

# **Direct and Indirect Effects of Self-Esteem on Financial Satisfaction**

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#### ABSTRACT

In this study, we explore the role of self-esteem on financial satisfaction and propose that self-esteem relates to financial satisfaction both directly as well as indirectly through financial behavior. Data for this study was obtained from a multistage random sample of household financial officers in Kerala, India (n = 500). Results showed that self-esteem significantly relates to household financial officers' financial satisfaction after controlling for financial knowledge and sociodemographic factors. The relationship between self-esteem and financial satisfaction could be both direct and indirect through financial behavior. The findings suggest that financial educators and financial therapists should work together to enhance not only objective financial knowledge but also psychological traits such as self-esteem for engaging in desirable financial behavior, which in turn relates to financial satisfaction.

Keywords: Self-Esteem, Financial Behavior, Financial Satisfaction JEL Classifications: G41, G51, G53

#### **1. INTRODUCTION**

The sense of self is inevitable for our well-being. Human beings are strongly and pervasively concerned with self-esteem, on the assumption that a high level of self-esteem will cause various benefits. Self-esteem is nothing but how an individual value oneself. Prior studies on psychology and personality revealed that self-esteem is a major psychological trait (Judge and Bono, 2001; Judge et al., 1998) and crucial to individuals' behavior, thus it affects the various aspects of their life (Baumeister et al., 2003; Branden, 1992, 1994, 2001; Crocker and Park, 2004; Di Paula, 1997; Pyszczynski et al., 2004; Rosenberg et al., 1995). In other words, individuals' self-esteem is a major factor for their life satisfaction (Campbell, 1981; Çivitci and Çivitci, 2009; Kong and You, 2013; Ye et al., 2012) which is comprised with various domain satisfactions, particularly financial satisfaction (Bowling and Windsor, 2001; Diener and Diener, 1995; Loewe et al., 2014; Michalos and Orlando, 2006; Oishi et al., 1999; Xiao et al., 2009).

Recently, researchers showed the link between self-esteem and financial behavior. Those who have high self-esteem tend to be engaged in desirable financial behavior (Tang and Baker, 2016). Literature showed that domain behavior contributes to domain satisfaction (Lyubomirsky et al., 2005; Otake et al., 2006). Researchers confirmed this connection from financial perspective. Specifically, those who have engaged in desirable financial behavior are likely to be satisfied financially (Antony and Thomas, 2023; Joo and Grable, 2004; Xiao et al., 2006; Xiao et al., 2009).

In this study, we explore the role of self-esteem on financial satisfaction and posit that self-esteem relates to financial satisfaction directly and indirectly through financial behavior. An understanding of financial satisfaction is important, as it contributes to overall life satisfaction. Thus, revealing the role of self-esteem, a major psychological trait, on financial satisfaction of household financial officers is significant for the policy formulation and implications.

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#### 2. LITERATURE REVIEW AND THEORY

#### 2.1. Self-Esteem and Financial Satisfaction

Self-esteem is defined as the general attitude of an individual towards oneself (Rosenberg et al., 1995). Self-esteem is the belief that a person is fit to live and worthy of living (Branden, 2001). A high-level of self-esteem indicates favorable self-evaluation and low-level of it represents unfavorable judgment of the self. Individuals with high self-esteem exhibit more confidence in their behavior and use more self-regulatory strategies than those with low self-esteem (Baumeister et al., 2003). They exhibit more persistence in the face of failure and are able to overcome difficulties (Boden et al., 2008; Branden, 1992). Baumeister et al. (2003) revealed that individuals with low self-esteem show the inclination towards floccinaucinihilipilification that indicates action or habit of estimating as worthless. They express negative attitude not only towards themselves but also towards other people, events, and circumstances. Researchers suggested that self-esteem is a major predictor for life satisfaction. In other words, evaluation of an individual about oneself is important for evaluation of an individual about the whole life (Civitci and Civitci, 2009; Kong and You, 2013).

