Determinants of Financial Behaviour: Does Digital Financial Literacy (DFL) Foster or Deter Sound Financial Behaviour?

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Abstract

The rise in bankruptcy cases among Malaysia's younger population shows that youngsters have weak money management skills or financial behaviour (FB). Digital financial goods and services (DFS) have increased in popularity because of social isolation due to COVID-19 disease. Therefore, digital financial literacy (DFL) - financial literacy (FL) from the digital standpoint has spurred. Based on the theory of planned behaviour, DFL is expected to influence oneself in executing good FB. This study examines the role of DFL in influencing students' FB, incorporating other vital factors, such as FL, financial attitude (FAT), peer influence (PEI), parental influence (PRI), and social media influence (SMI). SmartPLS was used to analyse data from a survey of 183 Malaysian university students using partial least squares (PLS) modelling. The measurement model signified that the instrument utilised was valid and reliable. The result indicated that FL, FAT, PRI, and SMI displayed a significantly positive impact on FB. Meanwhile, DFL negatively affects FB, which surprisingly contradicts the expectation that it could foster sound FB. This study concludes that DFL deters sound FB. In light of DFS's recent ascent in popularity, these results add to the expanding body of knowledge on DFL.

Keywords: financial literacy, digital financial literacy (DFL), financial behaviour, students, Malaysia

1. Introduction

Youth bankruptcies in Malaysia are notably prevalent. According to the most recent data from the Malaysian Department of Insolvency (2021), between 2017 and October 2021, 36,173 Malaysians aged 18 to 44 were declared bankrupt. Poor financial management and the ease of performing online financial transactions have resulted in the high occurrence of personal bankruptcy. The usage of digital payments is presently the highest among this age group (Gomes, 2022). Digital financial literacy (DFL), or the ability to use digital financial products and services, is thus just as crucial as basic financial literacy. Despite the younger generation's solid understanding of DFL (Rahim et al., 2022), it is still unclear how it affects their financial management.

The ongoing COVID-19 pandemic has led to a transition from traditional physical financial transactions to electronic alternatives. This shift is driven by the need for individuals to practise physical seclusion and avoid contact with others in order to effectively mitigate the spread of the disease. Previous research conducted by Al-Maroof et al. (2020) and Puriwat and Tripopsakul (2021) has indicated that the apprehension around the COVID-19 pandemic has had a substantial impact on the adoption and utilisation of technology across various domains, including as education and daily financial transactions. Mansour (2021) asserted that the COVID-19 pandemic has significantly expanded the usage of digital financial services. Accordingly, the ease of executing financial transactions might influence individuals' financial behaviour (FB). Nevertheless, evidence indicates financial literacy could improve individual financial behaviour, but proof of DFL's influence on financial behaviour is scarce.

The principal objective of this study is to examine the various elements that influence the financial behaviour of young individuals, with a specific focus on the concept of DFL. A study of students in Selangor, Malaysia, yielded 183 questionnaires that could be analysed. The findings derived from the use of partial least squares structural equation modelling (PLS-SEM) indicate that financial literacy (FL), financial attitude (FAT), parental influence (PRI), and social media influence (SMI) have the potential to positively impact students' responsible financial

behaviour (FB). Meanwhile, good digital financial literacy (DFL) seems to deter students' sound FB.

The observed results add greatly to the financial literacy literature. Prior research mostly focused on numerous factors affecting financial behaviour while ignoring DFL. In addition, this study identifies the major elements that impact FB, which policymakers should consider when devising effective methods to enhance sound FB among the young. This should provide a thorough procedure that takes into account the essential elements of DFL which emerged as a result of the COVID-19 pandemic. The negative impact of DFL on youth's sound financial behaviour could be a wake-up call to financial educators to not only focus on improving DFL but also inculcate a good practice of financial behaviour in using DFS.

