

Full Length Research Paper

Toward a framework of determinants of financial management and financial problems among university students

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This study examines the effect of financial socialization, financial knowledge, financial attitude, and socialization agents on predicting financial management among college students. The sample comprised 2,430 students in six public and five private universities across Malaysia, which were randomly selected for the study. A self-administered questionnaire was used as the data collection method. The results indicate that in order of rank, spendthrift attitude, financial socialization, secondary socialization agents, and financial knowledge predict financial management. In addition, the results indicate that, in order, spendthrift attitude, secondary socialization agents, conservative attitude and financial management predict financial problems among college students.

Key words: Financial management, financial problems, financial attitude, financial knowledge, financial socialization, effect of socialization agents, university students.

INTRODUCTION

Financial management has been identified as the main determinant of one's financial well-being (Garman and Fogue, 2006; Joo, 2008; Xiao, Tang, and Shim, 2009), which, in turn, is influenced by four major factors – financial attitude, financial socialization, financial socialization agents and financial knowledge. Young adults, particularly college students, receive more attention from financial educators (Goldsmith and Goldsmith, 2006; Gutter, Garrison, and Copur, 2010; Hayhoe, Leach, Turner, Bruin, and Lawrence, 2000; Hira, Anderson, and Petersen, 2000; Joo, 2008; Norvilitis et al., 2006) as they have easier access to financial sources such as credit, debt and educational loans, than previous generations of students. College students may be considered as a high-risk group based on economic stability and, consequently, well-being, due to their propensity to borrow to fund their college education. Recent college graduates carry a considerable debt load and financial problems at the time when they have just begin working with starting salaries (Leach, Hayhoe, and Turner, 1999).

Students like all other people learn financial management early in life, however, it is extensively held among researchers that family experiences, in particular, often provide the foundation for the student's financial management (Danes and Hira, 1986; Hira and Mugenda, 2000; Watchravesringkan, 2008). Previous researchers who have examined the effect of socialization on financial management skills concluded that financial practice during childhood has a significant effect on financial attitude, financial knowledge and financial behavior in later life. Financial literacy is an important component of successful financial decision-making, and many young people attempt to improve their financial knowledge. Successful financial management does not only depend on financial knowledge, but also financial attitude (Joo and Grable, 2004; Lim, Teo, and Loo, 2003). A number of research findings emphasized that, generally, persons with stronger perceptions and positive financial attitudes tend to be more satisfied with their financial appraisals (Joo and Grable, 2004). Evidence suggests that attitudes precede the development of money management (Roberts and Jones, 2001). In other words, money attitude contributes to predict financial practices (Dowling, Corney, and Hoiles, 2009; Shim, Xiao, Barber, and

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Lyons, 2009). A number of studies have reported that there is a relationship between money attitudes and the level of financial problems (Dowling et al., 2009; Hayhoe et al., 2000; Lim, et al., 2003) among adults. Those who were more attached to money as a source of power and influence were more involved in financial problems. This study aims to examine the influence of financial socialization, financial attitude, and financial knowledge on financial management and financial problems among college students in Malaysia.

Understanding which factor may influence financial management and financial problems among college students will be useful in designing more effective financial education programs to prepare young students to be successful personal financial managers when they enter the labor market. Concerning the important role of students in the economy as the future educated and professional labor force and financial users in the market place, it is important to understand the factors that are used to predict financial management and financial problems among them. Such knowledge about students' financial management and financial problems is important as their present financial behavior has a significant effect on their future financial well-being and overall life satisfaction.

In addition, it should be noted that although various researchers assess college students' financial management, the study of the predictors of financial problems is scarce. Furthermore, previous studies have not linked together the financial socialization, financial attitude, effect of socialization agents and financial management with financial problems. Therefore, this study may be the first effort to connect socialization, attitude, and knowledge with predicting financial management and financial problems. In addition, providing such knowledge about the predictors of college students' financial problem may contribute to the existing literature in financial management characteristics among students.

Objective of study

The main objective of the present study is to identify factors that significantly predict financial management and financial problems among university students. As there are few studies that have been done in this area, the exploratory factors predict that financial management and financial problems will improve knowledge concerning financial management, in general, and, particularly, financial problems.