Prior literature evidently showed that financial satisfaction is a major domain of life satisfaction (Bowling and Windsor, 2001; Diener and Diener, 1995; Loewe et al., 2014; Michalos and Orlando, 2006; Oishi et al., 1999; Xiao et al., 2009). Financial satisfaction is the individuals' satisfaction with their financial situation (Joo, 2008). In other words, financial satisfaction is the individuals' perception regarding personal financial condition (Ali et al., 2015). It is the appraisal of individuals' satisfaction regarding personal financial situation (Hira and Mugenda, 1998). According to Zimmerman (1995), financial satisfaction is the state of being happy, healthy, and free from worry about financial situation. It is the satisfaction of individuals with their objective and subjective financial situation (Joo and Grable, 2004). Literature shows that there is no consensus regarding the measurement of financial satisfaction. Even though some researchers used multiple-item measures to assess financial satisfaction (Hira and Mugenda, 1998; Lown and Ju, 1992), the single-item measures are widely used for the assessment of financial satisfaction (Joo and Grable, 2004; Morgan, 1992; Vera-Toscano et al., 2006; Xiao et al., 2014).

Findings of the study among Chilean workers suggested that financial satisfaction is the strongest predictor of life satisfaction (Loewe et al., 2014). Based on the idea of Maslow's (1970) need hierarchy theory, financial satisfaction might be the dominant factor in emerging nations than the wealthy nations (Loewe et al., 2014). In other words, the relationship between financial satisfaction and life satisfaction is stronger in less wealthy nations (Veenhoven, 1991). Unlike the wealthy nations, lower level needs are not met in the poor nations (Oishi et al., 1999). Physiological needs are important than other needs which come only after the lower level needs are achieved. Many people in poor countries still lack basic goods and services which are important for their happiness and the amount of money they have is a strong cause for happiness (Diener and Diener, 1995). Since self-esteem is the major predictor of life satisfaction, which is primarily concerned with financial satisfaction, it can presume that there is a relationship between self-esteem and financial satisfaction. Besides, Hira and Mugenda (1998) showed that selfimage, which is measured by four items from the Rosenberg's (1965) self-esteem scale, significantly correlated with financial satisfaction.

#### 2.2. Self-Esteem and Financial Behavior

Literature shows that researchers have studied financial behavior from different settings (Hilgert et al., 2003; Robb and Woodyard, 2011; Strömbäck et al., 2017; Tang and Baker, 2016; Xiao, 2008; Yong et al., 2018). Financial behavior refers to the human behavior relevant to management of financial resources (Xiao, 2008). It involves cash management, credit management, saving behavior, and investment behavior. Each behavior tends to be the antecedent to the next, that is, there is a hierarchical relationship between these behaviors (Hilgert et al., 2003). Researchers suggested that financial behavior can be categorized as desirable and risky financial behavior (Xiao et al., 2014). Robb and Woodyard (2011) suggested that adequate fund for future emergencies, preparedness for retirement, paying of credit card balances regularly, getting copy of credit card report, risk management, and not overdrawing a checking account are the desirable financial practices.

Recently, researchers revealed the significance of individuals' selfesteem as a psychological attribute in determining their financial behavior. Specifically, individuals with high self-esteem tend to be engaged in desirable financial behavior and those with low self-esteem likely to be engaged in undesirable financial behavior (Pitfield, 2016; Tang and Baker, 2016). Sages and Grable (2011) suggested that the higher the self-esteem in prior period, the more will be the steps taken for future financial planning. Evidence showed that high self-esteem is related to more planned purchasing behavior and low self-esteem to more compulsive buying behavior (DeSarbo and Edwards, 1996; Yurchisin and Johnson, 2004). Low self-esteem is a situation of powerlessness and individuals with low self-esteem have a desire for conspicuous consumption (Pitfield, 2016). The state of low-power increases the willingness to pay for status symbol products (Rucker and Galinsky, 2008) and consumers resolve the powerlessness with conspicuous consumption (Pitfield, 2016). Evidence showed that individuals having self-threat tend to be engaged in materialistic consumption and in the long run, this materialistic behavior can create financial struggle for low-income earners (Pitfield, 2016). Duesenberry (1949) suggested that consumption level of household is in accordance with what others do (i.e., to keep up with the Joneses). In order to achieve peer acceptance and restore the loss of selfesteem, low-income earners consume excessively and it creates high-level of debt (Isaksen and Roper, 2008). Consumers purchase products in accordance with the preferences of the reference group, thus they substitute their financial and personal well-being with social well-being (Mead et al., 2011).

Literature shows that individuals having high self-esteem exhibit more self-regulation (Baumeister et al., 2003; Di Paula, 1997; Di Paula and Campbell, 2002) which is essential for sound financial behavior. Self-regulation enables the individuals for avoiding overspending, impulsive purchases, and to follow the budget strictly (van Raaij, 2016). Researchers showed that individuals having low self-esteem exhibit high level of anxiety (Crocker and Park, 2004; Greenberg et al., 1992; Pyszczynski et al., 2004) which is related with spending more than what is earned, failure in prompt payment of bills, and reaching maximum limits on credit cards (Sages et al., 2013). More anxious people likely to hold conservative assets in their portfolio and save less for future (Gambetti and Giusberti, 2012). Less anxious people tend to be engaged in more desirable financial behaviors in the areas of formulation of financial goals, savings, and spending (Hayhoe et al., 2012).

