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# DETERMINANTS OF SAVING BEHAVIOR THROUGH SAVING INTENTIONS: AN EMPIRICAL EVIDENCE FROM THE SERVICE SECTOR

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**ABSTRACT-** This study is conducted on the societal phenomenon of saving behavior and saving intentions of the people of developing countries as increment and economic stability depend upon the savings and investment of the country. This research aims to thoroughly analyze the primary determinants for saving behavior in the presence of saving intentions in Pakistan's service sector. The data were collected from 269 respondents. Employees of the service sector in Lahore, such as banks, hotels, education, and industries, were the targeted population of this study. The non-probability, convenience sampling technique was used. The pre-structured questionnaire was used to collect the data is an indication that this is a quantitative study. The researcher verified the data through AMOS version 23 and SPSS version 22. Using SEM in AMOS, the outcome of the study shows that the key determinants of saving behavior, such as financial literacy, attitude towards saving, subjective norms, and future orientation have a significant association with saving intentions. This study is helpful for the financial institutions in understanding the determinants for saving behavior of the people and making the appropriate policies.

**Keywords: Saving Behavior, Saving Intentions, Subjective Norms, Financial Literacy, Self-control, Future Orientation, Peer Influence, Service Sector**

## I. INTRODUCTION

Individuals with a comparable pace of lifetime pay have diverse conduct with respect to their savings at the time of retirement. Due to rapid changes in the value of money worldwide, people have different perceptions about investment to secure their future for retirement compared to saving money (Venti & Wise, 1998). As per the previous studies, inadequate saving is usually caused by wrong prediction in spending (Ulkumen *et al.,* 2018), lapses in self-control (Tangney *et al.,* 2018), over-emphasis on the present rather than the future, or culture effects (Malkoc & Zauberman, 2018). It reduces the elasticity of demand for the loan in various need hours (Cassidy *et al.,* 2018).

Due to per capita income, Pakistan's saving rate is decreasing day by day; usually, 8.4% of whole income is being saved by Pakistanis, but worldwide, the average saving rate is 27%, which is quite higher than our country. Pakistani people consider saving their money at home as compared to banks since they feel it more convenient. A study named "Emerging Affluent Consumer in Asia" is disclosed by Standard Chartered Bank (SCB) by the name of "race to save." Pakistan, China, Singapore, Hong Kong, Taiwan. Korea, India, and Kenya are countries where this research was conducted.

Recently, the inflation rate in Pakistan is 11.12 % which leads to low investment rates. People have to meet their family's expenses, and it is a core problem that one person earns for the whole family. So the reason for instability in Pakistan's economy is that people are not in the habit of saving money. They are unaware of how to avail themselves of the small opportunities in the business sector. A weak financial approach and less skilled people are also two major problems in the service sector. All it happens due to the non-professional or non-serious attitude of people. People should know how to save money for their future so that they can use it in difficult times.

Increment and economic stability are dependent upon the savings and investment in the country. In a country like Pakistan, investment and savings are reciprocal to each other. They have an inverse relationship as consumption starts increasing, savings will automatically decrease. When consumption is low, savings will be increased. It directly affects the economic growth of the country. This research describes various options that directly affect the saving behavior of the service sector, and it allows the

employees to extract the main essence of how they can secure their future by saving money. Today, effective mobilization and utilization of domestic resources are the major objectives for sustained growth and self-reliance. Due to these reasons, the knowledge of the determinants of saving and analysis of saving behavior is essential for policymaking (Trotta, 2018).

## II. LITERATURE REVIEW

### 2.1 Saving Behavior

Psychologically, if a person does not spend money and saves something for his future is known as saving behavior (SB) (Warneryd, 1999). According to Rey *et al.* (2018), interest rate directly affects an individual's saving behavior. Reserve funds can be portrayed comparably as that particular proportion of money is not used (Popovici, 2012). Single individual savings' reckless contemplations might be affected by various macro and micro factors. Large scale components impact those savings' foolish contemplations and lead to a high joblessness rate and reduce the nation's GDP. It is stated that the saving behavior derives pre-requisite and growth of the economy from maintaining the balance of international trade and pension system (Kiri *et al.,* 2018).

### 2.2 Financial Literacy

Financial literacy (FL) is described as knowing about personal money and learn how to manage it (Garman & Forgue, 2006). Individual existence can be controlled by FL, which demonstrates and investigates the financial situation. The universal assumption is that the employees know more about the pension systems and how it impacts them. It is equally hypothesized that such employees are completely informed, and they depend on accurate knowledge related to their likely retirement benefits and consumer needs and henceforth capable of arriving at optimal saving decisions and making better decisions for their retirement (Aluodi *et al.,* 2017). Saeedi and Hamedi (2018) stated that different finance-related terms have different meanings for various peoples, and it is called financial literacy. Moreover, they expressed that financial capability, education, and literacy are three major aspects of international and national organizations.

