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Financial Literacy of Hospitality Professionals

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Abstract

Financial literacy is an important asset for individuals. Undeveloped countries not only have issues with a lack of financial literacy among their citizens but countries with much stronger economies also may experience the same problem. Despite an abundance of studies that are focused on this subject, authors are not familiar with studies that concentrate on the financial literacy of hospitality professionals. This study attempts to determine if there are significant differences in the level of financial literacy among hospitality professionals based on gender, age, level of education, years of work experience, and hospitality segment. The results of the study show that knowledge of financial literacy depends on the age and level of education of individuals. Financial literacy self-assessment suggests that a hospitality segment where a person is employed and the level of education have the highest impact on the score, very closely followed by age.

Key Words: *financial literacy, hospitality professionals*

1. Introduction

Financial literacy is vital for individuals who want to establish future financial security and avoid large amounts of debts. The economic crises around the world in 2008 and 2009 prompted international government and business leaders to search for causes and led to uneasiness over financial literacy. Various surveys conducted globally assessed financial literacy as low, triggering the international leaders' concerns (Lusardi & Mitchell 2011a, 2011b, 2013, 2014). Even well developed countries, such as the United States (U.S.), are not immune to low levels of financial literacy. Improvement of financial literacy is imperative to the economy (Lusardi & Mitchell 2008, 2013, 2014; Lusardi & Tufano 2009; Lusardi & Wallace 2013; Mandell & Klein 2009; Theodos, Kalish, Mckernan, & Radcliffe 2014). In the U.S., financial literacy has become an important consideration of the President, directing the President's Advisory Council of Financial Capabilities to oversee the improvement efforts at the national level with a plethora of organizations being involved at the state and local levels.

Although numerous academic studies were done to access a level of financial literacy among individuals, e.g. Lusardi (2011, 2012a), Robb and Woodyard (2011), Woodyard and Robb (2012), Allgood and Walstad (2013), Mottola (2013), Nicolini et al. (2013), Lachance (2014), Lusardi and Mitchell (2014), and Scheresberg (2013), knowledge about the financial literacy of hospitality professionals is extremely limited. Despite the fact that the hospitality industry is one of the leading industries in the U.S. and the world (Walker 2008), authors are not familiar with published studies that focus on hospitality professionals. This research concentrates on this professional group. The purpose of this study is to define the financial literacy profile of hospitality professionals by answering the following research questions:

1. What is the financial literacy profile of hospitality professionals?
2. Are there significant differences in the financial literacy based on one's gender?
3. Are there significant differences in the financial literacy based on one's age?
4. Are there significant differences in the financial literacy based on one's years of work in the hospitality industry?
5. Are there significant differences in the financial literacy based on one's hospitality work segment?
6. Are there significant differences in the financial literacy based on one's education level?

2. Literature Review

The measurement of financial literacy, although the subject of numerous surveys, studies, working papers, and research articles, has been assessed from several perspectives without a consensus of a uniform measurement tool. According to Hung et al. (2009) and Huston (2010), it is difficult to identify a uniform measurement. This stems from two issues: (a) lack of a consensus in definition of financial literacy, and (b) an agreement of the content of the construct (Hung et al. 2009; Huston 2010).

Agreeing with Hung et al. (2009) and Huston (2010), Huston (2012), and Remund (2010) suggest the definitions used by numerous scholars are inconsistent. Remund (2010) advocates an integrated definition of financial literacy: "A measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions" (p. 284). This study addresses understanding (knowledge) and confidence (self-assessed) related to short-term and long-term decision-making and financial planning.

The U.S. Treasury (2010), defined the Financial Literacy and Education Commission (FLEC) core financial literacy competencies as: earning, spending, borrowing, saving and investing, and protecting. To identify content of the financial literacy construct, Remund (2010) reviewed research studies conducted between 2000 and 2006. This review revealed four common content topics: budgeting, saving, borrowing, and investing. For this study, four categories were defined: money basics, borrowing, building assets, and protecting assets.

