# A Model of Credit Use and Financial Satisfaction

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This study tested a preliminary model of credit use and financial satisfaction based on the Deacon and Firebaugh (1988) systems approach to management. The dependent variable in the model was financial satisfaction; the independent variables were categorized into three groups: socio-economic characteristics, credit attitudes, and credit practices. Respondent feelings about their credit obligations was the most powerful predictor of financial satisfaction; high levels of concern were related to lower levels of satisfaction. The subjective assessment of credit obligations was more important in explaining financial satisfaction than the objective measurement of family debt burden such as debt repayment-to-income ratio. Fifty-two percent of the variation in the model of financial satisfaction was accounted for by socio-economic characteristics, credit attitudes, and credit practices.

# KEY WORDS: credit, financial satisfaction

Consumer credit is a financial management resource that can contribute to financial well-being if it is used wisely. Economic investment theory (Fisher, 1930; Herendeen, 1974) suggests that consumers can increase their utility through judicious use of debt. Both at the individual or family level and at the macro-economic level financial counselors and educators are concerned about the overuse and abuse of credit. Despite concerns about the growing problem of credit overuse and the rising bankruptcy rate, Americans continue to use high levels of credit (Willis, 1991).

Satisfaction with personal financial affairs is an important component contributing to life satisfaction (Andrews & Withey, 1976; Campbell, Converse & Rogers, 1976; Mammen, Helmick & Metzen, 1983). The ability to manage resources effectively is an important component of financial satisfaction (Godwin & Carroll, 1986; Hira, 1987; Hira & Mueller, 1987) yet Americans express high levels of dissatisfaction with the financial

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aspect of their lives (Andrews & Withey, 1976; Campbell, Converse & Rogers, 1976). While previous research has examined the relationship between a wide range of financial and economic variables with financial satisfaction, the relationship between credit use and financial satisfaction has received little attention except for the work of Hira (1987).

To what extent do credit management practices and attitudes affect financial satisfaction? The answer to this question may interest consumer educators and financial counselors. This study examined the relationship between credit attitudes and practices and financial satisfaction based on the Deacon and Firebaugh (1988) systems approach to management.

# **Related Studies**

Researchers have examined credit attitudes and practices in relation to demographic variables; highlights of a few studies are summarized here. While the results are not entirely consistent, the following variables have been linked to more favorable attitudes toward the use of credit: younger householders (Bloom and Steen, 1987), higher income households, higher education and persons who use credit cards (Mandell, 1973). Attitudes toward credit are positively related to selected credit practices (Danes & Hira, 1986).

The number of credit cards used by the household and the amount of money the money manager feels comfortable in owing on all credit cards are the most significant predictors of the debt-to-income ratio; both relationships are positive (Mueller & Hira, 1984). Additionally, the money manager's age, household size, and housing status are negatively related to the household's solvency status while the size of monthly debt payments is positively related to household solvency status (Hira, 1987). Hira also found that a lower debt-to-income ratio was related to higher financial satisfaction; this study was one of the few which included credit practices in assessing financial satisfaction.

Satisfaction is achieved when a need or desire is fulfilled; financial satisfaction is a measure of the difference between a person's desired and actual financial situation. Measuring financial satisfaction relies not only on objective factors such as income and wealth, but also on a subjective comparison to a standard or reference point (Hafstrom, 1983; Ackerman & Paolucci, 1983; Davis & Helmick, 1985). In fact, subjective measures of satisfaction and well-being were found to contribute substantially to the predictive value of objective measures (Ackerman & Paolucci, 1983; Davis & Helmick, 1983; Winter, Bivens, & Morris, 1984).

Use of financial management techniques recommended by financial educators contributes to financial satisfaction and to higher net worth (Titus, Fanslow & Hira, 1989; Lawrence, Carter, & Verma, 1988). Older age, smaller household size and use of implementing behaviors were related to higher financial satisfaction (Titus, Fanslow & Hira, 1989). Titus, Fanslow and Hira (1989) compared the financial satisfaction of a group of family money managers in 1982 and 1986. Despite an increase in net worth, the respondents were less satisfied with their finances in 1986. The researchers attributed the decreased satisfaction to lack of preparedness to meet emergency expenses, lack of understanding of net worth and cash flow, and to a negative economic climate in the region. Davis and Helmick (1983) concluded that financial aspirations are an important component of financial satisfaction.

Researchers have employed various measures of financial satisfaction ranging from one question to multi-item scales. While one question may appear to be an efficient measure, the alpha reliability of an instrument increases with the number of items (Carmines & Zeller, 1979) thus suggesting the use of a multi-item measure.

Godwin and Carroll (1986) developed a 10-item scale to measure satisfaction with financial management; the alpha reliability was .71. Hira (1987) employed an 8-item index yielding a gamma of .7. Hira, Fanslow and Titus (1989) used a 7-item measure of financial satisfaction resulting in a coefficient alpha of .79. Davis and Helmick (1985) reported a Cronbach's alpha of .74 for a 5-item scale. Fanslow, Titus and Hira (1989) used 10 Likert-type items that resulted in an alpha of .85.

