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Impact of Social factors, Self-control, and Financial Education on Financial Literacy and Financial Saving Behaviour among University Students in Saudi Arabia

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#### ARTICLE INFO

#### ABSTRACT

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#### Keywords

Peer Influence, Parental Influence, Financial Saving Behaviour, Saudi Arabia.

The primary research objective aimed to empirically assess the influence of peer influence, self-control, financial education, and parental influence on the financial saving behaviour mediated through the financial literacy of university students in Saudi Arabia. A sample of 260 students participated in the study, selected using purposive sampling, and data were collected through a self-administered questionnaire. The study employed a quantitative research approach with a cross-sectional research design. The empirical regression results revealed positive and statistically significant impacts of parental and peer influences, financial education, and selfcontrol on financial literacy. Mediation analyses further indicated a significant mediating effect of financial literacy in the relationship between peer influence, self-control, parental influence, financial education, and financial saving behaviour. Drawing from the aforementioned study, the research

contributes insights endorsing financial education initiatives and collaborative endeavours among stakeholders to cultivate a holistic environment conducive to financial literacy. The study contributes theoretically by incorporating financial education and self-control into established frameworks and practically by advocating curriculum reforms within Saudi Arabian universities. Limitations encompass the study's singular country focus and the absence of moderating variables, prompting a call for future research to delve into cultural variations, introduce moderators, and adopt mixed-method approaches for a more comprehensive understanding.

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### 1. Introduction

In the contemporary dynamic milieu, the promotion of individual well-being in the present-day economy hinges on the cultivation of financial awareness. To this end, it is imperative to equip the younger generation with fundamental financial knowledge and skills, a crucial undertaking for facilitating consequential financial decision-making (Dogra, Kaushal, & Sharma, 2021). Recent indicators suggest a diminishing emphasis on savings habits and financial management among the younger demographic, thereby influencing their self-sufficiency and contributing to an augmented reliance on familial and governmental support, leading to increased indebtedness (Hasler & Lusardi, 2017). Hence, societies characterized by elevated levels of financial literacy tend to cultivate individuals who are more adept at navigating decisions related to financial savings (Alshebami & Aldhyani, 2022). Financial literacy encompasses the acquisition, processing, and proficient utilization of financial information for the purposes of strategic planning, effective money management, and judicious debt handling (Mitchell & Lusardi, 2015). It empowers individuals universally to proficiently manage their finances, make well-informed investment decisions, and utilize the available array of financial services (Zait & Bertea, 2015). Enhanced financial literacy facilitates the mitigation of risks, strategic career planning, and effective management of retirement savings (Behrman et al., 2012; De Winne & Petkeviciute, 2021). Conversely, a decline in financial literacy may result in increased borrowing (Foltice, 2017). Remarkably, global data on financial literacy reveals that approximately 33% of adults exhibit financial literacy, underscoring a notable disparity between developed and developing nations (Klapper, Lusardi, & Van Oudheusden, 2015; Lusardi & Mitchell, 2011).

Within the Gulf states, which constitute a developing region, financial literacy persists at a relatively low level (Alshebami & Aldhyani, 2022). Saudi Arabia demonstrates subpar financial literacy, with a meagre 35% of men and 29% of women possessing financial literacy (Alshebami & Aldhyani, 2022). Notwithstanding economic reforms, Saudi Arabia contends with diminished financial awareness, influencing savings behaviour, particularly among the youthful demographic, constituting 37% of the population (Ali et al., 2021). Research findings indicate a substantial deficiency in financial literacy among university students in Saudi Arabia (Alshebami & Aldhyani, 2022; Sobaih & Elshaer, 2023). Alarming statistics underscore a deficiency in financial saving behaviour, resulting in an escalation of significant loans characterized by high interest rates (Camarate & Adra, 2019). In this context, addressing the gap in financial literacy is deemed crucial in Saudi Arabia and can be achieved through fostering collaborative efforts among stakeholders to bolster individual self-control and considering social factors such as parental influence and peer influence (Allen et al., 2007; Shankar, Vinod, & Kamath, 2022). Acknowledging this, the Saudi government is actively advocating for financial education and initiatives, as indicated by Putri and Wijaya (2020) resulting in an enhancement of financial saving behaviour, as demonstrated by Alshebami and Aldhyani (2022).

