

Financial Manager Profile Scale: An Initial Analysis

An effective diagnostic tool for profiling financial managers has been a continuing focus of work by academics and financial management professionals. This article reports the initial results of a factor analysis of 38 financial attitudes and behaviors that identified four distinct profiles: Financially Anxious Managers, Sound Financial Managers, Credit Dependent Managers, and Financially Distressed Managers. The Financial Management Profile Scale (FMPS) appears to offer promise for use by financial educators and practitioners.

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The relationship between man and his money has intrigued observers since Biblical times. But it was not until research efforts were undertaken by investigators such as Goldberg and Lewis (1978), Rubenstein (1980), and Yamauchi and Templer (1982) that steps were taken to develop measurements of money attitudes. In 1982, Yamauchi and Templer created one of the most widely recognized money attitude scales. Based on clinical and theoretical literature, they identified three broad content areas concerning money and psychology: security, retention, and power-prestige. From this foundation, Yamauchi and Templer generated 62 statements that were later reduced to a 29-item Money Attitude Scale (MAS) based on use with a sample of adults.

According to Yamauchi and Templer (1982), factor analysis revealed four factors, Power-Prestige, Retention-Time, Distrust, and Anxiety, which provided a reliable assessment of money attitudes. A person who scored high on Power-Prestige likely held attitudes that indicated status seeking, competition, recognition, and acquisition. Conversely, low scorers on Power-Prestige tended to minimize the importance of money as a symbol of success and status. Individuals who scored high on Retention-Time emphasized the process of financial preparation, and generally held future security as a primary goal. People who scored high on Distrust appeared to maintain hesitant, suspicious, and doubtful attitudes involving money situations. Finally, someone who scored high on the factor Anxiety tended to view money as a source of anxiety, while low scorers could be described as less worrisome with and about money. A decade later, Anderson, Camp, Kiss, Wakita, and Weyeneth (1993), using the MAS with a sample of college students, had results inconsistent with those of Yamauchi and Templer.

Furnham (1984) subsequently expanded the focus of the Yamauchi and Templer (1982) research to include money attitudes and behaviors by combining items from the MAS with items from Goldberg and Lewis (1978) and Rubenstein (1980). Furnham's factor analysis results with a sample of adults in Great Britain were similar to those of Yamauchi and Templer with factors identified as Obsession, Power-Spending, Retention, Security-Conservative, Inadequacy, and Effort-Stability. The resulting Money Beliefs and Behaviors Scale (MBBS) caught the attention of family financial management researchers who began a continuing stream of research. Research studies with the MBBS using the entire 60 items (Bailey, Johnson, Adams, Lawson, Williams, & Lown, 1994; Bailey & Lown, 1992), a 42-item version (Bailey & Gustafson, 1986; 1991; Wilhelm & Varcoe, 1991) and a 38-item version (Wilhelm, Fridrich, & Varcoe, 1992; Wilhelm, Varcoe, & Fridrich, 1993) were conducted with samples of college students or adults. Some studies considered the relationship between MBBS results and selected demographic characteristics. MBBS results of these studies were similar to, but never consistent with, results reported by Furnham. Results on the relationship between money attitudes and demographic factors also were inconsistent.

Concurrently, two other related lines of inquiry were emerging. One focused on cognitive style, or the way an individual perceives, gathers, uses and perhaps acts on financial information. The Prochaska-Cue Inventory of Financial Style (1988; 1993) measured cognitive personal financial management style, identified as Analyzing and Holistic. The Rettig and Schulz (1991) Preferred Financial Decision Making Style of Individuals instrument identified two cognitive financial decision making styles described as the analyst-synthesist and realist-pragmatist approaches. The other line of inquiry emerged from financial practitioners who used additional methodologies to explain money attitudes on the basis of their work with clientele (e.g., Bernstein, 1993; Domini, 1988; Epstein & Garfield, 1992; Gurney, 1988; Mehrabian, 1991; Mellan, 1994; Pring, 1993). From this latter perspective, Epstein and Garfield (1992) asserted that the focus on financial style preference is overdue, because personal understanding of what preferences and attitudes means to an individual allows for greater control over financial behavior.