The structure of this research article is explained in this section. The second section reviews relevant research with proposes hypotheses. The following section provides an in-depth overview of the study's design, encompassing the selection of instruments and the methodology employed for analysing the data. The fourth section of the paper encompasses the presentation and analysis of the research findings, followed by a comprehensive discussion. The final section of the paper addresses the limits of the study and outlines potential avenues for future research.

2. Literature Review and Hypothesis Development

Previous research on financial behaviour has predominantly focused on identifying the factors that exert influence on it. Various determinants have been examined and mostly surrounding financial literacy. The theory of planned behaviour is one of the most popular theories used to explain the factors that affect good financial behaviour. Hence, factors such as perceived behavioural control (stems from knowledge possessed by an individual), attitude towards the behaviour and subjective norms (from financial socialisation) are considered important in influencing individuals' financial behaviour. This section provides an analysis of existing research on financial behaviour and the factors that influence it, including the most recent part of financial literacy, digital financial literacy (DFL), which has only been apparent due to the rapid rise of digital financial goods and services.

2.1 Financial Behaviour (FB)

Financial behaviour (FB) has become an important research subject due to the recent development of high bankruptcy cases, specifically among the youth. Various studies defined financial behaviour differently. One of the most simple definitions is by Ananda and Mikhratunnisa (2020), who defined financial behaviour as "behaviour in managing personal finance (p. 982)". Hence, any actions or skills related to using or managing financial resources could be considered financial behaviour. For instance, Beverly et al. (2003) claimed that financial behaviour could range from basic money management skills like tracking spending to the most complicated skills such as investment diversification. Meanwhile, Widyastuti et al. (2020) add the element of planning as part of financial behaviour. They are long-term financial planning and retirement saving planning.

Since financial behaviour encompasses various elements, numerous instruments have been used to measure the financial behaviour of an individual. Akben-Selcuk (2015) who examined the financial behaviour of college students measured financial behaviour in relation to paying bills on time, utilising the budget in planning for spending, and saving behaviour. The students are required to rate their engagement in the said behaviour on a scale from 1 to 5. On top of measuring financial behaviour, numerous studies have examined the determinants of financial behaviour. The section that follows examines prior research on the determinants and related theory.

2.2 Determinants of Financial Behaviour

Many studies have been conducted to investigate the crucial factors that may influence financial behaviour. Subsequently, guidelines for implementing intervention programmes pertinent to the identified primary components have been outlined. This section outlines the determinants of financial behaviour in relation to the theory of planned behaviour by Ajzen (1991).

Pahlevan Sharif and Naghavi (2020) clearly explain the theory of planned behaviour (TPB). TPB suggests that an individual behaviour could be explained by perceived behavioural control, attitude towards the behaviour, and subjective norms. The first factor, perceived behavioural control, is related to the ability of an individual to engage in certain behaviour. It is believed that the more knowledge an individual possesses related to the behaviour, the higher the chances of engaging in the behaviour. This is because the more knowledgeable individuals are about the behaviour, the more confident they are to engage in it. Pahlevan Sharif and Naghavi (2020) asserted that this internal factor (confidence) could encourage or obstruct an individual in conducting certain behaviour.

The second factor is the attitude towards the behaviour. Attitude towards the behaviour refers to individuals' perception towards conducting the behaviour. If the individuals have a positive attitude towards the behaviour, they

will engage in that behaviour. A positive attitude will generally accrue if the individual believes such behaviour is beneficial. The last factor is subjective norms, which relate to the conduct of people surrounding an individual. An individual will engage in behaviour that people they perceive as important conduct the same behaviour or expect them to conduct that behaviour. In other words, the "norms" surrounding individuals are critical in determining their actions.

