

A Model Proposal for Explaining the Investment Behaviour of University Students

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Abstract

This study proposes a unique structural model to understand the effects of financial literacy (F- Financial Literacy), lack of self-control (LSC-Lack of Self-Control), peer influence (PI-Peer Influence), parental socialisation (PS-Parental Socialisation) and social media (SM-Social Media) on university students' investment behaviour (IB-Investment Behaviour). The originality of the study lies in combining the effects of these factors on investment behaviour within the framework of a model. In addition to the limited studies in the literature, the study makes both theoretical and practical contributions by conducting hypothesis tests with PLS-SEM analysis. Data were collected from students (n=137) studying at the Faculty of Economics and Administrative Sciences (FEAS) during the summer term of 2023 through an online survey. The analysis revealed that the model is appropriate and financial literacy, lack of self-control, parental socialisation and social media positively affect investment behaviour, while lack of self-control has a negative effect on investment behaviour and only peer effect is not supported. This study provides an important framework for understanding the financial decision-making processes of university students and provides guidance for policy makers and educators.

Keywords: *Financial Literacy, Lack of Self-Control, Peer Effect, Parental Socialisation, Social Media, Investment Behaviour.*

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1. INTRODUCTION

Today, university students, who are generally young individuals, need to have a high level of financial awareness regarding financial knowledge and skills to increase their capacity to make important financial decisions in achieving and sustaining economic well-being (Alshebami & Aldhyani, 2022). A high level of financial literacy for the whole society, especially for the young generation of students, is very important for making the right investment behaviours (Alekan et al. 2018).

According to Yushita (2017), individuals with financial literacy are better able to manage their finances and financial literacy leads to savings and investment behaviours when applied correctly in decisions (Ayuningsih & Dewi 2023). Financial literacy is measured by various indicators such as knowledge of finance, savings, credit understanding, insurance and investment knowledge that are useful for one's future financial life (Salsabilla et al., 2022).

One of the most important supports in the development of financial literacy is parental influence. Parents' level of education and income affect children's financial literacy. Children become financially literate by observing their parents' financial behaviours such as saving and investing (Radianto et al., 2019).

In addition to parental influence, the most important social support in the development of financial literacy is peer influence and social media influence. Apart from these factors, the lack of self-control that individuals have is also important (Alshebami & Aldhyani, 2022). Mpaata et al. (2020) showed that self-control acts as a moderating variable in the relationship between financial literacy and savings behaviour.

Homan (2015) explained that peer influence has an impact on financial literacy and that students tend to refer to their peers in thinking, behaving and perceiving. According to Homan (2015), as the degree of parental education increases, children's financial literacy tends to increase (Radianto et al., 2019).

In order to determine how university students' attitudes and behaviours towards financial literacy affect their investments and whether lack of self-control, social media, parental socialization and peer influence also contribute to these investments, a study was planned especially for ESOGU FEAS students. The reason for the selection of FEAS students in the study is that the most comprehensive education on financial literacy is provided to students studying in these faculties. In many departments of these faculties, information on financial markets is given within the scope of courses such as financial management, capital markets, general economics, business finance, production management, investment analysis, evaluation of investment projects, etc. as compulsory and elective courses. In addition, the insufficient number of studies in the literature examining the effects of financial literacy (F- Financial literacy), lack of self-control (LSC- Self-control), parental socialization (PS- parental socialization), social media (SM- social media) and peer influence (PI- Peer-influence) on

investment behaviour (IB- Investment behaviour) of university students with a structural model constitutes the main starting point of this study.

2. LITERATURE REVIEW AND HYPOTHESES

The model proposed in this study explains how university students' investment behaviour is influenced by social environment (parents and peers), social media, lack of self-control and financial literacy from birth to adulthood. The following section reviews the literature on the variables affecting investment behaviour.

2.1. Financial Literacy

The financial values, knowledge and attitudes of young people are acquired from their home and environment. This includes family, school, friends and organisations (social media). These factors shape young people's financial behaviour over time (Alshebami & Aldhyani, 2022).