The lack of a uniform measurement tool has resulted in an assortment of financial literacy surveys. While the United States' financial literacy has also been included in some global research (Lusardi & Mitchell 2011a, 2011b), the United States has also been the prime focus of numerous research studies (Allgood & Walstad 2013; Bumcrot et al. 2013; Lachance 2014; Lusardi & Mitchell 2007a, 2007b, 2007c, 2008, 2011a, 2011b, 2013; Mottola 2013; Nicolini et al. 2013; Robb & Woodyard 2011; Scheresberg 2013; Woodyard & Robb 2012). The source of the majority of the research in the U.S. results from four recurring surveys: Jump$tart Coalition, Health, and Retirement Study (HRS), RAND American Life Panel (ALP), and National Financial Capability Study (NFCS). These surveys focused on specific age groups as well as all adults. The Jump$tarts Coalition (Mandell & Klein 2007) survey was given to high school and college students, while adults over the age of 50 responded to the Health and Retirement Study (Lusardi & Mitchell 2007a), and the RAND American Life Panel (Lusardi & Mitchell 2007b) focused on married couples. The National Financial Capabilities Study (NFCS) in 2009 and 2012 was the first recurring survey dedicated to financial literacy. It was directed at adults over the age of 18 (FINRA Investor Education Foundation 2009, 2012). Other surveys have been distributed in the U.S. to smaller, more specific populations.

3. Methodology

3.1 Instrument

We used a financial literacy assessment survey of 25 questions. Although this was the first time these questions were used in this combination, the survey was developed from a pool of

209 questions used in 14 surveys (Appendix A) referenced in academic articles between 1996 and 2013. To reduce the pool to the 20 knowledge questions and five self-assessment questions, 44 experts in financial literacy, economics, accounting, small business, and adult education evaluated the questions. The experts identified financial topics within the four areas of financial literacy (money basics, borrowing, building assets, and protecting assets) the assessment would cover. After identifying the topics, the experts reviewed questions covering these topics for inclusion in the final assessment instrument. Once the pool was narrowed, the experts appraised them for clarity of language and wording. The questions remaining in this assessment survey (Appendix B) were based on a consensus of the expert panel. The survey results in two scores: a knowledge score, or objective financial literacy, and a self-assessed score, or subjective financial literacy. The knowledge score is the number of correct responses related to the total questions and is expressed as a percentage on a scale of 0% to 100%. The self-assessed score is the average of the five self-assessed question answers on which are expressed as an integer between 1 and 7.

3.2 Variables and Data Collection

The dependent variables in this study are the financial literacy knowledge score and the self-assessed financial literacy score. Independent variables, based on the research questions, were gender, age, education level, years in the hospitality industry, and hospitality segment.

The survey was a convenience sample taken at the Florida Restaurant and Lodging Association show in Orlando, Florida, U.S.A. in October 2015. From the questionnaires distributed and collected during the show, 48 questionnaires provided complete information for analysis.

4. Results and Discussion

SPSS 22 statistical software was used for statistical analysis. Results of descriptive statistics defining a hospitality profession financial literacy profile, based on a sample group, are listed in Table 1. The group is balanced between males and females. The median age is 38, while the mean age is 41. More than half (57.8%) of the participants have been working in the industry more than ten years. More than half (58.3%) of the participants are from the restaurant and hotel segment of the hospitality industry. The other segments included travel, private clubs, hospitals, event planners, and concession. Fewer than half (37%) did not complete college. The number of correct responses to the knowledge portion of the financial literacy survey in each of the independent variables ranged from a mean 8.8 to 15.4 out of 20, with a total sample mean of 12.9. This translates to a minimum percent correct of 44.0% (in the variable for high school highest level of education) to the highest percentage 77.1% (post-graduate education), while the total mean percentage is 64.4%.