In relation to the first factor (perceived behavioural control), financial knowledge is considered vital in explaining financial behaviour because having essential financial knowledge boosts individual confidence to practice sound financial behaviour. This notion is highlighted by numerous studies that found a significant impact of financial literacy on financial behaviour (Akben-Selcuk, 2015; Ananda & Mikhratunnisa, 2020; Angela & Pamungkas, 2022; Chong et al., 2021; Henager & Cude, 2016; Mien & Thao, 2015; Widyastuti et al., 2020). Financial literacy measures financial knowledge of an individual's financial matters (Benetos & Lacolley, 2015) because having higher financial knowledge enables a person to practice positive financial behaviour (Chong et al., 2021). Mien and Thao (2015) claimed that there is conclusive evidence that financial literacy positively affects financial behaviour. Various justifications have been laid out, such as a financially knowledgeable individual (1) can utilise the knowledge in preparing a financial budget and managing their finance (Ananda & Mikhratunnisa, 2020), (2) will highly participate in financial-related activities (Ananda & Mikhratunnisa, 2020), (3) know the importance of good financial management for their future (Angela & Pamungkas, 2022), and have a lower probability of borrowing excessively (Akben-Selcuk, 2015). Similarly, low financial literacy could result in financial mistakes and affect daily financial management (Henager & Cude, 2016). This is because financial literacy boosts individual confidence, giving them a positive perception of the extent to which they can practice sound financial behaviour as per TPB. Thus, the following hypothesis is proposed:

H1: Financial literacy (FL) has a significant positive effect on students' financial behaviour (FB).

The incorporation of digital financial literacy (DFL) is necessary in order to accommodate the diverse range of advanced digital financial products and services within the framework of pertinent financial knowledge. The traditional manner of carrying out financial transactions has changed to online transactions since the COVID-19 pandemic outbreak. DFL is defined as "financial literacy in digital financial technology (p.3)" by Setiawan et al. (2020). Previous research has characterised DFL as a multidimensional construct encompassing an understanding of digital financial products and services, practical know-how in using such products, and self-protection in relation to risk related to such products (see AFI, 2021; Lyons & Kass-Hanna, 2021; Morgan et al., 2019; Tony & Desai, 2020).

As much as financial literacy could affect financial behaviour, DFL should have the same effect because it is a branch of financial knowledge. A similar argument has been set forth by Setiawan et al. (2020) and Rahayu et al. (2022), who suggest that the effect of DFL on financial behaviour should be similar to the effect of non-DFL (Financial Literacy in general). Both studies examined the impact of DFL on financial behaviour, using data from Indonesian students from the 25 to 40 age group, and revealed a significant and positive impact of DFL on individuals' financial behaviours. Hence, they concluded that DFL can guide the young generation in financial management decisions (Rahayu et al., 2022) and ensure they have rational saving behaviour (Setiawan et al., 2020). Hence, in alignment with the concept of financial literacy, possessing an acceptable level of digital financial knowledge, also referred to as DFL, would contribute to individuals' perception of their ability to exercise effective control over their financial practises. Thus, the following is hypothesised:

H2: Digital financial literacy (DFL) has a significant positive effect on students' financial behaviour (FB).

In relation to the second factor (attitude towards the behaviour), it is believed that financial attitude plays a vital role in influencing individuals to practice sound financial behaviour. Parrotta and Johnson (1998) defined financial attitude as "the application of financial principles to create and maintain value through decision-making and proper resource management (p. 27)". Meanwhile, according to Mikhratunnisa and Ananda (2020), financial attitude is a "state of mind, opinion, and a person's assessment of his finances, which are then applied to attitudes (p. 984)". Both definitions imply that financial attitude is the perception of an individual in relation to conducting certain financial behaviour such as maintaining a budget or saving. As per TPB, having a positive attitude towards sound financial behaviour practice could lead a person to engage in such behaviour. Previous studies (Akben-Selcuk, 2015; Mien & Thao, 2015; Mikhratunnisa & Ananda, 2020; Yahaya et al., 2019) reported that financial attitude is a significant determinant of financial behaviour. Meanwhile, Mikhratunnisa and Ananda (2020) asserted that financial attitude forms thought and opinion about certain financial behaviour, which translates into the performance of such behaviour. A positive thought (attitude) towards certain financial behaviour will lead to the engagement of that behaviour. Thus, consistent with TPB, the following is hypothesised:

H3: Financial attitude (FAT) has a significant positive effect on students' financial behaviour (FB).

