undertaken to examine the effect of financial literacy on financial behavior and financial satisfaction. Data have been collected from 326 participants by using a self-administered questionnaire. Linear regression has been applied to test the hypotheses, while Preacher and Hayes method has been used to estimate the moderation and mediation effect. There is less knowledge about the mechanism that may clarify the link between financial literacy and level of financial satisfaction. This paper is the first of its kind in Pakistan to investigate the relationship between financial literacy and individual's financial satisfaction with intervening role of financial behavior and moderating role of self-esteem. The study findings reveal that financial literacy is significantly related to both financial behavior and financial satisfaction. Further it is also observed that financial behavior plays intervening role in the relationship between financial literacy and financial satisfaction. ***Findings also reveal that self-esteem does not affect the link between financial behavior of individuals and financial literacy.*** *This study provides several significant implications for individuals, organizations, academicians and policy makers, in the sense that increasing financial literacy is essential to form positive and healthy financial behavior which ultimately increases individual's financial satisfaction with financial situation.*

JEL Classification: *D91, G50, G53, G59*

Keywords: *Financial Literacy, Self-esteem, Financial Behavior, Financial Satisfaction, Theory of Planned Behavior.*

INTRODUCTION
Pakistan is a developing economy and has shown significant changes in the financial environment. Recent development in the financial environment has changed consumer preferences as well as the satisfaction level of individuals. Today's investors and consumers require more features and information to satisfy their wants than it required few years ago. With the advent of technology, financial behavior and satisfaction characteristics have also been changed in developing countries like Pakistan. Making correct financial decision is mandatory for higher level of financial satisfaction. Whereas, good understanding of financial management

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and comparable financial behavior is required for making right financial decisions (Ali & Hashmi, 2018). Money and capital management are also important for financial satisfaction and well-being, whereas financial literacy plays a considerable role in positive financial behavior (Grohmann, 2018). Without having positive financial behavior individuals cannot be able to achieve desired level of financial satisfaction. In general, it is argued that financial satisfaction with particular situation is significant contributor of individual happiness and certain financial behavior have an impact on improving individual's happiness and satisfaction (Xiao, Tang & Shim, 2009). Moreover, financial satisfaction is considered a major determinant of happiness and a significant part of overall financial well beings. Financial satisfaction is said to be achieved if individuals can successfully fulfill their basic and financial needs without any financial difficulty.

In the behavioral finance literature, it is reported that financial behavior has significant contribution in financial satisfaction or dissatisfaction with economic conditions. It is also stated that individual's behavior related to financial management is influenced by other socioeconomic, sociological, and psychological factors such as income level, financial position, self-efficacy, financial literacy, self-esteem, financial education and financial knowledge (Coşkuner, 2016). Financial satisfaction is the part of whole life satisfaction and it may be further explained by the notion of financial behavior. Theory of planned behavior (hereafter TPB) has provided foundation to explain domain specific behavior. The planned behavior theory is flexible and allows adaptation and addition of different determinants in order to address various research issues. Recently, the concept of TPB has been incorporated in behavioral finance and documented that investigating user intention/willingness to perform financial behavior has better power than studying actual behavior. According to Ajzen (1991) TPB, individuals' particular behavior depends on their intentions, individual beliefs, normative beliefs and control beliefs. The intention to behave is influenced by relevant knowledge, education, attitude, literacy, experience and believes. In this context financial literacy increases individuals' knowledge and belief in managing financial matters and encourages positive financial behavior which ultimately brings finance specific satisfaction. Healthy financial behavior may also result of higher self-esteem, self-belief and self-confidence. This study also assumes that financial literacy increases confidence, brings positive financial behavior and enhances financial satisfaction. Individuals with considerable understanding of financial affairs are able to manage their money well and tend to be more financially satisfied than others.

Various studies on financial behavior focused on the financial literacy with the assumption that financial literacy is important element of financial understanding and a major contributer of attitude and behavior of individuals. Financial literacy can directly affect both financial behavior and financial satisfaction. Higher level of financial literacy tends to improve financial behavior and individuals who knows and understand financial matters are more satisfied as compared to others. It is also argued that financial literacy can indirectly impact financial satisfaction through financial behavior. Yap, Komalasari and Hadiansah (2019) reported a positive effect of financial behavior on financial satisfaction and show that positive financial behavior tends to fulfillment of different financial objectives and further leads to overall financial satisfaction. Moreover, Robb and Woodyard (2011) contended that financial behavior serves as a significant component and can intervenes the link of financial literacy and financial satisfaction. Financial literacy increases healthy financial behavior, which in turn expected to produce higher financial satisfaction. Meanwhile, self-esteem has also been associated with financial literacy and healthy financial behavior (Tang & Baker, 2016). Self-esteem is an important determinant of financial behavior and can buffer the financial behavior and financial literacy relationship and may have the positive consequences for individual financial well beings. It may influence the link between financial literacy and finance related behavior as level of individual self-esteem varies across different people which helps individuals in determining financial behavior. Thus, financial literacy and self-esteem are related with financial behavior and further financial behavior predicts overall financial satisfaction of individuals.