Building on the view of Epstein and Garfield (1992), this research evolved with the purpose of developing a tool which could serve as a foundation for (a) diagnosing clients' spending problems and underlying attitudes, (b)

encouraging client discussion to increase problem awareness, and (c) encouraging client discussion in the development of a mutually agreed upon diagnostic intervention plan. Specifically, the purpose of this paper is to present the initial results from the financial manager profile scale (FMPS) for use by financial educators and practitioners. The scale presented does not replicate Furnham's (1984) earlier work, but does include statements reflecting both financial behaviors and attitudes toward money.

Methodology

Instrument and Data Collection

Data for this study were generated from a U.S. Department of Health and Human Services demonstration project conducted in a Washington, D.C. SMSA county. The project was designed to link participants to community services that might offer them intervention(s) to stabilize their financial situation. A comprehensive assessment of the participants' financial situation, and financial counseling intervention, when applicable, were foundations of the project. Cooperative extension staff and trained volunteers conducted the computerized financial assessment and administered the 170-item questionnaire. The instrument assessed financial attitudes and practices, housing practices and attitudes, social support, family functioning, and several personality measures.

Data collection for the project extended from January 1992 through June 1993. Financial and descriptive data were converted to SAS readable files. Overall, 765-project clientele provided information for the financial profile, with 757 records actually available for use. Of the 765 participants, only 519 completed the survey instrument. Data for this research were limited to the 38 items assessing financial attitudes and behaviors on a four-point Likert-type scale where 1 equaled "strongly disagree" and 4 equaled "strongly agree." These items were generated from the literature and previous research to reflect a broad range of attitudes and behaviors characteristic of prescriptive financial management strategies as well as practices common to the financially distressed. Sample size was reduced to 375 for this analysis due to missing data on at least one item considered.

Sample Characteristics

Female respondents comprised 57.3% of the sample, with males comprising 42.7%. The ethnic background of respondents was diverse with 57.6% of respondents being White, 33.3% Black, and 9.1% responding as other, including American Indian, Hispanic, Asian, other, and unknown. The majority of respondents were married (55.1%), followed by respondents who indicated being separated, divorced, or widowed (27.3%). Single respondents constituted 9.5% of the sample. Other responses included single parent household (4.3%), shared living-family unit (3.2%), and other (.5%).

The majority of respondents held less than a four year college degree (85.2%), with the remainder (14.8%) having a baccalaureate degree or higher. Households with children were the target audience and the majority of respondents (92.3%) reported having three or fewer children per household, with the remainder reporting 4-10 children. The mean age of respondents was 37.07 years, with a range of 21 to 87 years. The diversity of the sample was particularly evident in the reported gross household earned and unearned income that ranged from no annual earnings to \$65,184, with a mean of \$6,802.

Limitations of the Data Set

Findings from this study should be considered with caution. First, this was a convenience sample of financial managers who acknowledged some level of financial distress in their household. They chose to participate in this project because of the perceived benefit of the financial education/counseling offered or the referral to other community resources. Second, when compared to the U.S. Bureau of the Census (1994) data for the nation in 1992, this sample was, on average, slightly older, less educated, and representative of greater racial diversity. Households were comprised of fewer married couples, and reported more children present. The income range also was lower; fewer households reported two earners.

Statistical Analysis

To provide a parsimonious description of the financial manager profiles, principal components factor analysis was performed on the 38 items. Twelve factors with eigenvalues of 1.0 or greater were extracted and accounted for 60.13% of the variance. Varimax rotation was used to simplify the factor loadings structure and to increase interpretability. With orthogonal rotation the factors remain uncorrelated, and the sum of the variance accounted for by the factors does not change. Finally, four factors were extracted on the basis of Catell's scree test (1966), Kaiser or eigenvalue-one criterion, and the interpretability of the rotated factors.

Items loading .40 or greater on each factor were retained. This method resulted in 29 financial attitude and behavior statements representing four factors, named for the dominant concepts. Nine items lacked sufficient loadings to support the internal consistency of the factors and were omitted from the scale. Cronbach's coefficient alpha was calculated for each factor to determine internal consistency.

Results and Discussion

Four underlying financial manager profiles emerged from the factor analysis: (a) Financially Anxious Managers, (b) Sound Financial Managers, (c) Credit Dependent Managers, and (d) Financially Distressed Managers. Rotated factor loadings and Cronbach's coefficient alpha for each factor are presented in Tables 1. A brief discussion of each factor and supporting item loadings follows.

