

A STUDY ON FINANCIAL BEHAVIOUR OF FEMALE STUDENTS

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Abstract: Financial behaviour is related to the management of money. All individuals make decisions related to savings, investments and borrowing. The current study is an attempt to examine how the financial behaviour of female students is affected by the theory of planned behaviour. The correlation between intention and the variables of the theory of planned behaviour i.e., attitude, subjective norm and perceived behavioural control has been ascertained. Data from 158 female students from various colleges in Ajmer city of Rajasthan, India shows a positive relationship between intention and attitude and intention and subjective norm. However, a negative correlation was observed between intention and perceived behavioural control. Further, multiple regression analysis was used to identify the relationship between these variables and to check that up to what extent the financial behavior is affected by the three variables.

Keywords: Financial behaviour, theory of planned behaviour, female students.

Introduction

The students today are considerably more aware of their surroundings than they were before. Social media and technology have given them the opportunity to make informed decisions in consonance with the available information. Students, particularly those in higher education systems are capable of making financial decisions for themselves according to their future long-term goals, whether they are earning or not. The students in this group even borrow money to meet their education-related and supplementary expenses. Some of the higher education students in India also do part-time/full-time jobs along with pursuing an undergraduate or a post-graduate degree. College students are expected to be more knowledgeable in dealing with financial choices and decisions (Susilowati, Kardiyem & Latifah, 2020). Some of the students are studying the courses where they are taught about financial management. Even if they do not study a finance-related course, financial education among them should be given enough importance just like the other subjects (Liu & Lin, 2021). A number of factors influence financial behavior and choices of students. For instance, the nature of a person affects their attitudes and behaviour towards something (Susilowati, Kardiyem & Latifah, 2020).

They start making investments during the early stage of their lives as they have pre-decided financial goals in mind. Multiple saving and investment options are available to the public like stocks, bonds, mutual funds and government schemes (Chakraborty & Digal, 2011). Some people also use instruments like bank deposits as investment options. Understanding the reasons behind how people behave in a certain way can allow to make strategies for developing new and making changes in the existing financial products.

Conceptual Framework

Theory of planned behavior

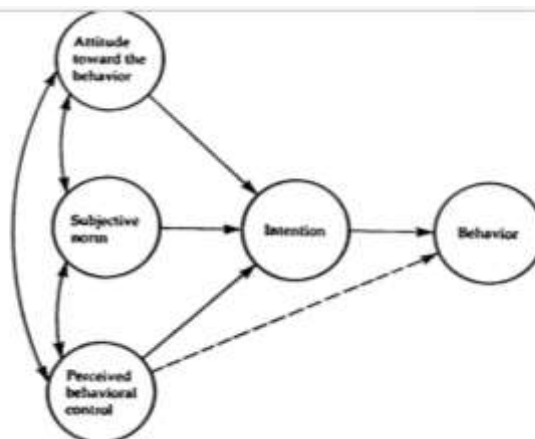
The theory of planned behaviour (Ajzen, 1991) states that the behaviour of people is guided by their beliefs, their experiences and the expectations of significant others (Ajzen, 1991). Human behavior is affected by their attitude and personality. Theory of planned behavior studies human behavior in specific contexts. This theory, aims to explain human behavior that causes certain actions. It has three main variables – perceived behavioral control, attitude and subjective norm as explained in Table 1.

Table 1: Variables in theory of planned behaviour and their meaning

Variable	Meaning
Perceived Behavioral Control	It refers to the perceived ease or difficulty of performing the behavior. It is assumed to reflect past

	experience as well as anticipated impediments and obstacles
Attitude	Whether a person has favorable or unfavorable evaluation or appraisal of the behavior in question
Subjective norm	It refers to the perceived social pressure to perform or not to perform the behavior

Source: Ajzen (1991)



Source: Ajzen (1991)

When these three aspects are favourable, the person’s intention to perform a particular behavior becomes stronger (Ajzen, 2006). Hence, these three-variables lead to an intention which can eventually result in an individual behaving in a certain way. As per this theory, the behaviour can be predicted through the strength of intention to perform a particular task (Hayden, 2019). In a like manner, this theory from the subject of Psychology has earlier been applied to the subject of finance.