Prior studies tried to connect financial satisfaction with financial literacy (Ali, Rahman & Bakar, 2015; Falahati, Sabri & Paim, 2012; Grable & Joo, 2001), while some other scholars investigated financial behavior and financial satisfaction relationship and reported that individual's financial behavior is important for financial well-being (Bashir, Arshad, Nazir & Afzal, 2013; Xiao et al., 2009). Although some latest researchers studied intervening role of financial behavior between financial satisfaction and its predictors (Asebedo & Payne, 2018; Yap, Komalasari & Hadiansah, 2019). Little is known about the pertinent role of financial literacy in explaining financial behavior at different level or how their influence varies across diverse geographical settings.

Thus far few studies investigated financial literacy in relation with financial behavior and financial satisfaction. Some studies highlighted the importance of psychological factors which can influence this relationship (Bashir et al., 2013; Chen et al., 2017; Coşkuner, 2016) still there is little consensus about mediators and moderating role of psychological variables. Moreover, many previous researchers have used single item-scale to measured financial behavior and financial satisfaction (Joo & Grable, 2004; Kirbiš, Vehovec & Galić, 2017) in future need to measure key variables through multi-items scale (Xiao & Porto, 2017). Additionally, financial literacy and financial satisfaction in Pakistan is still new and need more research as there has been limited work done on financial literacy (Bashir et al., 2013). To our knowledge no research has been conducted to study this integrated model. This study is unique, and it is the first of its kind in Pakistan to investigate the relationship between financial literacy and financial satisfaction with mediating role of financial behavior and moderating role of self-esteem. It is significant to understand the possible mechanism through which financial literacy influences financial satisfaction and could buffer the positive relationship of financial literacy and financial behavior.

The basic aim of the current study is to examine financial literacy's direct and indirect effect on financial satisfaction through financial behavior. This study contributes to the satisfaction literature by exploring impact of financial literacy on both financial behavior and financial satisfaction. Our study also adds knowledge to the satisfaction literature by investigating the mediating role of financial behavior. Further contributes to the behavioral finance literature by analyzing whether self-esteem modifies the association of financial behavior and financial literacy of Pakistani citizens. Our study findings have several significant implications for individuals, policy makers, academicians, and organizations. Increasing financial literacy is essential to form positive financial behavior, which ultimately increases individual's financial satisfaction. Therefore, policy makers can use this information to promote and enhance financial literacy and self-esteem by taking the right steps and decisions.

The reminder of the paper is organized as follows: part two, presents integrated literature review related to the financial literacy, behavior and financial satisfaction. Part three explains measurement scales of variables and related methodology used for this study to ascertain the basic objective and test the hypotheses. Section four describes findings and results obtained via SPSS 25 and SPSS PROCESS. Part five provides comprehensive discussion and relates findings with prior studies. Finally, this study concludes with the summary, limitations, future research directions, and recommendations.

LITERATURE REVIEW

Financial literacy and financial behavior

Review of previous literature shows that financial literacy contributes to form positive and healthy financial behavior, which contributes to individuals' financial satisfaction. Recent studies have invistigated the association of financial literacy and financial behavior and found mixed results, meanwhile latest studies reveal that financial literacy has a positive affect on financial behavior (Pandey, Ashta, Spiegelman & Sultan, 2020). Recently, it is observed that financial literacy helps individuals to understand financial affairs and activities. According to Andarsari and Ningtyas (2019) financial literacy reflects and enhances the financial behavior of a person and individuals. A person with good financial literacy is better able to manage his income and assets while persons with low literacy cannot properly manage financial matters and bear less significant financial behavior (Widyastuti, Sumiati, Herlitah & Melati, 2020). Insignificant financial behavior is because of low financial literacy, leading to negative financial satisfaction (Jewell & Kambhampati, 2015). Financial literacy, education, knowledge, income and financial self-esteem are the most important ingredients of positive financial behavior. Like, Allgood and Walstad (2016) reported that financial literacy positively affects financial behavior of individuals. Literature indicates financial behavior positively associated with both financial knowledge and financial literacy. Proctor, Linley and Maltby (2009), documented that financial knowledge and education are positively related with financial behavior and social wellbeing. Moreover, financial literacy has a direct effect on financial behavior, especially higher level of financial literacy and positive financial behavior lead to higher financial satisfaction of individuals (Joo & Grable, 2004). Financial literacy encourages desirable financial behavior and enhances financial satisfaction. Bianchi (2018) reported a positive relationship among financial literacy, financial education and financial behavior.