LITERATURE REVIEW

The development of the ability to manage personal finances has become increasingly important in today's world since people should plan for long-term investments

for their retirement and family expenses, such as children's education. There is a common consciousness among researchers that the ability to manage resources effectively is the main determinant of successful financial well-being (Garman and Fogue, 2006; Joo, 2008; Kim, 2001; Shim et al., 2009). Financial management includes practices relating to cash, credit and savings management (Xiao, Sorhaindo, and Garman, 2006). Xiao (2008) indicated that an effective behavior refers to a positive or desirable behavior as a way to decrease the likelihood of financial problems, as recommended by consumer economists. Joo (2008) indicated that effective financial management should improve financial well-being positively and failure to manage personal finances can lead to serious long-term, negative social and societal consequences (Perry and Morris, 2005).

The studies of financial management among college students (Borden, Lee, Serido, and Collins, 2008; Eckel and Grossman, 2002; Knight and Knight, 2000; Lea, Webley, and Walker, 1995; Livingstone and Lunt, 1993; Lyons, 2008) have shown that students have inadequate knowledge and skills to manage their finances. They fail to make correct financial decisions and experience a high level of financial strain and financial problems. Financial management, like all other issues, is learned principally from parents through observation and participation in financial experiences like shopping. Within this environment of financial interaction between parents, children have acquired information by observing how their family views financial processes. Children learn financial management behavior through participation and observation and through intentional instruction by socialization agents such as peer groups and the media (Danes, 1994). Contained by the family, children learn how to handle their money and interact with the adult financial world when entering school and communicating with peers through the media and the Internet. However, it is widely documented that the principal and financial management skills, financial attitude, habits and even financial styles are learned during the socialization process and interaction with socialization agents (Danes and Haberman, 2007).

Evidence suggests that money attitudes precede the development of money behavior (Roberts and Jones, 2001). In other words, money attitudes contribute to predict financial practices (Dowling et al., 2009; Shim et al., 2009) and financial management (Dowling et al., 2009; Hayhoe et al., 2000; Lim et al., 2003). The findings indicate that people with stronger perceptions and positive financial attitudes tend to be more successful in financial management and are more satisfied with their financial appraisals (Joo and Grable, 2004). While the findings indicate that a positive attitude toward money contributes to effective financial management, others have indicated that those with a negative money attitude are involved with a higher level of financial problems (Lim and Teo, 1997).

Financial problems, as the direct output of negative financial behavior, have been a topic of interest among financial researchers. Although the term 'financial problems' has not been consistently defined in the literature, the term generally refers to a mismatch between financial resources and demands (Kerkmann, Lee, Lown, and Allgood, 2000). Several studies indicate that positive financial behavior, such as financial planning and budgeting, are the main component of one's financial satisfaction (Fitzsimmons and Wakita, 1993; Garman and Fogue, 2006; Xiao, 2008) and, conversely, frequent financial problem is a symptom of economic insecurity. Poor financial management is often accompanied by personal financial problems, which includes those personal and family money management practices that have consequential, detrimental and negative impacts on one's life at home and/or work (Garman, Kim, Kratzer, Brunson, and Joo, 1999).

One of the reasons for financial problems is the financial illiteracy of individuals and lack of financial skills and practices. Financial literacy refers to adequate knowledge of personal finance facts and the vocabulary for successful personal financial management (Garman and Fogue, 2006). Prior studies of high school students consistently found that they are not receiving a good education in personal financial fundamentals and have poor knowledge (Chen and Volpe, 1998). The research findings of Mandell (2009) among high school seniors revealed that students are leaving schools without the ability to make critical decisions affecting their lives. Chen and Volpe (1998) through a review of several studies from 1993 until 1997, concluded that poor knowledge of financial issues such as investment, savings and spending fundamentals are the most common problem encountered by people experiencing financial problems (Chen and Volpe, 1998).

Financial problems, in addition to economic stressors, can contribute to other personal and family burdens. Marcolin and Abraham (2006) pointed out that financial problems are often the basis for divorce; mental illness, such as isolation, emotional stress, depression and lower self-esteem; and a variety of other unhappy experiences. To lessen the likelihood of financial problems, researchers have indicated the importance financial attitude, financial knowledge and skills. For instance, Marcolin and Abraham (2006) indicated that having financial literacy is an essential basis for both avoiding and solving financial problems.

METHODOLOGY

The study sample comprised students from six public universities and five private universities across Malaysia, which were randomly selected for the study. A self-administered questionnaire was used as the data collection methodology. The number of distributed questionnaires to 11 universities was 3,850, and a total of 2,500 completed and usable questionnaires were returned. The mean age of the respondents was 21 years, and of all respondents 39.6% were male and 60.4 were female students. In the Malaysian context

the number of female students exceeds the number of male students.

