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Full Length Research Paper

Assessment of university students' financial management skills and educational needs

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The main aim of this study is to assess university students' financial management skills and financial education needs. Data were collected among Malaysian public and private university students. Samples were selected using multi stage stratified sampling techniques. A total of 11 universities were randomly selected for the study and 350 questionnaires (300 for in campus and 50 for off-campus students) were distributed to students through the student affairs divisions of the respective universities. Perceived financial management skills were measured using a 5-point Likert scale from 1 (no skill at all) to 5 (very skilful) on 11 management related items: daily expenses, debt, future needs, time, savings, use of education loan, social interaction, stress, decision making, problem solving and career planning. The scores for the financial management skills were computed and the results revealed significant differences in the mean score among ethnic groups, with Chinese students scoring the lowest compared to other ethnic groups; public university students were perceived to have higher financial management skills compared to private university students; however, there was no gender difference in the score. Concerning the financial education needs, students indicated that they needed training related to career planning.

Key words: Financial management skills, education needs, Malaysian public and private university students, stratified sampling techniques, career planning, daily expenses, social interaction, stress, decision making.

INTRODUCTION

As education loans become a major source of financing for university students in Malaysia, their personal financial management skills need to be assessed to ensure effective and efficient use of financial resources. Most university students believe that with higher education they could ensure higher rank occupations and hence, higher income. Therefore, students who pursue higher education have to spend their time in the university, which, in turn, keeps them away from participating in the job market and having their own income. Thus, finance is becoming a significant factor in the choice of whether to pursue university education or to work. Students often begin their university education without ever having been solely responsible for their own personal finances (Cunningham, 2001; Nellie, 2002).

While in the university, the students have to manage their own expenses.

The research findings indicate that while students have wide access to financial services, such as education loans and credit, they lack the financial management knowledge and experience to manage money, which may lead to financial problems (Goldsmith and Goldsmith, 2006; Kidwell and Turrisi, 2004; Masud et al., 2004; Norvilitis et al., 2006). The assessment of students' financial management skills is the primary focus of the present study. The National Higher Education Fund Corporation loan (PTPTN) is the major source of financing for tertiary education in Malaysia. The availability of this loan since 1997 has enabled more students to pursue higher education. Logically, the loan received should be adequate to support the cost of living; however, studies by Masud (2004) and Sabri (2008) revealed that, university students are experiencing financial problems due to the lack of financial management knowledge.

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The ability to manage financial resources is essential for everyday life activities. Well-informed and financially educated people are able to make better decisions for their families and, thus lead to higher financial security and well-being (Hilgert and Hogarth, 2003). However, Benn (2003) indicated that the understanding of consumption, as reasoned behaviour or action, is inadequate in today's modern society, where consumerism is characterized by globalization, cultural changes and the liberation of the individual (Benn, 2003). In other words, consumption is part of children's and youngsters' formation and socialization, and plays an important role in the development of identity and self-conception (Benn, 2003). Therefore, there is a need to understand the financial skills and abilities of students, since their financial behaviour will have an important impact on their future life and personal well-being. Educational programmes such as seminars, workshops and even printed pamphlets have been recognized as tools to improve financial knowledge and enhance financial skills (Bayer et al., 2009; Borden et al., 2008; Fox et al., 2005; Lusardi and Mitchelli, 2007; Peng et al., 2007). However, knowledge about students' financial skills and educational needs enable the policymakers and financial planners to develop appropriate strategies and programmes to enhance students' financial knowledge. Enhancing students' financial skills would benefit the individual, finance services providers, universities and the nation. The specific objective of the present study is to assess university students' financial management skills and to determine students' financial education needs.

Objectives of the study

The main objective of this study is to assess financial management skills among Malaysian university students. The assessment of students' financial management skills will enhance knowledge concerning financial behaviour, as not many studies have been done in this area. The second objective of this study is to look at the students' financial education needs. This information could help in developing a practical financial education programme for university students.