The cultivation of financial literacy extends beyond formal education, encompassing crucial social elements such as parental and peer influence. Parents, in particular, function as primary role models for their children's behaviour, exerting a significant impact on their comprehension of consumer behaviour, especially in the early stages of development (Hayta, 2008). They possess the capacity to impact the financial literacy of their children from early childhood through adulthood (Clarke et al., 2005). Likewise, the influence of

peers plays a crucial role in augmenting financial literacy (Putri & Wijaya, 2020). Their influence moulds the comprehension of monetary values and informs the process of making financial decision (Hota & Bartsch, 2019). Within student circles, favourable peer influence has the potential to augment financial capabilities and foster improved savings habits (Zokaityte, 2017). Essentially, when peers exert positive influence on one another, there is a probability of collectively cultivating enhanced financial savings. When examining the impact on saving behaviour and financial literacy, it is crucial to consider not only the aforementioned social influences but also individual self-control, emphasizing the importance of financial education in fostering increased savings behaviour (Mpaata, Koske, & Saina, 2023). Self-control involves the regulation of desires and actions to achieve specific goals, encompassing the restraint of impulsive purchases and the establishment of robust retirement plans (Sklar, Rim, & Fujita, 2017). Similarly, financial education played a significant role in augmenting financial literacy (Khusaini et al., 2022), that could contribute to the enhancement of financial saving behaviour. This assertion finds additional support in the study by Alshebami and Aldhyani (2022) contending that the enhancement of financial education, contributing to the improvement of individual financial saving behaviours, can be achieved through factors such as self-control, peer influence, parental influence, and financial literacy.

Moreover, numerous empirical studies have investigated the relationships among peer influence, financial education, parental influence, financial literacy, self-control, and financial saving behaviour; however, certain gaps in the literature persist. For instance, Alshebami and Aldhyani (2022) utilized solely peer influence and parental influence as factors influencing financial literacy and financial saving behaviour. In another study, the examination of the impact of financial education on financial literacy was conducted by Khusaini et al. (2022), yet, other influential social factors and the role of self-control in financial saving behaviour were disregarded. These omissions underscore the need for a comprehensive investigation into the relationships among "social factors, financial education, self-control, financial saving behaviour, and financial literacy," particularly within the context of Saudi Arabia where prior studies have shown limited attention to financial literacy in its early stages (Alshebami & Aldhyani, 2022; Supanantaroek, Lensink, & Hansen, 2016). This observation lends further support to the notion that there is insufficient focus on financial literacy and financial saving behaviour, particularly among individuals in Saudi Arabia (KPMG in Saudi Arabia, 2020). Therefore, these factors are deemed crucial in influencing financial literacy and financial saving behaviour among university students in Saudi Arabia. The study aims to empirically test the impact of peer influence, self-control, parental guidance, and financial education on financial saving behaviour through financial literacy. The research employed a quantitative research method with a cross-sectional study design, collecting data from 260 students through self-administered questionnaires using purposive sampling technique.

The research's significance lies in its innovative integration of financial education and self-control within Saudi Arabian university settings, emphasizing the pivotal role of heightened educational engagements. It illuminates the interplay between structured financial programs and individual traits, emphasizing their impact on informed financial decision-making. From a practical perspective, the study underscores the need for customized financial literacy initiatives that foster both knowledge acquisition and self-discipline, promoting collaborative efforts among institutions, families, and peers to instil

responsible financial habits in students. These insights provide a basis for policymakers and educators to advocate for comprehensive curriculum reforms aimed at nurturing financial competence among Saudi Arabian students. The research is structured into four chapters, commencing with a literature review that contextualizes the study within existing knowledge. Subsequent chapters cover research methodology, data analysis and results, and conclude with a discussion of findings and research limitations.

## 2. Literature Review

# 2.1 Parental Influence Effect on Financial Literacy"

Parental influence, characterized as any perspective or attitude shaping the child's own attitude, encompasses a significant role in this context. Empirically, Kardash, Coleman-Tempel, and Ecker-Lyster (2023) emphasized a robust positive correlation between parental financial practices, including budgeting, savings behaviours, and open discussions about financial matters, and the development of financial literacy. Moreover, Bhatia, Chawla, and Singh (2021) indicated that parental engagement in financial education positively influences the financial literacy of young adults, cultivating improved financial decision-making skills and responsible financial behaviours. These results underscore the importance of parental modelling and guidance in imparting essential financial concepts and behaviours. They suggest that a supportive home environment with active parental involvement in financial matters constitutes a pivotal foundation for cultivating robust financial literacy skills in children and adolescents. Furthermore, Khalisharani et al. (2022) and Khalisharani et al. (2022) illustrated the persistent impact of parental financial behaviours on the enduring financial habits and attitudes of their offspring. Emphasizing that both direct parental teachings and observed behaviours substantially meld financial attitudes and behaviours during the transition to adulthood. Consequently, the study posits the following research hypotheses.

