

Family financial socialization, financial information seeking behavior and financial literacy among youth

Family financial
socialization
and financial
literacy

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Abstract

Purpose – This study examined the relationship between financial information seeking behavior and financial literacy, as well as the relationship between parents' teaching and behavior with financial information seeking behavior through the factors of the risk information seeking and processing model among youth.

Design/methodology/approach – A sample of 802 tertiary education students participated in this cross-sectional study. Using covariance-based structural equation modeling, the model was assessed and hypotheses were tested.

Findings – The results revealed that financial information seeking behavior contributed to youth's financial literacy. While parents' sound financial behavior was directly related to seeking financial information, both parents' financial teaching and behavior indirectly, through the risk information seeking process, encouraged youth to actively seek for financial information. Moreover, parents' financial socialization directly and also indirectly through the risk information seeking and processing model explained youth's financial information avoidance. Among the two parts of the risk information seeking and processing model, planned behavior factors played a more salient role than cognitive need for financial information.

Originality/value – This study extends the risk information seeking and processing model by integrating family financial socialization to the model and applies it in the context of consumers' financial behavior. The results improve our understanding of the social and psychological mechanism that drives consumers' financial literacy and decision-making.

Keywords Financial literacy, Financial information seeking, Parents, Consumer's financial behavior, Youth, RISP

Paper type Research paper

Introduction

An increasingly financialized world has raised the importance of consumers' financial literacy in recent decades. The rapid development of financial products and services requires consumers to make more complex financial decisions than ever before (Bannier and Schwarz, 2018). This has attracted researchers' and policymakers' interest in improving people's financial literacy aiming to change their undesirable financial habits and form positive financial behaviors (Oecd, 2005, Xu and Zia, 2012; FINRA Foundation, 2013; Tang and Baker, 2016).

Knowledge of personal financing and more importantly financial literacy is particularly important among today's adolescents and youth as they are more exposed to financial decision-making than their parents (Aprea *et al.*, 2016). A low level of financial literacy with the mentality of "own now, pay later" and the relative ease of access to credit cards may carry them into indebtedness and hinder them from financial planning for a secure future (Pahlevansharif and Yeoh, 2018; Lusardi *et al.*, 2009). Moreover, their financial behavior during this period of time would probably persist into adult life. This is because, most of the youth, at this stage of life actively learn and build the skills that they need to be financially independent (Shim *et al.*, 2010).

Recent research has highlighted the importance of family as the primary socialization agent for learning finance especially among youth (Gudmunson and Danes, 2011). In



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explaining family financial socialization, [Gudmunson and Danes \(2011\)](#) mentioned that “family has served as a filtering point for information from the outside world and has been a foundation for continued financial socialization throughout one’s lifetime” (p. 645). However, while studies on the effects of family in the socialization process are abundant in the literature, investigation of the role of family agents in the process of learning finances is in its early stages. Indeed, the majority of past research on financial literacy explored the effects of sociodemographic characteristics of individuals on their financial literacy and behavior ([Lusardi and Mitchell, 2008, 2014](#); [Van Rooij et al., 2011](#); [Alessie et al., 2011](#); [Agnew et al., 2013](#); [Bucher-Koenen and Lusardi, 2011](#); [Beckmann, 2013](#); [Sabri et al., 2010](#)), and little is known about social and psychological mechanisms that drive consumers’ financial literacy and decision-making.

Moreover, despite a recognition of the importance of financial information seeking (FIS) ([Oecd, 2005](#)), relatively little attention has been paid to the process of seeking out financial information and how this process may contribute to financial knowledge and more broadly financial literacy. The results of surveys conducted by Organisation for Economic Co-operation and Development (OECD) in 30 OECD countries ([Oecd, 2005](#)) stressed consumers’ reluctance to seek out financial information as one of the major causes of financial illiteracy. The report further indicated that the majority of consumers did not actively seek out financial information due to the impression that finance was a complicated subject. Thus, the financial information that they received was obtained by chance or accident. Also, perceived difficulty in understanding financial information was an important barrier for FIS. They concluded that consumers’ awareness of the necessity of financial information would lead to FIS that in turn may contribute to their financial literacy. However, empirical research on the effectiveness of FIS and the underlying mechanisms that drive this behavior is scarce.

Therefore, to fill the gaps in our knowledge, this study proposes a theory-based model by incorporating the most important financial socialization agents, that is, parents ([Gudmunson and Danes, 2011](#); [Van Campenhout, 2015](#)) and the risk information seeking and processing (RISP) model ([Griffin et al., 1999](#)) to improve our understanding of the variability of financial literacy among youth. This model is an extension of the application of the RISP model in the context of consumers’ financial behavior, which is investigated under a broader project entitled Financial Literacy and Behavior Among Malaysian Young Adults in which the inner mechanism of the RISP model has been examined.

When research makes reference to young people, we can observe the phrases “youth” and “young adults” frequently used and interchangeable with no apparent “one universally accepted definition.” In a Malaysian context, the term “youth” is equally as wide ranging, argued to cover an age range between 15 and 40. However, the definition provided in National Youth Development Policy would appear to be as appropriate as any other and aligns with the respondents used in this research, namely tertiary education students. According to National Youth Development Policy programs and activities, youth are those individuals aged from 18 to 25 ([Institute for Youth Research Malaysia, 2018](#)).