#### 2.3. Financial Behavior and Financial Satisfaction

Literature shows that domain behavior contributes to domain satisfaction (Lyubomirsky et al., 2005; Otake et al., 2006), including financial behavior to financial satisfaction, which suggest that there is a positive relationship between financial behavior and financial satisfaction (Antony and Thomas, 2023; Davis and Runyan, 2016; Joo and Grable, 2004; Xiao et al., 2006; Xiao et al., 2009). Those who have engaged in desirable financial behavior likely to be satisfied with their financial resources (Loibl and Hira, 2005; Woodyard and Robb, 2016). Specifically, those who have engaged in financial practices like prompt payment of bills, adequate savings, free from debt, investment, and insurance likely to be satisfied financially (Xiao et al., 2006). Xiao et al. (2014) found that financial satisfaction increases with desirable financial behavior and decreases with risky financial behavior. Hira and Mugenda (1998) found that spending behavior predicts financial satisfaction significantly. Desirable financial behaviors like rational budget management and saving habit contribute positively to financial satisfaction (Ünal and Duger, 2015). The exploratory framework of the determinants of financial satisfaction developed by Joo and Grable (2004) suggested that financial behavior is the key individual determinant of financial satisfaction.

### 2.4. Financial Knowledge, Financial Behavior, and Financial Satisfaction

Existing literature on personal and household finance suggests that the relationship between financial knowledge, financial behavior, and financial satisfaction is robust and consistent (Ali et al., 2015; Antony and Thomas, 2023; Joo and Grable, 2004; Taft et al., 2013; Xiao et al., 2006). Conventional belief suggests that individuals who are financially savvy tend to be financially satisfied by engaging in responsible financial practices. Nonetheless, increased financial knowledge is important but not enough for engaging in sound financial practices, which may lead to financial satisfaction (Hadar et al., 2013; Tang and Baker, 2016).

### **2.5. Sociodemographic Factors, Financial Behavior, and Financial Satisfaction**

Prior research showed the relationship of sociodemographic factors with financial behavior and financial satisfaction. Lind et al. (2020) reported that compared to men, women were likely to engage in more responsible financial practices. Joo and Grable (2004) found that those who have higher level of household income tended to exhibit responsible financial practices than others.

Similarly, those who have education beyond high school but less than college level was likely to be engaged in desirable financial behaviors than those who have included in other educational groups. Results showed that being older is related with decline in high cost borrowing, and being single or separated increases the likelihood of high cost borrowing and decreases the chance of emergency savings. Similarly, those who have high income and education are likely to have a plan for retirement and less likely to use high cost borrowing (de Bassa Scheresberg, 2013). Henager and Cude (2016) found that being employed positively relates with financial behavior.

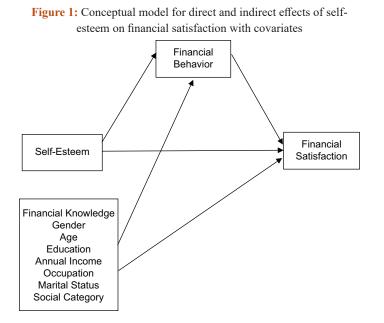
Loibl and Hira (2005) reported gender differences in financial satisfaction. Specifically, being male contributed to financial satisfaction significantly. Sumarwan and Hira (1993) found that age and income are positively and significantly related with financial satisfaction. Hira and Mugenda (1998) showed that age, marital status, and education were correlated significantly with financial satisfaction among non-retirees compared to retirees. Older, married, and those with more education reported more financial satisfaction compared to younger, single and those with less education. Owusu (2021) found that individuals who are employed likely to be more financially satisfied than the unemployed. Moreover, Johri and Anand (2022) conducted a study in India and reported the caste differences in life satisfaction which is primarily concerned with financial satisfaction. Specifically, Individuals from general caste have more life satisfaction compared to those from scheduled castes.