Review Of Literature

Financial behavior of students

Kumar et al. (2017) show that there is a relationship between financial behavior, financial literacy and financial decisions. As per the authors, high financial literacy leads to better financial behaviour which eventually leads to better financial decisions. That is why the students should be given financial literacy by their parents. Susilowati, Kardiyem & Latifah (2020) studied the impact of financial literacy and financial confidence on the financial behavior of students. Their study is related to 230 respondents of the Faculty of Economics of Universitas Negeri Semarang who have taken the Budgeting and Financial Management course. They indicated that factors like self-esteem, belief-future change and belief-future prosperity to directly impact the financial behaviour. As per Masud et al (2004), young adults learn to manage their money from their parents and teachers. Their study, which included students living independently also identified that male students were facing more financial problems than females. The distinction between rural and urban areas is also to be considered. The students with higher grades faced fewer problems than those with lower grades. Students can be provided with the required financial education through the internet (Liu & Lin, 2021). As per them, students can be taught about managing finance by integrating it with their practical life experiences. Financial education allows students to plan their expenses and incomes appropriately. A study conducted in Malaysia identified that financial behavior has a strong impact on financial distress among undergraduate students (Lajuni, Bujang, & Karia, 2018). However, this distress can be reduced by promoting financial knowledge among them. Xiao et al. (2007) identified how financial behavior affects the overall satisfaction in the life of a college student. The attitude, knowledge and values are affected by family, peers as well as the financial education. They identified cash management, credit management and the savings behaviour of the students. The college educators need to provide better financial education to the students in order to ensure good financial behaviour.

Sabharwal (2016) identified why people save money. The main reason is that people save for emergency needs. Meeting family needs was found to be the second most common reason. Lochner, Stinebrickner &

Suleymanoglu (2021) studied the borrowing behaviour of the students. The study which collected data from the students in Canada concluded that the support from parents and use of personal savings reduce the burden of loans from the students. By studying the investment behaviour of students, they identified that many students have taken education loans, while most of them either have investments or some form of savings. (Mattsson, 2019). They used the convenience sampling method and concluded that investment is a complex process and the investment behaviour is affected both by internal and external factors. Hence, the students should carry out all the necessary research before making any kind of investment decisions.

Objectives

- To comprehend the correlation of attitude, perceived behavior control and subjective norm with intention.
- To evaluate whether attitude, perceived behavior control and subjective norms have a relationship with the intention to save through saving account/ FD/ RD
- To analyze whether attitude, perceived behavior control and subjective norms have a relationship with the intention to invest through the instruments like shares/ mutual funds / Debentures or bonds.

Hypothesis

H₀₁: There is no correlation of intention with the attitude, subjective norm and the perceived behavioural control

H₀₂: The variables attitude, subjective norm and the perceived behavioural control do not have a significant relationship with the intention to save or invest

Research methodology

This study tries to answer “whether the perceived behavioural control, attitude and subject norm impact the financial behavior intention of the female students?”

The theory of planned behavior (Ajzen, 1991) has been used as a base for this study. This theory has its roots in the subject- Psychology. After careful understanding of the theory, a questionnaire was prepared to study financial behavior of female students from various colleges of Ajmer city of Rajasthan, India. 200 college students were served an online questionnaire. 158 completely filled questionnaire have been taken for this study. The questionnaire had 2 parts: in the first part, the respondents were asked about details like income received, source of income, age. The second part focussed on the theory of planned behaviour. The variables were measured on the likert scale of 1(Strongly Disagree)- 5 (Strongly Agree). The following variables were identified and related questions were asked from the participants of the study.