The aim of the current study is (1) to examine the relationship between FIS behavior and financial literacy and (2) to investigate the relationship between parents’ teaching and behavior and FIS behavior through the factors of the RISP model among youth.

Background of the study

Financial literacy

Globalization and the rapid development of financial services sector increasingly require consumers to make more complex financial decisions. This has heightened the importance of financial literacy. However, in the context of consumers’ financial behavior, the absence of a consistent and precise definition of financial literacy has resulted in some confusion from

using financial literacy, financial knowledge and financial education interchangeably in the literature (Potrich *et al.*, 2018). Huston (2010) argued that financial literacy encompasses two main dimensions including financial knowledge acquired through observation, experience and education, as well as ability and confidence of applying financial knowledge to make sound financial decisions. In other words, financial knowledge is an inner dimension of financial literacy. Therefore, financial literacy can be defined as the ability to understand and use financial knowledge to make sound financial decisions.

Broadly speaking, past empirical research on financial literacy falls into three categories (Lin *et al.*, 2017). First, studies that have investigated financial literacy at national levels. Some of these studies also explored different socioeconomic and demographic factors that may explain individuals' financial literacy and financial knowledge. The results revealed that low financial literacy is prevalent, both in developed (Lusardi and Mitchell, 2008, 2014; Van Rooij *et al.*, 2011; Alessie *et al.*, 2011; Agnew *et al.*, 2013; Bucher-Koenen and Lusardi, 2011) and in developing countries (Klapper *et al.*, 2012; Beckmann, 2013; Sabri *et al.*, 2010). Also, research has shown that financial literacy varies widely among different age, ethnic and education groups (Lusardi, 2015; Sabri *et al.*, 2010). Moreover, prior studies consistently have shown that women have lower financial literacy levels than men (Potrich *et al.*, 2015, 2018; Atkinson and Messy, 2012; Mottola, 2013; Agarwalla *et al.*, 2015).

The second group of empirical studies has examined whether financial literacy leads to financial decision-making in terms of wealth management (Behrman *et al.*, 2012), saving and spending (Lusardi, 2009), borrowing and credit management (Mottola, 2013; Agarwal *et al.*, 2009; Stango and Zinman, 2009; Lusardi and Tufano, 2009), retirement planning (Lusardi and Mitchell, 2007), stock market participation (Van Rooij *et al.*, 2011) and demand for financial products (Lin *et al.*, 2017). Overall, the results indicated that financial literacy significantly contributes to positive financial behavior. Consumers with higher levels of financial literacy showed higher savings and wealth planning (Behrman *et al.*, 2012; Dvorak and Hanley, 2010), more prepared for their retirement and tended to diversify their investment more than those with low financial literacy levels (Lusardi and Mitchell, 2011; Clark *et al.*, 2012). Also, people with high financial literacy were more likely to invest in stock markets (Van Rooij *et al.*, 2011) and purchase financial products such as life insurance (Lin *et al.*, 2017). Moreover, negative associations between financial literacy with credit card debt, high cost borrowing and having excessive debt were found (Lusardi and Tufano, 2009; Scholnick *et al.*, 2013).

The third body of literature has examined the effects of financial education from program implementation, curriculum development and assessment of students' progress to the role of gender and personality on the process of financial literacy education. The results of the studies showed that financial literacy education improves consumers' financial behavior in terms of saving, spending, credit management and financial planning (Asarta *et al.*, 2014; Borden *et al.*, 2008; Walstad *et al.*, 2010; Koh, 2016). Also, literature suggests that financial literacy education should start from childhood or as early as possible (Koh, 2016).

Despite a growing body of literature on consumers' financial literacy, the mechanisms that contribute to financial literacy are largely overlooked. Thus, this study by employing social learning theory and the RISP model examines the mechanism that leads to financial literacy.

The effect of financial socialization on financial literacy

Socialization is described as the process through which an individual acquires attitudes, values, norms, knowledge and behaviors from socialization agents (Ward, 1974). Early definitions had limited this process largely to children and childhood (Churchill and Moschis, 1979). However, recent research argues that socialization is a lifelong process (Hayta, 2008). The results of social learning studies suggest that a great deal of consumer financial attitudes and behaviors are learned from a variety of social agents such as parents, other family

members, peers, teachers and media (Gutter *et al.*, 2010). Among different social agents, parents have attracted increasing research attention due to their influential role during the early young stages when youth are developing increased financial independence (Shim *et al.*, 2010) and as a result financial issues become more salient in the parents–children relationship (Allen *et al.*, 2007).

In the pathway to financial independence, youth who are still mostly dependent upon their parents' financial support learn from their parents by observing and emulating their attitudes and behaviors (Shim *et al.*, 2010; Gutter *et al.*, 2010). Indeed, parents' influence is not limited to purposive and direct teaching but also encompasses implicit role that they play in shaping their children's attitude, knowledge and behavior in the socialization process (Gudmunson and Danes, 2011). The results of empirical studies also confirmed that youth's positive financial attitudes and healthy financial behavior in terms of spending, saving and credit cards use can be explained by their parents' sound financial behavior (Pinto *et al.*, 2005; Shim *et al.*, 2010; Gutter *et al.*, 2010; Angulo-Ruiz and Pergelova, 2015). Moreover, past studies showed that parents' financial teaching and behavior played a more prominent role than other agents such as work and school education (Pinto *et al.*, 2005; Shim *et al.*, 2010). The current study suggests that parents' financial teaching and parents' financial behavior may lead to youth's FIS/avoidance, which in turn would explain their financial literacy. Therefore, this study integrates family financial socialization theory in terms of parents' financial teaching and behavior with the RISP model to examine the role of family in the process of seeking financial information and its effect on youth's financial literacy level.

