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Financial Fitness Quiz Findings: Strengths, Weaknesses, and Disconnects

Abstract
This article reports findings from an online financial self-assessment tool, the Financial Fitness Quiz. The quiz consists of 20 statements about practices in financial management, saving and investing, insurance and estate planning, credit, and shopping. Data from the quiz are used to study the frequency of performance of 20 frequently recommended financial practices. Data were collected in 2003 from 2,155 respondents. Differences were found in total quiz scores by age, gender, education, income, and race. Comparisons of 2003 survey results with studies in 2001 and 2002 are presented, and implications for Extension educators are discussed.

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This article reports findings from Rutgers Cooperative Research and Extension's Financial Fitness Quiz, an online financial self-assessment tool for consumers. The Financial Fitness Quiz can be accessed on the World Wide Web at www.rce.rutgers.edu/money/ffquiz/default.asp. Data from the quiz are used to study the frequency of performance of recommended financial practices by respondents in order to inform future financial education programs. The study reports 2003 findings and compares them to prior studies (O'Neill, 2004; O'Neill & Xiao, 2003), conducted in 2001 and 2002. Five implications for financial practitioners and consumer educators are provided.

Sample and Methodology

Data were collected from 2,155 persons who completed the online Financial Fitness Quiz from January 7, 2003 through January 6, 2004. Respondents included 2,086 U.S. residents (96.8%) from 43 states and 69 non-U.S. residents. Females represented 60.5% of the sample. Over half (51.4%) of the respondents were under age 35, with 23% age 35-44, 15.7% age 45-54, and 9.9% age 55 or over. Sample sizes in 2001 and 2002 were 173 and 834 (two samples), respectively.

Eight of every 10 (80.5%) respondents were Caucasian, with 6.3% African-American, 4.2% Asian, 4.3% Hispanic, and 4.7% Native American or other. About half (50.2%) of the sample had a bachelor's degree or higher, and almost six in 10 (57.5%) had a household income of less than $50,000. Another 22% earned $50,000 to $74,999; 9.9% earned $75,000 to $99,999; and 10.6% earned $100,000 or more.

The Financial Fitness Quiz consists of 20 statements about financial practices in the areas of financial management, saving and investing, insurance and estate planning, credit, and shopping practices. Respondents are asked to select a number from 1 (never) to 5 (always) that describes their frequency of performing each behavior. An exception is the question about having a current will, which is answered with a yes (5) or no (1) answer.

The non-parametric Kruskal-Wallis test was used to determine differences of individual item scores by age, gender, education, income, and race. ANOVA was used to test for differences in demographic variables in terms of the total score. An alpha level of 5% was used for all statistical tests.

Findings

The mean score for the quiz in 2003 was 65.88, compared to 64.98, 67.34, and 69.18 with three earlier data sets. The scores for each quiz question in this data set and the previous three studies are shown in Table 1. The five questions with the highest scores, indicating the most frequently performed practices, were the same as those in prior studies with the same survey instrument. These five practices are having a checking account to pay bills, having enough money each month to pay household expenses, having insurance to cover big unexpected expenses, comparison shopping for major purchases, and keeping organized financial records.

The six questions with the lowest scores, indicating the least frequently performed practices, were also the same as those in prior studies. These six practices are having a current will, having written financial goals with a date and dollar cost, calculating net worth annually, having at least three month's expenses set aside, having a written plan (budget) for spending and saving money, and earning an after-tax yield on savings and investments greater than the rate of inflation.

Table 1.
Average Scores and Rankings for *Financial Fitness Quiz* Statements
(N = 3,162 in 4 Data Sets)

Financial Practice	**2003 Sample N= 2,155**	**2002 Sample #2 N= 365**	**2002 Sample #1 N= 469**	**2001 Sample N = 173**
I have a bank checking account (or credit union share draft account) with which to pay bills.	4.79 (1)	4.73 (1)	4.82 (1)	4.72 (1)
I have enough money each month to pay my rent or mortgage payment and other household expenses.	4.58 (2)	4.58 (2)	4.54 (2)	4.55 (2)
I have insurance to cover "big" unexpected expenses, such as a hospital bill or disability.	4.16 (3)	4.18 (3)	3.94 (4)	4.10 (3)
I keep organized financial records and can find important documents easily.	3.85 (5)	3.94 (4-tie)	3.84 (5)	3.76 (4-tie)
I comparison shop for major purchases by checking at least three sources.	4.04 (4)	3.94 (4-tie)	4.02 (3)	3.76 (4-tie)
I have enough money to pay for an emergency, such as a large car repair.	3.57 (7)	3.76 (6)	3.55 (6)	3.64 (6)
I avoid impulse purchases and don't use shopping as a form of recreation.	3.66 (6)	3.72 (7)	3.50 (7)	3.56 (8)
I have a personal investment account for retirement (other than an employee pension).	3.10 (11-tie)	3.58 (8)	3.05 (11)	3.58 (7)
I save regularly for long-term financial goals, such as education for my children, a house, or retirement.	3.30 (10)	3.56 (9)	3.31 (10)	3.46 (10)