### 2.3 Subjective Norms

Subjective norms (SN) include the pressure towards an individual from parents, friends, and siblings (Ajzen, 1991). The capability to inspire someone's behavior is based on subjective norms (Duflo & Saez, 2001). Wan *et al.* (2018) investigated that a moderate negative relationship exists between attitude and intentions, which is called subjective norm. Smith (2015) mentioned that subjective norms, attitudes, and perceived behavior are controlled indicators that can be used in the teaching sector of nursing education. Subjective norms have negative and positive aspects. If someone acts normatively or acts as accordingly as prescribed, it will be positive and negative in vice-versa (Prout & Wadkinds, 2014).

### 2.4 Future Orientation

Future orientation (FO) is the degree to which a corporation collectively encourages and rewards future-oriented behaviors such as planning and delaying gratification (House *et al.,* 2004). As explained by Bryson (2018), organizations know the benefits of FO regarding their management and employees' goals. Cooper and Seginer (2018) wrote in their book that multicultural nationals used the navigating pathways to identify careers, future orientation, and schooling. Gore (2018) examined that future orientation and hope expressions are involved in the court of young adults along with their childhood experience.

### 2.5 Peer Influence

Wang *et al.* (2018) stated the degree to which the selection and peer influence (PI) effect is occurred by different dimensions of engagement in schools. Huefner *et al.* (2018) explained the effect of positive and negative peer influence regarding residential care on the behavior of serious problems by youth. Moreover, negative peer influence, wherever the bulk of youth during a home manifested on top of the common range of great behavior issues, is occurred thirty-seven percent of the time. Positive peer influence, wherever the bulk of youth revealed no major problem behaviors for the month, is occurred forty-seven percent of the time. According to Berger (2018), program rewards and peer influence affect the client churn by social networking. Further, they stated that gamified rewards like earning a reward as critical financial rewards (i.e., just receiving a reward) decrease client churn and moderate the effects of peer influence.

### 2.6 Self-Control

If a person can control his emotions and desires, it can be defined as self-control (SC) (Baumeister, 2002). Meldrum *et al.* (2018) showed the relationship between adolescent anti-social behavior, adolescent self-control, and parental practices. This relationship can be examined at early childhood or can be assessed by both paternal and maternal self-control to shape them. Making several decisions impairs sequent self-control. Drawing from a limited-resource model of self-regulation and government performance, the

authors assumed that call creating reduces the identical resource used for active responding and self-control (Vohs *et al.,* 2018). Yang *et al.* (2018) demonstrated that comprehensive training on self-control can increase the capacity of a human being to overcome situations. If someone wants to enhance your self-control capacity, you have to improve your system of depression.

**2.7 Attitude towards Saving**

In a certain situation, the decision to save money is known as a saving attitude (Jung, 1921; Fishbein & Ajzen, 1975). Wong *et al.* (2018) discussed that three million people in Hong Kong and twenty-one million in the United Kingdom have an attitude towards saving (ATS) regarding retirement or expiring from duty under the individual saving accounts and provident fund. Especially, risk-averse folks allotted additional of their savings to low-risk funds than risk-seeking folks. The pattern of findings is consistent in each urban center and the United Kingdom voluntary retirement investment schemes. These findings are thought-about in light-weight policy choices created in urban center retirement and United Kingdom pension schemes.

**2.8 Saving Intentions**

Saving intentions (SI) can be described in many ways. Directly, it depends upon an individual's priorities. (Fishbein & Ajzen, 1975; Davis, 1989). Ru *et al.* (2018) noted an exploration of the results of perceived behavioral management and normative factors on an individual's saving intentions. Moreover, they explained that an individual has saving intentions and responds promptly if an individual knows about its benefits and a way of clarity. It stimulates an individual towards the plan about his saving to secure the rest of his life on retirement. Social norms also play a vital role in saving intentions.

**2.9 Hypotheses of the Study**

Based on the theoretical background, the following hypotheses are postulated in this study:

**H1:** There is a positive relationship between financial literacy and saving behavior.
**H2:** Subjective norms and saving behavior are positively associated.
**H3:** Future orientation and saving behavior are positively related.
**H4:** There is a positive association between peer influence and saving behavior.
**H5:** Self-control and saving behavior are positively associated.
**H6:** There is a positive relationship between attitude towards saving and saving behavior.
**H7:** Financial literacy and saving intentions are positively associated.
**H8:** Subjective norms and saving intentions are positively related.
**H9:** There is a positive relationship between future orientation and saving intentions.
**H10:** Peer influence and saving intentions are positively associated.
**H11:** Self-control and saving intentions are positively related.
**H12:** There is a positive relationship between attitude towards saving and saving intentions.
**H13 (a):** Saving intentions mediate the relationship between financial literacy and saving behavior.
**H13 (b):** Saving intentions mediate the association between saving behavior and subjective norms.
**H13 (c):** Saving intentions mediate the relationship between future orientation and saving behavior
**H13 (d):** Saving intentions mediate the association between peer influence and saving behavior.
**H13 (e):** Saving intentions mediate the relationship between self-control and saving behavior.
**H13 (f):** Saving intentions mediate the association between attitude towards saving and saving behavior.