In their 2022 study, Rahim and colleagues addressed the issues of defining, measuring, and evaluating the levels of financial literacy in the literature on financial literacy. They noted that financial literacy can be defined in a wide variety of ways. The first definition, which they identified, includes "having relevant financial knowledge, which is referred to as knowledge and skills" (Organisation for Economic Co-operation and Development (OECD), 2020; Perbadanan Insurans Deposit Malaysia (PIDM), 2020; Thomas & Subhashree, 2020). In addition to the aforementioned definitions, Thomas and Subhashree (2020) and Perbadanan Insurans Deposit Malaysia (PIDM) (2020) include the concept of "confidence" as part of their definition of financial literacy. The second definition is based on the idea of an individual's ability to make financial decisions using financial knowledge, skills and confidence (Bawre & Kar, 2019; Henager & Cude, 2016; Lusardi & Mitchell, 2014; Perbadanan Insurans Deposit Malaysia (PIDM), 2020).

Mitchell and Lusardi (2015) defined financial literacy as "an individual's capacity to obtain, understand and use financial data to make effective and complete financial decisions". Alshebami and Aldhyani (2022) stated that family and personal investors should have the necessary level of financial literacy to be financially successful.

In their study in 2022, Rahim and colleagues identified financial instability and lack of financial literacy as key factors contributing to bankruptcy and social anxiety among young people. Lusardi and Mitchell (2014) define financial literacy as "the ability of people to process economic details and make informed decisions about financial planning, wealth accumulation, debt, and retirement".

Albeerdy and Gharleghi (2015) defined financial literacy as "an individual's ability to make informed judgements and constructive decisions about the use and management of money". Alekam et al. (2018) assessed that financial literacy among younger generations enables individuals to manage

their money surpluses and deficits in order to make correct and accurate financial decisions for better future planning and to consider saving for retirement.

It is argued that people with high financial literacy will have better investment awareness. It is based on the assumption that people with high financial literacy will be more aware of the potential benefits of investing and therefore more likely to engage in such activities. Therefore, the following hypothesis was developed for the effect of financial literacy on investment awareness.

Hypothesis 1: Financial literacy has a positive effect on investment awareness

2.2. Lack of Self-Control Effect

In their 2015 study, Bernheim and colleagues defined self-control as "controlling behaviour in a simple choice between long-term goals and immediate pleasure". They further defined self-control as the degree to which an individual perceives oneself as having power over circumstances and current situations (Mpaata et al., 2023).

Mpaata et al., (2020) defined self-control as "essentially, behaviour control that considers the good and the bad before taking any action." The higher an individual's self-control, the higher the behavioural control of that individual. Additionally, Siswanti and Halida (2020) stated that self-control "is related to the individual's power to have values and beliefs that can be used as a guide when taking action or making decisions". In light of the findings of many researchers, Kassim et al. (2022) evaluated that self-control is the capacity of a person to regulate his own behaviour before taking action.

Shefrin and Thaler (1988) proposed the behavioural life cycle theory, which posits that individuals' financial behaviour throughout their lives is contingent upon their capacity to regulate their instincts and the costs of applying self-discipline. Ali et al. (2022) asserted that the financial behaviour of young people with higher self-control is more consistent and their capacity to manage their assets will be higher, which will increase their investment knowledge. In light of the preceding discussion, the following hypothesis is put forth:

Hypothesis 2: A lack of self-control has a negative effect on investment awareness.

2.3. Peer Influence

Jamal et al. (2015) assessed that, in addition to parenting factors, peer influence can affect individuals' financial behaviour and that in Malaysia, peer pressure is the clearest cause of young adults' deterioration in managing their financial affairs. A similar argument was also supported by Duflo and Saez (2001). There is a link between group behaviour of people with similar interests and individual behaviour.

Alekam et al. (2018) stated that peers, as well as parents, continue to be a powerful socialization tool that determines the future behaviour of adolescents. Peers can be defined as a group of people who

come after the family and become one of the sources of knowledge that cannot be obtained from the family (Kassim et al., 2022).

According to Zaihan (2016, p. 19), peer influence defines the extent to which peers influence an individual's attitudes, thoughts and behaviours. According to Hidayah and Bowo (2018), peers are environments that provide comfort in addition to the family environment where interaction with people with similarities takes place and this will have both positive and negative effects. From the views of the above experts, it can be concluded that peers are several individuals within a group who exchange information and influence each other, and there is age equality.

Based on these discussions, the following hypothesis for peer influence is proposed.

Hypothesis 3: There is a positive effect of peer influence on investment awareness.