### 2.6. Personal and Household Finance in Indian Context

In India, no adequate research was conducted regarding the role of self-esteem on personal and household finance, whereas financial knowledge, financial behavior, and financial satisfaction were studied and reported. Through the survey on financial literacy and financial inclusion, National Centre for Financial Education (NCFE, 2019) found that 49% respondents met the minimum target score in financial knowledge and 53% in financial behavior. In Kerala, 70% and 57% respondents were crossed the minimum threshold limit on financial knowledge and financial behavior respectively. The report of Committee on Household Finance (2017) reveals that the average Indian households allocate their wealth in physical assets. The reluctance to make investment in financial assets is partly due to lack of trust in financial institutions. It is also reported that Indian households largely depend on unsecured debt mostly in the form of non-institutional sources. Recently, Antony and Thomas (2023) conducted a study among household financial officers in Kerala to check whether subjective financial knowledge relates with financial satisfaction. Results showed that subjective financial knowledge relates with financial satisfaction both directly and indirectly through financial behavior, after controlling for objective financial knowledge and socioeconomic factors.

#### 2.7. Current Study

Even though literature shows various factors which are linked with financial behavior and financial satisfaction, self-esteem has not received due attention. Although a few studies showed the link



between self-esteem and financial behavior (Pitfield, 2016; Tang and Baker, 2016), no prior studies have investigated the role of selfesteem on financial satisfaction. From the available evidence, it can be assumed that self-esteem is related with financial satisfaction directly and indirectly through financial behavior. Financial knowledge and sociodemographic factors which are found in the literature in this regard, are also included in the model (Figure 1). On that ground, the following hypotheses were formulated:

- H<sub>1</sub>: Self-esteem is directly and positively related with financial satisfaction, conditional on financial knowledge and sociodemographic factors.
- H<sub>2</sub>: Self-esteem is indirectly and positively related with financial satisfaction, through financial behavior, conditional on financial knowledge and sociodemographic factors.

#### **3. METHODS**

#### **3.1. Participants and Procedure**

The study was conducted among household financial officers in Kerala, India. Household financial officers are the persons who manage finance in their households. Through multistage random sampling, we interviewed 500 respondents and obtained responses from them. The entire Kerala state was divided into three zones: South zone, Central zone, and North zone. One district from each zone was selected randomly. Again one Panchayat and one Municipality or Corporation were selected from each district (the random selection gave three Panchayats and three Municipalities). Further, one ward was selected from each selected Panchayat and Municipality. Finally, six wards represented the entire Kerala. From each ward in Panchayat, 87 households (86 in North Zone) and from each ward in Municipality, 80 households were selected randomly. From each household, we contacted the household financial officer and obtained responses. Whether a male or female member was to be interviewed was based on who is primarily managing the finance in household. Data were collected from 500 participants with no missing observations. All participants gave their informed consent.

### **3.2. Measurement of Variables**

3.2.1. Self-esteem

The study used ten-item scale developed by Rosenberg (1965) to measure the self-esteem of the respondents (Appendix A). The present study used the modified five-point scale instead of the original four-point scale. Responses ranged from 1 (Strongly disagree) to 5 (Strongly Agree). The scale offered an adequate level of internal consistency (Cronbach's alpha = 0.874).

#### 3.2.2. Financial behavior

The study used nine items from the Financial Management Behavior Scale developed by Dew and Xiao (2011) to measure the financial behavior of respondents (Appendix B). Even though the scale measures the general financial behavior, it includes three subscales for measuring cash management, credit management, and savings and investment behavior. Since credit card is not popular among the household financial officers in Kerala and 94% respondents are not using credit card, the subscale of credit management is not included in the analysis. Responses measured on a five-point scale ranging from 1 (*never*) to 5 (*always*). The scale offered an adequate level of internal consistency (Cronbach's alpha = 0.853).

#### 3.2.3. Financial satisfaction

The study used one-item scale developed by Morgan (1992) to measure respondents' financial satisfaction. Respondents were asked, "How satisfied are you with your financial situation?" Responses were measured on a five-point scale, with higher numbers indicating greater degrees of financial satisfaction.

#### 3.2.4. Covariates

Control variables include respondents' sociodemographic variables and financial knowledge. The sociodemographic variables were coded as 0-1 dummies. It includes: Gender (female = 1), age ( $\geq 40 = 1$ ), education (college level = 1), annual income ( $\leq 200,000 = 1$ ), occupation (have a job = 1), marital status (married = 1), and social category (general = 1). Financial knowledge of respondents was assessed by using the measure of NCFE (2019), which was developed within the framework suggested by International Network on Financial Education (INFE, 2011). Financial knowledge is the understanding about concepts and products in personal finance (Lind et al., 2020). The respondents were asked to give their responses on eight questions which covers division, time value of money, interest paid on loan, simple and compound interest calculation, inflation, risk-return relationship, and diversification (Appendix C).

