Cognitive and Non-Cognitive Factors as Predictors of Financial Wellbeing Mediated through Financial Management Behavior in Pakistan

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Abstract

Financial wellbeing is among the key antecedents for the mental and physical health of an individual. This study aimed to examine the effects of cognitive and non-cognitive factors on financial wellbeing mediated through financial management behavior. A cross-sectional survey method based on a quantitative design was employed to collect the data. A total of 306 usable responses from university students and employees were obtained by following a self-administered approach. Multiple regression analysis techniques were applied to test the study hypotheses. Results revealed the significant impact of optimism, mental budgeting, deliberative thinking, financial literacy, self-control, financial management behavior, and financial wellbeing. Likewise, financial management behavior showed mediating role between cognitive and non-cognitive factors and financial wellbeing. The implications are presented based on the findings of the study.

Keywords: *Optimism, Mental Budgeting, Deliberative Thinking, Self-control, Financial Literacy, Financial Management Behavior, Financial Wellbeing*

1. Introduction

An integral notion of psychological wellbeing for a human is to be satisfied from all aspects of life Hageman, Sherraden, Birkenmaier, and Loke (2019) and financial wellbeing is one of the core components of psychological wellbeing (Shim, Xiao, Barber, & Lyons, 2009). Almost every individual manages his/her household expenditure in one or another way wherein few people tend to save or vice versa (Fünfgeld, et al., 2009) which is due to the financial management behavior of the individual which is further pronounced as financial wellbeing (Gutter, et al., 2011). Following authors like Dooley, et al. (1996) and O'Neill, et al. (2005) inferred that the mental and bodily health of a person is positively linked with financial wellbeing. Lack of financial wellbeing results in financial distress which not only diminishes physical health but also causes to reduce the productivity of an employee at the workplace (Bagwell & Kim, 2003; Garman, Kim, Kratzer, Brunson, & Joo, 1999; Garman, Leech, & Grable, 1996; Joo & Garman, 1998; Strömbäck, Skagerlund, Västfjäll, & Tinghög, 2020). Financial wellbeing considers being the function of a personal characteristic, financial management behavior, and financial stressor events (Kim & Garman, 2003). Financial wellbeing deal with the feeling of the financial condition of an individual and to what extent people feel anxiety about uncertainties concerning financial decision (Strömbäck, Lind, Skagerlund, Västfjäll, & Tinghög, 2017). However, financial wellbeing is a subjective term as people with the same income level feel different about their income adequacy toward the meeting of their basic needs of life. As one may have different spending and consumption habit from others. Individual perception about the level to which flow of income meet financial demands of life called income adequacy in the publication (Danes & Rettig, 1993). If people are feeling that their income adequacy is low to meet their basic needs of lives then they have negative emotion of adverse financial condition which cause to reduce financial wellbeing (Mahendru, 2020). Moreover, few personalities are less vulnerable to the feeling of anxiety as a response to their financial behavior. This behavioral diversity highlights the needs of individual differences in financial management behavior and financial wellbeing. Previous studies focused on a cognitive factor that influences financial management behavior as financial literacy, numeric skills (Strömbäck et al., 2017).