2.4. Parental Socialization

Buccioli and Veronesi (2014) argue that parental teaching is more effective than formal education at school and that they show different behaviours according to different socio-demographic variables. OO (2019), parental influence begins with teaching saving during childhood and adolescence. In addition, parents' approach as a teaching method determines the ability to cope with financial problems in the future.

Brown et al. (1993) and Clarke et al. (2005) stated that financial literacy can be improved at a higher level by parents showing good examples and providing education to their children from an early age (Jorgansen, 2007).

A study by Kim and Jang (2014) assessed that long-term support and influence from parents can lead to a higher level of self-esteem among younger generations.

Mandell (2008) claims that one of the most important factors determining financial literacy is the education level of the parents.

Cohen and Nelson (2011) and Ramsey (2004) considered that the most important education on how to use money and investments consistently and logically, which is the basis of financial literacy, is the education given by parents at home (Alekan et al., 2018). Parents can transfer their financial practices to their children through financial socialization. Financial socialization is the development of basic terms and concepts related to financial issues such as investment, saving, banking, insurance, credit card uses, as well as knowledge and skills related to money management (Ismail et al., 2020). Considering that financial socialization within the family will contribute positively to investment awareness, the following hypothesis is proposed:

Hypothesis 4: There is a positive effect of parental socialisation on investment awareness.

2.5. Social Media

Millennials were born and raised in the age of information and communication technologies and as a result, social media has become an important tool in many activities. According to Kurnia (2020); it is stated that the degree of dependence of Generation Y on the internet and related technologies is high. Yusop and Sumari (2013) stated that Millennials, especially students, use social media to communicate, socialize, access financial information, and conduct research to complete university assignments. Asserts that social media is employed for a multitude of purposes, including the enhancement of students' financial literacy (Yanto et al., 2021). Sohn et al. (2012) evaluated various financial dissemination tools, including parents, coworkers, schools and the media. The results of the study showed that there is a significant relationship between media and financial literacy, while parents play a relatively small role in financial socialisation (Putri & Wijaya, 2020). In light of the preceding discussions, the following hypothesis is put forth for consideration:

Hypothesis 5: The use of social media has a positive effect on investment awareness.

The investment behaviour research model designed with the help of the proposed hypotheses describing the relationships between the factors is given in Figure 1.