Financially Anxious Managers

The first factor, labeled Financially Anxious Managers, consisted of 11 items representing individuals who worried about meeting normal daily and monthly living expenses. A common element linking the 11 statements was a sense of anxiety or worry concerning financial situations and tasks. A second theme focused on the inability to meet financial needs (e.g. expenses exceeding income, increasing debt, overdue notices). Someone scoring high on this factor would likely view their finances as a source of worry and anxiety. Alternatively, someone scoring low on this factor would be less worried about finances and money situations. Consistent with this profile, respondents indicated that a temporary decrease in household income would cause a major financial emergency. Savings were not available for meeting downpayment needs.

Sound Financial Managers

The second factor, Sound Financial Managers, consisted of eight items representing individuals who were most prepared for financial emergencies. A common theme was a focus on facts and a strong management orientation to plan, decide, and implement. These individuals had existing financial plans, accurate estimates of living expenses, a budget, and a solid understanding of financial statements and terms. Someone scoring high on this factor would likely approach financial problems carefully, methodically, and with great attention to details. A low score might characterize someone with a somewhat cavalier attitude regarding financial management.

Credit Dependent Managers

Factor 3, Credit Dependent Managers, had a Cronbach's alpha of .67. This factor, unlike any found in the literature review, suggested that someone scoring high on this factor probably had credit management problems, which, if poorly administered, might lead to increasing financial distress. The four items that comprised this factor suggested that a high score would be indicative of (a) someone who relies on credit almost exclusively for daily expenditures, (b) someone who finds emotional relief in spending money, and (c) someone who, although making minimum monthly payments on debt, may be pushed into a financial emergency if his/her income fails to meet expenditure needs. In summary, someone scoring high on this factor, would likely find credit a source of, as well as, protection from stress and anxiety.

Financially Distressed Managers

Factor 4, Financially Distressed Managers, described a manager with serious financial management problems, such as bouncing checks, disregarding spending plans, having accounts in collection, spending more money than earned or possessed, having money related arguments with family members, and regularly borrowing money to meet bills. This factor consisted of six items, and had an internal consistency of .61. A high score on this factor would likely characterize someone who was regularly confronted with financial and family conflicts. Such conflicts might be attributed to a failure to plan financially or a lack of discipline in managing spending.

Summary

The Cronbach coefficient alpha for the final form of the Financial Manager Profile Scale (FMPS) was .75. Coefficients for Factors 1, 2, 3, and 4 were .81, .70, .67, and .61, respectively. A coefficient alpha of .65 was considered sufficient to indicate scale reliability (Pedhazur & Schmelkin, 1991), and the scale and factor coefficients were in a range similar to those reported by other researchers (e.g., Bailey & Lown, 1992; Wilhelm, Varcoe, & Fridrich, 1993; Yamauchi & Templer, 1982). Mean scores for the total FMPS and Factors 1, 2, 3, and 4 were 2.64, 3.02, 2.80, 1.54, and 2.47, with standard deviations of .34, .59, .52, .61, and .62, respectively.

Table 1
Factors Generated from the Financial Manager Profile Scale

<u>Factors</u>	<u>Statements</u>	<u>Rotated Factor Loadings</u>
<u>Factor 1. Financially Anxious Manager</u> ($\alpha = .81$)		
	I worry about being able to meet my normal monthly living expenses.	.79
	It costs more for my family to live than what money we have coming in each month.	.71
	I am reluctant to open the mail for fear of finding more bills.	.67
	I worry about the total amount I have to pay each month on my charge accounts, credit cards, and/or other loans.	.56
	I have received overdue notices because of late or missed payments.	.54
	Conversations about money with family, friends, or co-workers make me anxious and uneasy.	.53
	Overall, I am more in debt than this time last year.	.53
	When purchasing large items, such as an appliance, a car, etc., I have little or no money available for a down payment.	.47
	Simple financial tasks, such as balancing the checkbook or paying bills, are postponed because the thought of it makes me anxious and uneasy.	.45
	A temporary decrease in household income would likely cause a major financial emergency for my household.	.45
	I have trouble meeting monthly health care expenses.	.42
<u>Factor 2. Sound Financial Manager</u> ($\alpha = .70$)		
	I have an accurate estimate of my actual monthly living expenses and my total debt.	.67
	I have a weekly or monthly budget that I follow.	.64
	I have an overall plan that will help me to reach my financial goals.	.60
	I study and understand the credit statements, credit terms, and determination of finance charges for my loan(s)/account(s).	.54
	Once I have made a decision about finances, I immediately take action.	.51
	I prefer to make current spending decisions based on a long-range financial plan.	.50
	My household financial records are detailed and accurate.	.49
	I want to consider as many detailed facts as possible before I make a financial decision.	.47
<u>Factor 3. Credit Dependent Manager</u> ($\alpha = .67$)		
	Although I make my payments, I often charge other purchases so my overall debt level rarely goes down.	.74
	Purchases, such as clothing or other basic necessities, which were previously paid for with cash are now purchased on credit.	.73
	I have recently opened additional store charge accounts or credit card accounts.	.61
	I can't resist a sale! Sometimes, I buy things I truly do not need, but want.	.55
<u>Factor 4. Financially Distressed Manager</u> ($\alpha = .61$)		
	I sometimes "bounce" checks.	.55
	I make spending plans, but I have trouble disciplining myself to carry them out.	.53
	Creditors' legal departments or collection agencies have written or phoned regarding my account(s).	.48
	I often spend more money than I have.	.45
	Money related arguments with family (spouse/partner, children, or others) occur frequently.	.41
	I have regularly borrowed money from family, friends, or coworkers to get me through a hard time	.40