Financial information seeking/avoidance behavior

While research on the antecedents of financial behavior and financial literacy is abundant in the literature, there is a dearth of research on the effects of FIS, a critical factor that may account for these phenomena and its importance has been highlighted before (OECD, 2005). Although, the role of information seeking behavior has been neglected by previous empirical studies in the context of consumers' financial behavior, there is a rich body of literature on the mechanisms that explain how individuals seek and process information in other fields such as communication, health, environmental studies, energy and so on (Yang *et al.*, 2014). While the traditional theoretical approach for explaining information seeking by adopting the uses and gratifications perspective distinguishes between active and passive information seeking and views the audience as active (Chaffee, 1982), the availability of huge amount of information in the current electronic society has called for research on consumers' information avoidance behaviors (Brashers *et al.*, 2002; Yang and Kahlor, 2013). One of the most comprehensive models that has been used in numerous scholarly works to predict people's information seeking and avoidance behavior is the RISP model (Griffin *et al.*, 1999).

The RISP model incorporates cognitive and sociopsychological factors that explain an individual's seeking and processing of information when he/she feels threatened by a specific hazard such as environmental risk (Griffin *et al.*, 2004) or health risk (Yang *et al.*, 2010a, 2010b). The model borrows heavily from existing theories and theoretical models such as the heuristic systematic model (Eagly and Chaiken, 1993) and the theory of planned behavior (Ajzen, 1991) as well as concepts from different disciplines such as perceived hazard characteristics, affective response to risk that was drawn from the risk literature and relevant channel beliefs and information seeking behaviors from mass communication (Yang and Kahlor, 2013). Although the model originally was developed to scrutinize risk information seeking in the field of communication (Griffin *et al.*, 1999), later it was utilized to study information seeking and processing in other contexts and disciplines (Griffin *et al.*, 2005).

The RISP model suggests that individuals' perceived information insufficiency while drives information seeking behavior and process, reduces financial information avoidance (Griffin *et al.*, 2008). This is because, "people will exert whatever effort is required to attain a 'sufficient' degree of confidence that they have accomplished their processing goals" (Eagly and Chaiken, 1993). Further, the model proposes that the size of the gap between individuals' perceived knowledge and information sufficiency threshold (i.e. perceived information insufficiency) depends on their affective response and informational subjective norms. In other words, individuals' response to a given risk (e.g. fear, anxiety and worry) may determine their perception of the amount of the needed information to cope with the risk (Griffin *et al.*, 2004). The results of past research have supported that affective response and emotions influence heuristic as well as systematic information processing (Griffin *et al.*, 1999, 2008; Fredrickson and Branigan, 2005).

Informational subjective norm as the other predictor of perceived information insufficiency is rooted in the theory of planned behavior. Informational subjective norms are an individual's perceptions of whether relevant others expect him/her to seek information. Griffin *et al.* (2004) argues that "One's perception that valued others expect one to keep on top of information about the risk . . . could . . . affect one's judgment about how much information one needs to have about the risk." The RISP model adopts two more determinants of behavior from the theory of planned behavior including attitudes toward information seeking (i.e. relevant channel beliefs) and perceived behavioral control (i.e. perceived information-gathering capacity). Thus, information seeking behavior is triggered through social normative pressures to obtain information sufficiency, beliefs of valuableness and usefulness of information, as well as capacity and confidence to gain information (Yang *et al.*, 2014).

Furthermore, different individual characteristics, such as sociocultural variables and relevant past hazard experience, play the antecedents' role that would impact an individual's perception and cognitive evaluation of risk characteristics (i.e. perceived hazard characteristics) at the beginning of the model. Then, the model suggests that the person's view of the hazard characteristics may influence his/her affective response. Indeed, "the more dreaded the hazard, the more that people want restrict regulation employed to reduce its risks" (Griffin *et al.*, 1999).

In summary, an individual's past financial hazard experience (e.g. financial difficulties) would influence his/her perception of risk characteristics (e.g. severity of potential harm) that in turn may trigger the person's affective responses (e.g. feeling anxious about financial risk). Then, affective response would determine the person's perception of the amount of knowledge that he/she needs to perform effectively. This path along with attitudes toward information seeking as well as social normative pressures and confidence to seek and obtain relevant information would drive information seeking behavior.

Objectives of the current study

This study extends the RISP model by integrating family financial socialization to the model and applies it in the context of consumers' financial behavior. The detailed process of the RISP model to explain consumers' FIS and avoidance behavior has been investigated in another study by the authors of the current research. Indeed, the main objective of this study is to examine the role of the process of seeking out financial information in the mechanism that translates parental socialization into financial literacy. More specifically, this study examines the relationship between financial information seeking behavior and financial literacy, as well as the relationship between parents' teaching and behavior with financial information seeking behavior through the factors of the RISP model among youth. Figure 1 shows the research model.