However, little research available on a non-cognitive factor that accounts for financial behavior and financial wellbeing. Agarwal, Chomsisengphet, and Lim (2017) concluded that noncognitive attributes mostly influence financial choices. Self-control, deliberative thinking, optimism and three unrelated variable or biases which affect financial management behavior and financial wellbeing that need to be explored in-depth (Strömbäck et al., 2017). Financial literacy as a non-cognitive factor while mental budgeting as a cognitive factor has never been explored for financial wellbeing. Financial literacy and individual household financial management behavior are important which counts for financial wellbeing and retirement wellbeing (Hastings, Madrian, & Skimmyhorn, 2013). Financial literacy refers to the use of knowledge and skills efficiently for lifetime financial security (Mandell, 1997), Mandell, et al. (2009) suggested that sizable literature established a link between financial literacy and different dimension of financial behavior. Lusardi and Mitchell (2007) posit that financial literacy and retirement planning, a saving of individual are positively associated. While Van Rooij, Lusardi, and Alessie (2011) conclude that financial literacy is associated with the stock market contribution of individuals. However, up to my knowledge, no study yet explore financial literacy and its effect on cash management, saving, and investment management which is the dimension of financial management behavior. Thaler (1990) discusses mental budgeting refers as a narrow form of mental accounting. Mostly concern with a destination of money which include spending and saving of money by Antonides, De Groot, and Van Raaij (2011). Self-control may be defined as the ability of the upcoming self to control the existing self, moreover, self-control is the ability to control first impulses or resist temptation (Strömbäck et al., 2017). According to the behavioral life cycle hypothesis (BLC) people behave as per their preference of present or future consumption pattern (Pompian, 2011, p. 93). BLC hypothesis established a link between consumption and saving behavior of an individual. A saving attitude is considered to be a vital part of financial management behavior. Both cognitive and non-cognitive factor influence financial management performances which constitute from saving, cash and investment management behavior. Advanced financial management behavior further pronounced to better financial wellbeing.

There is a need to study these non-cognitive factors with cognitive factors simultaneously. To help individuals to make better decisions and increase their wellbeing (Strömbäck et al., 2017). As failure to managing household finance may cause serious social consequences (Perry & Morris, 2005). According to my information, this study is the first one that will explore the mediating role of financial management behavior on financial wellbeing. As work of (Strömbäck et al., 2017) highlighted the need to study the mediating role of financial management behavior on financial wellbeing. The effect of mental budgeting with non-cognitive factor financial literacy on financial management behavior is not been explored yet. Financial well-being among working women of Pakistan has been explored with its effect of financial literacy only in 2016[1]. No study has summarized the relationship between cognitive factors and financial wellbeing in developing countries like Pakistan.

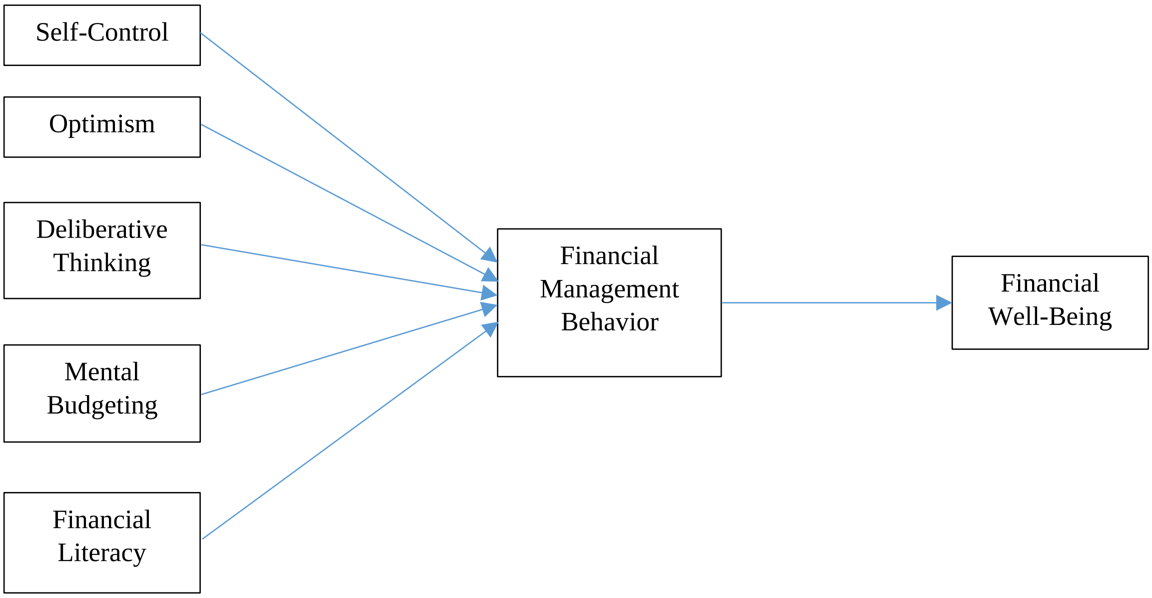
2. Literature Review

Financial wellbeing is one of the core domains of psychological wellbeing for an individual. It defines as a feeling of being happy, economically wealthy, and restricted from worry and it