**H1:** Financial literacy significantly affected by parental Influence.

# 2.2 Peer Influence Effect on Financial Literacy

Peer influence refers to the impact exerted by individuals or society in directing expenditure patterns, thereby contributing to an augmentation in financial literacy. Numerous empirical studies propose that peers can exert a noteworthy influence on financial decision-making and literacy levels. For instance, Cordero, Gil-Izquierdo, and Pedraja-Chaparro (2022) observed that the financial attitudes and behaviours of individuals were markedly impacted by the financial practices of their peers. Similarly, Alshebami and Aldhyani (2022) uncovered that the financial behaviours of adolescents were heavily shaped by the financial habits and decisions of their friends and peers. Conversely, alternative findings yielded contrasting results in a different context. For instance, Thomas and Subhashree (2020) indicated that although peers may have an influence on certain financial behaviours, the overall impact on financial literacy might not be as substantial as previously posited. Additionally, Pereira (2022) discovered that peer influence played a significant role in augmenting financial literacy. Building upon the preceding discussion, the study formulates research hypotheses.

**H2:** *The financial literacy has significantly affected by peer influence.* 

## 2.3 Financial Education Effect on Financial Literacy

Financial education comprises the acquisition of skills and attitudes necessary to comprehend concepts related to money and finance. Empirically, Khusaini et al. (2022) conducted a study to analyse the impact of financial education interventions on financial literacy. The study underscored the efficacy of targeted financial education initiatives, particularly those emphasizing practical applications and tailored to specific demographics, in augmenting individuals' financial knowledge and understanding. Another significant empirical study by Cordero et al. (2022) affirmed that financial education positively impacts both financial literacy and subsequent financial behaviours among employees. Consequently, the study posits the following research hypotheses.

**H3:** Financial Literacy Significantly Effect by Financial Education.

# 2.4 Self-Control Effect on Financial Literacy

Individuals exhibiting robust self-control tendencies are inclined to consistently allocate a portion of their income to savings, manifest superior financial habits, and possess heightened confidence in their current and future financial stability. Empirically, Boto-García, Bucciol, and Manfrè (2022) established a notable correlation between self-control and financial saving behaviour. Furthermore, they emphasized that self-control contributes to an increase in financial literacy. Furthermore, Duckworth et al. (2019) discovered that elevated self-control levels predicted improved financial outcomes in young adulthood. Those with higher self-control during adolescence were more prone to exhibit high levels of financial literacy, correlating with better financial behaviours. These studies underscored the significance of self-control as a crucial determinant of financial literacy. Consequently, the study formulates the following research hypotheses.

**H4:** Financial literacy significantly affected by self-control.

### 2.5 Financial Literacy Effect on Financial Saving Behaviour

Financial literacy encompasses the comprehension and knowledge of financial concepts and the effective management of personal finances. Lusardi and Mitchell (2023) conducted a study and identified a substantial correlation between financial literacy and several positive financial behaviours, including savings rates and investment diversification. Similarly, Kartini et al. (2021) suggested that individuals with enhanced financial literacy are capable of enhancing their financial saving behaviour, encompassing improved debt management, increased savings, and enhanced retirement planning. These findings underscore the pivotal role of financial literacy in shaping individual financial behaviours, emphasizing the positive impact of possessing sufficient financial knowledge on decision-making in financial matters. Moreover, Bucher-Koenen et al. (2017) reinforced the notion that individuals possessing greater financial literacy can substantially contribute to enhancing the financial saving behaviour of individuals, subsequently elevating their well-being levels. This includes activities such as retirement planning, effective credit management, and making well-informed investment decisions. Thus, the study posits the following research hypotheses.