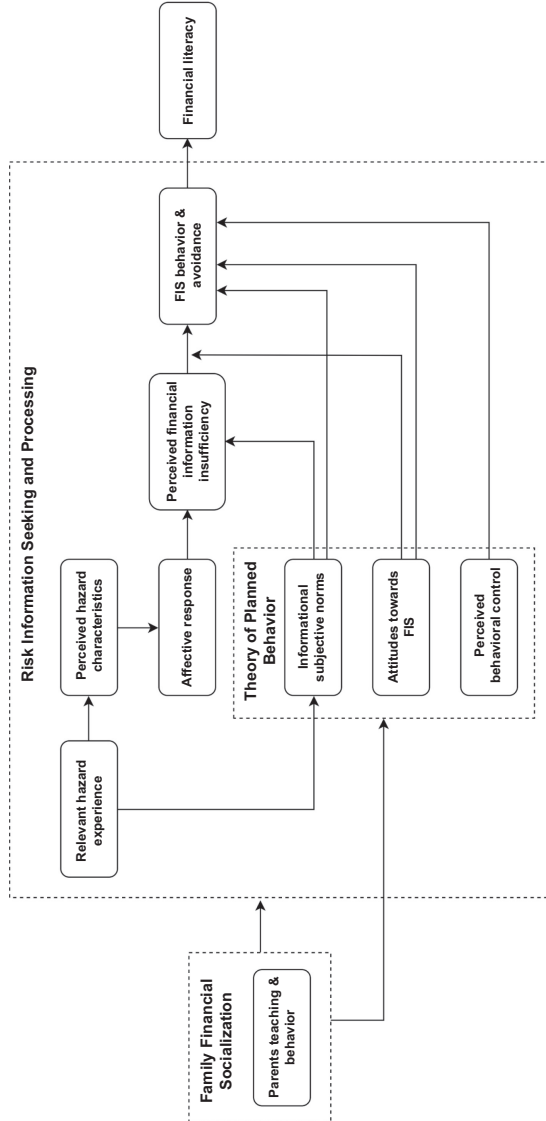


Figure 1.
Research model

The results improve our understanding of the social and psychological mechanism that drives consumers' financial literacy and decision-making.

Methods

This study adopted a cross-sectional design to test the model and hypotheses. The data from the Financial Literacy and Behavior Among Malaysian Young Adults project, which was collected through self-administrated questionnaires and purposive sampling method, was used.

Participants

The respondents were 802 tertiary education students with a major other than business finance, economy, banking and accounting to eliminate potential biases in answering financial knowledge questions. Respondents' mean age was 20.16 years (SD = 2.31). Among them, 53% ($n = 425$) were female and 47% ($n = 377$) were male. The majority were Chinese (52.4%), followed by other ethnicities (27.8%), Malays (10.0%) and Indians (9.1%).

Measures

Parents' financial behavior was measured using five items each asking participants the extent to which they thought that their parents were engaged in sound financial behaviors such as tracking expenses, spending within the budget, savings for the future, paying credit card balances and investing. *Parents' financial teaching* was measured asking participants to indicate to what extent their parents taught them about financial matters such as saving, spending, shopping and managing credit cards (Shim *et al.*, 2010). Parents' financial teaching and behavior were measured using seven-point Likert scales ranging from 1 (never) to 7 (always). Respondents' *financial literacy* was assessed using 13 questions addressing both basic (e.g. interest rates, time value of money, discounting and compounding, inflation and nominal vs real interest rates) and advanced (e.g. function of financial markets and characteristics of financial instruments such as stocks, bonds and mutual funds) level of financial literacy (Van Rooij *et al.*, 2011). Total number of correct answers to the 13 questions was used as the financial literacy score ranging from 0 (no correct answer) to 13 (correct answer to 13 questions). Using seven items on an 11-point semantic differential rating scale (e.g. not helpful vs helpful), this study measured instrumental and experiential *attitudes toward FIS* (Yang and Kahlor, 2013). Five questions adapted from past studies (Yang and Kahlor, 2013) were used to measure injunctive (four items, e.g. "it is expected of me that I seek information about personal finance.") and descriptive norms (one item, i.e. "people in my life, whose opinions I value, seek information about personal finance.") of the participants' *informational subjective norms* on a seven-point Likert scale (ranging from 1 for strongly disagree to 7 for strongly agree). *Perceived behavioral control* was measured using three questions addressing the extent to which the respondents had confidence to find and understand financial information (e.g. "I do not know where to find information about personal finance."). The items ranged from 1 (strongly disagree) to 7 (strongly agree) (Yang and Kahlor, 2013). Three items adapted from Kahlor (2007) (e.g. "I seek information about personal finance") and three items adapted from Yang and Kahlor (2013) (e.g. "whenever any finance topic comes up, I go out of my way to avoid learning more about it.") were used to assess *FIS behavior* and *financial information avoidance*, respectively, on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Using five 11-point Likert scale items ranging from 0 to 10, *perceived hazard characteristics* (e.g. "How important to you is financial knowledge?") were measured (Kahlor, 2007). *Relevant hazard experience* was measured using an item asking if respondents' parents or siblings ever suffered financial

difficulties, how serious it was, on 11-point Likert scale ranging from 0 to 10 (Yang and Kahlor, 2013). *Positive affect* (e.g. not excited to very excited) and *negative affect* (e.g. not worried to very worried) were measured using four items on an 11-point semantic differential rating scale (Yang and Kahlor, 2013).