Figure 1. Research Model

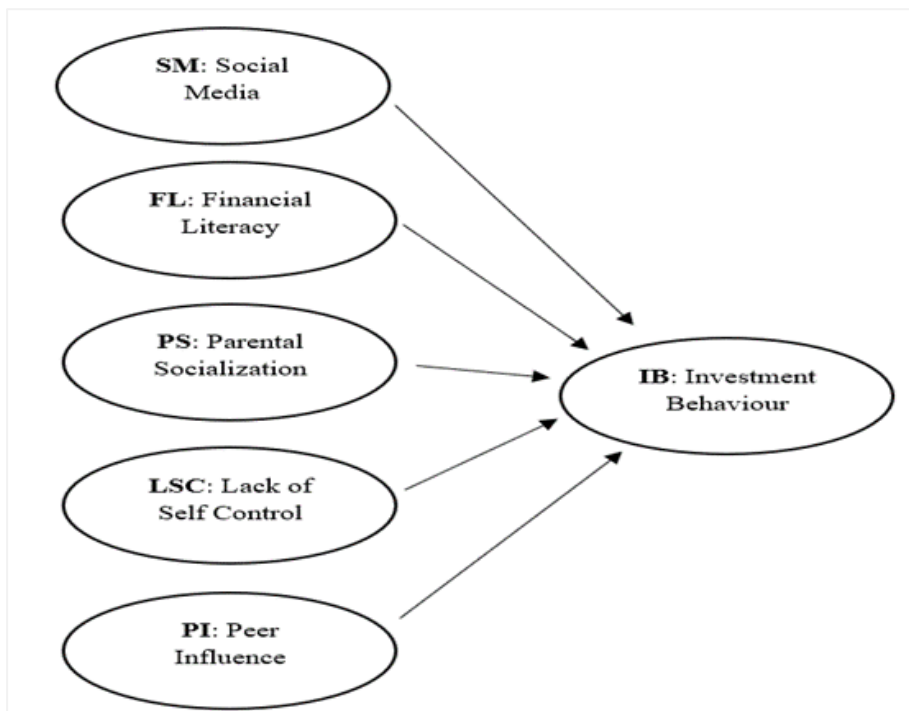


Table 1. Demographic Characteristics of Students

Variable	Level	Frequency	Percent
Gender	Female	74	54
	Male	63	46
Department	Business Administration	56	0.41
	Finance	7	0.05
	Finance and Banking	11	0.08
	Statistics	35	0.26
	Economy	10	0.07
	SBKY	18	0.13
Class	2	12	8.8
	3	36	26.2
	4	89	65.0
Income status	My Income Does Not Cover	45	32.8
	Balanced Budget	41	29.9
	My Income Covers My Expenses	51	37.2
Your Family's Income Status	Too bad	5	3.6
	Bad	76	55.5
	Middle	48	35.0
	Good	8	5.8
Total		137	100.0

2.6. Measurement Model

PLS-SEM was used to analyse the data. PLS-SEM is a technique that can be used safely with small samples and does not require the assumption of multivariate normality. Analyses in PLS-SEM usually involve evaluation of the measurement and structural model (Hair et al., 2017). The research model and survey questions of this study were developed from the study of Azizah and Mulyono (2020) and also from the literature review.

The evaluation of the measurement model is investigated by discriminant and convergent validity. Convergent validity is examined with the help of factor loadings of the statements (items) in the data collection tool, AVE and CR. Factor loadings are required to be greater than 0.70 and statistically significant. $CR > 0.70$ and $AVE > 0.50$ for the measurement model (Hair et al., 2014, 2017; Gürbüz & Yılmaz, 2023).

In the study, 1 statement from FL, one from LSC, 3 from IP and 3 from IB were excluded from the measurement model since their factor loadings were below 0.60. In the study, factor loadings were determined to be between 0.705-0.940 (see Figure 2). In addition, as can be seen in Table 2, $CR > 0.70$ and $AVE > 0.50$. Therefore, it is understood that the convergent validity of the constructs is provided (Fornell & Larcker, 1981).

Table 2. Construct Reliability and Validity

Factors	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
FL	0,816	0,871	0.576
IB	0.902	0.927	0.719
LSC	0.935	0.948	0.754
PI	0.827	0.920	0.851
PS	0.925	0.942	0.766
SM	0.881	0.918	0.736

Since the square root of the AVE in Table 2 is larger than the correlation coefficients between the variables, it can be said that the Fornel-Larcker criteria also provide discriminant validity. The diagonal values in Table 3 are the square root values of AVE.

Table 3. Discriminant Validity (Fornell-Larcker Criterion)

	FL	IB	LSC	PI	PS	SM
FL	0.759					
IB	0.592	0.848				
LSC	-0.152	-0.264	0.868			
PI	0.289	0.311	-0.183	0.923		
PS	0.221	0.312	-0.091	0.234	0.875	
SM	0.403	0.429	-0.012	0.402	0.267	0.858

The HTMT criterion proposed by Henseler et al. (2015) is the ratio of the mean of the correlation values of the statements of each variable in the model to the geometric mean of the correlations of the same variables. The authors emphasise that the HTMT value should be less than 0.85. Table 4 confirms the discriminant validity of the constructs according to the HTMT criterion

Table 4. Heterotrait-Monotrait Ratio (HTMT)

	FL	IB	LSC	PI	PS	SM
FL						
IB	0.681					
LSC	0.184	0.278				
PI	0.341	0.353	0.206			
PS	0.246	0.324	0.093	0.233		
SM	0.471	0.470	0.075	0.474	0.282	

2.7. Structural Model

At the structural model stage, path analysis and hypothesis testing are performed. Before testing the hypotheses of the study, the collinearity problem was investigated. For this purpose, Variance Inflation Factor (VIF) was used. If the VIF value is greater than 5, it is assumed that there are collinearity problems in the model (Hair et al., 2014, 2017). In the study, since Inner VIF Values < 3 (1.062 < Inner VIF Values < 1.386), there is no multicollinearity problem among the latent variables.

As can be seen from the model fit values in Table 5, it is understood that the structural model has sufficient fit. Figure 2 shows the path analysis, Table 6 shows the results of the general hypothesis tests and Figure 3 shows the Performance-Importance Map.