**2.10 Conceptual Model**

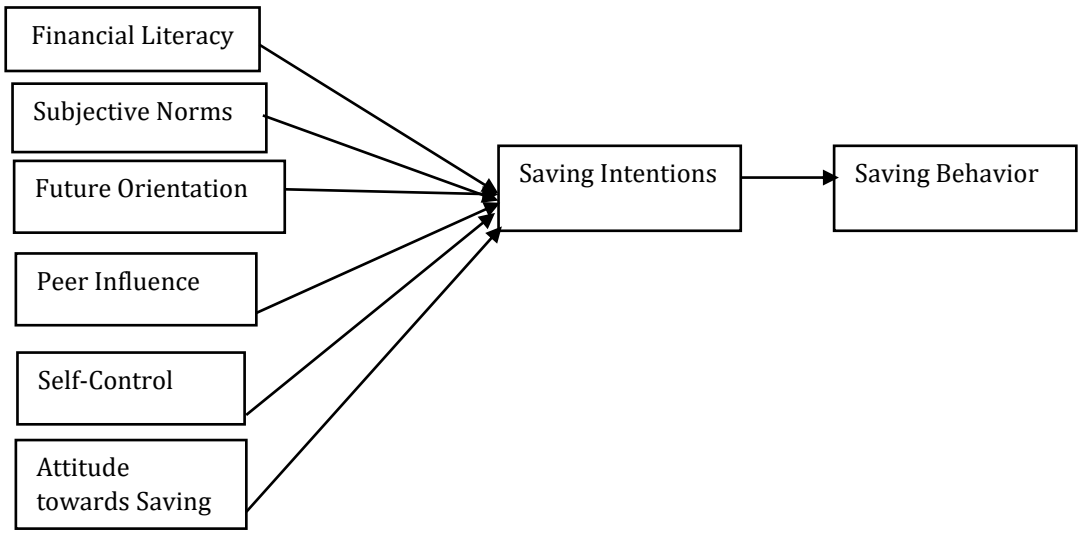


**Figure 1:** A Conceptual Model describing the Determinants of Saving Behavior through Saving Intentions

## III. METHODS

**3.1 Research Design**

The researcher conducted this study on the societal phenomenon. For this purpose, the quantitative method is determined because it is more acceptable and widely used. This study was comprised of a quantitative research design. This study figured out that the major reason for saving behavior in the service sector through saving intentions. Unit of analysis was individual employees. The data were gathered at a one-time period, so the time horizon was cross-sectional. This research was done in the natural environment with the least interference by the researcher. Henceforth, the study settings of this study were non-contrived. Employees of the service sector in Lahore were the targeted population of this study. The sample size was 269 respondents who were taken from the service sector such as banks, hotels, education, and industries. The non-probability sampling technique was used because the population was unknown and owing to finance and time constraints, convenience sampling was used. The self-administered questionnaire was used to collect the primary data. To get the distinctive results, the questionnaires were distributed among individuals who belong to different age groups.

**3.2 Measures**

***3.2.1 Saving Behavior***

Saving behavior contains 8 items, such as "I save to achieve certain goals," adopted from Delafrooz and Paim (2011).

***3.2.2 Financial Literacy***

Financial literacy contains 7 items, such as "I have better understanding of how to invest my money," adopted from Hira and Loibl (2005).

***3.2.3 Subjective Norms***

Subjective norms contain 6 items, such as "I think that people who I consider important or whose opinion I think it's important that I save regularly," adopted from Widyastuti *et al.* (2016).

***3.2.4 Future Orientation***

Future orientation contains 10 items, such as "I think about how things can change in the future and try to influence those things in my everyday life," adopted from Strathman (1994).

***3.2.5 Peer Influence***

Peer influence contains 5 items, such as "I always compare the amount of saving and spending with my friends," adopted from Eid *et al.* (2009).

***3.2.6 Self-Control***

Self-control contains 10 items, such as "I don't save, because I think it's too hard," adopted from Esenvalde (2011).

***3.2.7 Attitude towards Saving***

Saving attitude contains 8 items, such as "I can't afford to save," adopted from Fishben and Ajzen (1975).

### *3.2.8 Saving Intentions*

Saving intentions contain 12 items, such as "I intent to save money for unexpected expenditure," adopted from Widyastuti *et al.* (2016).

## IV. RESULTS

### 4.1 Data Collection Tools

Data is verified by AMOS version 23 and SPSS version 22, and different steps are followed for the descriptive and inferential analysis.