[1] https://files.consumerfinance.gov/f/201501_cfpb_digest_financial-well-being.pdf)[1s]

is purely centered on the personal opinion of an individual financial situation (Stolper & Walter, 2017; Xiao, Tang, & Shim, 2009). Financial well-being constitutes various financial decisions and these decisions are defining features of it (Shim et al., 2009; Strömbäck et al., 2017). Financial decision evolves from financial management behavior (FMB) which further effect by various cognitive or non-cognitive factor. Positive or negative feeling about financial condition defines financial wellbeing/distress (Prawitz et al., 2006). Kim et al., (2003) reported that people with a great level of financial wellbeing are fewer likely to have poor physical or mental health. O'Neill, Sorhaindo, Xiao, and Garman (2005) state that individual mental and physical health is adversely affected by an increase in financial worries/distress. Bagwell et al. (2003) find spillover effect of lowest financial wellbeing not only in poor health but also on worker productivity at the workplace. Financial wellbeing is the outcome of financial management behavior. It is also affected by financial attitude and financial knowledge (Fitzsimmons & Leach, 1994; Kim, 2000). A sizable number of studies has been investigated the financial management behavior and process which are used by people to achieve highest financial wellbeing (Joo & Garman, 1998; Kim, 2000). Financial wellbeing is a highly personal state it deals with how people subjectively feel about their financial condition regardless of income level. Anxiety about uncertainty link with the financial decision and perceived financial security about the current and future financial matter are elements of financial well-being (O'Neill et al., 2005). Financial security refers to the ability to meet day-to-day expenditure as well as endurance to absorb financial shocks[2] . O'Neill et al. (2005) conclude that people are happier if they feel financially secure. To measure financial wellbeing, it's both components should assess differently. Ponchio, Cordeiro, and Gonçalves (2019); Sorgente and Lanz (2019) confirmed the association between financial wellbeing and financial management behavior. Attitude impactings financial management behavior also found to influence financial wellbeing (Joo & Garman, 1998; Shim et al., 2009). While Xiao et al. (2009) prove positive association between financial wellbeing and financial management behavior (FMB). It constitutes from cash management, saving behavior and credit management of individual (Xiao et al., 2007). Previous work in FMBS scale was conducted by Servon and Kaestner (2008) but this study only measure one or two domain simultaneously. Despite various studies on FMBS only two studies, first one was frequency financial management behavior by (Fitzsimmons et al., 1993) and personal financial management style (Prochaska-Cue, 1993) these were validated with an only non-generalize sample. The financial management behavior (FMBS) scale was developed by Choi, Laibson, and Madrian (2011) which is multi-dimensional and psychometric valid. Self-control, deliberative thinking, Optimism, and mental budgeting are psychological construct and financial literacy is a non-cognitive variable which counts for financial behavior management of an individual (Ponchio et al., 2019). Self-control define as an ability of controlling current self to constitute future selves (Strömbäck et al., 2017). It refers to resist bad habits, temptation and controlling first impulses (Stucke & Baumeister, 2006). Change inner response to interrupt undesirable financial tendencies and refrain from practicing such tendencies (Tangney, Baumeister, & Boone, 2004). People with better self-control produce an optimal fit between self and world (Muraven, 2010). Previous studies that explore the connection between self-control and financial management behavior focus on the precise dimension of financial decisions such as credit card usage, compulsive shopping, and unforeseen expenditure issue or retirement planning. Although Achtziger, Hubert, Kenning, Raab, and Reisch (2015) conclude that people with less control more likely to suffer from compulsive shopping while Gathergood (2012) state that individual with self-control problem more likely to disturb from credit withdrawals and face unexpected expenditures. According to Biljanovska and Palligkinis (2018) people with short level of self-control, and due to absence of planning and obligation manage to have low level of wealth addition. Choi et al. (2011) conclude that people with self-control problem unable to manage adequate money for retirement. High level of self-control is link with better financial management behavior leading individual to save more and focus on long term (Tangney et al., 2004). Number of research work available to identify the measure suitable for gauging self-control (Costa Jr & McCrae, 1992; Muraven & Baumeister, 2000). Further Tangney et al. (2018) developed a brief self-control scale to overcome the drawbacks available in previous research. Optimism define as individual who overestimates the positive outcome and underestimates the probability of negative outcome (Heaton, 2002). People with high level of optimism have more propensity to save and retire later (Anderson, Baker, & Robinson, 2015; Strömbäck et al., 2017). However, Puri and Robinson (2007) conclude that extremely optimistic behavior shows deficit financial behavior. Weinstein and Lyon (1999) claim that people with a good level of optimism are less likely to consider risk in financial decisions. Tennen & Affleck, (1987) find that if the person is optimistic about the future, then there is less probability to concern about possible negative consequences. Optimism positively affects financial management behavior on an individual (Balasuriya, Muradoglu, & Ayton, 2010). Previous studies on the measurement of optimism reveal that few of it was conducted in the laboratory while some consider the life expectancy of an individual as a proxy to measure optimism (Scheier & Carver, 1985). Deliberative thinking maybe defines as effortful, slow, and consciously controlled (Pachur & Spaar, 2015). It can be seen as the opposite of initiative thinking which is effortless and emotionally charged (Kahneman, 2003). These both system of thinking are phenomenally supported whereas intuitive system are automatic one while other is controlled one (Kahneman & Egan, 2011; Mukherjee, 2010). Betsch and Iannello (2009, p. 21) state that tendency to rely on deliberative and intuitive decision making is very from person to person. Such individual difference in decision making style of a person constitutes management behaviors (Dane & Pratt, 2007). Preference for initiative and deliberative (PID) scale has been developed by (Betsch, 2004). PID shows good internal consistency. Despite the usefulness of PID it also highlights few weaknesses it uses the term intuitive directly and mentions two different dimensions of deliberative thinking which they labeled as the cognitive base or planned structure. To report these restrictions Betsch and Iannello (2009) established a united scale to assess the individual to access the individual difference in deliberation and intuition. Mental budgeting relates to a destination of money such as spending and saving of money. Mental budgeting is a narrow form of mental accounting (Thaler, 1990). Mental accounting may be defined as the psychological segregation of economic resources in diverse categories. For example, individuals may categorize food, clothing, and entertainment budgets separately (Heath & Soll, 1996).The notion of mental budgeting is compatible with research on mental accounting (Henderson & Peterson, 1992). Mental budgeting differs from economic mental accounting it labeled saving and spending categories and budget is reserve for each category differently (Heath & Soll, 1996). Spending could be track against each budget. Purpose of allocating budget to each different account is to keep spending within limit of that particular account. It considers as self-control device to manage household finance. Financial management behavior and mental budgeting are positively associated (Antonides et al., 2011). In order to measure mental budgeting, its measure was established by Centiq advisory group. Financial literacy refers to the skill of managing, analyzing, reading, and communicating personal financial condition which ultimately affects financial wellbeing (Anthes & Most, 2000). Remund (2010) defines financial literacy as an ability to understanding a key financial concept and managing personal finance and changing economic conditions. Several studies in literature conclude direct association between financial literacy and financial behavior management (Saeedi & Hamedi, 2018; Skagerlund, Lind, Strömbäck, Tinghög, & Västfjäll, 2018). For measuring financial literacy items have been adopted from the study of (Cude et al., 2006; Loibl & Hira, 2005). The core objective of this research is to explore if self-control, mental budgeting, deliberative thinking, financial literacy, and optimism predict financial management behavior and financial well-being. Then financial management behavior either explains the relationship of financial wellbeing with self-control, mental budgeting financial literacy deliberative thinking optimism simultaneously or individually. BLC hypothesis also guess that self-control will be absolutely linked with general saving behavior. We also conjecture that self-control will be absolutely related with financial wellbeing and financial management behavior however mediating role of financial management behavior is also examined. This study will come up with addition to the existing literature about cognitive non-cognitive determinants and financial behavior in three significant ways. First, this research is exclusive that it observes different cognitive and non-cognitive subjective differences simultaneously effecting to financial management behavior. This study concurrently considers financial literacy and cognitive factor in models predicting financial wellbeing. Second, we also discover the effect of self- control and other cognitive factors on a extensive range of financial management behaviors (FMB), rather than just one only financial behavior either saving or investing. Lastly, we also discover how cognitive and no cognitive factors narrate to anxiety and professed security related with a person's financial situation. On the basis of above described literature, conceptual framework is developed which is as under:

Figure 1. Conceptual Framework



The hypotheses of this study are:

H1: *Self-control has a significant positive impact on financial management behavior.*

H2: *Optimism has a substantial direct impact on financial management behavior.*

H3: *Deliberative thinking has a significant direct impact on financial management behavior.*

H4: *Mental budgeting has a significant direct impact on financial management behavior.*

H5 *Financial literacy has a significant direct impact on financial management behavior.*

H6: *Financial management behavior has a significant direct impact on financial wellbeing.*

H7: *Financial Management Behavior has a significant mediation role between self-control, deliberative thinking, optimism, mental budgeting, and financial wellbeing financial literacy.*

3. Methodology

3.1 Sample and Procedure

An online survey has been conducted by using Google form and email to more than 300 respondents and approximately 300 questionnaires were physically floated to students of various universities and a total of 306 responses were received. The main determination of the study is to measure the factor of financial well-being in the context of developing countries like Pakistan. Four non-cognitive and one cognitive factor which accounts for financial wellbeing through the mediating role of financial management behavior (FMB) has been considered for the research. For studying individual financial behavior and a cognitive and non-cognitive factor that influence FMBs and financial well-being individual, the unit of analysis for this purpose is university students and employees of different business organizations.

IBM SPSS Program v.25 was used to statistically compile the data. Many tests were run to check either data has any errors before hypothesis testing. First of all missing values and outliers are removed from data. Errors were corrected by referring to original questionnaires. Then correlation was calculated to find the relationship between the variables through Pearson Correlation analysis. The next step was to calculate the reliability of data, for this purpose Cronbach alpha was estimated for variables of the study. After that confirmatory factor analysis (CFA) is done to check the validity, reliability, and multidimensionality of all the constructs of the study. To find mediation between dependent and independent variables macro process by Andrew Hayes was used through SPSS.

3.2 Measurement

All constructs were gauged through using 5 points Likert scale which ranges from 1= strongly disagree to 5= strongly agree. Higher scores on variables pronounced to a higher level of construct.

3.2.1 Financial Management Behavior

Maximum studies have measure financial behavior on a one-item scale, usually related to investment behaviors and savings behavior. We used the twelve items scale of the Financial Management Behavior Scale (FMBS). An example of the item includes “Comparison shopped when purchasing a product and service”.

3.2.2 Financial Well-Being

We measured financial well-being in two different dimensions, two distinct scales were used, one gauging financial anxiety-related and one computing perceived financial security. Four items from (Fünfgeld & Wang, 2009) were accepted to quantifying anxiety related to money matters. Three items included for computing financial security from (Strömbäck et al., 2017). For both scales, the respondent was asked to rate 1 (strongly disagree) to 5 (strongly agree).

3.2.3 Self-Control

It was quantified through a general measure of self-control which is a smaller version of the Brief Self-Control Scale (Tangney et al., 2004)). It consists of five items, And the four items from the Short-Term Future Orientation Scale (Antonides et al., 2011).

3.2.3 Optimism

Five items from the Lifetime Orientation Scale established by (Scheier & Carver, 1985). Example include “In uncertain times, I usually expect the best “person having high level of optimism mostly agree or strongly agree with the statement.

3.2.3 Deliberative Thinking

two items from the Unified Scale to Assess Individual Differences in Intuition and Deliberation were taken from the study of (Pachur & Spaar, 2015)

3.2.3 Mental Budgeting: Four items were adopted from the study of mental budgeting and management of household finance by (Antonides et al., 2011).