Figure 2 shows that the factor loadings of FL (financial literacy) range between 0.705-0.794. The highest correlation coefficient is between FL and FL3 (0.794). The higher the FL, the higher the FL3 'I have the ability to keep financial records for my income and expenditures'.

The factor loadings of PS (Parental Socialization) are between 0.838-0.921. The highest correlation coefficient is between PS and PS29 (0.921). The higher the PS, the higher the PS29 'I value my parents' guidance on how to manage my finances'.

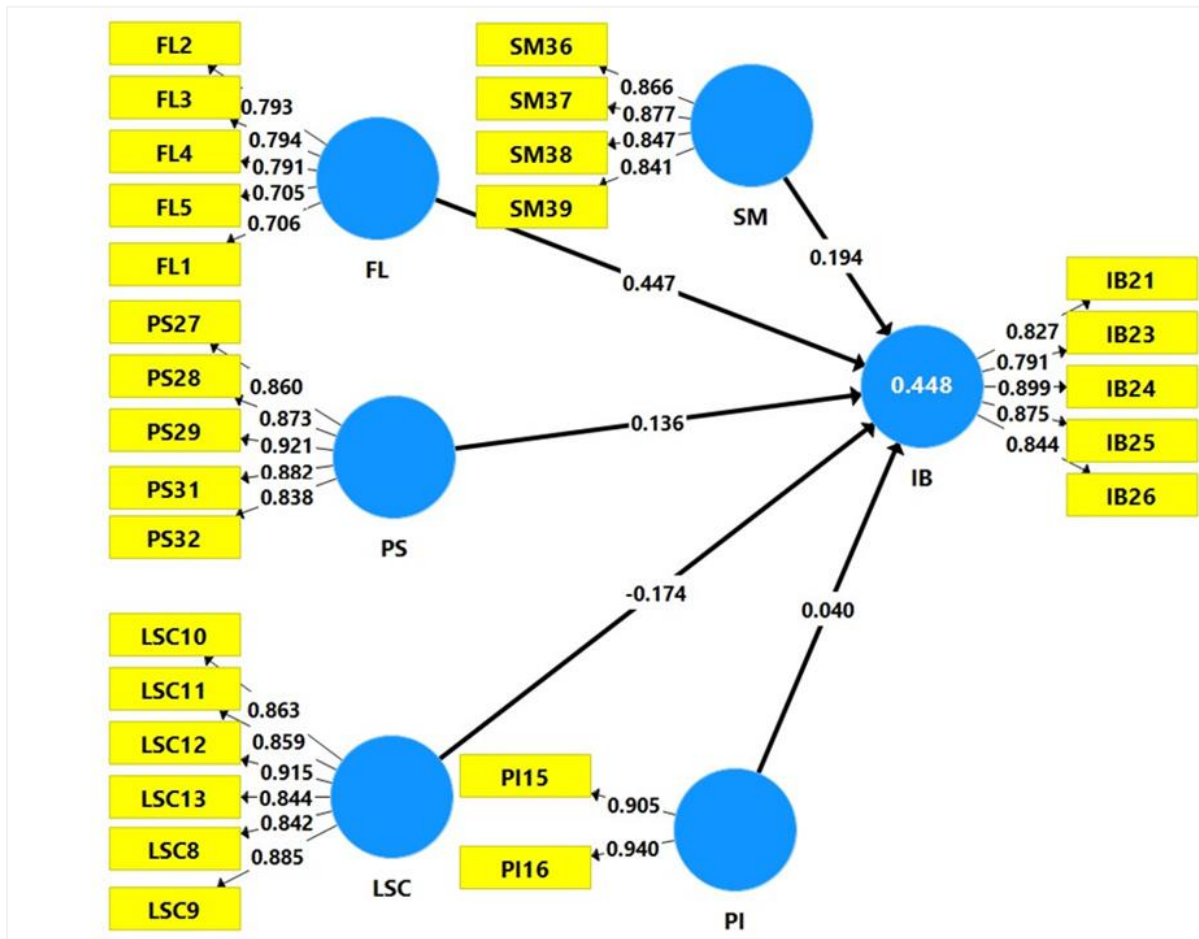
The factor loadings of LSC (Lack of Self-Control) are between 0.842-0.915. The correlation value between LSC and LSC12 is 0.915. As LSC increases, the 'Buy now, think later' thinking of LSC12 will also increase.