The third factor that could influence an individual behaviour based on TPB is subjective norms. For financial behaviour, financial socialisation is expected to create a norm for practicing sound financial behaviour. Sharif et al. (2020) explained that financial socialisation could result in the acquisition and development of positive values related to financial management behaviour, consequently resulting in financial well-being. A few important social financial agents are commonly discussed in previous literature, namely peers, parents, and social media.

The term "peer" denotes an individual with whom a student would typically spend a significant amount of time (Thomas & Subhashree, 2020). According to Alekam et al. (2018), peer interaction can be considered a type of social impact. A study by Dangol and Maharjan (2018) examined the impact of peer influence on saving behaviour. The result indicated that Nepalese youth's saving behaviour is significantly influenced by peers. Similarly, Mohd et al. (2021) claimed that peers could not only shape a friend's saving behaviour but also influence good spending behaviour. This could be explained by TPB because being surrounded by peers who practice good financial management creates a norm of good financial management practice for an individual. As a result, the hypothesis that follows is advanced:

H4: Peer Influence (PEI) has a significant positive effect on students' financial behaviour (FB).

Apart from peers, parents are also considered an important social agent in influencing individual financial behaviour. During the early years of a child's existence, parents play a significant role in shaping their environment. Therefore, several types of parental-child interactions, such as the transmission of financial skills and information, might be informally conveyed to the children. Numerous research found a significant positive impact of parental influence on financial behaviour (Akben-Selcuk, 2015; Angela & Pamungkas, 2022; Dangol & Maharjan, 2018; Norvilitis & MacLean, 2010; Pahlevan Sharif et al., 2020). Akben-Selcuk (2015), who examined the financial behaviour of college students, reported a significant positive impact of parental influence (teaching of finance) on students' financial behaviour. The author additionally proposed that empowering parents with financial literacy would be advantageous, as they might afterwards transmit this knowledge to their children through conversations.

Likewise, Norvilitis and MacLean (2010) observed that kids who were instructed by their parents on financial management exhibited lower levels of credit card debt. Hence, financial interaction between parents and children at home indirectly implies to the children that it is vital to follow the right financial management practice. Consequently, they will perceive that it is important for them to practice sound financial management as their parents did. Angela and Pamungkas (2022) mentioned that children tend to imitate their parents' actions. Undeniably, parents are important figures to the children; hence financial socialisation by parents could shape a better financial behaviour for the child, as per TPB's subjective norms. Therefore, the hypotesis 5 is proposed:

H5: Parental Influence (PRI) has a significant positive effect on students' financial behaviour (FB).

Social media has emerged as a significant platform for interpersonal communication and fostering social connections. Because of the COVID-19 pandemic, movement restrictions were implemented, which boosted social media usage, particularly among the students or youth. The utilisation of social media platforms in Malaysia has witnessed an 8% surge between the years 2021 and 2022 (Digital Business Lab, 2021). In January 2022, 89% of Malaysian use social media, with WhatsApp, Facebook, and Instagram being the most frequently used platforms. Even though an earlier study by Bawre and Kar (2019) claimed that people still prefer to seek financial decision advice from family and friends instead of social media, a later study by Cao et al. (2020) found otherwise. Cao et al. (2020) asserted that social media could be a useful source for improving personal financial well-being. Hence, using social media for financial purposes could promote financial management learning and spur positive financial behaviour.

Nevertheless, a dearth of research exists about the correlation between social media usage and financial behaviour. For instance, a paper by Singh (2020) merely reviews studies on social media's impact on consumer buying behaviour. The paper concludes that social media is an important driver of consumer buying behaviour. Based on TPB, the information gained or viewed on social media could be considered one of the factors affecting individuals' subjective norms, thus affecting their financial behaviour. This is because social media is normally composed of pages of the person an individual perceives as important in their lives. Therefore, this study proposes the following hypothesis:

H6: Social Media Influence (SMI) has a significant positive effect on students' financial behaviour (FB).