Data analysis

A two-step approach of maximum likelihood covariance-based structural equation modeling was used in this study (Pahlevan Sharif *et al.*, 2018). The analysis was conducted using AMOS version 24. First, a confirmatory factor analysis was performed on all constructs to assess the measurement model. More specifically, the model fit was evaluated using several model fit indices. Also, Cronbach's alpha, composite reliability, maximal reliability, average variance extracted and maximum shared variance of the constructs were computed to assess construct reliability and construct validity in terms of convergent and discriminant validity of the constructs. Cronbach's alpha greater than 0.7 indicated good internal consistency among the items. To establish construct reliability, composite reliability and maximal reliability should be greater than 0.7. Average variance extracted greater than 0.5 supports good convergent validity. To fulfill the requirement of discriminant validity, average variance extracted of a construct should be greater than its maximum shared variance. Items that loaded weakly on their respective construct (factor loading less than 0.5) were excluded (Pahlevan Sharif and Sharif *et al.*, 2018). Second, the latent variable score of the constructs was computed using the imputation method provided by AMOS. The imputed latent variable scores were used to develop the structural model and test the hypotheses. All tests were two-tailed and a *p*-value of less than 0.05 was considered to be statistically significant.

Results

Table 1 reports the results of the assessment of the measurement model. The fourth item of negative affect was removed from the model as it loaded weakly on its construct. By following the modification indices, five pairs of the item measurement errors of the constructs were allowed to freely covary (perceived hazard characteristics: one pair; attitude toward FIS: two pairs; parents' behavior: one pair; and FIS behavior: one pair). The revised measurement model fitted the data well [$\chi^2(895) = 2265.378, p < 0.001, \chi^2/df = 2.531$, goodness of fit index (GFI) = 0.882, comparative fit index (CFI) = 0.945, incremental fit index (IFI) = 0.945, Tucker-Lewis index (TLI) = 0.939, normed fit index (NFI) = 0.912, standardized root mean square residual (SRMR) = 0.058 and root mean square error of approximation (RMSEA) (90% confidence interval (CI)) = 0.044 (0.041–0.046)]. All factor loadings were greater than 0.5 (ranges from 0.574 to 0.940) and statistically significant at 0.001 (*z*-value ranges from 15.556 to 49.033). All constructs showed a high level of internal consistency as measured by Cronbach's alpha (ranges from 0.812 to 0.966) greater than 0.7. Moreover, maximal reliability (ranging from 0.909 to 0.991) and composite reliability (ranging from 0.810 to 0.965) of all constructs were greater than 0.7 demonstrating construct reliability and convergent validity. Average variances extracted of all constructs were greater than 0.5 (ranging from 0.522 to 0.795) except for parents' behavior (0.465). However, average variance extracted is a too conservative measure, and construct reliability greater than 0.7 alone can be used to establish convergent validity (Pahlevan Sharif *et al.*, 2018). Average variance extracted of each construct was greater than its maximum shared variance (ranging from 0.039 to 0.317) establishing discriminant validity of the constructs.

Next, the structural model was assessed. The final model, shown in Figure 2, was arrived after removing nonsignificant paths. The results of assessing the structural model are reported in Table 2. FIS behavior was significantly related to financial literacy. There were

Construct/Items	Factor loadings	Cronbach's alpha	Composite reliability	Maximal reliability	Average variance extracted	Maximum shared variance
FIS behavior		0.906	0.904	0.981	0.656	0.317
FIS behavior 1	0.858 ^{***}					
FIS behavior 2	0.889 ^{***}					
FIS behavior 3	0.865 ^{***}					
FIS behavior 4	0.720 ^{***}					
FIS behavior 5	0.698 ^{***}					
Avoidance		0.891	0.893	0.991	0.737	0.225
Avoidance 1	0.797 ^{***}					
Avoidance 2	0.890 ^{***}					
Avoidance 3	0.885 ^{***}					
Attitude toward FIS		0.966	0.965	0.975	0.795	0.317
Attitude toward FIS 1	0.846 ^{***}					
Attitude toward FIS 2	0.882 ^{***}					
Attitude toward FIS 3	0.928 ^{***}					
Attitude toward FIS 4	0.887 ^{***}					
Attitude toward FIS 5	0.878 ^{***}					
Attitude toward FIS 6	0.886 ^{***}					
Attitude toward FIS 7	0.933 ^{***}					
Perceived behavioral control		0.873	0.878	0.909	0.707	0.039
Perceived behavioral control 1	0.823 ^{***}					
Perceived behavioral control 2	0.931 ^{***}					
Perceived behavioral control 3	0.760 ^{***}					
Informational subjective norms		0.869	0.873	0.987	0.581	0.303
Informational subjective norms 1	0.606 ^{***}					
Informational subjective norms 2	0.831 ^{***}					
Informational subjective norms 3	0.801 ^{***}					
Informational subjective norms 4	0.816 ^{***}					

(continued)