**H5:** Financial saving behaviour significantly affected by financial literacy.

## 2.6 Mediating Effect of Financial Literacy

Prior literature highlights the significant role of financial literacy in empowering individuals to formulate future plans and achieve heightened financial well-being (Alshebami & Aldhyani, 2022). Equipping individuals with essential skills for making prudent financial decisions and navigating challenging situations, financial literacy emerges as a catalyst for effective financial management (Zulfaka & Kassim, 2023). Diverse factors, such as influences from parents, peers, and the surrounding environment, collectively contribute to the augmentation of individuals' financial literacy levels. This empowerment enables individuals to plan for retirement, cover their children's education costs, and make well-informed financial decisions (Alshebami & Aldhyani, 2022). Acknowledged as a motivator of saving behaviour, elevated financial literacy is positively associated with an enhanced ability to save and proficiently manage finances (Alshebami & Aldhyani, 2022). Significantly, the literature underscores that increased financial literacy among young individuals, particularly students, is associated with a more profound understanding and appreciation of the value of saving (Daud et al., 2023). The influential factors shaping optimal saving behaviours include both parental influence and an individual's level of financial literacy (Lusardi & Mitchell, 2023). Regardless of whether an individual is a business professional or a member of a family unit, possessing a higher degree of financial literacy proves to be advantageous (Stolper & Walter, 2017). In other terms, empirical evidence additionally substantiates the idea that financial education markedly elevates financial literacy, subsequently exerting an influence on improved financial behaviour. Studies such as those conducted by Wagner (2019) demonstrated a positive and significant impact of financial education on financial literacy. These programs proficiently equip individuals with essential skills for making sound financial decisions, managing finances prudently, and planning for the future. Furthermore, Lusardi (2019) illustrates that individuals subjected to financial education display elevated levels of financial literacy, resulting in tangible outcomes such as heightened savings rates, improved debt management, and enhanced retirement planning. Subsequent studies have also highlighted the pivotal role of self-control in enhancing financial literacy, which, in turn, contributes to improved financial saving behaviour. Hashmi et al. (2021) identified a noteworthy correlation between heightened levels of self-control and judicious financial decision-making, suggesting that individuals with greater self-control are inclined towards more prudent financial behaviours, including improved budgeting and diminished impulsive spending. The preceding discussion forms the basis for the following research hypothesis.

**H6:** Parental influence significantly affect towards financial saving behaviour with mediating effect of financial literacy.

 $\acute{ extbf{H7}}$ : Peer influence significantly affect towards financial saving behaviour with mediating effect of financial literacy.

**H8:** Financial education significantly affect towards financial saving behaviour with mediating effect of financial literacy.

**H9:** Self-control influence significantly affect towards financial saving behaviour with mediating effect of financial literacy.

## 3. Research Design

The research aimed to explore the influence of "parental influence, financial education, peer influence, and self-control on financial saving behaviour" with the mediating role of financial literacy among Saudi Arabian students. To fulfil this objective, the researchers adopted a quantitative deductive approach. This method involves the collection of numerical

data, enabling statistical analysis and providing objective insights into the phenomena under investigation (Lazaraton, 2005). The study utilized a cross-sectional research approach, gathering data at a singular time point. This design facilitates the examination of a diverse sample at a specific moment, offering a snapshot of the relationships between variables. The cross-sectional approach provides efficiency in data collection, enabling the study to capture a broad range of participants' perspectives (Spector, 2019). The researchers collected data from a cohort of 300 respondents, specifically university students in Saudi Arabia. The selection of students was carried out using a purposive sampling technique, focusing on individuals with knowledge related to financial management. The purposive sampling technique was deemed appropriate for this study to ensure the inclusion of participants with relevant expertise in the subject matter (Etikan, Musa, & Alkassim, 2016). Hence, through the utilization of purposive sampling, this methodology enhanced accessibility and efficiency in engaging the participants of the survey.

### 3.1 Research Instrument

The data was collected through a self-administered questionnaire, adapted from previous studies. Parental influence consisted of 8 items, peer influence comprised 5 items, and self-control included 10 items, all adapted from existing research (Alshebami & Aldhyani, 2022). The component related to financial education consisted of 5 items, which were adapted from existing research (Garman et al., 1999). The construct of financial literacy encompassed 7 items, while the construct of financial saving behaviour comprised 7 items. Both of these constructs were adopted from the study conducted by Alshebami and Aldhyani (2022). "These adopted constructs were ranked on five-point Likert scale where; 5=strongly agree, 4=agree, 3=neutral, 2=disagree, and 1=strongly disagree". The adopted construct is appended in Appendix A. The variables are depicted in the following Figure 1.

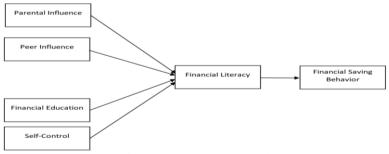


Figure 1. Research Framework

### 3.2 Descriptive Statistics

Table 1 presents the predicted results, displaying descriptive statistics of data pertaining to various influential factors and behaviours among university students in Saudi Arabia. In this context, it is evident that self-control is relatively high among these students, with a mean of 4.12 and a narrow standard deviation of 0.65, suggesting a consistent level of self-discipline. Financial literacy also appears notably strong, with a mean of 3.80 and a relatively low standard deviation of 0.62, indicating a generally

uniform understanding of financial concepts. However, there may be some diversity in the influence of parents and peers on financial decisions, as evidenced by the wider ranges and standard deviations in these categories compared to self-control and financial literacy. The mean scores for parental influence (3.76) and peer influence (3.45) suggest moderate levels, but the broader standard deviations imply variability in how these influences impact financial behaviours among Saudi Arabian university students. Additionally, the average scores for financial education (2.98) and financial saving behaviour (3.65) fall between moderate to slightly higher levels, indicating room for improvement in these areas.