Measurements

Dependent variables

Financial management was defined as successful money conduction including effective spending and saving behavior. To measure financial management, two main dimensions including savings and spending behavior were considered and an instrument was developed included 16 items requiring students to confirm whether they spent their money on items (gambling, smoking, food) and savings (saving for long term goals, saving for emergency needs) using a Yes or No scale. A higher score indicated good financial behavior and a lower score indicated risky financial behavior. A financial problem was defined as failure to manage expenses and experience financial strain. To measure financial problems ten items were used on a 4-point Likert scale from never (1) to everyday (4) and focused on issues such as cash flow management and financial planning problems.

Independent variables

To understand factors that predict financial management and financial problems several factors were identified based on previous literature. Financial socialization (financial experiences during childhood), financial attitude involving spendthrift (negative attitude) and conservative attitude (positive attitude), effect of financial socialization agents including primary agents (parents, siblings) and secondary agents (peer, media, mobile), and financial knowledge were considered as predictors of financial management and financial problems among university students.

Financial socialization is defined as the process by which young people obtain knowledge, skills, and attitudes relevant to their effective functioning in financial issues. To measure this construct a 10-item instrument was used in which students were asked to determine the age they started financial practices on a response scale from 7 years old to never. Thus, higher scores indicate earlier childhood financial experience and those who never had the experience were scored as zero. The effect of financial socialization agents was measured by asking respondents how much socialization agents influenced their financial behavior based on a scale from zero (no influence) to eleven (high influence). Socialization agents include primary (parents, siblings, religion) and secondary (peers, school, Media).

Financial attitude is defined as beliefs and feelings about money. A scale of 7 items was considered to measure financial attitude including spendthrift attitude and conservative attitude toward money. Respondents were asked to determine their agreement with statements on a scale response from 1 (disagree) to 4 (agree). Financial knowledge was measured by testing for correct answers on 25 questions concerning, for example, financial goals, financial records, savings, investments, retirement, banking system, time value of money, wills, insurance, education loan, and general knowledge on personal finance.

Statistical analyses

To determine the predictors of financial management multiple regression and path analysis was obtained to determine which predictors had a significant effect on financial problems among students. The aim of path analysis is to provide quantitative estimates of the causal connections between sets of variables. The

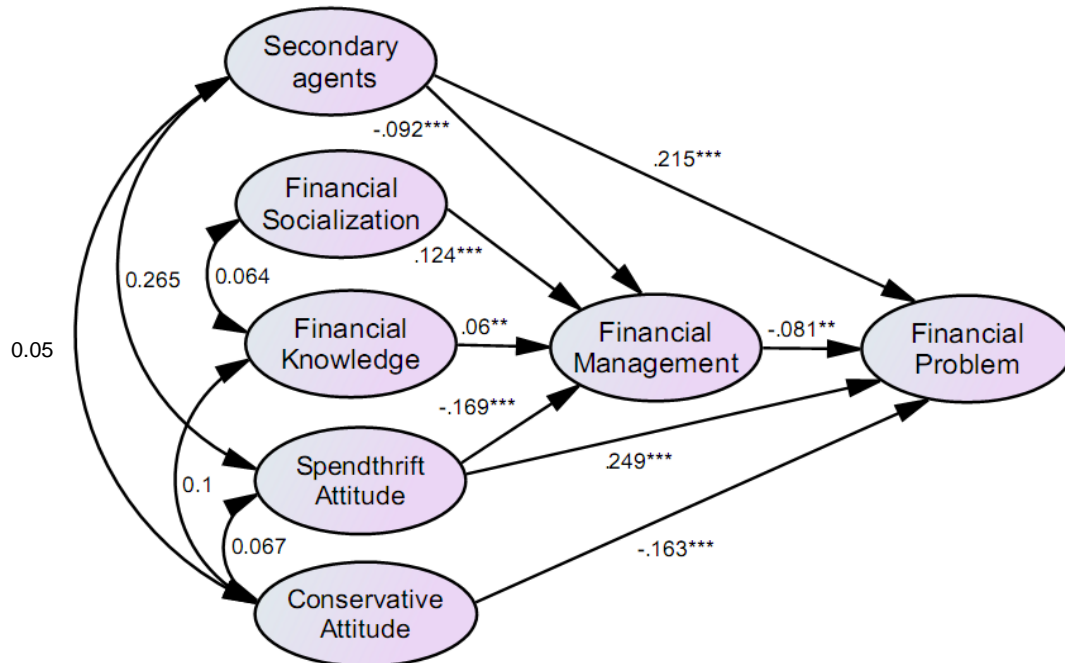


Figure 1. Results of path analysis for predicting financial management and financial problem among college students.

path diagram makes explicit the likely causal connections between variables (Field, 2005). To compare with multiple regression, a path analysis separates direct effects and indirect effects through a medium variable while the regression analysis considers the direct effect only (Ahn, 2002). To conduct path analysis in the present research two sets of multiple regressions were carried out to obtain the direct and indirect effects.