Grable, Park and Joo (2009) revealed that individual's financial behavior can be influenced by their level of financial knowledge. Finance specific literacy has been positively linked to the financial behavior (Allgood & Walstad, 2016). Higher financial literacy enhances positive financial behavior while low financial literacy creates complexities in financial behavior. Similarly, Xiao and Porto (2017) showed that financial literacy contributes to the financial behavior in the sense that it improves money management and finance specific behavior. It was also observed that individuals with high financial literacy are good at taking right financial decisions. Negative financial behavior is because of poor financial literacy which leads toward undesirable financial satisfaction (Falahati et al., 2012). People with comparable financial literacy possess better and healthy financial behavior than those who have low financial literacy and know less about financial concepts (Asaad, 2015). Following the positive theoretical and empirical predictions, we can expect a positive relationship between financial literacy and financial behavior:

H1: Financial literacy significantly and positively affects individual's financial behavior.

Financial literacy and financial satisfaction

Financial literacy is one of the major components of financial behavior and financial satisfaction. It is the ability to understand how a transaction occurs; how people make, manage and invest money. Financial literacy is recognized as the key skill to manage personal finance (Allgood & Walstad, 2016). Recently the concept of financial literacy has been modified and can be defined as the understanding of financial concepts, risk and skills to apply such knowledge to make right and effective financial decisions (Goyal & Kumar, 2021). Financial literacy has a positive impact on financial satisfaction. People with higher financial literacy tend to be more careful in making financial decisions and feel more satisfied. In various studies it has been observed that individuals who possess higher financial literacy will be more satisfied with their financial situation as compared to those persons who have low financial literacy. Whereas, financial satisfaction is a subjective term and generally financial satisfaction means achieving financial goals, in other words fulfillment of finance specific desired. Scholars have different stances in defining and explaining financial satisfaction. Financial satisfaction is domain specific satisfaction and only limited to income level and financial management (Joshanloo, 2018). Financial literacy is a crucial aspect in determining the level of financial satisfaction. High level of financial literacy is required to properly manage financial affairs and to improve financial satisfaction (Cera, Khan, Belas & Ribeiro, 2020). Farida, Soesatyo and Aji (2021) recently reported that individuals who have better financial literacy tend to have greater asset management skills and better perception of financial behavior and satisfaction. Furthermore, financial literacy increases confidence and improves locus of control believes. People with good self-control will easily handle pressure and they are less concerned about financial affairs and more satisfied with their financial conditions (Iramani & Lutfi, 2021).

Joo and Grable (2004) have defined financial satisfaction as fulfillment of one's own financial needs and satisfaction with current financial situation. Literature identified many variables that appeared to affect financial well-being and individual satisfaction. Most common factors that influence satisfaction are income, demographic characteristics and financial conditions. For instance, Falahati et al. (2012) documented that income, education and financial status significantly related with financial satisfaction. It has been observed that financial literacy positively affects finance specific satisfaction and improves overall subjective well beings. Usually, individual's financial literacy and financial behavior both can affect the level of financial satisfaction. Related literature also indicates that financial solvency, knowledge, education, literacy, attitude and risk tolerance may influence financial satisfaction and also play a crucial role in determining financial satisfaction (Saurabh & Nandan, 2018). It is also stated that financial literacy has a positive relationship with financial well being. Based on theoritical predictions, we can hypothesize that:

H2: Financial literacy positively and significantly affects financial satisfaction.

Financial behavior and financial satisfaction

Various factors have been found to influence financial satisfaction, one of which is financial behavior (Damian, Negru-Subtirica, Domocus & Friedlmeier, 2020). Financial satisfaction can be explained using financial behavior and the notion of financial behavior is based on the theory of planned behavior which explains individual behavior arises due to the intentions.

Individual's financial behavior emerges from the existence of intentions. Further financial behavior reveals the extent to which a person has used financial literacy and knowledge to manage personal finance and financial needs. A better financial literacy and financial behavior can enhance financial wellbeing and satisfaction level of individuals (Iramani & Lutfi, 2021). Meanwhile, positive financial behavior is important as far as financial satisfaction is concerned. Financial literacy, education, knowledge, income and self-esteem are the most important components of positive financial behavior.

An important construct within financial psychology literature is financial behavior. The notion of financial behavior is not consistently explained and is associated with varied definitions; it is subject to the financial situation, status, income, and expected financial outcomes (Saurabh & Nandan, 2018). In general, financial behavior is a particular attitude and individual behavior related to finance, capital and management of financial affairs. Financial behavior has long been considered a significant contributor to financial satisfaction as Xiao et al. (2009) stated that domain specific behavior effects domain specific satisfaction. Research has shown that financial behavior can have short term and long term effect on financial satisfaction. Literature documents financial behavior has a positive link with financial satisfaction. For example, Jewell and Kambhampati (2015) reported that those who possess positive financial behavior tend to be more satisfied. Those who practiced decent financial behavior tend to have better financial satisfaction with financial situation. Likewise, it is also observed that financial satisfaction level increases with healthy financial behavior and decreases with poor financial behavior (Falahati et al., 2012).