The factor loadings of SM: (Social Media) are between 0.841-0.877. The correlation value between SM and SM37 is 0.877. As SM increases, SM37's opinion 'I benefit from financial reports on social media when investing' will also increase.

The factor loadings of PI (Peer Influence) are 0.905 and 0.940. The correlation value between PI and PI16 is 0.940. As PI increases, PI16's statement 'I talk (discuss) with my friends about investment options' will also increase.

The factor loadings of IB (Investment behaviour) are between 0.791-0.899. The highest correlation coefficient is between IB and IB24 (0.899). As IB increases, IB24's 'I plan to manage my spending in order to invest' will increase.

Figure 2. Model of Investment Behaviour of University Students



FL: Financial Literacy, LSC: Lack of Self Control, PI: Peer Influence, IB: Investment Behaviour, PS: Parental Socialization, SM: Social Media

For structural model fit, SmartPLS calculates Geodesic Distance (d_G), Standardized Root Mean Square Error Squared (SRMR), Normed Fit Index (NFI), Chi-Square and Square Euclidean Distance (d_ULS) values. The goodness of fit values of the model are presented in Table 5. When the fit statistics calculated for the fit of the model in Table 5 are examined, it is seen that the structural model has adequate fit.

Table 5. Model Fit

SRMR	0.064
d_ULS	1.558
d_G	0.802
Chi-Square	609.388
NFI	0.781

When the results of the hypothesis tests in Table 6 are analysed; all hypotheses are supported except for the PI→IB relationship.

Table 6. Hypothesis Testing

Hypothesis	Effect Coefficients	t-values	p-values	Result
FL→IB	0.447	5.269	0.001***	Supported
LSC→IB	-0.174	2.439	0.015**	Supported
PI→IB	0.040	0.399	0.690 ^{ad}	Not Supported
PS→IB	0.136	1.672	0.095*	Supported
SM→IB	0.194	2.169	0.030**	Supported

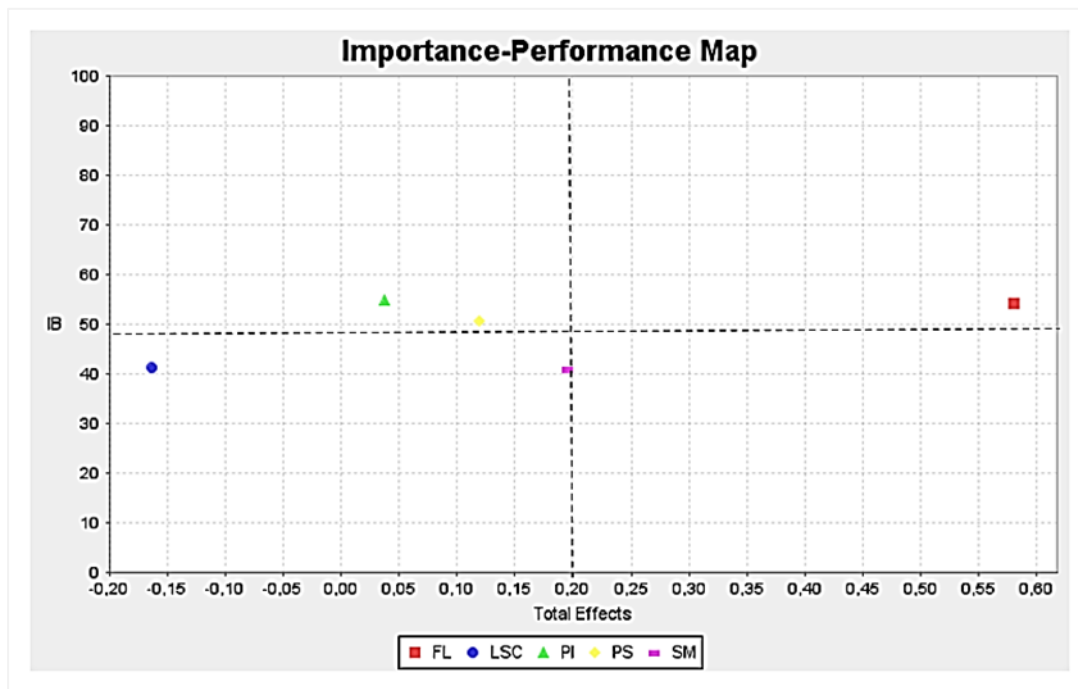
Additionally, an importance-performance map (IPMA) analysis was conducted in the study. Figure 3 illustrates the IPMA, while Table 7 presents the IPMA values of the latent variables that explain the investment variable. IPMA, a valuable analytical approach in PLS-SEM, is “also known as the importance-performance matrix, impact-performance map, or priority map analysis”. The IPMA compares the total effects, which represent the importance of the constructs in shaping a given target construct (endogenous latent variable), with the average latent variable scores, which indicate their performance. According to Ringle and Sarstedt (2016), the aim “is to identify constructs that have relatively high importance for the target construct (i.e., those with a strong total effect) but also have relatively low performance (i.e., low mean latent variable scores).”