#### 3.3. Data Analysis

The data collected from respondents were analyzed with SPSS. The study used ordinary least squares regression-based path analysis through PROCESS macro version 4.0 (Hayes, 2021) to test the direct and indirect effects of self-esteem on financial satisfaction. Bootstrap estimation approach tested the significance of the indirect effect of self-esteem on financial satisfaction. To check for possible multicollinearity on independent variables, correlation analysis was done prior to the regression analysis.

#### 4. RESULTS

Table 1 shows the summary statistics on all measures as well as covariates. Respondents had an average self-esteem score of 2.95 out of 5. Their financial behavior score averaged 2.59 and their financial satisfaction score averaged 2.94 out of 5. Table 2 shows both Pearson and partial correlations between self-esteem, financial behavior, and financial satisfaction. Self-esteem is positively and significantly correlated with financial behavior and financial satisfaction. The relationship between financial behavior and financial satisfaction is also positive and significant. It is found that after controlling for covariates (sociodemographic factors and financial knowledge), the relationships were still significant. There is no problematic multicollinearity between the independent variables as the value of tolerance is above 0.10 and VIF value is below 5.

Using ordinary least squares path analysis, it was found that selfesteem is related with financial satisfaction directly and indirectly through financial behavior, holding financial knowledge and sociodemographic factors constant. Results indicated that the regression coefficient between self-esteem and financial behavior was statistically significant (Path *a*), as was the regression coefficient between financial behavior and financial satisfaction (Path *b*). As shown in Table 3, respondents having more selfesteem tend to engage in responsible financial behavior (a = 0.33), and respondents who engaged in responsible financial practices tend to be satisfied with their financial resources (b = 0.61).

#### Table 1: Summary statistics on all measures and covariates

A bootstrap confidence interval for the indirect effect (ab = 0.20) based on 5000 bootstrap samples was entirely above zero (0.14-0.27). These results support the hypothesis that self-esteem is indirectly and positively related with financial satisfaction, through financial behavior, conditional on financial knowledge and sociodemographic factors.

Self-esteem was still a significant predictor of financial satisfaction after controlling for the financial behavior (Path c '). In other words, self-esteem is related with financial satisfaction independent of its effect on financial behavior (c' = 0.18). It supports the hypothesis that self-esteem is directly and positively related with financial satisfaction, conditional on financial knowledge and sociodemographic factors. The total effect (Path c) of self-esteem on financial satisfaction was also found significant (for more details, see Appendix D).

### 4.1. Direct Effect of Self-Esteem on Financial Satisfaction

The direct effect of self-esteem, c' = 0.18, suggests that two household financial officers who differ by one unit in their selfesteem are estimated to differ by 0.18 units in their reported financial satisfaction holding financial behavior, financial knowledge, and sociodemographic factors constant. The coefficient is positive, meaning that the household financial officer having more self-esteem but who is equal on financial behavior, financial knowledge, and sociodemographic factors is estimated to be 0.18 units higher in reported financial satisfaction.

		Mean	SD	Min	Max
Self-esteem		2.95	0.75	1.20	4.90
Financial behavior		2.59	0.65	1.11	4.00
Financial satisfaction		2.94	0.83	1.00	5.00
Gender (Ref. = Male)					
Female, n (%)	138 (27.60)				
Age (Ref. = $<40$ )					
≥40, n (%)	300 (60.00)				
Education (Ref. = No college level)					
College level, n (%)	175 (35.00)				
Occupation (Ref. = Have no job)					
Have a job, n (%)	405 (81.00)				
Annual income (Ref. = >₹200,000)					
≤₹200,000, n (%)	378 (75.60)				
Marital status (Ref. = Single)					
Married, n (%)	453 (90.60)				
Social category (Ref. = Backward classes)					
General, n (%)	160 (32.00)				
Financial knowledge		5.71	1.45	1.00	8.00

#### Table 2: Correlation coefficients between self-esteem, financial behavior, and financial satisfaction

	Self-esteem	<b>Financial behavior</b>	<b>Financial satisfaction</b>
Pearson correlations			
Self-esteem	-		
Financial behavior	0.89**	-	
Financial satisfaction	0.85**	0.91**	-
Partial correlations (controlling for covariates)			
Self-esteem	-		
Financial behavior	0.57**	-	
Financial satisfaction	0.42**	0.51**	-

<sup>\*\*</sup>P<0.01

## 4.2. Indirect Effect of Self-Esteem on Financial Satisfaction

The indirect effect of self-esteem on financial satisfaction,  $ab = 0.33 \ (0.61) = 0.20$  suggests that two household financial officers who differ by one unit in their self-esteem but equal on financial knowledge and sociodemographic factors are estimated to differ by .38 units in their reported financial satisfaction as a result of the tendency for those having relatively more self-esteem to engage in more desirable financial behaviors, which in turn translates into greater financial satisfaction.