Table 1.
The results of the
measurement model
assessment

Construct/Items	Factor loadings	Cronbach's alpha	Composite reliability	Maximal reliability	Average variance extracted	Maximum shared variance
Informational subjective norms 5	0.735***					
Positive affect		0.885	0.889	0.984	0.669	0.144
Positive affect 1	0.872***					
Positive affect 2	0.849***					
Positive affect 3	0.874***					
Positive affect 4	0.657***					
Negative affect		0.871	0.880	0.989	0.713	0.106
Negative affect 1	0.691***					
Negative affect 2	0.940***					
Negative affect 3	0.882***					
Perceived hazard characteristics		0.859	0.851	0.986	0.538	0.206
Perceived hazard characteristics 1	0.575***					
Perceived hazard characteristics 2	0.618***					
Perceived hazard characteristics 3	0.817***					
Perceived hazard characteristics 4	0.867***					
Perceived hazard characteristics 5	0.748***					
Parents teaching		0.842	0.845	0.988	0.522	0.203
Parents teaching 1	0.672***					
Parents teaching 2	0.740***					
Parents teaching 3	0.786***					
Parents teaching 4	0.724***					
Parents teaching 5	0.683***					
Parents behavior		0.812	0.810	0.990	0.465	0.203
Parents behavior 1	0.622***					
Parents behavior 2	0.638***					
Parents behavior 3	0.574***					
Parents behavior 4	0.855***					
Parents behavior 5	0.687***					

Table 1. Note(s): *** $p < 0.001$

significant positive relationships between parents' teaching with perceived hazard characteristics, informational subjective norms, attitudes toward FIS and avoidance. There was a significant negative association between parents' teaching and financial information

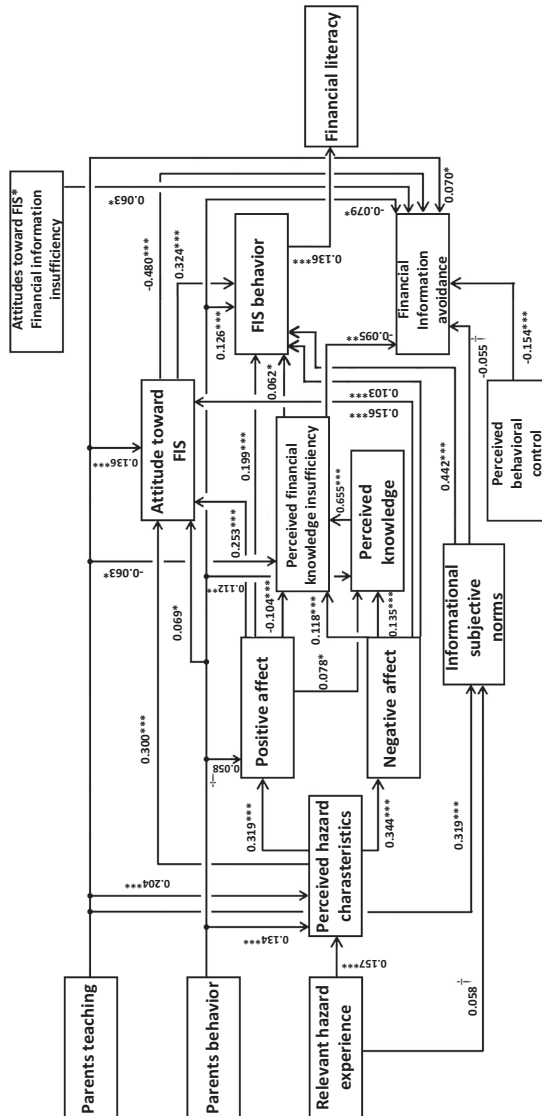


Figure 2. Structural model assessment results

Paths	Standardized path coefficients	95% confidence intervals	
		Lower bound	Upper bound
FIS behavior → Financial literacy	0.136 ^{***}	0.063	0.209
Parents teaching → Perceived hazard characteristics	0.204 ^{***}	0.128	0.280
Parents teaching → Informational subjective norms	0.319 ^{***}	0.254	0.384
Parents teaching → Information insufficiency	-0.063 [*]	-0.114	-0.012
Parents teaching → Attitude toward FIS	0.136 ^{***}	0.069	0.203
Parents teaching → Avoidance	0.070 [*]	0.001	0.139
Parents behavior → Perceived hazard characteristics	0.134 ^{***}	0.058	0.210
Parents behavior → Positive affect	0.058 [†]	-0.009	0.125
Parents behavior → Attitude toward FIS	0.069 [*]	0.004	0.134
Parents behavior → Perceived current knowledge	0.112 ^{**}	0.043	0.181
Parents behavior → FIS behavior	0.126 ^{***}	0.079	0.173
Parents behavior → Avoidance	-0.073 [*]	-0.148	-0.010
Relevant hazard experience → Perceived hazard characteristics	0.157 ^{***}	0.092	0.222
Relevant hazard experience → Informational subjective norms	0.058 [†]	-0.007	0.123
Perceived hazard characteristics → Negative affect	0.344 ^{***}	0.279	0.409
Perceived hazard characteristics → Positive affect	0.319 ^{***}	0.252	0.386
Perceived hazard characteristics → Attitudes towards FIS	0.300 ^{***}	0.235	0.365
Negative affect → Perceived current knowledge	0.135 ^{***}	0.066	0.204
Negative affect → Information insufficiency	0.118 ^{***}	0.067	0.169
Negative affect → Attitudes toward FIS	0.156 ^{***}	0.097	0.215
Negative affect → FIS behavior	0.103 ^{***}	0.058	0.148
Positive affect → Perceived current knowledge	0.078 [*]	0.009	0.147
Positive affect → Information insufficiency	-0.104 ^{***}	-0.155	-0.053
Positive affect → Attitudes toward FIS	0.253 ^{***}	0.194	0.312
Positive affect → FIS behavior	0.199 ^{***}	0.152	0.246
Perceived current knowledge → Information insufficiency	0.655 ^{***}	0.604	0.706
Information insufficiency → FIS behavior	0.062 [*]	0.017	0.107
Information insufficiency → Avoidance	-0.093 ^{**}	-0.154	-0.036
Informational subjective norms → FIS behavior	0.442 ^{***}	0.397	0.487
Informational subjective norms → Avoidance	-0.055 [†]	-0.116	0.006
Perceived behavioral control → Avoidance	-0.154 ^{***}	-0.211	-0.097
Attitude towards FIS → FIS behavior	0.324 ^{***}	0.273	0.375
Attitudes toward FIS → Avoidance	-0.480 ^{***}	-0.541	-0.419
Attitude towards FIS * Information insufficiency → Avoidance	0.063 [*]	0.010	0.116