Table 2: Variable from Theory of Planned Behaviour and question asked from the respondents

Variable	Question
Perceived behavioral Control	I have access to: <ul style="list-style-type: none"> • Saving account/ Fixed deposits/ Recurring Deposits • Shares/ Mutual Funds • Debentures / Bonds
Attitude	Rate these saving or investment option <ul style="list-style-type: none"> • Saving account/ Fixed deposits/ Recurring Deposits • Shares/ Mutual Funds • Debentures / Bonds
Subjective Norm	I think, my parents will approve if I choose: <ul style="list-style-type: none"> • Saving account/ Fixed deposits/ Recurring Deposits • Shares/ Mutual Funds • Debentures / Bonds

Intention: In future, I plan to put my money in following option(s):

- Saving Account/ Fixed Deposits/ Recurring Deposits
- Shares/ Mutual Funds
- Debentures / Bonds

The correlation between each intention and the three related variables of the theory of planned behaviour

has been noted. Multiple regression is a statistical method that is used to determine the relationship between variables that have a reason and result relation among them (Uyanık & Güler, 2013). Multiple regression analysis was used to determine the relationship between the dependent variable intention and the independent variables from the theory of planned behaviour i.e., attitude, subjective norm and perceived behavioural control. Since there is one dependent and more than one independent variable, multilinear regression has been used for this purpose (Uyanık & Güler, 2013). For applying multiple regression analysis, multicollinearity has been checked using the variance inflation factors (VIF) as they might have an impact on the correlation (Daoud, 2017). Savings Account/ Fixed Deposits/ Recurring Deposits were taken as the instruments for saving. Shares/ Mutual Funds/ Debentures / Bonds have been taken as the options available for investment.

Limitations of the study

Due to the small sample size of 158, the results cannot be generalised. Further, the study is related to a particular geographical area. This study is related to a particular point of time. Hence, the results are subject to change with time and place. The fact that some people use instruments like fixed deposits for both saving and investment has been ignored for the purpose of this study. This study aims to show the relationship between the variables and intention. the intention will lead to behavior at the later stages. Hence, the behavior has neither been measured, nor taken into consideration for this study.

Analysis and Interpretation

Demographics of Female Students

The essential details of the undergraduate female students, like their age, monthly earning, sources of money received and the part of earnings spent by them have been analysed.

Table 3: Basic information about the respondents

Variable	Category	Number of respondents	Percentage of respondents
Age	Upto 18	40	25.3164557
	19-22	118	74.6835443
	Above 22	0	0
	Total	158	100
Money received by the respondents per month	Upto 1000	110	69.6202531645
	1001-3000	30	18.987341772
	3001-5000	6	3.79746835443
	More than 5000	12	7.59493670886
	Total	158	100
Sources of money obtained by the female undergraduate students	Part-time job/Full-time Job	2	1.265823
	Part-time job/Full-time Job, Pocket Money from Parents	2	1.265823
	Pocket Money from Parents	124	78.48101
	Self Employed	28	17.72152
	Self-Employed, Part-time job/Full-time Job	2	1.265823
	Total	158	100
Percentage of money spent by the female undergraduate students	<20%	52	32.91139241
	>50%	26	16.4556962
	20%- 50%	80	50.63291139
	Total	158	100

Source: Primary data

No respondents in the undergraduate courses were above the age of 22. A majority of them (74.68%) were in the age group of 19-22 years. 69.62% (110) students received an amount of Rs 1000 per month from different sources like a part-time or full-time job, pocket money from parents, or income from being self-

employed. While 18.98% received between 1001 and 3000. 12 respondents received more than Rs 5000 per month to be used as per their needs.

Many of the Indian undergraduate students 124 (78.48%) depend on the pocket money received from their parents. This is the same as per Kartik, Willis & Jones (2016), who mentions that most of the students in the age group 15-24 are financially dependent. While 28 respondents (17.72%) out of the total 158 earn money through self-employment. 80% of the respondents spend 20-50% of the money received by them during the month. Only 32.91% of the students save 80% or more of the amount received by them during the month. 2 of the respondents use a mix of job and pocket money from parents for meeting their requirements.

Calculation of Correlation

1. Between Attitude and Intention

Table 4: Correlation between Attitude and Intention

Attitude	Intention	Correlation	Sig. (2 Tailed)
Rate Saving Account, Fixed Deposits, Recurring Deposits for saving	In future, I plan to put my money in the following option(s): [Saving Account/ Fixed Deposits/ Recurring Deposits]	0.321*	0.004
Rate Shares / Mutual Funds for investments	In future, I plan to put my money in the following option(s): [Shares/ Mutual Funds]	0.474*	0.000
Rate Debentures / Bonds for Investment	In future, I plan to put my money in the following option(s): [Bonds / Debentures]	0.406*	0.000

Calculating the correlation between the variable attitude and intention, a positive correlation was found. This exhibits that the options that are rated high by the students will be preferably opted for by them in the future. The correlation is significant for shares, mutual funds, debentures and bonds at a p-value 0.001. It is insignificant for saving, recurring and fixed deposits.