3.2.3 Financial Literacy

Seven items for measuring financial literacy has been adopted from the study by (Thung, Kai, Nie, Chiun, & Tsen, 2012).

4. Data Analysis

This section of the paper contains various test results and analysis of data to justify hypothesized model of the study.

4.1 Reliability Analysis

The Cronbach Alpha is calculated to run a reliability analysis. The recommended value for reliability is below 1 and above 0.5. The total number of financial well-being items is seven and the alpha value is 0.92. The reliability of financial management behavior is 0.96 and the total number of items on the scale is 12. The reliability analysis self-control shows that the Cronbach alpha value is 0.91 and the total number of items of this instrument is nine and the total number of deliberative thinking are two and the value of reliability is 0.76. The total number of mental budgeting scale is four and the reliability value is 0.90, similarly, the value of optimism and financial literacy reliability are 0.92 and 0.93 and their items are four and five respectively. So we can conclude that scale measuring the construct is reliable and the internal consistency of the measure taken is satisfactory.

4.2 Correlation Analysis

From correlation analysis results it was found that self-control was significant correlation with FWB ($r=0.526$, $p < 0.01$), there was significant correlation of optimism with FWB ($r= 0.658$, $p < 0.01$), significant correlation was found between FWB and mental budgeting ($r=0.568$, $p < 0.01$), FMB was absolutely associated with financial literacy ($r=0.546$, $p < 0.01$), financial wellbeing was significant associated with deliberative thinking ($r=0.600$, $p < 0.01$), and FMB was significantly positively correlated with FWB ($r=0.672$, $p < 0.01$).

Table 1. Descriptive Statistics and Correlation Results

	M	SD	FWB	FMB	SLC	OPT	MB	FL	DT
FWB	4.60	.558	1						
FMB	3.3	.615	.672**	1					
SLC	2.54	.741	.526**	.659**	1				
OPT	2.63	.792	.658**	.721**	.600**	1			
MB	4.57	.713	.568**	.575**	.491**	.823**	1		
FL	2.63	.693	.546**	.435**	.378**	.403**	.439**	1	
DT	4.60	.884	.600**	.553**	.700**	.639**	.757**	.719**	1

**. Correlation is significant at the 0.01 level (2-tailed).

4.3 Structural Model

The structural model was confirmed as per previous research debates in the literature review in chapter 2. The below table shows the outcomes of model fitness which display that model is well fitted. While the model indicates the path coefficients between variables. The structural model shows the results for the assumption of the research.

Table 2. Model Fitness of Structural Model

Model	CMIN/DF	CFI	GFI	AGFI	RMSEA
Model	3.338	.995	.991	.915	.088

The outcomes of Structural model Analysis show that the association of Optimism and Financial Management Behavior is significant with the Estimate of .346 and P-value of .000. The affiliation of mental budgeting and Financial Management Behavior is significant with the Estimate value -.116 and P-value .000 which is <.05. The association of Deliberative thinking and Financial Management Behavior is significant with the Estimate value of .179 and P-value .000 which is <.05. The association of self-control and Financial Management Behavior is significant with the Estimate value .216 and P-value .000. The affiliation of financial literacy and Financial Management Behavior is significant with the Estimate value .075 and P-value .000. The association of Financial Management Behavior and Financial wellbeing is significant with the Estimate value of .392 and P-value .000. The association of financial literacy and financial wellbeing is significant with the Estimate value .220 and P-value .000. The association of mental budgeting and financial wellbeing is significant with the Estimate value .156 and P-value .000.

Table 3. Structural Model – Path Coefficients

Path of Variables			Estimate	P-value
FMmean	<---	optmean	.346	***
FMmean	<---	mbmean	-.116	***
FMmean	<---	dlbmean	.179	***
FMmean	<---	scmean	.216	***
FMmean	<---	flmean	.075	***
FWBmean	<---	FMmean	.392	***
FWBmean	<---	flmean	.220	***
FWBmean	<---	mbmean	.156	***

4.4 Mediation Analysis

All hypotheses of the study are being tested individually with the help of the process method for mediation developed by preacher and Hayes in 2004.