3. Research Design

3.1 Research Instrument

The study had a sample size of 183 accounting students from Selangor. The data was collected through the utilisation of an electronic survey platform known as Survey Monkey. The questionnaire is divided into five sections. The initial component of the study involved the collection of demographic information, including variables such as gender, age, and programme level of the participants.

The second part consisted of items pertaining to financial behavior of students (FB). In accordance with the studies conducted by Perry and Morris (2005) and Dew and Xiao (2011), a set of five items was utilised to evaluate the financial behaviour of students. The participants were requested to rate their degree of agreement with statements pertaining to their financial conduct, specifically in relation to money management practises such as saving and budgeting, using a scale ranging from 1 (indicating strong disagreement) to 5 (indicating strong agreement). The items assess whether the students are practising sound financial behaviour, such as shopping according to plan and saving monthly pocket money.

The third section contains FL and DFL related items. FL is assessed using three basic financial knowledge questions related to the ability of students to make a financial plan and prioritise their consumption needs (Perry & Morris, 2005). The five questions pertaining to DFL were derived from Setiawan et al. (2020) and encompassed the three prevalent dimensions outlined in prior research (refer Lyons & Kass-Hanna, 2021; Morgan et al., 2019; Tony & Desai, 2020), specifically: (1) knowledge of digital financial products and services, (2) proficiency or familiarity with the utilisation of digital financial products and services, and (3) consciousness of possible threats and strategies for safeguarding oneself against such risks.

The fourth section relates to financial attitude (FAT). Following Anthony (2011), seven items are developed to assess the students' financial attitudes. Respondents were instructed to indicate their degree of agreement with statements pertaining to the importance of making a financial plan, saving, or budgeting (1–Strongly disagree, 5–Strongly agree).

The fifth section contains items designed to ascertain the influence of social pressures on students' financial behaviour. The first social pressure is from peers (PEI). According to Dangol and Maharjan (2018), the term "peer" refers to those inside one's social circle. In the context of this study, PEI pertains to the influence that friends have on students' financial behaviour. The participants were requested to provide a rating indicating their degree of agreement with statements pertaining to the participation of friends in their personal financial decision-making process, using a scale ranging from 1 (indicating strong disagreement) to 5 (indicating strong agreement) (Churchill, Jr. & Moschis, 1979; Dangol & Maharjan, 2018; Jorgensen, 2007). The items determined whether or not the students heeded their friends' advice to save money and whether or not they discussed money management with their peers.

The second is PRI, defined as parents' influence on the students' financial behavior in this study. Participants were instructed to rate their degree of agreement with statements pertaining to parental engagement in their personal financial decision-making on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) (Norvilitis & MacLean, 2010; Shim et al., 2010). The measurements revealed whether or not the students had talked to their parents about every financial decision they made and whether or not their parents had given them advice on how to manage their money wisely.

The third comprised of items related to social media influence (SMI). SMI is defined in this study as the impact of social media on university students' financial decisions. Respondents were instructed to rate their degree of agreement with statements pertaining to the use of social media in the context of finance, using a scale ranging from 1 (indicating strong disagreement) to 5 (indicating strong agreement) (Karaa & Kuğu, 2016). The questions assessed whether the students engaged with pages or accounts that focused on financial and economic topics.

3.2 Data Analysis

The statistical tool employed in this study is SmartPLS 3.3.3 version   (Ringle et al., 2015), which is used to analyse both the measurement and structural models through the Partial Least Squares Structural Equation Modelling (PLS-SEM) approach.

This analysis began by measuring complete collinearity to address the problem of Common Method Bias, as suggested by Kock and Lynn (2012) and Kock (2015). In this method, all variables were regressed against a common variable. There is no bias from the single source data if the VIF value is less than or equal to 3.3.