The results of this study indicate the mean knowledge score (64.4%) to be higher than other studies. The Jump$tart survey scores between 1997 and 2008 and NFCS survey scores in 2009 and 2012 were below 60% (Lachance 2014; Shanks, Mandell & Adams 2013). Self-assessment scores for the participants of this study. The hospitality discipline is an applied one and is closely related to business. Perhaps individuals who have knowledge of hospitality business practices feel more confident when it comes to understanding financial matters.

A regression equation for financial the literacy knowledge score can be presented as:

Y=1104.386-4.088D1-0.542D2+0.542D3-0.303D4+9.339D5 and a regression equation for self-assessed financial literacy score can be presented as:

Y=47.092+0.298D10.023D2+0.203D3+0.392D4+0.301D5.

Where: D1-gender, D2-age, D3-years in business, D4-business segment, D5-level of education Level of education has the highest impact on financial literacy knowledge score (β=0.40, t=2.71 and ρ=0.1), followed by age (β=-0.542, t=2.71 and ρ=0.52). In terms of self-assessment questions, hospitality business segment (β=0.39, t=2.77 and ρ=0.008) and level of education (β=0.39, t=2.77 and ρ=0.18) have the highest impact on the self-assessed financial literacy score. The age of respondents is the third factor but stands very closely to level of education. Individuals employed in restaurants, engaged in hospitality education or work in other sectors of the hospitality industry have a self-assessment score of 63.07 (SD=20.83), 66(SD=24.34), and 66.3(SD=24.07), respectively. Perhaps individuals in other business sectors more actively participate in a company's business decisions or may have more work flexibility that allows them to educate themselves more.

For the financial literacy knowledge score, the only significant difference exists based on level of education (P value=.01) and for financial literacy self-assessment score such difference exists only based business segment (P value= .008). Actual knowledge based on test-results and perception of individuals about this knowledge can indeed vary. In 2011, the Global Financial Literacy Excellence Center (GFLEC) research highlights that a low level of education is one of the factors that affects financial literacy assessment scores in a negative way. When researchers explored financial literacy by age, they discovered that young adults and elderly adults show greater incidence of lower financial literacy assessment scores (Beckmann 2013; Hsu 2011; Lusardi 2011, 2012b; Lusardi & Mitchell 2014; Lusardi, Mitchell, & Curto 2010; Lusardi & Tufano 2009; Mandell & Klein 2007; Pahnke & Honekamp 2010; Scheresberg 2013).

As with many other studies, this study has its own limitations. The study uses a relatively small, convenient sample. Many individuals who attended the show want to receive enjoyable professional and social experience and are not interested in completing academic surveys. A repetition of a similar study would be beneficial but with the utilization of a larger sample.

Appendix A

Fourteen Surveys Used to Develop Financial Literacy Assessment Survey

	Survey	Researcher/ Author(s)	Year	Number of Questions	Participants
1	Investing IQ	Volpe, Chen, & Pavliko (1996)	1996	10	18+; U.S.
2	Survey of Personal Financial Literacy	Chen & Volpe (1998)	1998	31	18-29; U.S
3	Survey of Consumers	Hilgert, Hogarth & Beverly (2003)	2002	28	18+; U.S.
4	HRS	Lusardi & Mitchell (2007c)	2004	3	> 50; U.S.
5	DHS	van Rooij, Lusardi & Alessie (2005)	2005	16	30 - 60; Non-U.S.
6	ALP	Lusardi & Mitchell (2007b)	2006	23	18+; U.S.
7	TNS Global	Lusardi & Tufano (2009)	2007	3	18+; U.S.
8	Jump$tart	Mandell (2008)	2008	31	15 - 19; U.S.
9	CogEcon	Delavande, Rohwedder & Willis (2008); Hsu (2011)	2008	24	> 50; U.S.
10	NFCS	Lusardi (2011)	2009	5	18+; U.S
11	WBG	World Bank (2009)	2009	4	18+; U.S.
12	FLAT	Finke & Huston (2014)	2011	16	18+; U.S.
13	OECD	Atkinson & Messy (2011)	2012	8	18+; Non-U.S.
14	USIS	Alhenawi & Elkhal (2013)	2013	7	18+; U.S
Total				209	