### 4.2 Participants

The data were collected from the service sector in Lahore. The sample size was 269, which was collected from the employees of the service sector, including male and female respondents in which 141 were male, which is 52.4% of the sample, and females were 128, which is 47.6% of the sample. Data were collected from different age groups in which the highest percentage is 50.2% which falls in the age group of 25-30 years. 30.9% belongs to less than 24 years of age, 15.2% belongs to 31-40 years of age, 2.2% from 41-50 years of age, and 1.5% belongs to 51-60 years of age, in which 161 respondents having the percentage of 62.1% were single and 101 having the percentage of 35.5% were married, and 0.4% were divorced. 129 respondents had a contractual job, which is 48%, and 140 respondents were permanent employees, which is 52%. 127 respondents (47.2%) had almost two years of job experience, 82 respondents (30.5%) had 3-5 years of job experience, 34 respondents (12.6%) had 6-10 years of job experience, 13 respondents (5.2%) had less than 1-year job experience, and 11 respondents (4.5%) had more than 12 years of job experience.

### 4.3 Descriptive Statistics, Correlation, and Reliability Analysis

The data normality, multicollinearity, and missing values were checked before conducting final analysis. Table 1 depicts the correlation matrix. FL is positively correlated with SN ($r$ = .458, $p$ < 0.01), with FO ($r$ = .255, $p$ < 0.01), with PI ($r$ = .193, $p$ < 0.01), with SC ($r$ = .097, $p$ < 0.01), with ATS ($r$ = .153, $p$ < 0.05), with SI ($r$ = .131, $p$ < 0.05), and with SB ($r$ = .458, $p$ < 0.01). SN is positively correlated with FO ($r$ = .317, $p$ < 0.01), with PI ($r$ = .120, $p$ < 0.05), with SC ($r$ = .030, $p$ > 0.05), with ATS ($r$ = .013, $p$ > 0.05), with SI ($r$ = .224, $p$ < 0.01), and with SB ($r$ = .473, $p$ < 0.01). FO is positively correlated with PI ($r$ = .339, $p$ < 0.01), with SC ($r$ = .305, $p$ < 0.01), with ATS ($r$ = .330, $p$ < 0.01), with SI ($r$ = .351, $p$ < 0.01), and with SB ($r$ = .381, $p$ < 0.01). PI is positively correlated with SC ($r$ = .450, $p$ < 0.01), with ATS ($r$ = .398, $p$ < 0.01), with SI ($r$ = .278, $p$ < 0.01), and with SI ($r$ = .256, $p$ < 0.01). SC is positively correlated with ATS ($r$ = .612, $p$ < 0.01), with SI ($r$ = .379, $p$ < 0.01), and with SB ($r$ = .111, $p$ > 0.05). ATS is positively correlated with SI ($r$ = .487, $p$ < 0.01) and with SB ($r$ = .241, $p$ < 0.01). SI is positively correlated with SB ($r$ = .436, $p$ < 0.01). All the correlational values are significant. Since all the values are less than 0.85 so there is no multicollinearity in the data (Tabachnick & Fidell, 2001).

Furthermore, the mean values range from 3.0647 to 3.5855. It means that the majority of the respondents were either neutral or agreed with their respondents. All the standard deviation values are less than 1, so there is no dispersion in the data. According to Cronbach (1951), the value of Cronbach's Alpha should be greater than or equal to 0.70. Since all the values are greater than 0.70 so it depicts that the data is reliable.

**Table 1:** *Descriptive Statistics, Correlation, and Reliability Analysis*

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| **1-FL** | **0.802** | | | | | | | |
| **2-SN** | 0.458** | **0.785** | | | | | | |
| **3-FO** | 0.255** | 0.317** | **0.761** | | | | | |
| **4-PI** | 0.193** | 0.120* | 0.393** | **0.778** | . | | | |
| **5-SC** | 0.097 | -0.030 | 0.305** | 0.450** | **0.847** | | | |
| **6-ATS** | 0.153* | 0.013 | 0.330** | 0.398** | 0.612** | **0.759** | | |
| **7-SI** | 0.131* | 0.224** | 0.351** | 0.278** | 0.379** | 0.487** | **0.731** | |
| **8-SB** | 0.309** | 0.473** | 0.381** | 0.256** | 0.111 | 0.241** | 0.436** | **0.777** |
| **Mean** | 3.3956 | 3.5855 | 3.3914 | 3.2833 | 3.0647 | 3.2258 | 3.4064 | 3.4823 |
| **SD** | 0.7290 | 0.6895 | 0.5129 | 0.7654 | 0.7491 | 0.6173 | 0.5526 | 0.6275 |

***Note:*** FL = Financial Literacy, SN = Subjective Norms, FO = Future Orientation, PI = Peer Influence, SC = Self-Control, ATS = Attitude toward Saving, SI = Saving Intentions, SB = Saving Behavior, SD = Standard Deviation

**. Significant 2-tailed correlation at the 0.01 level.

*. Significant 2-tailed correlation at the 0.05 level.