Table 2.
The results of the structural model assessment

Note(s): ^{***} $p < 0.001$, ^{**} $p < 0.01$, ^{*} $p < 0.05$, [†] $p < 0.1$, two-tailed test

insufficiency. Parents' behavior was positively associated with perceived hazard characteristics, perceived current knowledge and FIS behavior and negatively related to financial avoidance. The relationship between relevant hazard experience and perceived hazard characteristics was supported as well. There were significant positive relationships between perceived hazard characteristics with negative affect and positive affect. This study found a statistically significant positive relationship between negative affect with perceived current knowledge and financial information insufficiency. Also, a positive association between positive affect and perceived current knowledge and a negative relationship between positive affect and financial information insufficiency were found. As it was

expected, there was a relatively strong positive relationship between perceived current knowledge and perceived financial information insufficiency. This study found a positive relationship between financial information insufficiency and FIS behavior as well as a negative relationship between financial information insufficiency and avoidance. Informational subjective norms were positively related to FIS behavior. The relationship between informational subjective norms and information avoidance was close to be significant. There was a significant negative relationship between perceived behavioral control and financial avoidance. Moreover, the relationships between attitudes toward FIS with FIS behavior and financial avoidance were supported. Also, there were significant relationships between the interaction of attitudes toward FIS and financial information insufficiency with financial avoidance. While the model explained 53.7% of the variance of FIS behavior and 28.5% of the variance of financial avoidance, only 1.9% of the variance of financial literacy was explained by the model.

Discussion

The findings of this study describe a pattern of relationships among family financial socialization in terms of parents' teaching and behavior, the RISP model and financial literacy among youth.

The results reveal that FIS behavior contributes to youth's financial literacy. This indicates that actively seeking for financial information plays a role in youth's financial literacy although the small coefficient of determination indicates that a substantial amount of the variance of financial literacy is still unexplained. In other words, youth may obtain financial information mostly from other channels than actively seeking for such information although FIS behavior is still considerable. The findings provide empirical evidence for the role of FIS behavior in youth's financial literacy that has been highlighted in the OECD reports (Oecd, 2005).

Moreover, this study shows that both parents' financial teaching and parents' financial behavior indirectly, through the RISP process, are linked to FIS behavior. Also, after controlling for the effects of other factors in the model, while there was a direct link between perceived sound financial behavior by parents and youth's FIS, this study could not find any statistically significant direct relationship between parents' direct teaching and information seeking behavior. These results lend support to previous studies, which consistently showed that parents as one of the financial social agents shape youth's financial attitudes and behavior (Pinto *et al.*, 2005; Shim *et al.*, 2010; Gutter *et al.*, 2010; Angulo-Ruiz and Pergelova, 2015). Past studies also have highlighted the more important role of parents' behavior than teaching so that parent's teaching on youth's financial socialization process would be more implicit (Gudmunson and Danes, 2011). This is because a family has so much to teach and what is aimed to be taught in a family has "multifaceted values." For example, when parents are teaching the importance of saving to their children, at the same time they may talk about being generous and sharing with others. This may erode the direct impact of teaching on specifically children's financial behavior (Gudmunson and Danes, 2011).

In addition, it is worth to mention that even the direct effect of parents' behavior explains a small part of the variance of FIS behavior. Thus, parents' role in youth's FIS behavior is mainly through the RISP process rather than directly informing such behavior of information seeking. Although there is no study investigating the relationship between parents' financial socialization and information seeking behavior, the findings of Shim *et al.* (2009) showed that parents' financial teaching and behavior indirectly through planned behavior factors lead to financial behavior. Thus, the findings indicate that parents' teaching and behavior encourage youth to actively seek for financial information mostly through the RISP model in which perceived financial knowledge insufficiency is the center of the process and this process would improve their financial literacy.

The results of assessing the effects of financial socialization on the RISP process indicate that when controlling for the direct effects of family financial socialization on FIS behavior, three factors including financial teaching and financial behavior by parents as well as youth's experience of relevant financial hazard, through triggering perceptual and cognitive evaluations of severity of financial illiteracy as a threat to life (i.e. perceived hazard characteristics), initiate the FIS and avoidance process of which parents' teaching role is more salient. While these results corroborate previous research on the RISP model in other contexts (Yang and Kahlor, 2013; Kahlor, 2007; Kahlor *et al.*, 2006; Griffin *et al.*, 2008), it extends the literature by providing empirical evidence for integrating parents' financial socialization and the RISP process.