Finance specific behavior has been positively linked with satisfaction and financial situation. People with positive financial behavior are more satisfied with their financial situations and there exists a significant relationship between financial satisfaction and perceived financial capability (Xiao, Chen & Chen, 2014). Furthermore, financial behavior directly and positively affects financial satisfaction (Saurabh & Nandan, 2018). Gutter and Copur (2011) reported that college student's financial behavior is positively related with satisfaction and well-being in United State of America (USA). Further stated that financial well-being varies with different socioeconomic factors and financial behavior. Based on the above literature we can propose following hypothesis:

H3: Financial behavior positively and significantly affects financial satisfaction.

Mediating role of financial behavior

One of the significant factors that may have an impact on financial behavior is financial literacy. Findings of previous studies documented that financial behavior could affect the link between financial literacy and financial satisfaction. Robb and Woodyard (2011) reported that financial behavior mediates the relationship between financial literacy and financial satisfaction. Arifin (2018) has conducted a research to investigate the intervening role of financial behavior between the relationship of financial satisfaction and its predictors. Findings of the study revealed that there exists a positive relationship between factor influencing financial satisfaction and individual's well-being, further reported that financial behavior can intervene the association between financial knowledge and financial satisfaction. Previous studies reported that financial behavior completely or partly mediate the association between financial literacy and level of satisfaction. Falahati et al. (2012) stated that financial literacy directly and indirectly affects financial satisfaction through financial behavior. Moreover, Saurabh and Nandan (2018) stated that both risk attitude of a person and financial behavior mediate the link between financial satisfaction and financial knowledge. Therefore, we can assume following hypothesis:

H4: Financial behavior mediates the association between financial literacy and financial satisfaction.

Moderating role of self-esteem

The direct connection between financial literacy and financial behavior has been examined extensively. Literature shows that different psychological variables influence this relationship. Various studies have used self-esteem as a moderator between different relationships of psychological variables. Thompson and Gomez (2014) have conducted a research to explore the moderating role of self-esteem and strain. He specified that self-esteem and efficacy are important to overcome effect of stress and strain. Avey, Palanski and Walumbwa (2011) reported that individual self-esteem is different from person to person and self-esteem can influence the relationship of various psychological factors. For example, follower's self-esteem can moderate the association of ethical leadership and follower behavior. Mäkikangas and Kinnunen (2003) have done research on moderating role of self-esteem and optimism bias on the association of psychosocial work stressor and general well-being and argued that self-esteem can buffer the relationship between emotional exhaustion and mental distress. Self-esteem is positively related with satisfaction and negatively associated with financial stress (Chen et al., 2017). It is documented that self-esteem can buffer the effect of domain specific knowledge on domain specific behavior.

Literature shows that self-esteem may be positively connected with finance specific behavior. Individuals with high self-esteem possess the ability to control difficulties and are optimistic about their coping abilities, thus they enjoy good financial conditions (Tang & Baker, 2016). Self-esteem is about positive evaluation and individuals give value and importance to themselves. Ferris, Lian, Brown, Pang and Keeping (2010) identified self-esteem as a contextual variable that could strengthen the relationship between financial behavior and domain specific performance. Positive evaluation of oneself reflects the self-esteem of a person. Self-esteem plays an important role to form responsible financial behavior as Tang and Baker (2016) observed that self-esteem operates as a progressive emotional source in making financial decisions which leads to healthy and positive financial behavior. In addition, it is also reported that self-esteem improves overall performance and satisfaction level of employees. Following the positive evidence, this study assumes following hypothesis:

H5: Self-esteem moderates the relationship between financial literacy and financial behavior.

Figure 1 describes the conceptual frame work of the study. Financial satisfaction is the dependent variable and main focus of the study. Financial satisfaction is influenced by both financial behavior and financial literacy. Further, financial literacy can directly and indirectly affect financial satisfaction through financial behavior. It is assumed that financial behavior mediates the link of financial literacy and financial satisfaction. Whereas, self-esteem moderates the relationship between financial literacy and financial behavior.