Table 1. Full Collinearity testing

VARIABLES	FB	FL	DFL	FAT	PEI	PRI	SMI
VIF	2.142	1.667	1.419	1.331	1.329	1.690	1.419

Note: FB is financial behaviour, FL is financial literacy, DFL is digital financial literacy, FAT is financial attitude, PEI is peer influence, PRI is parental influence, and SMI is social media influence.

4. Results and Discussion

4.1 Sample Characteristic

Table 2 summarizes the characteristics of the data set based on gender, programme level, and age. The table shows that 141 or 77% of the total respondents are female. The average age of the respondents is 22.5 years and 67.4% of them hold at least a bachelor's degree. The youngest age among the repsondents is 18 and the highest is 56-year-old.

Table 2. Sample Characteristics

Variables	Descriptions	N	%
Gender	Male	42	23
	Female	141	77
Programme Level	Diploma	29	15.8
	Bachelor's degree	123	67.4
	Master's degree	16	8.7
	Doctoral	2	1.1
	Professional	13	7.0
Age	Minimum	18	
	Mean	22.5	
	Median	21	
	Maximum	56	

4.2 Measurement Model Assessment

The present study assessed the efficacy of the model constructed by the two-step approach advocated by Anderson and Gerbing (1998). The initial step was an assessment of the measurement model in order to establish the instrument's validity and reliability, in accordance with the methodologies outlined by Hair et al. (2019) and Ramayah et al. (2018). Then, the structural model was evaluated to validate the proposed hypotheses.

For the measurement model, this study evaluated convergent and discriminant validity. Convergent validity refers to the degree to which two questions evaluating the same concept have a substantial emphasis on that particular component. In order to determine convergent validity, loadings, average variance extracted (AVE), and composite reliability (CR) are commonly used. According to Hair et al. (2017), it is recommended that the loading factor should be no less than 0.5, the composite reliability (CR) should be equal to or more than 0.7, and the average variance extracted (AVE) should be equal to or greater than 0.5.

Table 3 reports the measurement of the models. The table demonstrates that the AVE values above 0.5, while the CR values exceeded 0.7. The loadings demonstrated satisfactory results, as indicated by the presence of just four loadings that fell below the threshold of 0.708 (Hair et al., 2019). Consequently, the measurement is considered to possess both validity and reliability.

Table 3. Measurement Model

Variable	Items	Loading	CR	AVE
Financial Literacy (FL)	BK1	0.862	0.875	0.701
	BK2	0.884		
	BK3	0.761		
Digital Financial Literacy (DFL)	DFL1	0.854	0.889	0.617
	DFL2	0.821		
	DFL3	0.782		
	DFL4	0.805		
	DFL5	0.649		
Financial Attitude (FAT)	FA1	0.814	0.942	0.701
	FA2	0.827		
	FA3	0.782		
	FA4	0.843		
	FA5	0.875		
	FA6	0.867		
	FA7	0.85		
Peer Influence (PEI)	PE1	0.903	0.92	0.699
	PE2	0.829		
	PE3	0.9		
	PE4	0.869		
	PE5	0.654		
Parental Influence (PRI)	PR1	0.78	0.906	0.549
	PR2	0.688		
	PR3	0.645		
	PR4	0.646		
	PR5	0.778		
	PR6	0.828		
	PR7	0.777		
	PR8	0.762		
Social Media Influence (SMI)	SM2	0.616	0.817	0.531
	SM3	0.812		
	SM4	0.795		
	SM5	0.672		
Financial Behavior (FB)	FB1	0.782	0.806	0.512
	FB2	0.609		
	FB3	0.704		
	FB4	0.755		

Note: SM1 and PE6 were deleted due to low loadings.

Discriminant validity is an evaluative measure utilised to ascertain the degree of conceptual differentiation between two notions. This study measure discriminant validity using the HTMT criteria proposed by Henseler et al. (2015) and modified by Franke and Sarstedt (2019). According to more stringent criteria, the HTMT values should not

exceed 0.85, whereas under lenient criteria, they should not exceed 0.90. The HTMT values shown in Table 4 are all less than the stricter criterion of 0.85, indicating that the respondents understood that the construct was separate. The findings from the two validity tests, namely convergent and discriminant validity, indicate that the instruments employed in this study possess both validity and reliability.