Note. Survey: HRS--Health & Retirement Study, DHS—De Nederlandsche Bank Household Survey, ALP--American Life Panel, TNS Global--Taylor, Nelson, Sofres Global, CogEcon--Cognitive Economic Survey, NFCS--National Financial Capability Study, WBG--World Bank Global, FLAT--Financial Literacy Assessment Test, OECD--Organization for Economic Co-operation and Development, and USIS--University of Southern Indiana Survey; Selection Criteria: 1=Instruments receiving content evaluation (Fernandes et al. 2014; Knoll & Houts 2012; Kunovskaya et al. 2014), 2=Instruments heavily cited in research covered in the literature review, 3=Instrument questions reviewed and developed through comprehensive research or psychometric processes.

Appendix B

Basic Financial Literacy Assessment Survey

Demographic Questions
Please respond to the following demographic questions:

1. What is your gender?
o Male
o Female
o Other (please specify)

2. What year were you born? ________________

3. How many years have you been working in the hospitality industry?

o 0 - 2 years
o 3 - 5 years
o 5 - 10 years
o 10 - 20 years
o More than 20 years

4. What hospitality segment are you employed in?
o Restaurant
o Hotels
o Hospitality Education
o Other, please specify______________________

5. What was the last year of education that you completed?
o Did not complete high school
o High school graduate - regular high school or GED
o Some college
o College graduate
o Post graduate education

Knowledge Questions

1. If you were to invest $1,000 in a stock mutual fund, it would be possible to have less than $1,000 when you withdraw your money.
o True
o False
o Don't know
o Prefer not to answer

2. It is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares
o True
o False
o Don't know
o Prefer not to answer

3. To ensure that some of your retirement savings will not be subject to income tax upon withdrawal, you would contribute to:
o A Traditional IRA (Individual Retirement Account)
o A Roth IRA
o A 401(k) plan
o Don't know
o Prefer not to answer

4. To reduce the total finance costs paid over the life of a loan, you should choose a loan with the:
o Lowest monthly payment
o Longest repayment term
o Shortest repayment term
o Don't know
o Prefer not to answer

5. If you always pay the full balance on your credit card, which of the following is least important?
- o Annual interest rate
- o Annual fee
- o Line of credit
- o Don't know
- o Prefer not to answer

6. Your net worth is
- o the difference between your expenditure and income.
- o The difference between your liabilities and assets.
- o the difference between your cash inflow and outflow.
- o the difference between your bank borrowing and savings.
- o none of the above.
- o Don't know
- o Prefer not to answer

7. You can receive a free credit report annually from:
- o a credit union.
- o a commercial bank.
- o the Better Business Bureau
- o a credit bureau.
- o a professor.
- o Don't know

8. With compound interest, you earn interest on your interest, as well as on your principal.
- o True
- o False
- o Don't know
- o Prefer not to answer

9. The earlier you start saving for retirement, the more money you will have because the effects of compounding interest increase over time.
- o True
- o False
- o Don't know
- o Prefer not to answer

10. You should have an emergency fund that covers three to six months of your expenses.
- o True
- o False
- o Don't know
- o Prefer not to answer

11. If you have a savings account at a bank, you may have to pay taxes on the interest you earn.
- o True

o False
o Don't know
o Prefer not to answer

12. If the interest rate on an adjustable-rate mortgage loan goes up, your monthly mortgage payments will also go up.
o True
o False
o Don't know
o Prefer not to answer

13. Repeatedly refinancing your home mortgage over a short period of time results in added fees and points that further increase your debt.
o True
o False
o Don't know
o Prefer not to answer

14. Your credit report includes employment data, your payments history, any inquiries made by creditors, and any public record information.
o True
o False
o Don't know
o Prefer not to answer