## **4.3. Total Effect of Self-Esteem on Financial Satisfaction**

The total effect of self-esteem on financial satisfaction is derived by summing the direct and indirect effects, or by regressing financial satisfaction on self-esteem by itself: c = c' + ab =0.18 + 0.20 = 0.38 (Table 4). Two household financial officers who differ by one unit in self-esteem are estimated to differ by 0.38 units in their reported financial satisfaction, statistically controlling for financial knowledge and sociodemographic factors. The positive sign means that the household financial officer having greater self-esteem reports higher financial satisfaction.

#### **5. DISCUSSION AND CONCLUSION**

Financial satisfaction is the key objective of every individual as it contributes to life satisfaction. Even though researchers have documented financial satisfaction from different perspectives (Antony and Thomas, 2023; Atlas et al., 2019; Dare et al., 2020; Grable et al., 2021; Woodyard and Robb, 2016; Xiao et al., 2009), a better understanding of the determinants of financial satisfaction has not been arrived yet. With the objective of improving financial satisfaction through responsible financial behaviors, financial education programs in the past mainly focused on delivering objective knowledge, whereas recently financial educators recognized the role of psychological factors. The current study designed to test the role of self-esteem on financial satisfaction and to expand the literature in personal and household finance.

In this study, financial satisfaction was examined in association with self-esteem. The study explored the effect that self-esteem has upon financial satisfaction. As expected, self-esteem was directly and positively associated with financial satisfaction. The direct effect of self-esteem on financial satisfaction suggests that household financial officer having more self-esteem but who is equal on financial behavior, financial knowledge, and sociodemographic factors tend to be more financially satisfied. Further, it reveals the indirect effect of self-esteem on financial satisfaction through financial behavior. It suggests that household financial officer having more self-esteem is likely to be engaged in desirable financial practices, which in turn results in more financial satisfaction, holding financial knowledge and sociodemographic factors constant. The findings support the prior literature, as evidence suggests that self-esteem is positively related with financial behavior (Tang and Baker, 2016) and financial behavior with financial satisfaction (Antony and Thomas, 2023; Joo and Grable, 2004; Xiao et al., 2006; Xiao et al., 2009). As a positive psychological trait, self-esteem directly relates with financial

### Table 3: Path analysis results for direct, indirect, and total effects of self-esteem on financial satisfaction

Variable	Coefficient	SE			
		SĽ			
Path $c$ (DV: Financial satisfaction	/	0.04			
Self-esteem	0.38*	0.04			
Gender	-0.01	0.05			
Age	-0.18*	0.03			
Education	0.08*	0.02			
Occupation	0.01	0.01			
Annual income	-0.01	0.01			
Marital status	-0.03	0.02			
Social category	0.08*	0.03			
Financial knowledge	0.27*	0.02			
Path <i>a</i> (DV: Financial behavior)					
Self-esteem	0.33*	0.02			
Gender	0.05	0.03			
Age	-0.12*	0.01			
Education	0.04*	0.01			
Occupation	-0.01	0.01			
Annual income	-0.01	0.01			
Marital status	-0.01	0.01			
Social category	0.05*	0.02			
Financial knowledge	0.22*	0.01			
Path $b$ and $c'$ (DV: Financial satisfaction)					
Financial behavior (b)	0.61*	0.07			
Self-esteem $(c')$	0.18*	0.04			
Gender	-0.04	0.05			
Age	-0.10*	0.03			
Education	0.06*	0.02			
Occupation	0.01	0.01			
Annual income	-0.01	0.01			
Marital status	-0.03	0.02			
Social category	0.05	0.02			
Financial knowledge	0.14*	0.03			
*D -0.05					

\*P<0.05

#### Table 4: Effects of self-esteem on financial satisfaction

	Effect	SE
Total effect	.38*	0.04
Direct effect	.18*	0.04
Indirect effect <sup>a</sup>	.20	0.03

\*Bootstrap confidence interval based on 5000 bootstrap samples was entirely above zero (0.14-0.27). \*P<0.05  $\,$ 

satisfaction. Moreover, self-esteem is useful for engaging in desirable financial behaviors, which ultimately leads to financial satisfaction.