I have money spread across more than one type of investment (e.g., stocks, bonds, mutual funds, CDs).	3.10 (11-tie)	3.55 (10)	2.99 (13)	3.53 (9)
Less than 20 percent of my monthly take-home pay goes to credit cards, student loans, and car payments.	3.43 (8-tie)	3.54 (11)	3.41 (8)	3.35 (12)
I pay credit card bills in full to avoid interest charges.	3.43 (8-tie)	3.52 (12)	3.38 (9)	3.25 (13)
I know my federal marginal tax bracket (e.g., 15%).	2.87 (14)	3.18 (13)	3.01 (12)	3.40 (11)
I increase my savings when I receive a salary increase.	3.09 (13)	3.13 (14)	2.94 (14)	3.15 (14)
I have at least three months' expenses set aside in a readily accessible account (e.g., money market fund).	2.67 (17)	3.04 (15)	2.58 (17)	2.81 (16)
The after-tax yield of my savings and investments is greater than the rate of inflation.	2.79 (15)	2.93 (16)	2.78 (15)	3.10 (15)
I calculate my net worth (assets minus debts) annually.	2.53 (18)	2.84 (17)	2.49 (18)	2.68 (17)
I have a written plan (budget) for spending and/or saving my money.	2.77 (16)	2.32 (18-tie)	2.69 (16)	2.59 (18)
I have written financial goals with a date and dollar cost (e.g., $10,000 for a car in 2004).	2.22 (19)	2.32 (18-tie)	2.12 (19)	2.24 (19)
I have a current will.	1.91 (20)	2.26 (20)	2.01 (20)	2.11 (20)

Numbers indicate average scores for each quiz item and ranking from the most frequently performed (1) to the least frequently performed (20) financial practices. Data from four rounds of data collection in 2001-2003 are reported. Scores are based on responses to Financial Fitness Quiz questions using a Likert type scale with five possible responses ranging from 1(never) to 5 (always) or 1(no) and 5 (yes).

Similar to findings from 2002 Financial Fitness Quiz data (O'Neill & Xiao, 2003), differences were found in total quiz scores by age, gender, educational level, income, and race. Males had a higher mean score than females (68 versus 64), and older respondents had higher scores than younger ones. The mean scores for the different age groups were 60 for respondents under 25, 64 for age 25-34, 66 for age 34-44, 71 for age 45-54, 78 for age 55-64, and 80 for age 65 or older. Respondents with higher educational levels also had a higher average score. Scores were 58 for those with a high school education or less, 61 with some college, 61 with an associate's degree, 70 with a bachelor's degree, and 73 with a graduate degree or higher.

Higher income respondents were more likely than those with lower incomes to have a higher score. From the lowest to the highest income groups, the average scores were 58 for less than $25,000, 63 for $25,000 to $49,999, 69 for $50,000 to $74,999, 76 for $75,000 t0 $99,999, and 79 for $100,000 or higher. There were also racial/ethic differences in the total score. Asian respondents had the highest average score (75), followed by Whites (66), Native Americans or other (64), African-Americans (63), and Hispanics (61).

Three "disconnects" were found in the average scores for related quiz questions. First, more respondents said they have enough money to pay for an emergency such as a large car repair (score of 3.57) than those who said they have at least three month's expenses set aside (score of 2.67). Second, more respondents reported saving regularly for long-term goals (score of 3.30) than having written financial goals with a date and dollar cost (score of 2.22). Third, more respondents reported having enough money each month to pay bills (score of 4.58) than having a written plan (budget) for spending and/or saving (score of 2.77).

