

## Gender Differences in Financial Literacy among College Students

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**Abstract:** The paper aims to examine gender differences in financial literacy among college students. Using the stratified sampling method, 2,340 college students from six public and five private colleges were studied. The findings indicate gender differences in different dimensions of financial literacy, in which males were more knowledgeable in financial matters than female students. The results revealed that among the six dimensions of financial literacy, male students have more knowledge concerning credit and risk management, while females are more knowledgeable in respect of general financial literacy. [Leila Falahati, Gender Differences in Financial Literacy among College Students. Journal of American Science 2011;7(6):1180-1183]. (ISSN: 1545-1003). <http://www.americanscience.org>.

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### 1. Introduction

Gender issues have received considerable attention in statements concerning economics and finance in recent decades. Since gender differences have been observed in a number of financial domains, such as behavior, investment and, perhaps, most importantly, in financial skills, gender issues have become a concern among economists and gender educators. Scholars have documented gender differences in financial affairs such as financial literacy, attitudes and particularly financial behavior.

Prior studies have determined that financial literacy has important implications for financial behavior. However it is widespread among researchers that people with low financial literacy are more likely to have problems with debt (Lusardi and Tufano, 2009b), lower level of wealth management (Hilgert et al., 2003), and, most importantly, a lack of retirement planning (Lusardi et al., 2009a). Lusardi (2010) indicated that financial literacy is the main component of financial decision-making, and many young people desire more financial literacy.

Young adults, particularly college students, receive more attention from financial educators (Goldsmith and Goldsmith, 2006; Gutter et al., 2010; Hayhoe et al., 2000; Hira et al., 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. However, because of the lack of financial management skills and poor money management, students report greater financial problems, greater stress, as well as decreased financial well-being (Hayhoe et al., 2005; Hira and Mugenda, 2000; Kidwell and Turrisi, 2004; Norvilitis, et al., 2006).

In terms of financial literacy, college students showed an extensive gender disparity (Barber and Odean, 2001; Goldsmith and Goldsmith, 2006). Garman and Fogue (2006) pointed out that financial literacy is a fundamental tool in successful financial management. However, the research findings indicate that female students consider themselves as being less knowledgeable about financial topics (Hira and Mugenda, 1999), financial analysis (Webster and Ellis, 1996) and investing (Goldsmith and Goldsmith, 1997). In comparison to men, recent studies have also found that women are less knowledgeable financially (Goldsmith and Goldsmith, 2006).

To aid young adults, particularly college students, it is crucial to understand their level of financial literacy and, most importantly, understanding gender differences in financial literacy would provide more knowledge about students' financial needs. Furthermore, since college students are the future labor force contributors, it is necessary to understand the financial needs and dilemmas of males and females in conducting their finance during college life. Most importantly, the lack of financial literacy may lead college students to become involved in a higher level of financial problems during college life, which has a significant effect on their present and future family, and career life.

### 2. Materials and Methods

#### 2.1 Instrumentation

Financial literacy knowledge was measured by an instrument developed by Sabri et al., (2006) based on the Malaysian context. The instrument consisted

of 25 true and false questions concerning financial goals, financial records, savings, investment, retirement, banking system, time value of money, wills, insurance, education loan, and general knowledge on personal finance. However, finally, the components comprised six dimensions including: general knowledge, investment, savings, record, credit, insurance and risk management. The total score for financial knowledge and the six dimensions was computed by summing the correct answers for 25 questions.

## 2.2 Sample procedure and sample profile

Data were collected using the stratified sampling method at six public and five private universities across Malaysia. A self-administered questionnaire was used as the data collection methodology. Of the 2,500 students who responded to the survey, 40.4% were male and 59.6% were female students; 71.4% were Malay being the major ethnic group in Malaysia, 21.7 % were Chinese, 5 % were Indian and others (.8%). The mean age of the respondents was 21 years. Students from public universities were 60% while others, 40%, studied in private universities.

## 2.3 Data Analysis

To determine gender differences in financial literacy the mean comparison t-test was conducted between male and female students.

## 3. Results and Discussions

The results of the t-tests presented in Table 1, revealed that there were statistically significant differences between male and female students in the financial literacy score and some of its components. The results revealed that male students ( $M= 12.61$ ) have a higher level of financial literacy than female students ( $M= 12.21$ ). Assessment of financial literacy components indicated that female students ( $M= 3.69$ ) have a higher level of knowledge in general issues than male students ( $M= 3.63$ ). The findings indicated that the mean comparison for general knowledge was statistically significant,  $t=-1.023$   $P\leq .00$ .