LITERATURE REVIEW

Throughout the 1990s, issues related to financial education and knowledge were discussed among family and economic educators (Braunstein and Welch, 2002). Most of the recent studies focused on the financial planning of university students because many of them fail to plan their expenditure and unexpectedly experience financial problems. University students report having high debt, serious credit card usage, and high stress, as well as low financial satisfaction due to the lack of financial management skills (Holub, 2002; Nellie, 2002; Norvilitis

et al., 2006; Norvilitis et al., 2003). Young adults may be unprepared to effectively manage the psychological costs associated with financial problems such as increased levels of stress and decreased levels of well-being (Norvilitis and Santa, 2002; Roberts and Jones, 2001). However, it is generally accepted among researchers that, financial education is the key to decrease financial problems, especially among young adults. Concerning the importance of financial education, Brennan and Ritters (2004) indicated that, financial education plays a key role in financial empowerment, as education helps consumers acquire the skills, right attitudes and relevant knowledge needed in making choices for the best of their economic, health and safety wellness. The research findings among university students in the US reveal that, financial pressure is the most frequently cited reason for students discontinuing their education (Chiang, 2007). A study by Chen and Volpe (1998) reported that, university students generally lack financial knowledge. Those with higher levels of financial knowledge tend to have "right" opinions and make "correct" decisions related to savings, borrowing, and investing.

Many researchers have suggested that a lack of financial knowledge and skills results in students experiencing financial problems. Norvilities (2006), by reviewing several studies (Seaward and Kemp, 2000; Warwick and Mansfield, 2000) concluded that those seriously in debt might not understand the implications of their financial behaviour. Norvilities et al. (2006) and Hilgert and Hogart (2003) indicated that, financial knowledge is one of the strongest predictors of financial behaviour among university students. Perry and Morris (2005) found similar results. Of all the factors they considered being indicative of responsible financial behaviour, financial knowledge was found to have the greatest effect. Students' financial resources come from a number of sources. Parents, loans, credit cards and income from part time jobs are their basic financial sources (Leskinen and Raijas, 2006). Financial management skills and knowledge are needed to help students match their needs with their resources. Financial knowledge includes understanding financial activities such as the function of money and the use of financial services. Kempson et al. (2006) define financial skills and ability as the knowledge and understanding, that allows people to acquire the skills to deal with everyday financial matters and make the right choices.

Although most studies consider financial knowledge as a basic element of financial decision making and planning, only a few focused on financial skills. There is a difference between providing information as knowledge and the ability to apply it. Financial knowledge refers to financial information and literacy; however, financial skill is the ability to apply such knowledge to make financial decisions and planning. Some researchers define financial skills as the ability to understand and manage across a range of financial contexts including both predictable and unpredictable situations (Kempson et al., 2006). Researchers in the field of finance, such as Leskinen and

Raijas (2006) indicate that, financial skills and competence are based on financial knowledge and understanding, and are influenced by the personal attitudes in spending and saving. Therefore, financial skill and ability are needed to plan, control, manage and resolve financial risks and opportunities in the future.

Research has shown that several factors are associated with personal financial skills and knowledge, such as income, age, education, and socialization (Hira, 1997; Joo and Grable, 2004; Porter and Garman, 1993). Leskinen and Raijas (2006) indicated that financial skills are based on three factors - 1) demographic characteristics (age, sex, education, values and attitudes or habits), 2) the phase of life and immediate environment (family, socialization) and 3) the macro environment (society and its social, economic and cultural settings). However, these three factors may have a direct or indirect effect on one's financial skills and abilities. Not many studies have been done on the financial behaviour of Malaysian university students, except for those of Masud (2004), and Sabri (2008). Masud's (2004) study on Malaysian university students revealed that, the majority of them were experiencing financial problems because of the lack of knowledge and management skills.

The study concluded that, the purchasing power for the overall Malaysian population has increased, with no exception for students. Thus, although students are an important market segment, the majority of Malaysian students borrow money for their education and easily fall into debt because of the lack of financial planning for the future. Sabri (2008) conducted a study among Malaysian college students and found that, most of them were uncertain about where money is spent and that they bought unnecessary things and lent money to friends. According to Sabri (2008), the findings indicate that financial knowledge is a strong predictor of financial behaviour and a preventive factor for financial problems.

METHODOLOGY

Sample

The sample of the study comprised students in public and private universities. 11 universities were randomly selected (6 public and 5 private universities) for the study. For each university 350 students were randomly selected using the list of names obtained from the student affairs office. The total number of questionnaires distributed to 11 universities was 3,850. A total of 2,519 completed and usable questionnaires were returned by the students, which represents a 65% response rate.

Measurements

A self-administered questionnaire was used to collect the data in this study. The survey instrument included two scales. The first scale was developed to measure students' perceptions concerning their financial management skills. The financial management skills scale includes 11 statements concerning the students' perception

about their financial skills, including their management abilities of daily expenses, credit and debt, future needs, time management, savings, use of education loan, decision making, problem solving, stress management, interaction skills and career planning.