The results reveal that perception of hazard characteristics is positively associated with both positive and negative affects, which in turn are positively related to perceived financial knowledge, attitudes toward FIS and FIS behavior. In other words, perceived hazard characteristics develop both feeling of excitement and happiness as well as feeling of anxiety and concerns about financial knowledge of which the latter effect is stronger. Although in studies that examined the RISP model, perceived hazard characteristics are positively related to negative affect and negatively related to positive affect (Yang and Kahlor, 2013; Yang *et al.*, 2011), the results of the current study are in agreement with psychological literature describing positive and negative affects as independent feeling states (Russell and Carroll, 1999; Zautra *et al.*, 1997). Thus, an individual who views lack of financial literacy as a threat to his/her life, while is worried about finance, simultaneously is excited about it too. These feelings are related to an individual's perception of his/her financial knowledge, which in turn strongly contributes to his/her perceived financial knowledge insufficiency that informs FIS behavior and hinders financial information avoidance.

Scrutinizing the results in more detail reveals that among the two parts of the RISP process including theory of planned behavior factors of FIS and cognitive need for financial information, the former plays a more important role in translating parents' financial socialization into FIS behavior. This finding aligns with evidence from past studies (Kahlor, 2010; Yang and Kahlor, 2013). Considering the planned behavior part of the model, teaching finance by parents is a stronger driver than parents' behavior. While parents' sound financial behavior explains a small portion of the variance of attitudes toward FIS, parents' teaching contributes to both youth's attitudes and their perception of important others' pressure to seek financial information that in turn leads to FIS behavior. The results highlight the importance of teaching in improving youth's favorable attitudes toward seeking financial information and perception of social pressures to undertake FIS.

Furthermore, the results show that perceived gap between current financial knowledge and information sufficiency threshold, theory of planned behavior factors (i.e. attitudes toward FIS, informational subjective norms and perceived behavioral control) and family socialization factors (i.e. parents financial teaching and behavior) hinder financial information avoidance behavior. The results are consistent with past studies that used the RISP model to explain information seeking avoidance behavior (Kahlor, 2010; Yang and Kahlor, 2013). In other words, parents' teaching and behavior directly and also indirectly through the RISP model factors explain youth's financial information avoidance. Similar to FIS behavior, planned behavior antecedents are stronger contributors to avoidance behavior than perception of financial knowledge insufficiency. Moreover, the findings of the current research show that attitudes toward FIS weaken the negative relationship between financial information insufficiency and FIS avoidance. This means that when attitudes toward seeking financial information are positive, reducing the perceived financial information insufficiency gap gives an individual the impression that filling this gap is more feasible and conceivable. This would encourage him/her to search actively more for financial information.

Conclusion

The aims of the research were twofold, to examine the relationship between FIS behavior and financial literacy and to investigate the relationship between parents' teaching and behavior and FIS behavior through the factors of the RISP model among youth. The research consolidated existing literature in the area of consumers' financial literacy and family financial socialization.

The results of this research show that FIS behavior contributes to youth's financial literacy. Also, while parents' sound financial behavior is directly related to FIS behavior, both parents' financial teaching and behavior indirectly, through the RISP process, encourage youth to actively seek for financial information. Moreover, parents' financial socialization directly and also indirectly through the RISP model explains youth's financial information avoidance. Among the two parts of the RISP process, planned behavior factors played a more salient role than cognitive need for financial information.

The yielded findings have several implications. Firstly, the positive relationship between FIS and youth's financial literacy sheds light on the necessity of an environment in which youth are being exposed and trained to deal with financial matters. This kind of environment, which can provoke youth to seek for more financial information, should commence at young age from family level and gradually could be rolled out to education curriculum (Van Campenhout, 2015). Secondly, the results of our study show the mechanism through which family's financial behavior would be interpreted to more financially literate youth. The findings highlight that outset of financial literacy can be rooted in youth by the parent's financial behavior rather than their financial knowledge. In this regard, many governments all around the world take the initiative to conduct regular workshops and trainings to improve parents' financial knowledge that would lead to change in their financial behavior. As part of these programs, the communication among parents and children would be discussed, as they play a big role in shaping financial attitude of youth. Once the seed of FIS has been planted in youth through their parents' behavior, the education system would continue to develop financial skills through tailored programs. However, as Lusardi *et al.* (2010) have correctly pointed out, due to the differences in children's economic, psychological and financial background offering one-fit-all kind of programs does not seem so effective. Therefore, it is advisable that school-based education not only should offer some general financial literacy courses, which step by step can develop financial capability among children, but also could focus on some more advanced courses for those who have been well prepared at family level.

The current study is not without limitations. A single method self-report survey was conducted by this study, and data for all variables was collected from the same respondents that may give rise to common method bias. Also, the cross-sectional design of the study permits no conclusion on causality of the variables in the model. Future research may conduct longitudinal or experimental study to address this limitation. As the data for this study were collected from youth studying in five private universities located in Klang Valley area of Malaysia, most of the respondents were Chinese. However, Malays are the majority in Malaysia. This limits generalizability of the findings. A broader study including samples from other states, rural areas and nonstudents is recommended. This research only examined the role of parents' teaching and behavior in the model. Future studies are suggested to extend the model by including other financial socialization agents as well. Finally, conducting a qualitative study in the future would provide further insight into the findings of the current investigation.

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