The Financial Manager Profile Scale (FMPS) provided a reliable assessment of four distinct financial management profiles: (a) Financially Anxious Manager, (b) Sound Financial Manager, (c) Credit Dependent Manager, and (d) Financially Distressed Manager. Although the results of previous financial attitude scales have been inconsistent, there is general consensus among researchers that money attitudes can be grouped into factors such as: obsession, inadequacy, distrust, power, and anxiety (Watkins, 1994). Some of those same attitudes were apparent in the FMPS. The FMPS also is consistent with earlier scales in that the profiles represent a broad range of attitudes and proficiencies in dealing with personal finances.

Conclusions and Implications

Results of this study suggest that the FMPS, with continued use and refinement, may offer researchers and practitioners a unique assessment tool for understanding financial manager profiles. First, the instrument is brief, consisting of 29 attitude and behavior statements. Second, the scale goes beyond measuring money attitudes by providing a more comprehensive analysis of financial behaviors. Third, the profiles identified represent a range of behaviors and financial management styles. Fourth, the scale can be used as a foundation to diagnose spending problems and underlying attitudes, increase problem awareness, and develop diagnostic intervention plans. In brief, the FMPS is easy to administer and appears to be predictive of a range of financial manager profiles. The following discussion outlines how the FMPS can benefit financial educators and practitioners.

Scores developed from the FMPS could be used as a conduit to offering specific financial planning services, or in some cases, as a diagnostic tool for financial educators and practitioners in creating financial manager (i.e., client) profiles. The factors appear to provide predictive indications of the amount of financial management savvy someone possesses. These factors also can be used to indicate a need for more disciplined savings, spending plans, or strategies on the part of clientele. Because the factors are similar, yet distinct, the FMPS could be used to determine if a client needs education or counseling in simple financial tasks, credit and spending management, or comprehensive planning management. For example, clients who score high on factor two, Sound Financial Manager, represent individuals who already have their financial records in order, have a budget, and may have excess disposable income for investing. Individuals who score low on this factor probably need more remedial financial assistance that financial planners, for example, often are unable or unwilling to provide.

The FMPS could also be administered to couples to assess discrepancies in financial attitudes and practices reported by the partners. Results of the FMPS could be used to identify and resolve potential money conflict areas.

The FMPS could be useful with clients who simultaneously acknowledge financial mismanagement problems and a lack of skills, time, or interest to address those problems. The FMPS could be used to quickly and accurately pinpoint client financial management strengths and weaknesses.

In addition to its diagnostic usefulness for financial educators and practitioners, the FMPS also offers considerable potential to researchers interested in financial personality and behavioral attitudes in the creation of financial manager profiles. As one of the first financial manager profile scales that does not follow directly from work done by Furnham (1984), or focus entirely on money attitudes, the FMPS provides researchers the opportunity to test the scale with diverse populations, as well as unique homogenous samples. A subsequent step in the continuing development of a reliable scale is to consider the relationships between the individual profiles and selected demographic characteristics. The results of such tests will be important to financial educators and practitioners who require tools to create financial manager profiles quickly, efficiently, and effectively.

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Endnotes

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