Variables	Mediation analysis							
	Effect of IV on MV		Effect of M on DV		A direct effect of IV to DV		Bootstrap Results for Indirect Effects	
	B	**t**	**β**	**t**	**β**	**t**	**LLCI**	**ULCI**
SC-FM-FW	.393**	10.787	.610**	15.85	.0417**	2.6460	.2161	.3639
OP-FM-FW	.460**	15.23	.610**	15.85	.0405 **	6.26	.1447	.269
DT-FM-FW	.380**	13.06	.610**	15.85	.0366**	4.40	.1606	.2865
MB-FM-FW	.422**	12.04	.610**	15.85	.0369**	5.844	.1664	.282
FL-FM-FW	.439**	11.53	.610**	15.85	.0351**	7.51	.1368	.2513

N 306, control variable: Age, gender, education, job, income, experience
*p<.05,**p<.01

Mediation 1.

Is Self-control Have a significant effect on financial wellbeing through the meditating role of financial management behavior?

The mediation model is used to describe and analyze the process, which perceived the relationship of the independent and dependent variable through the hypothetical variable namely mediator. Our first hypothesis posits that financial wellbeing (FWB) and financial management behavior have a positive relationship with each other. Under the table mentioned below the effect of the mediator (FMB) on the dependent variable (FWB) is statistically significant with P<.01. Hence our first hypothesis of the study proven to be true. Attitude impacting financial well-being also prone to be affected by financial wellbeing. (Joo & Garman, 1998; Shim et al., 2009). (Xiao et al., 2009) also state the positive relationship between FMB and FWB. Hypothesis 7, posit that FMB mediates the relationship between self-control and FWB. Table 4 shows that FMB mediates the relationship between Financial well-being and self-control with p<.01. Hence our second hypothesis of the study is proven to be true. Self-control developed the habit of saving which is one of the dimensions of financial management behavior Tangney et al.2018.People with more self-control could manage to save enough money for retirement which ultimately causes to increase their financial wellbeing (Choi et al., 2011).

Mediation 2.

Is optimism have a significant effect on financial wellbeing through the meditating role of financial management behavior?

Hypothesis 7, state that financial management behavior (FMB) mediate the association between optimism and financial wellbeing (FWB). Table 5 shows that FMB mediates the affiliation between optimism and FWB. People with optimistic attitudes easily save more and retire later (Strömbäck et al., 2017). Affleck, Tennen, Croog, and Levine (1987) state that if one has a high expectancy about the future, then there is a low probability of concern about potential adverse consequences. Ultimately if negative feeling about once the financial position is reduced then the probability of financial wellbeing is increased. Optimism positively affects financial management behavior on an individual (Balasuriya et al., 2010). Hence the finding of the previous studies seems consistent with the results of hypothesis 3.

Mediation 3.

Is deliberative thinking have a significant effect on financial wellbeing through meditating the role of financial management behavior?

Hypothesis 7 of the study state that financial management behavior FMB mediates the relationship between deliberative thinking and financial wellbeing (FWB). Table 6 confirms the hypothetical relationship developed by hypothesis 4. Deliberative thinking is associated with financial management behavior (FMB) as well as with financial wellbeing (FWB). However, their relationship has never been explored in depth before. Deliberative thinking refers to meaning full purposeful and thinking which play a crucial role in financial management behavior. FMB is further pronounced for financial wellbeing.

Mediation 4.

Is mental budgeting have a significant effect on financial wellbeing through the meditating role of financial management behavior?

Hypothesis 7. State that financial management behavior (FMB) mediates the relationship between mental budgeting and financial wellbeing. Mental budgeting considers a self-control device for managing household finance. Financial management behavior and mental budgeting are positively associated (Antonides et al., 2011; Xiao et al., 2009) also state the positive association between FMB and FWB. However, the Effect of mental budgeting on financial wellbeing has never been explored in past researches. Table 7 confirms the mediation role of FWB between mental budgeting and FWB. Our hypothesis 5 is proven to be true.