First, all predictors were regressed on financial problems and, second, all predictors were regressed on financial management as the mediator variable. After conducting path analysis, the output (B coefficients) can be classified in three categories involving direct, indirect and total effects. The direct effect was the beta coefficient on the direct arrow from IV on DV. The indirect effects were calculated by multiplying the coefficients for each path from IV to Mediator and from Mediator to DV. Many researchers like to calculate the overall impact of one variable on another, e.g. of spendthrift attitude on financial problems. This is done by simply adding the direct effect of spendthrift attitude on financial problems to the indirect effects (Meyers, Gamst and Guarino, 2006). The results are presented in the form of a diagram as shown in Figure 1.

FINDINGS AND DISCUSSION

The results presented in Table 1, indicate that four factors directly explain financial problems and four factors predict financial management among students. The findings indicate that spendthrift attitude and secondary socialization agents have a positive effect, while conservative attitude, financial socialization and financial management have a negative effect on financial problems. Furthermore the results presented in Table 1, indicate that spendthrift attitude and secondary socialization agents with negative effect, and financial socialization

and financial knowledge with positive effect significantly predict financial management among students.

The results of the total effects depicted in Table 2, indicate that spendthrift attitude has the highest direct and indirect effect on financial problems among students, where 25.3% of variance of the financial problems, directly and indirectly through financial management, is explained by spendthrift attitude. Those students with a spendthrift attitude were involved in a higher level of financial problems. This finding is consistent with previous studies (Dowling et al., 2009; Hayhoe and Wilhelm, 1998; Lea et al., 1995; Lim et al., 2003). In the context of Asian countries, Lim and Teo (1997) studied the effect of financial attitude on financial problems among Singaporean college students and found that those students who experienced financial hardship were more likely to have higher levels of anxiety toward money.

The secondary socialization agent was the second determinant of financial problems, which has a direct and indirect effect on financial problems. This factor explains 19.2% of variance in financial problems among students (Table 2). Those students who are more affected by secondary socialization agents in financial issues were more involved in financial problems. These findings are consistent with the literature, which indicates the importance of peers and the media on student’s financial behavior and, consequently, perceived financial problems (Hong, Kubik, and Stein, 2004; Lusardi and Mitchell, 2007). It is documented that those who were more affected by their peers and the media as the financial information source had a higher level of financial stressors

Table 1. Summary of coefficients for factors predict financial problem and financial management among college students.

Financial problem	B (Unstandardized coefficients)	Std. error	Beta (Standardized coefficients)	T value	P value
Spendthrift attitude	0.011	0.001	0.249	10.359	0.000
Secondary socialization agents	.0002	0.000	0.215	9.021	0.000
Conservative attitude	-.013	0.002	-0.163	-7.146	0.000
Financial management	-0.003	0.001	-0.081	-3.462	0.001
Financial management					
Spendthrift attitude	-.208	0.03	-0.169	-6.99	0.000
Financial socialization	0.081	0.015	0.124	5.33	0.000
Secondary socialization agents	-.0028	0.007	-0.092	-3.81	0.000
Financial knowledge	0.147	0.057	0.06	2.58	0.008

Table 2. Results of direct, indirect and total effects of financial problem among college students.

Paths	Direct effect	Indirect effect	Total effect
Direct path			
Spendthrift attitude-----► Financial problem	0.249	0	0.249
Secondary socialization agents-----► Financial problem	0.215	0	0.215
Conservative attitude-----► Financial problem	-0.163	0	-0.163
Financial management-----► Financial problem	-0.081	0	-0.081
Indirect path			
Spendthrift attitude ---► Financial management --► Financial problem	0	0.013	0.262
Secondary S.Agents---► Financial management --► Financial problem	0	0.007	0.222
Financial socialization-► Financial management -► Financial problem	0	-0.01	-0.01
Financial knowledge--► Financial management --► Financial problem	0	-0.004	-0.004

stressors and problems. The results reveal that financial management has a direct and negative effect on financial problems, which is consistent with the previous literature (Dowling et al., 2009; Hayhoe et al., 2000; Joo and Grable 2004; Lyons, 2008). However, it can be explained that those students with greater financial management, have a lower level of financial problems and stressors.