The reliability of items is shown diagonally in the correlation matrix.

**4.4 Inferential Statistics**

The structural equational modeling was applied in two steps. The first step is the measurement model. In the second step, imputed data is entered into the structural model, and the relationship among variables is checked. For this purpose, AMOS 23 is used with maximum likelihood estimation. Minimum two variables can be used as the latent variable (Kelloway, 1998). A latent variable is created for financial literacy, future orientation, subjective norms, intentions to save, saving attitude, self-control, peer influence, and saving behavior. All variables were imputed as the manifest variable.

Model fitness is checked by the goodness of fit index (GFI), average goodness of fit index (AGFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA). The fitness of the proposed model is accepted as per the threshold suggested by Hu and Bentler (1999). Following are the values of the measurement model; CMIN = 737.769, D. F. = 365, CMIN/D.F. = 2.021, GFI = 0.856, AGFI = 0.817, CFI = 0.849, and RSMEA = 0.062, which are acceptable as per the reference mentioned in Table 2:

**Table 2:** *Summary of Model Fit Indices*

| Fit Indices | Standardized Values | CFA |
|---|---|---|
| CMIN | - | 737.769 |
| D. F. | - | 365 |
| CMIN/D.F. | ≤ 5 | 2.021 |
| GFI | ≥ 0.80 | 0.856 |
| AGFI | ≥ 0.80 | 0.817 |
| CFI | ≥ 0.80 | 0.849 |
| RMSEA | ≤ 0.08 | 0.062 |

**Measurement Model**

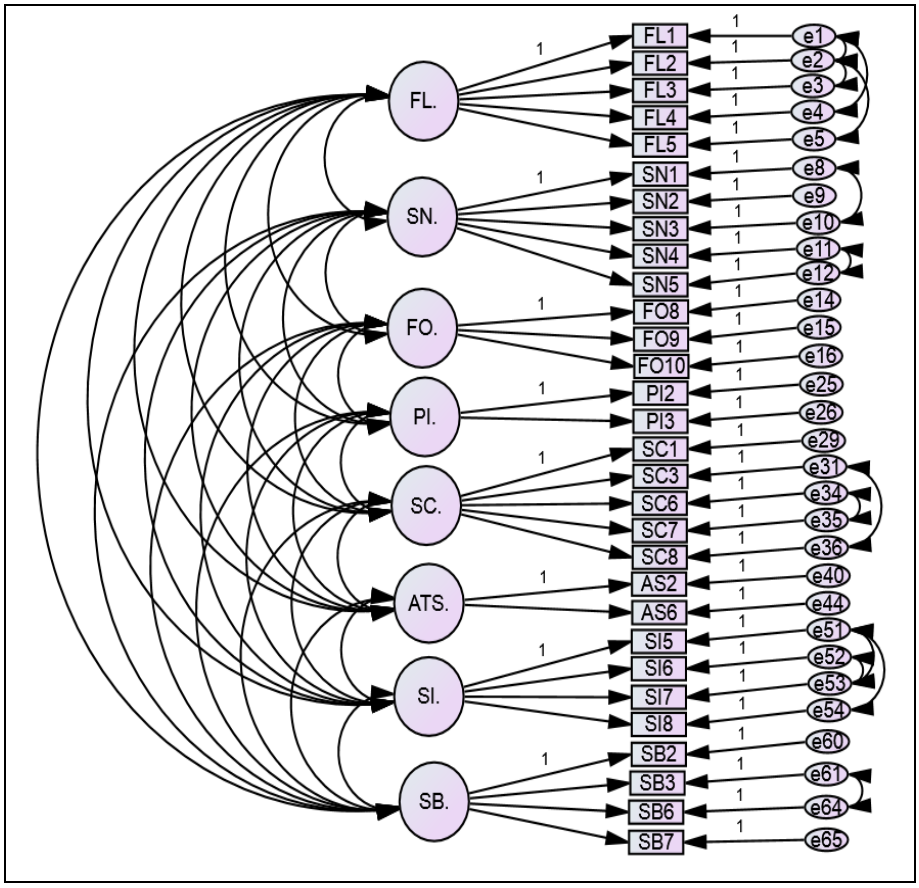


**Figure 2:** Measurement Model

**Standardized Regression Weights**

As per the criteria of Tabachnick and Fidell (2001), the golden rule of thumb for the factor loading values is 0.32. Table 3 shows that all the factor loadings of the measurement model are above 0.32:

**Table 3:** *Standardized Regression Weights*

| Variables | | | Estimates | p-value |
|---|---|---|---|---|
| FL1 | <--- | FL. | .488 | *** |
| FL2 | <--- | FL. | .704 | *** |
| FL3 | <--- | FL. | .496 | *** |
| FL4 | <--- | FL. | .571 | *** |
| FL5 | <--- | FL. | .637 | *** |
| SN1 | <--- | SN. | .599 | *** |
| SN2 | <--- | SN. | .610 | *** |
| SN3 | <--- | SN. | .632 | *** |
| SN4 | <--- | SN. | .462 | *** |
| SN5 | <--- | SN. | .718 | *** |
| FO9 | <--- | FO. | .571 | *** |
| FO10 | <--- | FO. | .651 | *** |
| PI2 | <--- | PI. | .648 | *** |
| PI3 | <--- | PI. | .874 | *** |
| SC1 | <--- | SC. | .712 | *** |
| SC3 | <--- | SC. | .641 | *** |
| SC6 | <--- | SC. | .561 | *** |
| SC7 | <--- | SC. | .674 | *** |
| SC8 | <--- | SC. | .591 | *** |
| AS2 | <--- | ATS. | .550 | *** |
| AS6 | <--- | ATS. | .726 | *** |
| SI5 | <--- | SI. | .541 | *** |
| SI6 | <--- | SI. | .478 | *** |
| SI7 | <--- | SI. | .435 | *** |
| SI8 | <--- | SI. | .870 | *** |
| SB2 | <--- | SB. | .670 | *** |
| SB3 | <--- | SB. | .781 | *** |
| SB6 | <--- | SB. | .750 | *** |
| SB7 | <--- | SB. | .491 | *** |
| FO8 | <--- | FO. | .650 | *** |

***Note:*** FL = Financial Literacy, SN = Subjective Norms, FO = Future Orientation, PI = Peer Influence, SC = Self-Control, ATS = Attitude toward Saving, SI = Saving Intentions, SB = Saving Behavior, *** $p < 0.001$

**Structural Model**

In the second stage of SEM, the structural model was made. Following are the values; CMIN = 3.170, D. F. = 1, CMIN/D. F. = 3.170, GFI = 0.997, AGFI = 0.894, CFI = 0.999, and RSMEA = 0.08, hence all the values lie within the prescribed limit. Table 4 shows the model fit summary:

**Table 4:** *Model Fit Summary of Structural Model*

| Fit Indices | Standardized Values | CFA |
|---|---|---|
| CMIN | - | 3.170 |
| D. F. | - | 1 |
| CMIN/D.F. | ≤ 5 | 3.170 |
| GFI | ≥ 0.80 | 0.997 |
| AGFI | ≥ 0.80 | 0.894 |
| CFI | ≥ 0.80 | 0.999 |
| RMSEA | ≤ 0.08 | 0.08 |

The structural model is presented in Figure 3:

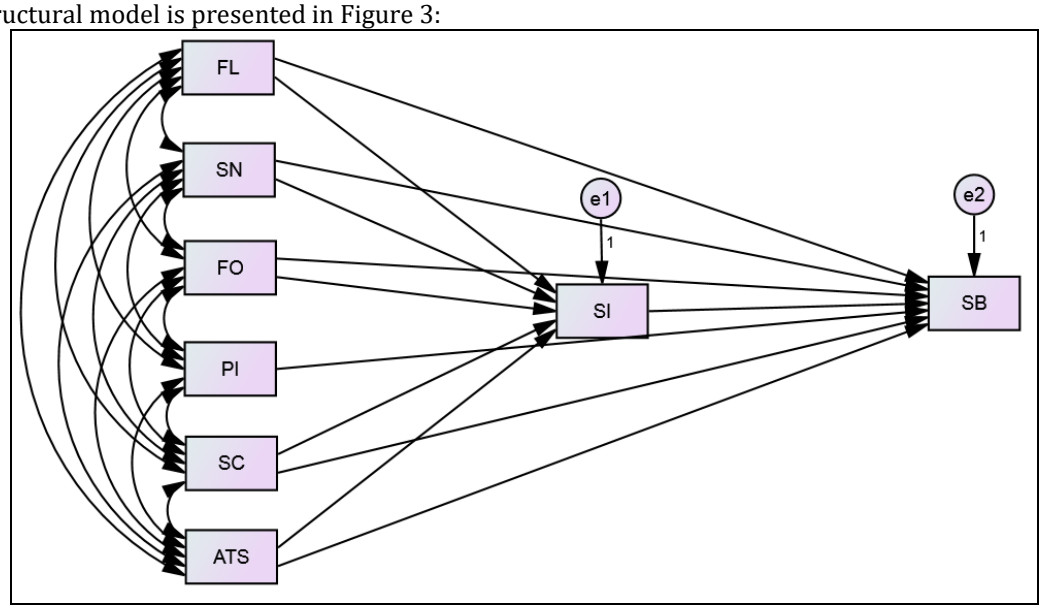


**Figure 3:** Structural Model

**Hypotheses Testing**

Analysis of this study shows that financial literacy and saving behavior have a significant relationship ($\beta$ = 0.592, $p$-value < 0.001). Hence H1 of the study is supported. Second, subjective norms and saving behavior show a significant association ($\beta$ = 0.858, $p$-value < 0.001). Hence H2 of this study is supported. Future orientation and saving behavior are significantly associated ($\beta$ = 0.019, $p$-value > 0.05). Hence H3 of this study is not supported. Peer influence and saving behavior have a significant association ($\beta$ = 0.176, $p$-value < 0.01). Hence H4 of this study is supported. Self-control and saving behavior have an insignificant association ($\beta$ = -0.063, $p$-value > 0.05). It means there is no direct association between saving behavior and self-control. Hence H5 of this study is not supported. Attitude towards saving and saving behavior have an insignificant association ($\beta$ = 0.015, $p$-value > 0.05). Hence H6 of this study is not supported. The association between financial literacy and saving intentions proves to be significant ($\beta$ = 0.309, $p$-value < 0.001). Hence H7 of this study is supported. Subjective norms also have a significant association with saving intentions ($\beta$ = 0.530, $p$-value < 0.001). Hence H8 of this study is supported. Future orientation and saving intentions also have a significant relationship ($\beta$ = 0.392, $p$-value < .01). Hence H9 of this study is supported. Peer influence and saving intentions also have a significant relationship, ($\beta$ = 0.277, $p$-value < 0.001). Hence H10 of this study is supported. Moreover, self-control and saving intentions have a significant association ($\beta$ = 0.101, $p$-value < 0.05). Hence H11 of this study is supported. Attitude towards

saving and saving intentions have significant association ($\beta$ = 0.362, $p$-value < 0.001). Hence H12 of this study is supported. Table 5 depicts the results of all the hypotheses of the study:

**Table 5:** *Hypotheses Testing Results*

| Hypotheses | | | Estimates | S.E. | C.R. | *p* | Status |
|---|---|---|---|---|---|---|---|
| **SB** | **<---** | **FL (H1)** | 0.592 | 0.067 | 8.872 | *** | Accepted |
| **SB** | **<---** | **SN (H2)** | 0.858 | 0.045 | 18.954 | *** | Accepted |
| **SB** | **<---** | **FO (H3)** | 0.019 | 0.068 | 0.284 | 0.776 | Rejected |
| **SB** | **<---** | **PI (H4)** | 0.176 | 0.06 | 2.950 | 0.003 | Accepted |
| **SB** | **<---** | **SC (H5)** | -0.063 | 0.05 | -1.278 | 0.201 | Rejected |
| **SB** | **<---** | **ATS (H6)** | 0.015 | 0.069 | 0.224 | 0.823 | Rejected |
| **SI** | **<---** | **FL (H7)** | 0.309 | 0.058 | 5.333 | *** | Accepted |
| **SI** | **<---** | **SN (H8)** | 0.530 | 0.045 | 11.77 | *** | Accepted |
| **SI** | **<---** | **FO (H9)** | 0.277 | 0.052 | 5.355 | *** | Accepted |
| **SI** | **<---** | **PI (H10)** | 0.041 | 0.049 | 0.839 | 0.402 | Rejected |
| **SI** | **<---** | **SC (H11)** | 0.101 | 0.039 | 2.557 | 0.011 | Accepted |
| **SI** | **<---** | **ATS (H12)** | 0.362 | 0.051 | 7.164 | *** | Accepted |

**4.5 Mediation Analysis**

Mediation Analysis was performed in AMOS 23. The direct, indirect, and total effects were analyzed. Since the direct beta with mediation ($\beta$ = 0.340, $p$-value < 0.001) and indirect beta ($\beta$ = 0.136, $p$-value < 0.001) both are significant so there is a partial mediation of saving intentions between financial literacy and saving behavior. Hence H13 (a) of this study is supported. Moreover, the direct beta with mediation ($\beta$ = 0.665, $p$-value < 0.001) and indirect beta ($\beta$ = .091, $p$-value < 0.001) both are significant so there is a partial mediation of saving intentions between subjective norms and saving behavior.

Finally, future orientation and saving behavior are significantly mediated by saving intentions. Since the direct beta with mediation ($\beta$ = -0.168, $p$-value < 0.001) and indirect beta ($\beta$ = .186, $p$-value < 0.001) both are significant so there is a partial mediation of saving intentions. Hence H13 (c) of this study is supported. Peer influence and saving behavior are not significantly mediated by the saving intentions, which shows a direct association between saving behavior and peer influence ($\beta$ = 0.150, $p$-value < 0.05), but there is no indirect association between them ($\beta$ = 0.027, $p$-value > 0.05). Hence H13 (d) of this study is not supported.