Furthermore, results reveal that financial knowledge is related with financial satisfaction directly and indirectly through financial behavior. These results are consistent with previous research regarding the relationship of financial knowledge with financial satisfaction. Specifically, those who are financially savvy tend to be satisfied with their financial resources through responsible financial behavior (Ali et al., 2015; Antony and Thomas, 2023; Hilgert et al., 2003). Besides, age and level of education are found statistically associated with financial satisfaction. Specifically, younger household financial officers are more financially satisfied compared to their older counterparts. Similarly, household financial officers having college education are more satisfied with financial resources than those with no college education. The significance of self-esteem as a predictor of financial satisfaction is a major finding with implications for financial therapists. Therapeutic intervention is possible by providing psychological support and financial advice to their clients. Financial therapists need to take efforts to develop a positive self-perception among household financial officers, as it creates self-confidence and self-regulation which are essential for engaging in responsible financial behaviors which ultimately leads to financial satisfaction. Keeping in view of the practices suggested by Branden (1994), financial therapists can intervene in the efforts of household financial officers for improving the self-esteem. For strengthening self-esteem, Branden suggests six practices namely, practice of: (a) living consciously, (b) self-acceptance, (c) self-responsibility, (d) self-assertiveness, (e) living purposefully, and (f) personal integrity.

For financial therapists, it is important to understand the level of clients' self-esteem, to provide more customized services. Nelson et al. (2015) suggest that financial therapists should understand the emotional aspects associated with financial management. Assessment of self-esteem, factors affecting self-esteem, and the strategies to improve self-esteem are the major areas to be addressed before advising the needy (Hira and Mugenda, 1998). Household financial officers, who believe that they are financially naive and incompetent in dealing with the financial matters, should seek expert advice.

Even though the relationship of financial knowledge on financial behavior and financial satisfaction is robust and consistent with prior studies, this research explored the importance of self-esteem on financial satisfaction. These findings suggest that financial educators and financial therapists should work together to improve both objective financial knowledge and psychological traits such as self-esteem among household financial officers. Delivering financial knowledge, without developing psychological traits like self-esteem, will be less effective. The proper blend of both self-esteem and financial knowledge can help the household financial officers to engage in desirable financial behaviors and to get satisfaction with financial resources. As suggested by Joo and Grable (2004), the combined efforts of both financial educators and financial practitioners may likely result in financial satisfaction through responsible financial behaviors.

Policymakers should emphasize the role of financial therapists among the household financial officers. Local self-government institutions in Kerala can be a part of this action plan. These institutions, at ward level, can provide services through professionals. Ward level platforms like Gram Sabha and Ward Sabha can be created for this purpose. Even though there are various programs undertaken at government level, the focus was on disseminating financial knowledge rather than developing psychological traits.

Even though the concept of self-esteem has drawn attention among the researchers in personal and household finance, no adequate study was found to examine its effects on financial satisfaction. We believe this research significantly contributes to the existing literature on personal and household finance. This research contributes to the literature on financial satisfaction by revealing the direct and indirect relationship of self-esteem with financial satisfaction. It adds to the literature on financial behavior by documenting the role of financial behavior in the relationship between self-esteem and financial satisfaction.

The limitations of the research should be acknowledged. With the cross-sectional nature of the data, it was unable to analyze the cause-effect relationship among variables. In this research, financial satisfaction of household financial officers was assessed by using five-point one-item measure. More rigorous measures can be used in further research. Future researchers can test the effect of bidimensional nature of self-esteem on financial satisfaction. Moreover, this model can be used in other domains of life satisfaction.

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#### APPENDIX

#### Appendix A: Self-esteem measure

S. No.	Items
1.	On the whole, I am satisfied with myself.
2.	At times I think I am no good at all. <sup>a</sup>
3.	I feel that I have a number of good qualities.
4.	I am able to do things as well as most other people.
5.	I feel I do not have much to be proud of. <sup>a</sup>
6.	I certainly feel useless at times. <sup>a</sup>
7.	I feel that I am a person of worth, at least on an equal plane with others.
8.	I wish I could have more respect for myself. <sup>a</sup>
9.	All in all, I am inclined to feel that I am a failure. <sup>a</sup>
10.	I take a positive attitude toward myself.
a Dovorso	beho

<sup>a</sup>Reverse coded

#### Appendix B: Financial behavior measure

#### S. No. Items

- 1. Comparison shopped when purchasing a product or service.
- 2. Paid all your bills on time.
- 3. Kept a written or electronic record of your monthly expenses.
- 4. Stayed within your budget or spending plan.
- 5. Began or maintained an emergency savings fund.
- 6. Saved money from every paycheck.
- 7. Saved for a long term goal such as a car, education, home, etc.
- 8. Contributed money to a retirement account.
- 9. Bought bonds, stocks, or mutual funds.