**Table 1.**Descriptive Statistics

	A *******	CD	Minimum	Maximum
	Average	SD	Willimum	Maximum
Parental Influence	3.76	0.82	2.10	5.00
Peer Influence	3.45	0.91	1.80	4.70
Self-Control	4.12	0.65	3.00	5.00
Financial Education	2.98	0.74	1.50	4.20
Financial Literacy	3.80	0.62	2.90	4.90
Financial Saving Behaviour	3.65	0.78	2.50	4.70

### 3.3 Diagnostics Test

The assessment of normality in a dataset is deemed crucial in SPSS to determine its adherence to a normal distribution. Employing statistical tests such as Shapiro-Wilk or Kolmogorov-Smirnov is imperative to validate the assumptions that underlie various statistical analyses (Bawoleh, Pangemanan, & Tielung, 2015). The authors employed the Shapiro-Wilk test to evaluate the normality of the data distribution. A obtained pvalue exceeding 0.05 signifies adherence to a normal distribution (Bawoleh et al., 2015). The Shapiro-Wilk test was executed, revealing a p-value less than 0.05, indicating that the data exhibited normality. Furthermore, the detection of common method bias was addressed by employing Harman's one-factor analysis through exploratory factor analysis (EFA) or principal component analysis (PCA). If a single factor accounts for more than 50% of the variance, it signals potential methodological influences rather than underlying constructs, suggesting the presence of common method bias in the observed variable correlations (Podsakoff et al., 2003). The one-factor value, being less than 50%, indicated the absence of common method bias. Conversely, the examination of multicollinearity, assessed through the VIF in regression analysis, centres on the interrelationships among predictor variables. It gauges the degree to which predictors are correlated, and if the VIF values are less than 3.33, it suggests no presence of common method bias (Kock, 2017).

# 4. Multicollinearity and Construct Reliability

Table 2 presents the predicted values, illustrating the construct reliability and multicollinearity. In SPSS, evaluating the reliability of a construct entails the scrutiny of factor loadings of items within a measurement scale. Generally, researchers consider factor loadings above 0.5 as a threshold to deem an item as significantly contributing to the

construct (Hair, Ringle, & Sarstedt, 2011; Reise, Widaman, & Pugh, 1993). Greater factor loadings indicate a stronger association between items and the construct. Table 2 displays all values exceeding 0.5. Construct reliability is often assessed using Cronbach's alpha, with values above 0.7 considered appropriate for reliability (Hair et al., 2011). The threshold value implies a reliable association among items within the construct. A higher alpha value indicates internal consistency, suggesting that the items effectively measure the same underlying construct (Hair et al., 2011). Table 2 indicates that each alpha value surpasses 0.70, affirming construct reliability. Conversely, multicollinearity pertains to elevated correlations among predictor variables in a regression model, posing challenges in interpreting individual predictor effects due to inflated standard errors or unstable coefficients. The recommended threshold for the VIF=< 5 (Hair et al., 2011). Table 2 reveals that all values are below 5, indicating the absence of multicollinearity issues.

Table 2.

Construct Reliability and Variance Inflation Factor.

Constructs	Items	Item Loadings	Alpha	VIF
Parents influence	PAI1	0.720	0.882	1.451
	PAI2	0.849		
	PAI3	0.755		
	PAI4	0.848		
	PAI5	0.781		
	PAI6	0.861		
	PAI7	0.807		
	PAI8	0.861		
Peer Influence	PEEI1	0.728	0.916	2.67
	PEEI2	0.824		
	PEEI3	0.796		
	PEEI4	0.833		
	PEEI5	0.756		
Financial Education	FAE1	0.882	0.939	1.78
	FAE2	0.758		
	FAE3	0.852		
	FAE4	0.893		
	FAE5	0.672		
Self-control	SEC1	0.817	0.942	2.29
	SEC2	0.893		
	SEC3	0.883		
	SEC4	0.867		
	SEC5	0.832		
	SEC6	0.876		
	SEC8	0.782		
	SEC9	0.745		
	SEC10	0.841		
Financial Literacy	FAL1	0.783		1.892
,	FAL2	0.872		
	FAL3	0.745		
	FAL4	0.923		
	FAL5	0.912		
	FAL6	0.934		
	FAL7	0.845		
Financial saving behaviour	FASB1	0.815		
U	FASB2	0.943		
	FASB3	0.822		
	FASB5	0.894		
	FASB6	0.821		
	FASB7	0.892		