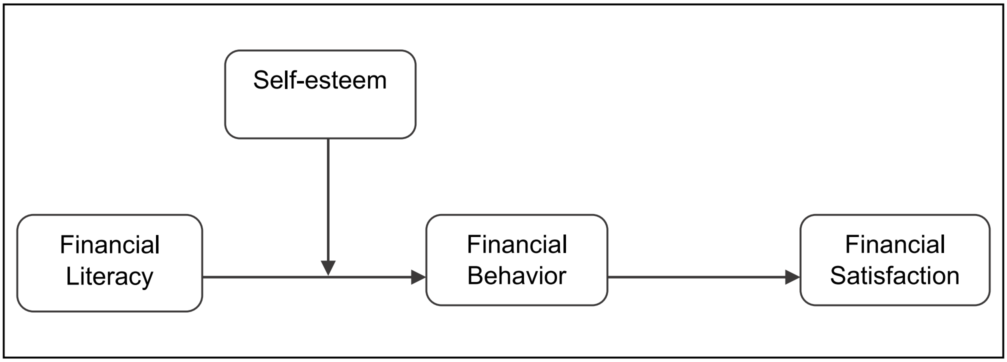

Figure 1: *Research Model/ Conceptual framework of the study*

METHODOLOGY

Population, sample and data collection procedure

Population of this study comprises employees working in public and private sector organizations located in Rawalpindi and Islamabad. The researchers distributed 500 printed questionnaires among employees, out of which 326 valid questionnaires were received back, making response rate of 65.2 percent. The respondents were selected from different financial and non-financial institutions, headquarters and places where the researchers would contact them easily. Likewise, convenience sampling technique has been used to collect relevant data from targeted population.

Research design

In social sciences, research design is a frame work applied to conduct study, collect data and test hypotheses in order to analyze study objectives. This study is quantitative in nature as closed ended questionnaire has been used to obtained data from respondents. Also, cross sectional research design is employed to collect data and to conduct research study.

Measures

The study adopts the questionnaires from prior studies related to the variables used in this study. The 5- Points Likert scale was used to measure the variables. Scale is range from 5 to 1, where 5 represents strongly agree, 4 denotes Agree and so on. The details of measurement scale are presented in the proceeding section.

Financial satisfaction

The questionnaire for financial satisfaction was adopted from Ali et al. (2015) containing 6 questions. Few questions of the scale are; (1) some time I feel my living costs is greater than my income, (2) If I had loss income, I could manage for considerable period, (3) Based on my present situation, I can obtain a loan if required. Through these items respondents were asked to rate their financial conditions and satisfaction level, whereas scale 5 means respondents are fully satisfied with their financial situation and vice versa.

Financial behavior

For the measurement of financial behavior, the scale of Dew and Xiao (2011) was used, which contains 15 items, few sample items are: (1) I spent more money than I had (2) I have to use credit due to shortage of cash (3) I have to cut living expenses. Higher scale indicates respondents bear positive financial behavior and have good understanding on how to use and manage money.

Financial literacy

Seven items were adopted from Hira and Loibl (2005) and Cude et al. (2006). Few items of the scale are: (1) I can understand financial affairs and maintained records (2) I have enough knowledge to manage my cash and money (3) I can prepare my own weekly (monthly) budget. Lower scale represents respondents possess low level of financial literacy and highest scale indicates individuals possess more financial literacy.

Self-esteem

The questionnaire for self-esteem was adopted from the study of Grable and Joo (2001). This scale was originally developed by Rosenberg (1965). Rosenberg scale contains 10 items and few items of the scale are: (1) I feel I am worthy person equally as others (2) On the whole I am satisfied with my life (3) I feel that I have many good qualities. The respondents were asked to label their feelings about themselves.

RESULTS

Demographic Profile

The results of demographical analysis showed that most of the respondents are males. The study sample includes, 70.6% (n = 230) males and 29.4% (n = 96) females. Sample was a rational blend of different age groups as 13.8 % (n = 45) were 20 years or below, 33.1% (n = 108) were between the age of 21-30 years, 31% (n = 101) were between the age of 31-40 years 17.5 % (n = 57) were between the age of 41-50 years and 4.6% (n = 15) were above 50 years of age. The sample included respondents with average qualifications as 13.5% (n = 44) holding intermediate certificates or below, 31.9% (n = 104) holding Bachelor degrees, 37.1% (n = 121) holding Master degrees while 46% (n = 14.1) holding MS/M.Phil. degrees and only 3.4% (n =11) having PhD degrees. Most of the respondents 57.4% (n =187) are working in Government sector, 36.2% (n=118) are doing private jobs whereas 6.4% (n=21) are engaged with other organizations. As far as experience is concerned 16.6% (n=54) have less than one year working experience, 31.6% (n=103) possess 1 to 5-year experience, 20.6% (n=67) have 6 to 10-year experience, 19.3% (n=63) posses 11 to 15-year experience, 9.5% (n=31) have 16-20-year experience, while only 2.5% (n=8) respondents are working for more than 20 years.

Correlation Analysis

Table 1 shows the result of correlation analysis along with reliabilities, means and standard deviation for variables. Moreover, reliability values are reported in parentheses. Alpha values of all variables are higher than 0.7 which means measurement scales are reliable. Correlation analysis has been carried out to check the correlation between demographical variables, independent, mediating, moderating and dependent variables. Means and standard deviation of variables also presented in the table 1.