Although self-control and saving behavior both are significantly mediated by saving intentions ($\beta$ = .088, $p$-value < .05). Since the direct beta with mediation ($\beta$ = -0.166, $p$-value < 0.001) and indirect beta both are

significant, so there is a partial mediation of saving intentions. Hence H13 (e) of this study is supported. The study endeavor shows that the direct association between self-control and saving behavior is not supported, but they are connected indirectly, like saving intentions mediate a significant relationship between self-control and saving behavior. Finally, attitude toward saving and saving behavior both are significantly mediated by saving intentions. Since the direct beta with mediation ($\beta$ = -0.244, $p$-value < 0.001) and indirect beta ($\beta$ = 0.258, $p$-value < 0.001) both are significant so there is a partial mediation of saving intentions. Hence H13 (f) of this study is supported. Table 6 exhibits the mediation results:

**Table 6***: Mediation Analysis*

| Hypotheses | Direct Beta without Mediation | Direct Beta with Mediation | Indirect Beta | Observed Mediation Type |
|---|---|---|---|---|
| **FL→SI→SB (H13a)** | 0.592*** | 0.340*** | 0.136*** | Partial Mediation |
| **SN→SI→SB (H13b)** | 0.858*** | 0.665*** | 0.091*** | Partial Mediation |
| **FO→SI→SB (H13c)** | 0.019 (ns) | -0.168** | 0.186*** | Partial Mediation |
| **PI→SI→SB (H13d)** | 0.176** | 0.150* | 0.027 (ns) | No Mediation |
| **SC→SI→SB (H13e)** | -0.063 (ns) | -0.166*** | 0.088* | Partial Mediation |
| **ATS→SI→SB (H13f)** | 0.015 (ns) | -0.244*** | 0.258*** | Partial Mediation |

***Note:*** FL = Financial Literacy, SN = Subjective Norms, FO = Future Orientation, PI = Peer Influence, SC = Self-Control, ATS = Attitude toward Saving, SI = Saving Intentions, SB = Saving Behavior, *** $p$ < 0.001, ** $p$ < 0.01, * $p$ < 0.05, ns = Not significant

## V. DISCUSSION

The results obtained in this study are mostly consistent with the previous studies. Financial literacy is positively associated with saving behavior. This result is supported by previous studies, same as Jamal (2016). So it can be said that financial literacy significantly impacts the determinants of saving behavior. Future orientation and saving intentions are found to be positively associated. It was supported by the previous study conducted by Delafrooz and Paim (2011). According to evidence from the previous studies, there is the strongest association between future orientation and saving intentions (Brounen, 2016). Peer influence and saving behavior have a significant association. Prior studies support these results, such as Duflo and Saez (2002).

Moreover, saving behavior and self-control have a significant association in previous studies like Esenvalde (2010), but this relationship is insignificant in this study. The main reason for its significance in the previous study is that they were conducted in foreign countries where demographics are different, like people have a high rate of income, age, and financial attitude that is why the result is different. Furthermore, there is a direct association between attitude towards saving and saving intentions, which is supported by previous studies (Tuvesson & Yu, 2011).

Saving intentions mediate the relationship between subjective norms and saving behavior. This result is supported by previous studies such as Croy (2010); Pascual-Ezama *et al.* (2014); Cuong and Jian (2014); Sudarsono (2015). Furthermore, saving behavior, attitude towards saving, financial literacy, subjective norms, self-control, and future orientation are significantly mediated by saving intentions (Widyastuti *et al.,* 2016).

## VI. CONCLUSION

The outcome of the study shows that all the determinants of saving behavior of people in the service sector have a significant association with saving intentions and saving behavior, except few ones such as subjective norms, financial literacy, and peer influence, have a significant association with saving intentions. Subjective norms, financial literacy, future orientation, and attitude towards saving have a significant association with saving behavior. However, self-control has a significant positive association with saving intentions but not with saving behavior. The results indicate that if people have financial literacy, their intentions to save and saving behavior are likely high. Subjective norms and peer influence also increase saving intentions and help people to adopt the saving behavior.

The results also show that subjective norms have a direct relationship with saving behavior, which indicates that comprehensive training on self-control can increase the capacity of a human being to overcome situations. To enhance self-control, one should improve systems of depression. But in this study, self-control and saving behavior have no relationship. Self-control and saving behavior have a significant relationship in previous studies such as Esenvalde (2010). The main reason for its significance is the difference in demographics of various countries, as people with a high income, age, and financial attitude. All the variables show the indirect relationships except peer influence and the saving behavior mediated by saving intentions.

As far as the practical implications are concerned, this study is beneficial for financial institutions in understanding the viewpoints of people regarding savings. They can make the most suitable policies by considering those factors. This study has some limitations too. This study was conducted in one province only. Future researchers can increase its generalizability by collecting data from other cities and provinces. Other sectors should be explored for data collection in the future. Moreover, this study was quantitative. Future researchers can use qualitative data to know the perceptions of people regarding saving intentions. This research was cross-sectional, but the researchers can conduct a longitudinal study in the future.

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