### 5. Empirical Regression Results

The multiple regression analysis demonstrate a positive and significant relationship between parental influence and financial literacy. The results indicate that peer influence significantly and positively affects financial literacy among university students. This implies that peers play a substantial role in shaping financial understanding and knowledge within this demographic, suggesting a stronger impact compared to parental influence. Furthermore, the findings also show that financial education has a positive and significant effect on financial literacy. The present study underscores the significance of formal financial education in augmenting financial literacy among the student demographic under consideration. Additionally, self-discipline emerges as a noteworthy factor exerting a substantial impact on financial literacy. This outcome elucidates a robust and markedly positive correlation, suggesting that the level of individual self-discipline significantly contributes to the development of financial comprehension among these youthful participants. Furthermore, the study reveals a noteworthy and positive association between financial literacy and responsible financial behaviours. This correlation underscores the pivotal role of heightened financial literacy in fostering positive outcomes in terms of responsible financial conduct among university students.

Further indirect findings indicate that peer influence exerts a notable and positive impact on financial saving behaviour through the intermediary variable of financial literacy. This underscores that the sway peers hold over financial saving behaviour operates partially by influencing and augmenting financial literacy among the student cohort. Similarly, formal financial education manifests a positive and significant indirect effect on financial saving behaviour via the mediating factor of financial literacy, underscoring the role of structured financial education in enhancing financial saving behaviour among university students in Saudi Arabia. This underscores the imperative of educational initiatives focused on elevating financial comprehension, consequently fostering improved financial behaviours among the youth.

Additionally, self-control demonstrates a positive and statistically significant influence on financial literacy, thereby extending its impact to financial behaviour. This correlation implies that individual self-control in financial decision-making positively contributes to heightened financial literacy, subsequently influencing more responsible financial behaviours within this student population. The aforementioned outcomes are outlined in Table 3 for reference.

 Table 3.

 Multiple Regression Results

Muttiple Regression Results.			
Hypothesis	Beta Value	e T Value S	Sig.Level
Parental influence->financial literacy	0.456	2.245	**
Peer influence->financial literacy	0.632	11.987	***
Financial education->financial literacy	0.387	2.785	**
Self-control->financial literacy	0.524	13.672	***
Financial literacy->financial behaviour	0.412	4.984	**
Parental influence->financial literacy->financial behaviour	0.289	3.857	**
Peer influence->financial literacy->financial behaviour	0.321	12.897	***
Financial education->financial literacy->financial behaviour	r 0.267	5.135	***
Self-control->financial literacy	0.399	14.023	***
R Square	0.451		
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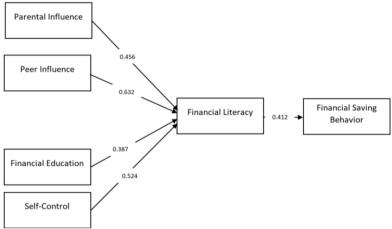


Figure 2. Beta Values

# 6. Discussion and Implications

The enhancement of financial literacy among Saudi Arabian university students, with subsequent improvements in saving behaviour and long-term financial planning, can be achieved through strategic utilization of peer influence, self-control, parental guidance, and financial education. The reinforcement of these elements notably contributes to the cultivation of financial literacy, empowering students to make well-informed financial decisions for their future. Consequently, the research aimed to assess the influence of peer dynamics, selfdiscipline, parental guidance, and financial education on financial saving behaviour via the intermediary variable of financial literacy in Saudi Arabian university students. Multiple regression analysis revealed a significant impact of parental influence on financial literacy. Studies (Alshebami & Aldhyani, 2022), substantiates the assertion that active parental involvement and discourse pertaining to money management exert a positive influence on elevated financial literacy among young adults. The study outcomes underscore the pivotal role played by familial and pedagogical guidance in shaping the financial literacy of individuals. Moreover, the impact of parental influence on financial literacy emerged as a significant and noteworthy factor. These findings align with the results observed in a parallel empirical investigation conducted by Alshebami and Al Marri (2022). Furthermore, financial education demonstrates a significant and positive impact on the financial literacy of students enrolled in educational institutions in Saudi Arabia. These findings highlight the crucial role played by financial education in enhancing financial literacy, aligning with the outcomes observed in (Khusaini et al., 2022). Consequently, these results indicate that financial education has emerged as a pivotal factor in enhancing the financial literacy of students within the Saudi Arabian educational context, underscoring the significance of systematically designed programs. In this context, the implementation of customized financial education initiatives within university settings is imperative to furnish students with requisite knowledge and competencies, enabling them to make judicious and conscientious financial choices throughout the trajectories of their academic and professional pursuits. Conversely, the aspect of selfdiscipline has demonstrated a notable impact on the financial literacy levels of students in Saudi Arabia. The outcomes align with the research of Ayuningtyas and Irawan (2021) reinforcing the assertion that exercising self-control over expenditure habits substantially contributes to elevated financial literacy levels. Furthermore, the findings underscore a favourable and statistically significant correlation between financial literacy and financial saving behaviour. This observation is consistent with the investigations of Lusardi (2019), Amagir et al. (2017) and Lusardi (2019) both of which emphasize the pivotal role of enhanced financial literacy in fostering improved financial saving practices among individuals.