The IPMA graphically combines these two aspects by comparing total impacts on the x-axis with latent variable performance scores scaled from 0 to 100 on the y-axis. For the interpretation of the results, the focus is on the constructs in the lower right area of the importance-performance map. These constructs have high importance for the target construct but underperform. As a result, there is a particularly high potential to improve the performance of the structures positioned in this area.

Table 7. IB's Performance-Importance Values

Variables	Total Effect (Importance)	Scores of Latent Variables (Performance%)
FL	0,58	55
LSC	-0,16	41
PI	0,04	55
PS	0,12	51
SM	0,199	41

Figure 3. Performance-Importance Map (Y axis performance, X axis importance)



When we examine the Performance and importance values in Figure 3 and Table 7, in terms of importance, FL (0.58) received the highest score, followed by SM (0.199), PS (0.12), PI (0.04) and LSC (-0.16), respectively. When we analyse the performance values; the highest score belongs to PI (55) and FL (55). PS scored (51), while PI and SM scored (41). According to this situation, it is understood that the most important variable explaining the IB (investment behaviour) of FEAS students is FL (Financial Literacy).

3. CONCLUSION

According to the results of the hypothesis tests in Table 6, it is observed that all alternative hypotheses are supported except for the PI→IB relationship. Financial literacy, lack of self-control, parental socialization, and social media significantly influence investment behaviour. With the help of Table 6; it is revealed that when the level of financial literacy among students increases by one unit, investment behaviour increases by 0.447 units, when the level of parental socialization increases by one unit, investment behaviour increases by 0.136 units, when the level of social media increases by one unit, investment behaviour increases by 0.194 units, and when the level of self-control deficiency increases by one unit among students, investment behaviour decreases by 0.174 units. It has been found that investment behaviour is most influenced by financial literacy in the study. The factor of self-control deficiency is negative in nature since it is measured with negative expressions such as "Buy now, think later" in LSC12. Therefore, it is natural for the LSC→IB coefficient to be calculated as negative. Consequently, when self-control deficiency increases by one unit among university students, investment behaviour will decrease by 0.174 units. In short, if students' uncontrolled shopping attitudes are high, investment behaviour will decrease.

According to the Performance-Importance Map, it is understood that the highest value for the investment variable is attributed to financial literacy both in terms of importance and performance. However, considering that the maximum value for performance level is 100, and the obtained value is 55, it can be seen from IPMA that there is room for further improvement in students' financial literacy levels.

Alshebami and Aldhyani (2022) determined that the influence of parents and peers positively explains financial literacy. Additionally, while financial literacy positively affects the savings habits of young people, self-control has been observed to negatively affect the relationship between financial literacy and saving behaviour. It has been found that self-control weakens the link between financial literacy and savings behaviour among Saudi youth. These findings parallel the results of the study.

Nawi et al. (2022) examined the impact of parental socialization, peer influence, financial literacy, and self-control on saving habits using multiple regression analysis. In their study, they found that, apart from financial literacy, other variables were able to explain saving habits. Therefore, it appears that similar results to our study were obtained except for the financial literacy variable.

Ali et al. (2022) investigated the relationship between financial literacy, saving behaviour, lack of self-control, family interaction and investment awareness in a study conducted among 409 students from the Faculty of Business Administration. The findings revealed that financial literacy, saving behaviour and family financial socialisation are positively related to investment awareness, while lack of self-control has a negative and significant effect on investment awareness. The findings of our study align with those of Ali et al. (2022) on financial literacy, family socialisation and lack of self-control.