Table 1: The Result of the t-Test for Financial Literacy

Items	Male	Female	t	Sig
Financial Literacy	12.61	12.21	2.58	.00
General	3.63	3.69	-1.023	.00
Credit	2.17	1.91	5.75	.00
Record	.940	.949	-.386	.696
Saving	3.071	3.075	-.073	.942
Risk management	1.57	1.43	3.56	.000
Investment	1.2	1.13	1.807	.071

\**df*:2338

Male students have a higher level of knowledge concerning credit ( $M= 2.17$ ) while females have a lower level ( $M= 1.91$ ) and, in addition, male students have a higher level of knowledge of risk management ( $M= 1.57$ ) than female students ( $M= 1.43$ ). The findings of the t-test analysis indicated statistically significant differences for credit knowledge, ( $t= 5.75$ ,  $P\leq .00$ ) and for risk management, ( $t=3.56$ ,  $P\leq .00$ ) between male and female students. However, although there were no statistically significant differences between male and females for records, savings and investment items the mean comparisons revealed slight differences. The mean comparisons of savings, records and investment knowledge indicated that male students have a higher level of knowledge in investment items while females have a higher level of knowledge concerning records and savings.

These findings indicate that male students are more knowledgeable financially than female students, which is consistent with previous findings (Chen and Volpe, 2002; Eitel and Martin, 2009; Goldsmith and Goldsmith, 2006; Hira and Mugenda, 2000; Lim et al., 2003; Shim et al., 2010), and emphasizes that female students have less financial literacy than male students. Female students have less knowledge concerning credit, risk, investment and insurance (Goldsmith and Goldsmith, 2006; Hira and Mugenda, 2000), while male students are less knowledgeable in general knowledge, records and savings (Barber and Odean, 2001). The results indicate that female students are more knowledgeable concerning general issues and savings and recording, which are relevant to cash flow management, while male students are more knowledgeable regarding credit, risk and investment, which are relevant to financial planning.

## 4. Conclusion and Implications

The main aim of the present study was to determine gender differences in financial literacy among college students. The findings of the research indicate that male students are more knowledgeable than female students, however, among the six dimensions of financial literacy, male students have more knowledge concerning credit and risk management, and females are more knowledgeable concerning general knowledge. The findings indicated that female students have a lower level of financial literacy than male students, which may result in female students being involved in a higher level of financial problems due to the lack of proper financial skills and literacy. In addition, it should be noted that the financial socialization process is the main part of acquiring financial literacy and skills,

therefore, parents might also consider providing equal practical opportunities for sons and daughters to practice and learn financial matters.

Moreover, regarding the family sphere, schools have an important role in enhancing students' financial literacy, therefore, due to differences in male and female financial literacy there is the need to enhance schools financial literacy programs and expand practical subtitles. An efficient financial literacy program must teach not only the basic knowledge and financial techniques but also ways to enhance self-efficacy, stress management, problem solving and life skills, as well as methods for the wise and even righteous use of financial resources for both male and female students.

There are various sources that students can tap into to acquire financial knowledge, such as attending seminars, workshops, courses and even pamphlets. All of these sources can be beneficial as they help provide basic financial management knowledge and skills during college life and before the student graduates and enters the job market, thereby equipping them with the necessary skills to manage their income effectively.

It should be mentioned that since the majority of students, both male and female, after graduation, are future labor force workers, it is important to set up educational programs to educate students about financial skills and the necessities of efficient money management. Based on the present research findings it is recommended that in formulating a financial education strategy, the distinct features of financial knowledge and financial management, such as savings, insurance and risk management should be taken into consideration to meet the information needs and help educate individuals on financial matters.

In addition, it is recommended that the program provides relevant information about the financial literacy and its benefits in later lifecycles. Moreover, as there is a large proportion of females among students who perceive themselves as having a lower level of financial literacy than males, a special education program that covers financial literacy and managerial skills should be set up. This would be for the purpose of equipping females with appropriate financial skills, as they will constitute the main proportion of the labor force after graduation.