2. Between Subjective Norm and intention

Table 5: Correlation between Subjective Norm and intention

Intention	Subjective Norm	Correlation	Sig. (2 Tailed)
In future, I plan to put my money in Saving Account/ Fixed Deposits/ Recurring Deposits	I think, my parents will approve if I choose: [Saving Account, Fixed Deposits, Recurring Deposits for saving]	0.789*	0.000
In future, I plan to put my money in Shares/ Mutual Funds	I think, my parents will approve if I choose: [Shares/ Mutual Funds for Investment]	0.485*	0.000
In future, I plan to put my money in Bonds / Debentures	I think, my parents will approve if I choose: [Debentures/ Bonds for Investment]	0.586*	0.000

A high correlation was seen between the subjective norm and the intention of female students and was found to be highly positive. This shows that the students whose parents will approve of a certain behavioural aspect are more like to accept that particular behaviour. The correlation is significant at p-value of 0.001.

3. Between Perceived Behavioural Control and intention

Table 6: Correlation between perceived Behavioural Control and intention

Intention	Behavioural Control	Correlation	Sig. (2 tailed)
In future, I plan to put my money in Saving Account/ Fixed Deposits/ Recurring Deposits	I have access to: Saving account/ Fixed deposits/ Recurring Deposits Shares/ Mutual Funds Debentures / Bonds	0.188	0.096
In future, I plan to put my money in Shares/ Mutual Funds	I have access to: Shares/ Mutual Funds	-0.023	0.840
In future, I plan to put my money in Bonds / Debentures	I have access to: Debentures / Bonds	-0.083	0.465

A negative relation was seen between the intention to invest and the accessibility to shares, mutual funds, bonds and debentures. This shows that the students either do not have accessibility but they wish to invest in these options or they have accessibility to these options but do not wish to use them. The correlation between Perceived Behavioural Control and intention is insignificant.

Multiple regression analysis

The multiple regression analysis has been used to analyse the relationship between the dependent variable- Intention and the independent variables attitude, subjective norm and perceived behavioural control. First, the VIF value was used to check whether there is multicollinearity between the variables (Daoud, 2017). Since the VIF value lies within the range of 1 and 5, multiple regression has been applied to the data.

Shares/ Mutual Funds

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Beta	Tolerance
1	(Constant)	1.345	.410		3.276	.002		
	Parents approval in choosing Shares/ Mutual Funds for Investment (SN ₁)	.410	.118	.357	3.490	.001	.846	1.182
	Rate Shares / Mutual Funds on the scale of 1 (Lowest) to 5 (Highest) (A ₁)	.331	.100	.339	3.311	.001	.847	1.180
	Access to Shares / Mutual Funds (PBC ₁)	-.109	.159	-.065	-.685	.496	.995	1.005

a. Dependent Variable: In future, I plan to put my money in following option(s): [Shares/ Mutual Funds]

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.579 ^a	.335	.309	.948	.335	12.611	3	75	.000

Intention: Planning to invest in shares/ mutual funds in future. (I₁)

R square: 0.335

Multiple Regression Value: 0.579

The VIF values are within acceptable limits hence, the multiple regression can be applied for this intention. The relation between the intention to invest in shares/ mutual funds in future and the related attitude, subjective norm and the perceived behavioral control is positive and strong. The relationship of intention with attitude and subjective norm is significant (p=0.001). However, only 33.5% of the intention is explained by these three variables. There are other factors too that affect the decision of investing in shares or mutual funds.