Table 4. Discriminant Validity Heterotrait-Monotrait Ratio (HTMT)

	1	2	3	4	5	6	7
1. DFL							
2. FAT	0.587						
3. FB	0.189	0.294					
4. FL	0.306	0.242	0.807				
5. PEI	0.099	0.076	0.282	0.203			
6. PRI	0.295	0.278	0.727	0.48	0.314		
7. SMI	0.251	0.139	0.497	0.306	0.56	0.377	

Note: DFL is digital financial literacy, FAT is financial attitude, FB is financial behaviour, FL is financial literacy, PEI is peer influence, PRI is parental influence, and SMI is social media influence.

4.3 Structural Model Assessment

The present study examined the multivariate skewness and kurtosis, as suggested by Hair et al. (2017) and Cain et al. (2017). It appears that the data collected for the investigation did not exhibit multivariate normality, as Mardia's multivariate skewness ($\beta=10.646$, $p<0.01$) and Mardia's multivariate kurtosis ($\beta=71.334$, $p<0.01$). Following Hair et al. (2019), this study reported the values of path coefficients, standard errors, t-values, and p-values for the structural model using the 5,000-sample re-sample bootstrapping technique (Ramayah et al., 2018). According to Hahn and Ang (2017), the use of p-values alone is insufficient for assessing the significance of a hypothesis. They argue that a more comprehensive approach, incorporating many factors such as p-values, confidence intervals, and effect sizes, should be adopted. The criteria utilised to evaluate the hypotheses of this investigation are presented in Table 5.

Table 5. Hypotheses testing

Hypothesis	Relationship	Std. Beta	Std. Dev.	t-value	p-value	BCI LL	BCI UL	f^2
H1	FL -> FB	0.418	0.060	6.907	p<.001	0.320	0.520	0.289
H2	DFL -> FB	-0.144	0.076	1.898	0.029	-0.310	-0.066	0.032
H3	FAT -> FB	0.115	0.060	1.914	0.028	0.027	0.226	0.022
H4	PEI -> FB	-0.055	0.062	0.888	0.187	-0.166	0.034	0.005
H5	PRI -> FB	0.374	0.069	5.456	p<.001	0.264	0.489	0.216
H6	SMI -> FB	0.189	0.066	2.854	0.002	0.081	0.299	0.057

Note: About 95% confidence interval was used with bootstrapping of 5,000. FB is financial behaviour, FL is financial literacy, DFL is digital financial literacy, FAT is financial attitude, PEI is peer influence, PRI is parental influence, and SMI is social media influence.

The R^2 for the impact of the six predictors on the dependent variable, FB, was determined to be 0.533. This indicates that the six determinants accounted for approximately 53.3% of the observed variability in FB. Based on the hypothesis testing result in Table 5, two variables exhibit a statistically significant positive influence on financial behaviour. They are FL ($\beta=0.418$, $p<0.01$) and PRI ($\beta=0.374$, $p<0.01$). Based on f^2, both variables have a medium effect (f^2 above 0.15). Even though the effect is small (f^2 below 0.15), FAT ($\beta=0.115$, $p<0.05$) and SMI ($\beta=0.189$, $p<0.05$) have a significant positive effect on students' financial behaviour. Therefore, H1, H3, H5, and H6 are supported. Contrary to the hypothesis that DFL could positively influence a student's financial behaviour, the result indicates that DFL has a significant negative effect on the financial behaviour of students ($\beta= -0.144$, $p<0.05$). Meanwhile, peers have no significant effect on students' financial behaviour. Hence, H2 and H4 are not supported.