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#### **References**

- [1] Barber B. Odean T. Boys Will Be Boys, Gender, Overconfidence, and Common Stock Investment. *Quarterly Journal of Economics*, 2001, 116: 261-292.
- [2] Chen H. Volpe R.P. Gender Differences in Personal Financial Literacy among College Students. *Financial Services Review*, 2002, 11: 289-307.
- [3] Eitel S.J. Martin J. 2009. First-Generation Female College Students' Financial Literacy: Real and Perceived Barriers to Degree Completion. *College Student Journal*, 2009, 43(2), 616-630.
- [4] Garman T.E. Forgue R.E. *Personal Finance* (8th ed.). Boston: Houghton Mifflin Company, 2006
- [5] Goldsmith R.E. Goldsmith E.B. Gender differences in perceived and real knowledge of financial investments. *Journal of Psychological Reports*, 1997:80, 236-238.
- [6] Goldsmith R.E. Goldsmith E.B. The Effects of Investment Education on Gender Differences in Financial Knowledge *Journal of Personal Finance*, 2006, 5(2): 55-69.
- [7] Gutter M.S. Garrison S. Copur Z. Social Learning Opportunities and the Financial Behaviors of College Students. *Family and Consumer Sciences Research Journal*, 2010, 38(4): 387-404.
- [8] Hayhoe C.R. Leach L. Allen M.W. Edwards R. Credit Cards Held by College Students. *Financial Counseling and Planning* 2005, 16(1): 1-10.
- [9] Hayhoe C.R. Leach L.J. Turner P.R. Bruin M.J. Lawrence F.C. Differences in spending habits and credit card use of college students. *The Journal of Consumer Affairs*, 2000: 34(1), 113-133.
- [10] Hilgert M.A. Hogarth J.M. Beverly S.G. Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*(Jul), 2003: 309-322.
- [11] Hira T.K. Anderson M. Petersen K. Students' Perceptions of Their Education Debt and Its Impact on Life after Graduation. *Journal of Student Financial AID*, 2000, 30(1): 7-19.
- [12] Hira T.K. Mugenda O.M. The relationships between self-worth and financial beliefs, behavior, and satisfaction. *Journal of Family*

- and Consumer Sciences Education*, 1999, 91(4): 76–82.
- [13] Hira T.K. Mugenda O.M. Gender Differences in Financial Perceptions, Behaviors and Satisfaction. *Journal of Financial Counseling and Planning*, 2000, 13(2): 86-92.
- [14] Joo S.H. Personal Financial Wellness. In J. J. Xiao (Ed.), *Handbook of Consumer Finance Research*, 2008 (pp. 21-33): Springer.
- [15] Kidwell B. Turrisi, R. An examination of college student money management tendencies. *Journal of Economic Psychology* 2004, 25: 601-616.
- [16] Lim V.K.G. Teo T.S.H. Loo G. Sex, financial hardship and locus of control: an empirical study of attitudes towards money among Singaporean Chinese. *Personality and Individual Differences* 2003, 34: 411-429.
- [17] Lusardi A. Mitchell O.S. Curto, V. Financial literacy among the young: Evidence and implications for consumer policy: National Bureau of Economic Research Cambridge, Mass., USA. 2009a
- [18] Lusardi A. Mitchell O.S. Curto V. Financial Literacy among the Young. *Journal of Consumer Affairs*, 2010, 44(2): 358-380.
- [19] Lusardi A. Tufano P. Debt literacy, financial experiences, and overindebtedness: National Bureau of Economic Research Cambridge, Mass., USA. 2009b.
- [20] Norvilitis J.M. Merwin M.M. Osberg T. M. Roehling P.V. Young P. Kamas M.M. Personality Factors, Money Attitudes, Financial Knowledge, and Credit-Card Debt in College Students. *Journal of Applied Social Psychology*, 2006, 36(6): 1395–1413.
- [21] Sabri M.F. Masud J. Paim L. *Financial Literacy, Attitude and Practice among Malaysian IPTs Students*. Serdang: UPM, 2006.
- [22] Shim S. Barber B.L. Card N.A. Xiao J.J. Serido J. Financial Socialization of First-year College Students: The Roles of Parents, Work, and Education. *Journal of Youth Adolescence* 2010, 39(12): 1457-1470.
- [23] Webster R.L. Ellis T.S. Men's and Women's Self-Confidence in Performing Financial Analysis. *Journal of Psychological Reports*, 1996, 79:1251-1254.

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