Table 1:
Means, Standard Deviations, Correlations and reliability analysis

Variables	Mean	S.d	1	2	3	4	5	6	7	8
1.Gender	1.29	.456	—							
2. Age	—	—	—	—						
3. Qualification	—	—	-.132*	.145**	—					
4. Experience	2.80	1.31	-.152*	.432**	.073	—				
5. Financial literacy	3.65	.686	-.095	.034	-.010	.057	(.751)			
6. Self-esteem	3.56	.480	-.061	.053	.018	.057	.487**	(.769)		
7. Financial behavior	3.65	.669	.035	-.021	-.065	-.054	.290**	.250**	(.863)	
8. Financial satisfaction	3.57	.701	-.055	.022	.039	.020	.521**	.637**	.292**	(.766)

*Note: N = 326; ** Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed); Alpha in parenthesis () shows reliabilities; for Gender, 1= "male", 2= "female"; for age, "1=20 and below", 2= "21-30", 3 = " 31-40", 4= "41-50" and 5= "Above 50"*

Table 1 shows that there exists positive correlation between independent variables, dependent variables, mediator and moderating variables. Result shows that financial literacy positively correlated with financial behavior (.290**) and also there exist a significant and positive correlation between self-esteem and financial behavior (.250**), whereas the correlation between financial literacy and self-esteem is (.487**). Moreover, financial literacy is positively associated financial satisfaction (.521**), while the correlation between financial behavior and financial satisfaction is positively significant (.292**). The highest value in the table is (.637**) which depicts self-esteem strongly and positively associated with financial satisfaction.

Regression Analysis

Linear regression has been used to determine the association between dependent and independent variables. Table 2 presents the beta value, R-squared and change in R-squared of financial literacy, financial behavior and self-esteem.

Table 2:
Hierarchical Regression Analysis for Outcomes

	Financial behavior			Financial satisfaction		
Predicator	β	R^2	ΔR^2	**β**	R^2	ΔR^2
Control Variables		0.016			0.008	
Financial literacy	0.288**	0.102	0.086	.531***	.276	.268
Self-esteem	0.193*	0.116	0.014			
Mediator						
Control Variables					.008	
Financial behavior				0.316**	.097	0.089

*Note: N= 326; unstandardized beta values are reported; *P< .05, **P< .01, ***P<.001; control variables includes age, gender, qualification, income*

For the main effects and regression analysis, we followed linear regression method which is most appropriate procedure. In the above table values of R^2 for demographic variables are very low i.e. 0.016 and 0.008 for control variables, which shows that control variables explain 1.6% and 0.8% variation in the financial behavior and financial satisfaction, respectively, while 8.6% variation in the financial behavior is explained by financial literacy. Financial literacy explains 26.8% change in financial satisfaction whereas mediator (financial behavior) brings nearly 9% changes in financial satisfaction.

Beta value of financial literacy, when regressed using financial behavior as dependent variable, estimates at 0.288** with p-value <.01, which means financial literacy positively and significantly associated with financial behavior. Whereas value of beta is positive and significant (β=.531***, p-value <.001), when regressed over financial satisfaction depicting 1 unit change in financial literacy, leads to 0.53 units change in financial satisfaction. Results also indicate that financial literacy is significantly and positively related to financial satisfaction (beta = 0.316**, p value < .01), which means one unit change in financial literacy tends to 0.23 units change in financial satisfaction. Moreover, the beta value of self-esteem is 0.193* with p-value <.05, which means self-esteem significantly associated with financial behavior.

Mediation Analysis

For mediation and moderation analyses, we employed bootstrapping method of Hayes (2013) which outperforms other mediation techniques. According to Preacher and Hayes (2008) there exists mediation if indirect effect become significant with non-zero value lying between upper limit and lower limit confidence interval. Table 3 shows financial literacy is positively associated with financial behavior and further depicts that financial behavior positively affects financial satisfaction as beta is positive and significant p-value <.00, t >1.96). The result regarding mediation is provided in table 3.

Table 3:

Results for mediation effects using bootstrap

	Effect	SE	T	P	95%LLCI	95%ULCI
Total effect	.531	.048	10.97	.000	.436	.626
Direct effect	.486	.049	9.73	.000	.387	.584
Indirect effect	.045	.018	—	—	.015	.090

Note: N=326. Bootstrap sample size = 5000; UL= upper limit; LL= lower limit; CI= Confidence Interval; SE = Standard error; whereas, IV= financial literacy; mediator= financial behavior; DV= financial satisfaction.

To examine whether financial behavior mediates the link between financial literacy and financial satisfaction, we followed bootstrap technique. According to the results reflected by table 3, it is evident that financial literacy indirectly effects financial satisfaction of individuals through financial behavior. Moreover, the effect of financial literacy can be partitioned into three parts i.e., direct effect, indirect effect and total effect. Direct effect of FL on FS when the mediating variable (financial behavior) is included in the model turns out to be 0.48 with significant p-value implying a significant relationship between FL and FS. The value of indirect effect is also significant as non- zero value lies between LLCI and ULCI (.015, .090), which means there exists a mediation effect. This result support hypothesis 4 which states that financial literacy positively mediates financial literacy and financial satisfaction relationship.