In their study, Shmueli et al. (2019) introduced a method called PLSpredict, which utilises a holdout sample approach to generate case-level predictions for items or constructs. This strategy employs the PLS-Predict algorithm and incorporates a five-fold process to assess the predictive relevance of the model. The researchers stated that a

decrease in the variance of all items (PLS-LM) is indicative of a robust predictive capability. Conversely, if the variances are bigger, it does not corroborate the predictive significance. On the contrary, when the majority of items exhibit lower values, there exists a moderate level of predictive power. Conversely, when the minority of things display lower values, the predictive power is seen to be low. Based on the analysis of Table 6, it can be observed that the errors identified in the Partial Least Squares (PLS) model are comparatively reduced in magnitude when compared to those of the Linear Model (LM). This finding suggests that the model constructed for the present study exhibits a notable degree of predictive capability. Additionally, the use of appropriate forecasting techniques could improve the predictive capability of the model (Guo, 2021).

Table 6. PLS-Predict

ITEM	PLS RMSE	LM RMSE	PLS-LM
FB4	0.967	1.145	-0.178
FB1	0.893	1.025	-0.132
FB3	1.145	1.237	-0.092
FB2	0.957	1.106	-0.149

Thus, the above result suggests that FL could positively influence a student to engage in sound financial behaviour. The financial knowledge possessed by students gave them confidence in practising good financial practices, such as following budgets and saving money. This result is consistent with previous studies (Akben-Selcuk, 2015; Ananda & Mikhratunnisa, 2020; Chong et al., 2021; Henager & Cude, 2016; Mien & Thao, 2015; Widyastuti et al., 2020) and confirms the influence of perceived behavioural control on financial behaviour as per TPB.

However, the result for DFL contradicts the hypothesis; instead, it indicates that students with high digital financial literacy tend to have bad financial behaviour. This might be because high DFL could be related to students' overconfidence in digital literacy, hence increasing the propensity to engage in risky financial behaviour. Therefore, the result contrasts with earlier studies by Setiawan et al. (2020) and Rahayu et al. (2022).

The result of this study corroborates the second factor of TPB, which is attitude. Consistent with earlier studies (Akben-Selcuk, 2015; Mien & Thao, 2015; Mikhratunnisa & Ananda, 2020; Yahaya et al., 2019), the more positive a student's attitude towards financial management, the better financial behaviour the student engages in.

For the third factor, which is subjective norms, it is clear from the result that only parents and social media could influence the financial behaviour of the students. Accordingly, parents should equip themselves with good practice of financial behaviour to ensure their children follow the right norms of financial management. The importance of social media has been undeniable in recent years because students or the younger generation spend most of their time online. Lack of peer influence on the students' financial behaviour could be related to the movement restriction order during the COVID-19 pandemic, whereby students mostly stayed home and interacted less with friends or peers; physical peer interaction was substituted with social media interaction.

5. Conclusion

High bankruptcy cases among the younger generation in Malaysia indicate that they are not practising sound financial behaviour. In order to inculcate good financial management practices among the younger generation, the determinants of sound financial behaviour must be identified. The theory of planned behaviour spells out three factors that could affect an individual behaviour: perceived behavioural control, attitude, and subjective norms. Employing 183 students in Malaysia, this study examined six identified determinants of financial behaviour, namely financial literacy (FL), digital financial literacy (DFL), financial attitude (FAT), peer influence (PEI), parental influence (PRI), and social media influence (SMI). Using structural equation modelling (PLS-SEM), the model tested in this study is deemed valid and reliable. The result indicates that the FL, FAT, PRI, and SMI have a significant positive influence on financial behaviour. In contrast, high DFL could deter sound financial behaviour, as evidenced by the significant negative effect. Meanwhile, peers (PEI) have no significant effect on students' financial behaviour. This study focuses on the effect of DFL on financial behaviour whereby DFL is measured using three dimensions: awareness, practical know-how, and self-protection. However, this study is limited because it applied a single measure of DFL. Future studies should examine the impact of the individual dimension of DFL on financial behaviour.

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