Regression equation

$$I_1 = 1.345 + 0.410 (SN_1) + 0.331 (A_1) - 0.109 (PBC_1)$$

Bonds/ Debentures

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.617 ^a	.381	.356	.728	.381	15.377	3	75	.000

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Beta	Tolerance
1	(Constant)	1.458	.315		4.627	.000		
	Rate these on the scale of 1 (Lowest) to 5 (Highest) Debentures / Bonds for Investment (A ₂)	.124	.073	.177	1.716	.090	.776	1.289
	Parents approval in choosing Debentures/ Bonds for Investment (SN ₂)	.495	.100	.509	4.947	.000	.778	1.285
	Access to Debentures/ Bonds (PBC ₂)	-.196	.142	-.126	-1.382	.171	.993	1.007

Intention: In future, I plan to put my money in following option(s): [Bonds / Debentures] (I₂)

R square: 0.381

Multiple Regression Value:0.617

Only 38.1% of the intention is explained by the three-variable attitude, subjective norm and the perceived behavioural control. This shows that there are many other variables that affect the intention of planning to invest in these options.

Regression equation

$$I_2 = 1.458 + 0.124 (A_2) + .495 (SN_2) - 0.196 (PBC_2)$$

Saving Account/ Fixed Deposits/ Recurring Deposits

Intention: In future, I plan to put money in Saving Account/ Fixed Deposits/ Recurring Deposits

R square: 0.653

Multiple Regression Value: 0.808

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.808 ^a	.653	.639	.831	.653	47.106	3	75	.000

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.068	.425		-.160	.873		
	Access to Saving Deposits/ Fixed Deposits/ Recurring Deposits (PBC ₃)	.218	.131	.115	1.661	.101	.965	1.036
	Parents will approve of choosing Saving Account, Fixed Deposits, Recurring Deposits for saving (SN ₃)	.772	.072	.752	10.736	.000	.942	1.062
	Rate Saving Account, Fixed Deposits, Recurring Deposits for saving on the scale of 1 to 5 (A ₃)	.128	.077	.119	1.675	.098	.913	1.095

The VIF values are within limits. Hence the multiple regression can be used. There was a significant relation (p<0.001) in case of subjective norm and intention to put money in Saving Account, Fixed Deposits, Recurring Deposits. While for the other two variables, it is insignificant (p>0.001). 80.8% of the intention

to save money through Saving Account, Fixed Deposits, Recurring Deposits for saving is determined by the three variables. The dependent and the independent variables have a strong relationship as can be seen from the multiple regression value of 0.653.

Regression equation

$$I_3 = -.068 + .218 (PBC_3) + .772 (SN_3) + .128 (A_3)$$

Discussion

H₀₁: There is no correlation of intention with the attitude, subjective norm and perceived behavioural control.

H₁₁: There is a correlation of intention with the attitude, subjective norm and perceived behavioural control. Attitude and intention have a positive correlation. The correlation of subjective norm with intention is positive and high. While the correlation of perceived behavioural control with intention was found to be a negative one. Hence, the null hypothesis is rejected as there is a correlation between intention and the independent variables, either positive or negative.

H₀₂: The variables attitude, subjective norm and the perceived behavioural control do not have a significant impact on the intention to save or invest

H₁₂: The variables attitude, subjective norm and the perceived behavioural control do not have a significant impact on the intention to save or invest

The three variables do not have a significant influence on the intention to invest in shares/ mutual funds/ bonds or debentures. However, they do impact the intention to save through savings accounts, fixed deposits or recurring deposits. Many other variables impact the process of making decisions about the intention.

Conclusion

The theory of planned behaviour is applicable in the study of the financial behaviour of the population. The attitude, perceived behavioural control and subjective norm influence the intention to save through Saving Account, Fixed Deposits, Recurring Deposits for saving. These are however not the main factors that determine investment through shares/ mutual funds/ debentures or bonds. Since as per the theory of planned behaviour, strong intentions lead to behaviour. That means that the people will save through the selected options. However, they might not invest in shares/ mutual funds/ debentures or bonds due to a negative and insignificant relationship of the subjective norm and the perceived behavioural control with intention. The other factors will influence the decision of selecting these options.

The perceived behavioural control and the intention have a negative correlation. This might eventually not lead to the intention converting into behaviour as these factors are not strong. The contributions of this study can be used to make comparisons between the different groups of the population. It can complement the previously existing studies on the theory of planned behaviour. They can be used to identify the future potential of saving, investment and borrowing products available.

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