The cultural context of Saudi Arabia, underscoring the cultural importance of familial guidance. While specific investigations into this sequential relationship may be limited, the broader evidence substantiates the well-established notion that parental guidance significantly shapes financial saving behaviour through its intermediary influence on financial literacy (Esmail Alekam & Bt Md Salleh, 2018; Khusaini et al., 2022). Hence, these results demonstrate the pivotal role of heightened financial literacy in educational institutions as a significant mediator in the relationship between parental influence and students' financial saving behaviour. Additionally, other findings highlight a positive and statistically significant influence of peer influence on financial saving behaviour, mediated by financial literacy. This underscores the importance of social networks in shaping financial decisions among university students in Saudi Arabia. While specifics of this sequential relationship may vary across studies, the overarching trend of peers influencing financial behaviours through literacy is consistently observed in the literature (Ingale & Paluri, 2022; Tokar Asaad, 2015). Hence, recognizing and harnessing peer influence can be instrumental in utilizing social networks to foster responsible financial habits among Saudi Arabian students, thereby enhancing their financial saving behaviour. Moreover, an additional mediating effect underscores the positive and significant impact of financial education on financial saving behaviour through the intermediary influence of financial literacy. This underscores the potential efficacy of financial education in cultivating a financially literate and empowered student population in Saudi Arabia, thereby promoting positive financial behaviour. In essence, these findings suggest that enhancing financial education has the potential to elevate financial literacy, consequently leading to an increase in financial saving behaviour (Lusardi, 2019). Moreover, the discerned positive and statistically significant influence of self-control on financial saving behaviour, mediated by financial literacy, holds particular relevance for university students in Saudi Arabia. The findings suggest that incorporating an emphasis on self-control within financial literacy programs in Saudi Arabia can empower students to undertake practical financial decisions in accordance with cultural values, thereby fostering responsible financial management in both academic and professional spheres. These results align cohesively with antecedent research in the field (Alshebami & Al Marri, 2022; Alshebami & Aldhyani, 2022; Farooq, Shah, & Rasheed, 2021). The antecedent research underscores the significance of financial literacy as a crucial mediating variable, capable of augmenting financial saving behaviour through enhancements in social factors, financial education, and self-control.

In light of preceding research, this study carries implications of both theoretical and practical significance. The theoretical contribution lies in the introduction of financial education and self-control as novel elements to the existing body of literature. The incorporation of financial education in the model emerges as pivotal, playing a substantive role in elevating financial literacy among university students in Saudi Arabia. Emphasizing well-structured courses within educational institutions pertaining to financial education becomes imperative, providing students not only with theoretical knowledge but also

essential practical skills crucial for navigating intricate financial landscapes. This addition enhances theoretical frameworks by elucidating the interdependence of educational interventions and individual attributes in cultivating enlightened financial decision-making.

Moreover, the inclusion of self-control as a substantial factor influencing financial saving behaviour through the mediation of financial literacy introduces a novel perspective within the Saudi Arabian context. The study, with its expanded framework, serves as a guide for other researchers, highlighting the significance of financial education and self-control. It invites further exploration in future research endeavours to understand how financial literacy can be enhanced, consequently amplifying financial saving behaviour.

In practical terms, this study offers implications for Saudi Arabian university students. Specifically, educational institutions are urged to prioritize enhancing financial education to endow students with essential financial skills. Additionally, the research underscores the crucial roles of familial and peer influences in shaping financial behaviours through literacy enhancement. From a practical standpoint, collaborative efforts involving families, peers, and educational institutions are deemed necessary to establish a comprehensive environment conducive to fostering responsible financial habits among students. Policymakers and educators can leverage these insights to advocate for curriculum reforms, ensuring the integration of financial education programs and strategies to cultivate self-discipline within the educational framework of Saudi Arabia. Furthermore, the findings of this study could guide government regulatory bodies in enhancing individuals' financial saving behaviour through improvements in financial literacy.