These disconnects raise questions about respondents' possible false confidence about their finances and an apparent lack of goal-driven savings and financial planning. Many respondents also appear to lack the capacity to "automate" their finances. The average score for the quiz item about increasing savings when a salary increase is received was 3.09, and the average score for saving regularly for long-term goals was 3.30. Investment knowledge and practice also indicate room for improvement. The average scores for quiz items about having money spread across more than one type of investment and respondents knowing their federal marginal tax bracket were 3.10 and 2.87, respectively.

Discussion and Implications

Based on three years' worth of consistent results from the Financial Fitness Quiz, five content areas were identified that should be addressed in financial education programs.

1. **Encourage Automation of Increased Savings When Salary Increases**. Financial Fitness Quiz respondents did not indicate a high propensity to increase their savings upon receipt of a higher salary. Therefore, programs such as Save More Tomorrow (Thaler & Benartzi, 2001) that allow workers to authorize increased retirement plan savings in advance of future pay increases, can prevent inertia and procrastination. At the very least, workers should be periodically reminded about their ability to increase plan contributions (e.g., at the end of each calendar year or at a work site where contracts are settled and result in a pay raise).

2. **Educate Consumers About Marginal Tax Brackets**. The score on the item about knowing your federal marginal tax bracket was relatively low in this study and three prior ones. Despite two major tax laws passed in 2001 and 2003 and all their attendant publicity, many respondents do not know how much tax they are paying on their last (highest) dollar of household income. Knowledge of income tax brackets can help inform wise investment decisions such as the use of tax-exempt or tax-deferred investments. Financial education curricula should include information about the impact of taxation.

3. **Provide Basic Investor Education Programs**. Only 21.3% of U.S. households own stocks, and 17.7% and 52.2% own mutual funds and retirement accounts, respectively, according to the most recent Survey of Consumer Finances data from the Federal Reserve Board (Aizcorbe, Kennickell, & Moore, 2003). This study found relatively low scores on investment diversification and earning an after-tax yield greater than the rate of inflation. Taken together, these findings indicate a need for financial education programs targeted toward investment novices, especially those with lower incomes. The ownership of publicly traded stocks is very concentrated among high-income and high-wealth families (Aizcorbe, Kennickell, & Moore, 2003). Two examples of available online courses for beginning investors with modest amounts to invest are the Investment Company Institute Education Foundation Investing for Success online course for African-Americans available at <http://www.ici.org/index.html> and the Cooperative Extension System Investing For Your Future basic investing course available at <www.investing.rutgers.edu>.

4. **Further Investigate and Address Cultural Differences**. This study found better compliance with recommended financial practices by respondents who were male, older, and had higher educational levels and incomes. It also found the highest average quiz scores among Asian respondents and the lowest among Hispanics and African-Americans. These differences in financial practices between ethnic groups merit additional investigation. For example, what cultural factors encourage or discourage savings and investments, written financial statements such as a budget or net worth calculation, and comparison-shopping strategies and the wise use of credit? Answers to these questions--with qualitative as well as quantitative data--can inform culturally appropriate educational intervention strategies.

5. **Recommend and/or Provide Periodic Financial Check-Ups**. It is obvious from this study and prior ones that consumers do not regularly prepare written financial documents such as a net worth statement, spending plan (budget), and financial goals. Whether the primary barrier is a lack of knowledge, motivation, and/or time, the fact remains that basic diagnostic financial calculations are not being regularly performed. This finding suggests the need for a simple "financial physical," where consumers could be provided with several diagnostic indicators (e.g., current credit report, net worth calculation, consumer debt ratio calculation, budget review, goal progress update, etc.) for a relatively inexpensive fee. Perhaps this is a niche that Extension educators can fill, to meet client needs and/or to generate revenue through user fees, because relatively few financial planners currently target the middle income market.

Conclusion

This study of Financial Fitness Quiz respondents is limited in the generalizability of its findings because the sample was convenient and non-random, and included respondents who were specifically directed to the quiz Web site by Extension educators and financial practitioners. Nevertheless, the findings, which are derived from a relatively large sample, are instructive to Extension educators. Finances affect each individual personally and are important in all program areas of Extension, including agriculture, family and consumer sciences, and 4-H youth development. Implications from this study include a need for education about investing, federal income taxation, and automated savings increase strategies, periodic professional financial assessments, and programs that address barriers to the adoption of recommended financial practices and cultural differences in financial management.

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