#### Appendix C: Financial knowledge measure

#### S. No. Items

- 1. I would like to know whether you think the following statements are true or false.
  - a. An investment with a high return is likely to be high risk.b. High inflation means that the cost of living is increasing
  - rapidly.
  - c. It is usually possible to reduce the risk of investment in the stock market by buying wide range of stocks and shares.
- 2. Imagine a father leaves behind ₹100,000 for his two children. If these two children have to share the money equally how much does each child get?
- 3. Now imagine that these children have to wait for 1 year to get their share of the ₹50,000 and inflation stays at 5%. In 1 year's time will they be able to buy fewer things than they can do it today.
- 4. You lend ₹25,000 to your friend one evening and he gives you ₹25,000/- back the next day. Did he pay any interest on this loan?
- 5. Suppose you put ₹1000 into a deposit account with a guaranteed simple interest rate of 10% per year. You don't make any further payments into this account and you don't withdraw any money. How much would there be in the account at the end of the 1<sup>st</sup> year, including interest?
- 6. Suppose you put ₹1000 into a deposit account with a guaranteed compound interest rate of 10% per year. You don't make any further payments into this account and you don't withdraw any money. How much would there be in the account at the end of the 5<sup>th</sup> year, including interest?

Appendix D: Path analysis results					
Variable	Coefficient	SE	Т	<b>P-value</b>	
Path c (DV: Financial satisfaction)					
Self-esteem	0.3815	0.0368	10.3648	0.0000	
Gender	-0.0063	0.0486	-0.1300	0.8966	
Age	-0.1785	0.0251	-7.1241	0.0000	
Education	0.0824	0.0184	4.4717	0.0000	
Occupation	0.0054	0.0118	0.4589	0.6465	
Annual income	-0.0127	0.0143	-0.8882	0.3749	
Marital status	-0.0312	0.0197	-1.5847	0.1137	
Social category	0.0802	0.0263	3.0477	0.0024	
Financial knowledge	0.2716	0.0246	11.0339	0.0000	
Path a (DV: Financial beh	avior)				
Self-esteem	0.3336	0.0215	15.4959	0.0000	
Gender	0.0476	0.0284	1.6756	0.0945	
Age	-0.1226	0.0147	-8.3664	0.0000	
Education	0.0443	0.0108	4.1130	0.0000	
Occupation	-0.0080	0.0069	-1.1639	0.2450	
Annual income	-0.0093	0.0084	-1.1045	0.2699	
Marital status	-0.0098	0.0115	-0.8503	0.3956	
Social category	0.0519	0.0154	3.3742	0.0008	
Financial knowledge	0.2245	0.0144	15.5906	0.0000	
Path b and c' (DV: Financ	ial satisfaction	1)			
Financial behavior $(b)$	0.6066	0.0723	8.3902	0.0000	
Self-esteem $(c')$	0.1792	0.0421	4.2608	0.0000	
Gender	-0.0352	0.0456	-0.7718	0.4406	
Age	-0.1041	0.0251	-4.1539	0.0000	
Education	0.0555	0.0175	3.1647	0.0016	
Occupation	0.0103	0.0111	0.9302	0.3527	
Annual income	-0.0071	0.0134	-0.5297	0.5965	
Marital status	-0.0253	0.0184	-1.3699	0.1713	
Social category	0.0487	0.0249	1.9548	0.0512	
Financial knowledge	0.1355	0.0282	4.8074	0.0000	
Path c (DV: Financial satisfaction)					
Model Summary: R <sup>2</sup> =0.8347, F (9, 490)=274.9122, P=0.0000					
Path a (DV: Financial behavior)					
Model Summary: R <sup>2</sup> =0.9091, F (9, 490)=544.4337, P=0.0000					
Path <i>b</i> and <i>c</i> ' (DV: Financial satisfaction)					
Model Summary: R <sup>2</sup> =0.8555, F (10, 489)=289.5009, P=0.0000					

Appendix D: Path analysis results