The third predictor of financial problems is conservative attitude; the negative effect of this factor indicates its preventive effect on financial problems. This factor explains 17.8% of variance in financial problems directly. It can be explained that students with conservative attitude toward money have a lower level of financial problems because they are security minded about financial issues. Financial management was the fourth predictor, which predicts 8% of financial problems among students. The effect of financial management was negative, which means those with greater financial management were perceived as having a lower level of financial problems. Financial socialization and financial knowledge have an indirect effect on financial problems through financial management. Similar to conservative attitude, the effect of financial

socialization and financial knowledge were negative on financial problems, which can be interpreted as a kind of preventive factor. Those with greater financial experiences during childhood and a higher level of financial knowledge have effective financial management and, consequently, a lower level of financial problems. This finding is consistent with the literature (Hira and Mugenda, 2000; Peng, Bartholomae, Fox, and Cravener, 2007; Shim et al., 2009), which indicates that early financial socialization, is related to financial learning, which, in turn, is related to financial attitude and, subsequently financial management.

The effect of financial socialization and financial knowledge was indirect and through the mediating effect of financial management. In fact, this association indicates that financial socialization and financial knowledge have a positive effect on financial management and the enhancement of one's financial management helps to prevent financial problems. The assessment of the direct effect and indirect effect on financial problems revealed that financial management may have a potential mediating effect on the effect of financial socialization,

financial knowledge, spendthrift and conservative attitude and secondary socialization agents on perceived financial problems.

CONCLUSIONS AND IMPLICATIONS

The research findings indicate that in order, spendthrift attitude (those who like to spend money), secondary socialization agents (effect of peer group and media), conservative attitude (those that care about their money), financial socialization (financial practices during childhood), financial management and financial knowledge predict financial problems among students. The findings show that students with spendthrift attitude and who are more affected by secondary socialization agents have risky financial management and are involved in a higher level of financial problems. However, those students with conservative attitude, earlier financial socialization, higher level of financial knowledge and effective financial management have fewer financial problems.

The negative effect of financial management on financial problems confirms the previous findings that poor financial management is often accompanied by personal financial problems (Leach et al., 1999; Prawitz et al., 2006). The significant indirect effect of predictors, such as financial socialization, financial knowledge, socialization agents and attitude through financial management indicates that financial management could mediate the association between predictors and financial problems. Therefore, it can be expected that by the enhancement of students' financial management skills the likelihood of financial problems decreases. In addition, the results reveal that among students, financial attitude and the effect of socialization agents (peer, media) have a greater effect than other variables, even financial management. Spendthrift attitude concerns those people who spend money in order to reduce stress and celebrate with money. Those students with a spendthrift attitude were involved in a higher level of financial problems. Previous studies among college students found financial management to be the main determinant of one's perceived financial problems while these findings indicate that the effect of attitude and socialization agents beyond the managerial skills. In respect of these findings, college students need assistance in developing money management skills to reduce the likelihood of financial problems, as financial illiteracy is the main reason for financial problems (Chen and Volpe, 2002; Garman and Forgue, 2006).

These findings indicate that financial attitude should be the target of financial education initiatives for college students. Taken together, family economics, consumer behavior educators, and educational initiatives might be more aware of the financial attitude role in students' financial management when providing training programs. Current educational programs are considered to enhance

students' basic financial knowledge and techniques, but not student's attitude. In fact, an effective financial education program might change students' financial attitude towards a specific behavior such as credit, savings and spending.

The high effect of secondary socialization agents on financial management and financial problems indicates that those more affected by secondary socialization agents have more risky financial management and are involved in a higher level of financial problems. Financial educators and practitioners who are involved in the developmental program, particularly in the training of students, may appreciate these findings. To enhance students' financial management and to reduce financial problems there is a need for more training concerning how to incorporate the basic financial knowledge of financial practices into their lives, and control secondary socialization effects, and negative attitudes toward money.

Concerning the effect of financial socialization on the enhancement of financial management and reducing financial problems, there is a need to enhance family understanding of how to involve children in the family's financial decision-making and, thereby, teach them how to make good decisions on their own. Since family has the key role in financial socialization, parents should be made aware that if they help their kids to make personal financial decisions in an open and communicative environment, then a positive relationship can be built and children will learn how to conduct finances adequately. If parents have a better understanding of how financial knowledge and practice during childhood can contribute to their children's success later in life, they might be more inclined to demonstrate positive financial management and provide or encourage adequate financial education at home for their kids.

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