# 7. Conclusion

The study aimed to empirically assess the influence of peer influence, self-control, financial education, and parental guidance on the financial saving behaviour of Saudi Arabian university students through the mediating role of financial literacy. Data were gathered from 260 university students for this purpose. The results of multiple regression analyses revealed the significant impact of parental influence on financial literacy, underscoring the pivotal role of familial guidance within the cultural context of Saudi Arabia. Similarly, peer influence in educational settings exhibited a positive and significant effect on financial behaviours through heightened literacy, illustrating the influential dynamics of social networks among students. Financial education also demonstrated a positive and significant influence, highlighting its crucial role in equipping students with essential skills and knowledge for navigating intricate financial landscapes.

Furthermore, financial literacy was identified as a significant mediator between parental influence, financial education, peer influence, and financial saving behaviour in Saudi Arabian university students. These noteworthy findings not only contribute theoretically by introducing self-control and financial education but also provide practical insights, advocating for an augmentation of financial education and collaborative efforts among families, peers, institutions, policymakers, and educators to establish a comprehensive environment conducive to the financial education of Saudi Arabian students. The study concludes by addressing research limitations and proposing future directions.

While the findings contribute significantly, there are notable limitations that warrant attention for future research to enhance generalizability. The exploration of generalizability beyond Saudi

Arabian students remains unaddressed, emphasizing the need for investigations across diverse cultural contexts. Introducing moderating variables such as management support or university culture could offer clarity on the relationships among constructs. Incorporating mixed methods, including qualitative approaches like interviews or observations, would strengthen research findings and provide deeper insights. The study's use of purposive sampling, a non-probability technique, limits generalizability; hence, future research could benefit from employing probability sampling methods to broaden its applicability.

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# Appendix A

# Survey Instrument

"Variables	S Questions	Source
	Due to financial education, my decision-making concerning finances has notably improved	
	Due to financial education, my confidence in making	
	investment decisions has significantly increased	
Financial	Due to financial education, I adjusted my investment plan by	(Garman et al.
education	either diversifying or implementing a more hostile attitude.	1999)
	Due to my financial education, I determined to increase the	
	amount, I contribute to my retirement savings	
	As a direct result of financial education, I started making	
	regular contributions towards the retirement plan.	
	My parents serve as positive role models for effective money	
	management	
	Money management is a frequent topic of discussion between	
	my parents and me.	
	I appreciate it when my parents oversee my spending habits	
	I find it beneficial to have my parents hold onto some of my	
	money occasionally to assist in my savings efforts	(Alshebami &
	I prioritize saving money because I believe unnecessary	Aldhyani,
influence	expenses shouldn't be covered by my parents	2022)
	Saving money has become a regular habit due to my parents'	2022)
	encouragement during my upbringing.	
	I prioritize saving money because I believe it's unfair for my	
	parents to cover expenses for items I desire but don't	
	necessarily need	
	Saving money regularly is a habit instilled in me by my parents	
	during my childhood.	
	As per by knowledge, my friends consistently save their	
	money using a savings account.	(Alshebami &
Peer	I always engaging in conversations about money management	Aldhyani,
influence	with friends in saving accounts.	2022)
	I often comparing spending and saving habits with my friends.	2022)
	I often spend my free time with my friends.	

I often participating in activities which are related to spending money with friends. I feel refrain from of my saving as I am facing different challenges. I feel pleasure in spending money on the non-practical Things. When I received the cash, I spent it instantly within one or two I see it, I like it, I buy it resonates with my spending behavior. (Alshebami & Self-Just do it' reflects my approach to purchasing things. Aldhyani, control Buy now, think about it later' characterizes my spending habits 2022) I'm easily tempted or attracted by the allure of spending. I often struggle to control my spending impulses. Setting saving goals for myself rarely results in their achievement. I prioritize short-term outcomes over long-term consequences in my decision-making. (Alshebami & I consistently set aside money for the future Aldhyani, 2022) When I purchase the goods, I compare the prices as an important strategy to save my money. I often evaluate the necessity of an item before purchasing as **Financial** keeping in view about savings. Behavior Lead to the straight of the straight basis to facilitate savings. I maintain emergency funds for unexpected financial needs. I strategize to decrease my expenses as part of my savings I save money with specific goals in mind. I aim to save until the end of my semester. My understanding of investing money has significantly I now have a better grasp on managing my credit usage. I possess a clear understanding of my financial requirements for retirement. (Alshebami & Financial I am proficient in maintaining my income and expenses Aldhyani, Literacy financial records. 2022) I often feel difficulties to manage my finances. "I now have a better understanding of various financial instruments such as bonds, stocks, T-bills, future contracts, options, etc."

I am able to prepare my daily, weekly and monthly budgets."