Moderation analysis

We applied process method of Hayes (2013) to analyze moderation effect. There exists moderation effect if interactive term (product of IV and moderator) become significant when regressed on dependent variable. Table 4 shows results of moderation analysis. The values of β, LLCI and ULCI are presented in the following table.

Table 4:
Results for Moderated Regression Analysis

	Financial behavior		
	B	95%LLCI	95%ULCI
Financial literacy	.195**	.027	.363
Self-esteem	.217**	.100	.335
Financial literacy X Self-esteem	.028	-.170	.227
ΔR^2	.001		

Note: N=326. Bootstrap sample size = 5000; LL=Lower limit; UL= Upper limit; CI= Confidence Interval; ΔR^2 = value change in R square; Financial self-efficacy is moderator.

Result in the above table revealed that financial literacy and self-esteem are positively related with financial behavior. To test the interactive effect, a cross product term IV and MV (Financial literacy & Self-esteem) is regressed on financial satisfaction. The value of independent variable and moderator are mean-centered. The result of interactive term reflects a non-significant relationship as zero-value contained between LLCI (-.170) and ULCI (+.227) with negligible R-Squared change. This shows that self-esteem does not affect the association of financial literacy and financial behavior, therefore hypothesis 5 is rejected and justification for this unique result is provided in the discussion section. In addition, moderated graph has been calculated to explain main effects and buffering effects of self-esteem.

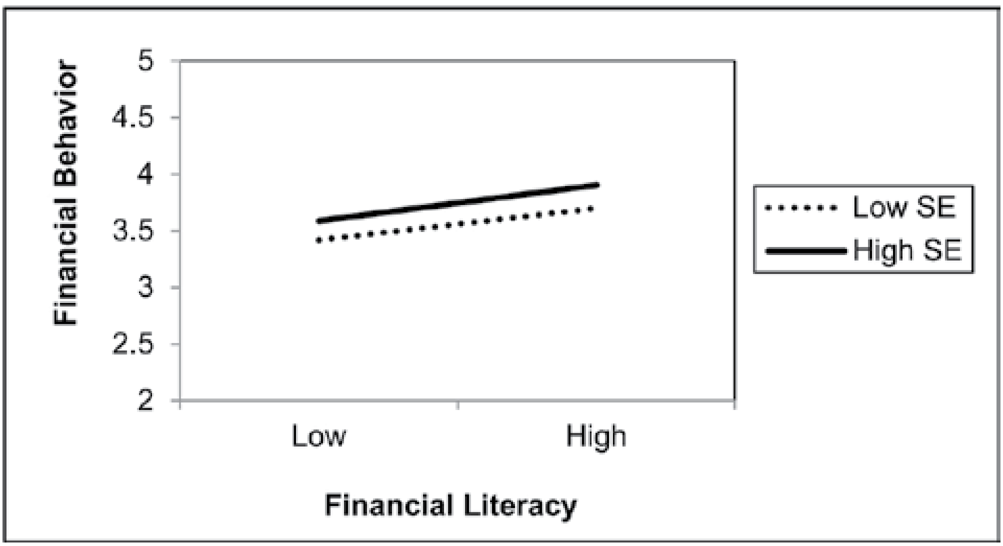

Figure 2: *Interaction effect of SE on financial literacy and financial behavior*

Figure 2 shows the Moderation Analysis where graph demonstrates level of self-esteem associated with financial literacy and financial behavior. Plots show that high FL leads to higher FB. Individuals with high financial literacy possess healthy financial behavior and those who have low financial literacy possess poor financial behavior. Doted plot denotes low level of self-esteem while bold line represents higher level of SE. The positive association of financial literacy and financial behavior was predicted and presence of self-esteem would increase this relationship. But result is against our prediction as presence of self-esteem does not strengthen the relationship between financial literacy and financial behavior. The slop of graph is steep equally in both situations which mean presence of SE does not bring considerable change in the relationship strength.

DISCUSSION

The study model predicts financial literacy positively affects financial behavior and financial satisfaction. Further, financial behavior could affect financial satisfaction and may act as an intervening factor between financial literacy and financial satisfaction, in the sense that financial behavior plays a bridging role between financial literacy and financial satisfaction. Individuals with high self-esteem may be less responsive to negative attitude and information than people with low level of self-esteem. Results of the current study suggest that presence of positive financial behavior enhances financial well-being while financial literacy directly and indirectly, affects financial satisfaction. Moreover, based on the theory of reason action and planned behavior theory, financial literacy creates positive intentions towards behavior which helps individuals to form healthy financial behavior. After the review of relevant literature, we have developed and tested five hypotheses.