The perceived financial management skills were measured by asking students to rate those 11 items on a scale of 1 (no skills at all) to 5 (very skilful). In addition, the instrument included a 12-item scale to gather information about their financial education needs. The scale was developed to gather information about students' financial education needs. This scale involved the same statements as the financial skills scale but the students were asked to choose the skills they wanted to learn.

Statistical analyses

A financial skill score was computed by summing the average scores for all 11 statements. t-tests and Analyses of Variances (ANOVA) were conducted on selected demographic characteristics, to determine the differences in financial management skills among students.

FINDINGS

Of the 2,519 students studied, 40.4% were male and 59.6% were female students. The ethnic composition was Malay (71.4%), Chinese (21.7%), Indian (5.0%) and others (0.8%). The age composition of students was 20 years (39.3%) (lowest age), 21 to 30 years (60.5%) and 31 years (0.2%) (highest age). The mean age of the respondents was 20.9 years. The majority of students were from public universities (60%) while others (40%) studied in private universities. More than half of the respondents (57%) were funded by education loans, while 13.5% of the respondents received a scholarship and only 29.2% received money from other sources (parents).

Financial skills

The ability to manage financial resources can lead to personal financial satisfaction. The expansion of the consumer market and marketing activities, such as advertisement and sales, makes it harder for individuals to cope with the market's increasing demand for their money (Masud et al., 2004). However, most of the students suffer from a lack of financial ability and skills. and most of them face financial problems. Eleven items were included in the questionnaire to measure the financial skills of the respondents. The respondents were asked to determine the level of their ability for each skill separately. The results of the financial skills among university students shows that 57% of the respondents (males and females) evaluate themselves as somewhat skilled and 30.6% reported themselves as skilled, 6.3% as having low skill, 7% no skill at all, and finally only 5.4% evaluated themselves as skilful. Assessing the financial skills components between male and female students depicted in Table 1, shows that, male students have greater ability in managing daily expenses, credit/debt, stress,

Table 1. Mean score* of financial skills components.

Component	Male	Female	t	Sig.
Manage Daily Expenses	3.33	3.29	0.935	0.35
Credit/Debt	3.09	3.08	0.176	0.86
Future needs	3.29	3.29	0.11	0.913
Time Management	3.26	3.26	-0.015	0.988
Stress Management	3.34	3.24	2.59	0.009
Saving	3.19	3.23	-0.933	0.351
Use of study loan	3.29	3.38	-2.46	0.014
Interaction skills	3.50	3.48	0.482	0.63
Decision making	3.54	3.41	3.27	0.001
Problem solving	3.55	3.42	3.5	0.000
Career Planning	3.45	3.41	0.959	0.338
Total Mean Score**	36.9	36.45	1.49	0.136

^{*}Mean was out of 5; **Total mean was out of 55

Table 2. Summary of mean comparison analysis of financial skills based on demographic factors.

Item	Mean	t, F	Sig.
Gender			
Male	36.9	+ 0 177	0.000
Female	36.45	t=3.177	0.002
Ethnic			
Malay	36.89		
Chinese	35.56	F=4.42	0.001
Indian	37.84		
University			
Private	37.05	+ 0.17	0.000
Public	35.15	t=3.17	0.002

decision making, problem solving and career planning than female students.

However, female students have greater ability in time management, savings and use of education loan than male students. Both male and female students perceived equal abilities in managing their future needs and interaction skills. The results indicate that, although statistically significant differences were found, overall, male students perceived that they have a higher level of financial skills based on the total mean score than female students. Overall, the mean comparison analysis showed that there is no significant difference in financial skills between male and female students. The results presented in Table 2, indicate that there is a significant difference in the financial skills level between public and private university students. Public university students have a higher skills score (Mean=37) than private university students (Mean=35). Financial skills were significantly different between ethnic groups. Among the different ethnic

groups, the results show that Chinese students report the lowest financial skills level (Mean=35.5), Malay students (Mean=36.8), and Indian students reported as having the highest level (Mean=37.8).

Financial education needs

The growing concern that students are inadequately prepared for today's financial market place has resulted in the demand for financial education. In recent years, some programmes have been developed to promote and provide financial education for students; however, based on the evidence, the need to have an effective programme remains. Data from this study provides important information concerning the financial needs of students.

According to the results depicted in Table 3, career planning received the highest support among the educational programmes needed. Skills for better social

Table 3. Students' financial education needs.

Component	Frequency (%)
Manage daily expenses	29.3
Credit/Debt management	20
Manage future needs	31.5
Time Management	34.6
Stress Management	32.9
Saving management	30.5
Use of study loan	21.9
Interaction skills	37.6
Decision making	34.5
Problem solving	34.9
Career Planning	45.3

interaction is the second important area followed by time management, decision making and problem solving skills. However, skills related to savings, stress, planning for future needs, managing daily expenses are in the fourth level of importance in educational needs, and credit and debt management received the lowest support.