Mediation 5.

Is deliberative thinking have a significant effect on financial wellbeing through meditating the role of financial management behavior?

Hypothesis 7. State that financial management behavior (FMB) mediates the affiliation between financial wellbeing and financial literacy. Table 8 confirms the mediation role of FWB between financial literacy and FWB. Our hypothesis 6 is proven to be true. . Several studies in literature conclude a direct relationship between financial literacy and financial behavior management (Saeedi & Hamedi, 2018; Skagerlund et al., 2018). Xiao et al. (2009) also state the positive relationship between FMB and FWB. However effect of financial literacy on mental budgeting has never been explored in past research particularly in the context of developing countries.

5. Discussion

Financial wellbeing is one of the core phases of Human wellbeing (Prawitz et al., 2006). Almost every individual has to manage his household expenditure in one or another way. Few people tend to save a lot or vice versa (Fünfgeld & Wang, 2009) which is due to the financial management behavior of the individual which is further pronounced as financial wellbeing (Gutter & Copur, 2011). Financial wellbeing considers being the function of a personal characteristic, financial management behavior, and financial stressor events (Kim, Garman, & Sorhaindo, 2003). Financial wellbeing deals with the feeling of the financial condition of an individual and to what extent people feel anxiety about uncertainties concerning financial decisions (Strömbäck et al., 2017).

The results of Structural Modeling all the paths of variables found significantly allied. The paths of Optimism, mental budgeting, Deliberative thinking, Self-control, & Financial literacy with financial management behavior are significantly allied. And direct paths of Financial Management Behavior, mental budgeting, & Financial wellbeing are also significantly positive.

The results in our research study clearly show that FMB has a positive relationship with FWB which means financial management behavior strengthens financial wellbeing. In the present study, we explored the influence of self-control, Optimism, Deliberative Thinking, mental budgeting, and financial literacy as cognitive factors on an extensive range of financial management behaviors (FMB), despite just sole financial behavior either saving or investing. Finally, we also discover how cognitive and no cognitive factors link to nervousness and perceived security linked with a person's financial situation.

As suggested by Strömbäck et al. (2017) the need to study the mediating role of financial management behavior on financial wellbeing. As failure to managing household finance may cause serious social consequences (Perry, 2005). In this study we confirmed the Mediating role of Financial Management behavior for the relationships of Deliberative Thinking, mental budgeting, self-control, Optimism, and financial literacy with the dependent variable financial well-being, and results proved that financial management behavior mediates the relationships. Mediating role of financial management behavior on financial wellbeing never been explored. All hypothetical relationships made between different construct proves to be true and model of the study are statistically significant and contribution made toward the theoretical domain of research is mediating the role of financial management behavior on financial wellbeing with cognitive and non-cognitive variables.

5.1 Theoretical and Practical Implications of the Study

The study offers various important implications. Theoretical, it is plausible to state that individuals high on self-control, optimism, deliberate thinking, mental budgeting and financial literacy help in basic financial management behavior which further lead towards financial well-being. In sum, the study proved the mediating role of financial management behavior between self-control, optimism, deliberate thinking, mental budgeting and financial literacy to financial well-being.

For practicing purposes, individuals need to make positive attribution about future, gain key insight into financial literacy and budgeting. It helps to guide towards managing personal finances. In addition, self-control and deliberate also helps to drive individuals in managing finances at micro level. These steps may play an important role to bring financial well-being.

5.2 Limitations and Future Directions

The implementation and context of pragmatic research often surface boundaries that restrict the generalizability of its results. For this inquiry, the following are the boundaries. A limitation associated with the study is with the geographical domain of the study as the result of the research will be different if the same would be conducted in a country of a developed nation. This study is based on a self-reported survey there could be the issue of social desirability. The result may be influenced by some issue of misunderstanding the question mentioned which includes unintentionally given the wrong answer to items in the survey. Future research will be conduct by comparing cross-sectional studies with different samples. Some more constructs from cognitive or non-cognitive constructs will be investigated with the relevance of financial wellbeing.

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