First hypothesis of the study posits that there exists a significant relationship between financial literacy and financial behavior which is confirmed by study results in the above section. Individuals who have higher level of financial literacy possess comparable financial behavior, which is consistent with the findings of Allgood and Walstad (2016). Similarly, Xiao and Porto (2017) also reported that financial literacy positively related with financial behavior. The second hypothesis is also accepted as findings of the study revealed that financial literacy positively affects financial satisfaction, which is consistent with the findings of Kirbiš et al. (2017) who reported that high financial literacy improves the level of financial satisfaction.

The link between financial behavior and financial satisfaction is statistically significant, which mean hypothesis three is also accepted. This result is in line with Joo and Grable (2004) who argue that positive financial behavior leads to more financial satisfaction, in the sense that people who are keen and have more involvement in the financial matters will be more satisfied with their financial conditions. Hypothesis 4 predicted that financial behavior plays mediating role between financial literacy and financial satisfaction. Consistent with previous literature, results in the above section evident that financial literacy affects financial satisfaction through financial behavior. Falahati et al. (2012) found that financial literacy directly and indirectly affects financial satisfaction through financial behavior. Moreover, Arifin (2018) reported that domain specific behavior affects domain specific satisfaction, several financial factors directly affect while others influence financial satisfaction through specific behavior.

Lastly, it was assumed that self-esteem influences the association of financial literacy and financial behavior as Tang and Baker (2016) stated that self-esteem could affect financial behavior through financial knowledge and other financial factors. However, in this study presence of self-esteem does not affect the strength of relationship. One possible explanation for this situation may be that in the Pakistani environment self-esteem does not play a considerable role in building specific behavior as herding behavior in Pakistan is quite higher, individuals make decisions on the basis of what the majority have made decisions besides whether they are wrong or right and group behavior influences individual behavior. According to Hofstede (1980) Pakistan is considered as a collectivist society and being collectivists, people feel more satisfaction while doing things collectively. The nature of collectivism makes individuals self-esteem irrelevant in moderating the link between financial literacy and financial behavior; it is therefore self-esteem hardly contributes anything to bring change in individual's financial behavior.

CONCLUSION

The basic purpose of this study is to identify the important factors that affect financial satisfaction and investigate the mediating role of financial behavior and the moderating effect of self-esteem. Self-administered questionnaire has been distributed among targeted participants. Preacher and Hayes (2008) method has been used to estimate the moderated-mediation analysis. Total five hypotheses have been tested, four of them are accepted and one is rejected. Findings of this study are in consonance with the previous studies as both financial literacy and financial behavior positively impact financial satisfaction. It is due to the fact that individual's financial behavior varies with the level of financial literacy and positive financial behavior likely to increase financial satisfaction. In line with theory of planned behavior, financial literacy and self-esteem beliefs positively influence financial behavior and demonstrate a positive connection among them. It is also found that financial behavior mediates the link between financial literacy and financial satisfaction. This study concludes that financial literacy has a significant and positive association with financial behavior and the presence of high self-esteem does not bring considerable change in the strength of the relationship between financial literacy and financial behavior. Financial literacy increases confidence and awareness which ultimately creates positive financial behavior. It is also worthwhile to mention that those who bear positive financial behavior; normally they are more satisfied and can take right financial decisions. This study contributes to the satisfaction literature by exploring effect of financial literacy on financial behavior and financial satisfaction. This study also adds knowledge to the relevant literature by examining the mediating role of financial behavior. Further contributes to the behavioral finance literature by analyzing whether self-esteem modifies the effect of financial behavior on financial satisfaction. Findings of our study have several significant implications for individuals, policy makers, academicians and organizations, in the sense that increasing financial literacy is essential to form positive financial behavior which ultimately increases individual's financial satisfaction.

LIMITATIONS AND FUTURE RESEARCH

There are some limitations to this study. Firstly, this research study is cross sectional in nature and we have collected data at one time, this will create problem of causality. It would be interesting to see whether collecting data at different time horizon like collecting data at two times would affect the pattern of results. Secondly, study sample is also small, therefore it is also suggested that sample should be increased in future while conducting study on this model and needs to identify new determinants of financial satisfaction to captured more and clear picture of financial situation and satisfaction in Pakistan.

This study has tested financial behavior as a mediator and self-esteem as moderator; future studies should use other variables like financial risk tolerance, financial stressor, financial solvency, self-esteem as mediator and moderator. It is recommended to conduct a comparative study on female and male financial behavior and its impact on domain specific satisfaction to ascertain the difference in the financial behavior of male and female in Pakistan. Findings of current study will be helpful for policy makers in taking right financial decisions and making effective polices in Pakistan. Level of financial literacy and self-esteem of individuals and households should be increased by encouraging positive financial behavior. Policy makers and academicians may use the information to educate and promote positive financial behavior to enhance nation's financial well-being. Financial environment plays significant role to form positive financial behavior, therefore a stable policy should be made to create more business opportunities to bring positive change in the financial environment.

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