Kassim et al. (2022), through regression analysis applied to students (351) from private universities in Selangor, Malaysia, revealed that financial literacy and self-control have a significant positive impact on money management behaviour, while parental socialization and peer influence do not affect money management behaviour. In our study, however, while there is a significant effect between these four variables and investment behaviour, there is only a significant negative relationship between self-control deficiency and the investment variable.

According to Alekam et al. (2018), in their study evaluating the level of financial literacy among the young generation in Malaysia (Family, Peer, Attitude, Savings, and spending behaviour), there is a significant positive relationship between behaviour and financial literacy. Furthermore, the findings indicate that Family/Parents and Peers significantly influence Financial Literacy.

Mpaata et al. (2020), from the context of developed countries, suggest that Social Influence has a positive effect on Savings Behaviour. Mpaata et al. (2023) examined the regulatory effect of self-control on the relationship between financial literacy and savings behaviour in a study conducted with 395 micro and small business owners in Kampala, Uganda. They emphasized that both financial literacy

and self-control explain savings behaviour, while also highlighting that the relationship between financial literacy and savings behaviour is governed by self-control.

In a study conducted by Zaihan (2016) on 450 students at the University Utara Malaysia (UUM), the impact of financial literacy, family socialization, peer influence, and self-control on savings was examined through multiple regression analysis. Except for peer influence, a significant relationship was found between savings and the other variables.

Jorgensen (2007) initially investigated the personal financial literacy characteristics of students using the College Student Financial Literacy Survey (CSFLS) with a sample of 450 undergraduate and graduate students. Secondly, they examined the influence of parents and peers on college students' financial literacy levels. In Jorgensen's study, it was found that financial knowledge, attitudes, and behaviour scores were low, but these scores increased significantly each year from freshman to graduate level. Additionally, it was determined that students influenced financially by their parents had higher financial knowledge, attitude, and behaviour scores. As a result, it was observed that students with higher financial knowledge had higher financial attitude scores and financial behaviour scores.

Yanto et al. (2021) collected data from 327 economics department students at universities in Indonesia through a Google survey form. At the end of this study, it was determined that students' use of social media has a positive effect on financial (literacy, attitude and behaviour).

One of the main limitations of the study is that it was conducted on students attending summer school courses at Faculty of Economics and Administrative Sciences. By increasing the sample size and diversity of faculties, various comparisons and generalizations can be made.

For future studies, other variables explaining investment behaviour could be included in the model, and additional intermediary or moderator variables could be added to strengthen the relationships in the study model.

This study is one of the few studies that explain the relationship between financial literacy, peer influence, lack of self-control, parental socialisation and social media and investment behaviour. This study, conducted on today's university students who are tomorrow's investor candidates, contributes to the existing literature and empirical findings on financial literacy, peer influence, lack of self-control, parental socialisation and social media in explaining the investment behaviour of ESOGU FEAS students and encourages investment behaviour.

The model presented in this study is an important step that can form the basis for future research and aims to increase awareness in the field of financial literacy. Limitations of the study and suggestions for future research are given below:

One of the important limitations of this study is that the data collection process covers only the students of the Faculty of Economics and Administrative Sciences (FEAS) of one university. This

situation limits the generalisability of the findings. Although PLS SEM gives successful results in small samples, the overall sample size is relatively small (n=137), which may reduce the statistical power. Another limitation is that the factors considered are limited and other variables that could potentially influence investment behaviour are not included in the model.

Specific suggestions for future research could be the following:

- The generalisability of the findings can be increased by testing similar models on students in different universities and various faculties.
- Including additional factors such as psychological factors, cultural factors or economic conditions in the model may provide a more comprehensive understanding of investment behaviour.
- Longitudinal studies can be conducted to examine changes in students' financial knowledge and behaviour over time.
- Moderating and mediating effects can be studied to understand the effects of financial education or economic crises on investment behaviour.

Ethics committee approval for the study was obtained from the Eskişehir Osmangazi University Ethics Committee on March 22, 2023, with meeting number 2023-04.

The authors declare that the study was conducted in accordance with research and publication ethics.

The authors confirm that no part of the study was generated, either wholly or in part, using Artificial Intelligence (AI) tools.

The authors affirm that there are no financial conflicts of interest involving any institution, organization, or individual associated with this article. Additionally, there are no conflicts of interest among the authors.

The authors affirm that they contributed equally to all aspects of the research.

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