CONCLUSIONS AND RECOMMENDATIONS

A great body of research indicated that, young adults often begin their university without having much financial knowledge and skills concerning financial issues (Cunningham, 2001; Nellie, 2002); however, the lack of financial knowledge and proper skills for effective financial management may lead them to face financial problems. In this study, the majority of students are the recipients of education loans. Only 30% of them receive income from other sources. Therefore, as the data showed that most students still have to support their educational expenditure by loans, it means that financial issues, especially financial planning, is important. Educational loans were provided to lessen the financial burden of students, however, as the data shows, only 5% of students are financially skilled and a high percentage of them only have a moderate level of knowledge and skill in financial issues.

Students' access to financial resources, even loans and debt, gives them an opportunity to spend money on basic and luxury needs. However, because of the growing purchase of goods and services for social display value among Asian students, the number of students facing financial problems increased significantly (Fan and Burton, 2002; Roberts and Jones, 2001; Ying, 2003) According to the Nellie Mae Annual Report (2002), the lack of experience in financial management may be particularly destructive to students' financial futures. Although there is not a significant difference in the financial skills between males and females in this study, the male students showed a higher level of financial skills than the

females. Regarding the ethnic groups, although the Chinese were generally economically better than other ethnic groups; surprisingly, the Chinese students have the lowest level of financial skills. Indian students have the highest level and Malaysian students are in the average level. Other differences were observed between public and private university students; public university students were significantly more skilful.

The main reason for this difference might be due to the curriculum offered in public universities. Most of the public universities have more general courses and programmes for students than private ones. The evidence indicates that financially educated people and those having an understanding of how to spend the money can effectively improve their financial satisfaction and security (Fitzsimmons et al., 1993). Skills and knowledge in credit. risk, and investment management are necessary to enable people to manage their finances and then effectively to meet their goals (Masud et al., 2004). Various sources can be tapped to acquire this knowledge; Borden et al. (2008) stated that for people lacking financial experience, financial education programmes have been identified as the key to improving financial skills and promoting personal financial responsibility (Elliot, 2000; Fox et al., 2005; Peng et al., 2007). The results from this study show that, most students are interested in learning financial skills.

The majority of students emphasized that, career planning is the most important educational need, followed by social interaction and time management. Basic financial skills such as problem solving, decision making and savings received attention as well. The results indicate that students are concerned about their future life after graduation. Indeed, students are in the age when their financial behaviour has a significant effect on their future life. As most research has emphasized, financial education is the best way to enhance students' financial knowledge and skills. However, it is important for the policymakers and implementers to consider differences in providing information and education to the target group.

As Hogart and Anguelov (2003) pointed out, education may require a combination of information, skill-building, and motivation to make the desired changes in behaviour. This distinction between information and education is a key point for policymakers. Most of the financial programmes have an informational structure and do not have a practical strategy to provide changes in financial

Students, like other people, learn financial matters early in life, and it is agreed among researchers that family experiences, in particular, often provide the foundation for the student's financial skills and behaviours (Hira and Mugenda, 2000; Watchravesringkan, 2008). The financial socialization process of young people is mainly achieved through communication, observation, and by learning through trial and error (Lachance and Bernier, 2004). Therefore, it is important that financial educators and policymakers consider the financial socialization process as the main process of students' financial skills and knowledge source in early life.

Financial skills concern future planning and the attainment of financial well-being. Improving the financial skills of students, needs a practical approach towards educational programmes. An effective programme must be developed based on students needs and should be presented in an integrated way to cover the wider population with a variety of life stages and characteristics. In addition, the output of the programme should be monitored to assess in more detail the financial needs. Indeed, the government must take a more active role in educational planning by enhancing the importance of financial education in high schools and in the case of adult learning.

The study among students by Makela and Peters (2004) revealed that, financial education in high school was useful but boring, and that some did not remember having received this education. Therefore, the financial educators must employ efficient methods in teaching financial matters.

The educational programmes should focus on improving the basic knowledge and skills concerning the financial products and financial services for young adults. In addition, providing basic financial management knowledge and skills upon graduation before they enter the job market can be beneficial, so they are equipped with the skills necessary to manage their income effectively.

Finally, further studies need to develop a model of "financial skill" based on factors affecting a student's financial decision-making process in the social, cultural and psychological context.

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