15. If you buy certificates of deposit, savings bonds, or Treasury bills, you can earn higher returns than on a savings account, with little or no added risk.
o True
o False
o Don't know
o Prefer not to answer

16. Bank A offers monthly compounding, and Bank B offers yearly compounding. Both banks offer the same interest rate. In your opinion, which bank would you choose if you wanted a higher return?
o Bank A
o Bank B
o Both banks offer the same return.
o Don't know
o Prefer not to answer

17. Do you think buying stock in a single company is safer than buying stock in several different companies?
o Yes
o No
o Don't know
o Prefer not to answer

18. A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less.

o True
o False
o Don't know
o Prefer not to answer

19. Imagine that you had $100 in a savings account, and the interest rate was 2% per year. After five years, how much do you think you would have in the account if you left the money to grow?
o More than $102
o Exactly $102
o Less than $102
o Don't know
o Prefer not to answer

20. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After one year, would you be able to buy:
o More than today
o Exactly the same
o Less than today
o Don't know
o Prefer not to answer

Self-Assessment Questions

1. I am comfortable with my knowledge to deal with day-to-day financial matters, such as checking accounts, credit and debit cards, mortgages, installment payments, and tracking expenses.
How do you rate yourself with regard to this statement?
o Strongly Disagree
o Disagree
o Slightly Disagree
o Neither Disagree or Agree
o Slightly Agree
o Agree
o Strongly Agree

2. I am comfortable with my knowledge to manage money, budgeting and planning my expenditures.
How do you rate yourself with regard to this statement?
o Strongly Disagree
o Disagree
o Slightly Disagree
o Neither Disagree or Agree
o Slightly Agree
o Agree
o Strongly Agree

3. I am comfortable with my knowledge to manage credit cards and debt, like car loans or a mortgage.
How do you rate yourself with regard to this statement?

- o Strongly Disagree
- o Disagree
- o Slightly Disagree
- o Neither Disagree or Agree
- o Slightly Agree
- o Agree
- o Strongly Agree

4. I understand investment products (for example stocks, bonds and mutual funds) and retirement accounts (such as IRAs,401Ks and annuities).
How do you rate yourself with regard to this statement?

- o Strongly Disagree
- o Disagree
- o Slightly Disagree
- o Neither Disagree or Agree
- o Slightly Agree
- o Agree
- o Strongly Agree

5. Consider your overall financial knowledge. How would you assess your overall financial knowledge?

- o Very Low.
- o Low Slightly
- o Low
- o Average
- o Slightly
- o High
- o High
- o Very High

Table 1: Descriptive Statistics

	%	N=	Mean Financial Literacy Number Correct (Total 20)	Mean Financial Literacy Percent Correct	Mean Self Assessed Financial Literacy (Max 7)
Total		48	12.9	64.4%	4.63
Males	45.8%	22	13.0	65.2%	4.56
Females	54.2%	26	12.7	63.7%	4.68
Age Group:					
18-30	22.9%	11	10.4	51.8%	3.85
31-40	31.3%	15	12.9	64.3%	4.41
41-50	16.7%	8	13.3	66.3%	4.93
51 and over	29.2%	14	14.6	73.2%	5.29
Years in Business:					
0-2	12.5%	6	12.7	63.3%	4.20
3-5	16.7%	8	12.4	61.9%	3.85
5-10	12.5%	6	9.5	47.5%	3.70
10-20	20.8%	10	13.9	69.5%	5.44

>20	37.5%	18	13.8	68.6%	4.94
Hospitality Segment:					
Restaurant	52.1%	25	12.9	64.6%	4.20
Hotels	6.3%	3	10.0	50.0%	2.80
Hospitality Education	10.4%	5	13.2	66.0%	5.36
Other	31.3%	15	13.2	66.3%	5.41
Education:					
No HS					
HS	10.4%	5	8.8	44.0%	4.64
Some College	27.1%	13	13.8	69.2%	4.11
College	37.5%	18	11.6	58.1%	4.64
Post Grad	25.0%	12	15.4	77.1%	5.15

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