The most economical and reliable measure of financial satisfaction identified by the literature search appears to be a six-item index measuring satisfaction with level of income, money for family necessities, ability to handle financial emergencies, amount of money owed, level of savings, and money for future needs of the family (Berger, Powell & Cook, 1988; Krannich, Riley, & Leffler, 1988). The alpha reliability coefficient of the instrument was reported as .87 and .91 in these two studies. Figure 1 Conceptual Model

Based on the conceptual framework, it was hypothesized that there would be a significant relationship between output represented by financial satisfaction and the input variables represented by the socio-economic characteristics of the family money manager and the throughput variables which were the family money manager's attitudes toward credit and credit practices.

# **Conceptual Foundation**

The family resource management model developed by Deacon and Firebaugh (1988) provided the theoretical foundation for this research. After reviewing a number of management models Heck and Douthitt (1982) concluded that the Deacon and Firebaugh model (1988) is best suited to empirical testing. Furthermore, Davis and Helmick (1985) concluded that the Deacon and Firebaugh systems theory is consistent with the widely used Campbell, Converse and Rogers (1976) conceptual framework of life satisfaction.

In the Deacon and Firebaugh model, the managerial subsystem consists of input, throughput and output. Input refers to the resources available to households and demands placed upon those resources. Throughput consists of the internal managerial process of planning and implementing behaviors that connect input and output. Output refers to the satisfaction or sense of well-being derived from demands being met (Deacon & Firebaugh, 1988). Research by Hira (1987) suggests that the throughput aspect of credit management can be a more important source of financial satisfaction than the input variables of resources and demands. For a concise but more detailed discussion of the use of the Deacon and Firebaugh framework in financial satisfaction research see Titus, Fanslow, & Hira (1989).

The systems approach assumes that satisfaction is attained through effective use of resources where inputs and throughputs combine to affect the output of financial satisfaction. A conceptual model was developed to illustrate the relationships among credit attitudes, credit practices, socio-economic characteristics and financial satisfaction (see Figure 1). Socio-economic characteristics represent input (demands and resources). Both attitudes toward credit use and credit management practices were considered part of the throughput (planning and implementing) subsystem. The use of credit as a means of obtaining goods and services contributes to financial satisfaction, which was the output (met demands, used resources and feedback) of the management process. The arrows in the model represent the hypothesized relationships between the independent variables (socio-economic characteristics, attitudes and practices) and the dependent variable financial satisfaction.

#### Procedures

#### Description of Variables

The dependent variable, financial satisfaction of the family money manager, was measured by a multi-item index (Berger, et al., 1988; Krannich et al., 1988). The index was created by summing responses to six items relating to financial satisfaction: level of income, money for family necessities, ability to handle financial emergencies, amount of money owed, level of savings, and money for future needs. The alpha reliability coefficient of the scale was reported as .87 and .91 respectively (Berger et al., 1988; Krannich et al., 1988). Each item was scored from 1 to 6; total scores could range from 6 (very dissatisfied) to 36 (very satisfied).

The socio-economic characteristics (inputs) included: age, sex, marital

status, household size, number of earners in the household, education, household income and savings. The throughput variables were: credit attitudes, amount of debt payment the family money manager felt comfortable with, the respondent's perception of appropriate purposes for borrowing money, and credit practices: types and numbers of credit cards used, amount of monthly credit payment, percentage of monthly income used for credit payment and feelings about current credit obligations. Respondents were classified as either convenience users or installment users of credit cards. Convenience users usually or always pay off the entire balance every month; installment users typically carry over a balance from month to month.

Monthly credit payments included mortgage, home equity loan and consumer credit obligations. Mortgage and consumer credit were combined on the assumption that decisions regarding consumer credit are made within a framework that takes mortgage obligations into consideration and vice versa. Thus the two categories of credit were considered fungible.

# Sample

The population for this study was the membership of a community credit union. The credit union membership was chosen due to its broad membership, the support of the board of directors and partial funding by the credit union. Five hundred subjects (6.4% of the population) were selected at random by computer.

# Data Collection

A pilot study was conducted to clarify wording and question format for the survey instrument. The instrument was revised and pretested with twenty credit union members. Further revision resulted in the instrument used in this study (Ju, 1989).

The questionnaire was mailed to the sample of 500 credit union members along with a cover letter signed by the credit union president and the researcher. The letter requested the responses of the person with the major responsibility for family or individual finances (family money manager). Data were collected according to methods developed by Dillman (1978). *Analysis* 

Frequency distributions were calculated for all variables. T-tests, analysis of variance (ANOVA), and correlation (Pearson correlation coefficient) were used to determine if the dependent variable financial satisfaction (output) was related to scores on the independent (input and throughput) variables: demographic characteristics and credit attitudes and practices.

The t-test was used to examine the difference in financial satisfaction scores between males and females and between convenience-type and installmenttype credit card users. ANOVA was used to determine whether financial satisfaction varied according to education level and feelings about credit obligations. Pearson r was employed to explore the relationship between financial satisfaction and 19 continuous scale independent variables.

Hierarchical multiple regression analysis was used to determine whether the three groups of independent variables were related to the dependent variable, financial satisfaction. The independent variables that were significantly related to financial satisfaction in the bivariate analyses were included in the hierarchical regression analysis. All categorical variables were recoded to the category midpoints. Dummy variables were created for nominal level variables.

For this study inputs and throughputs were considered to be acting simultaneously. The model being tested is a modified version of the Deacon-Firebaugh model. Future research with a larger sample could examine the input-throughput relationship using path analysis.

# Results

A total of 274 (54.8%) questionnaires contained sufficient data for use in the analysis. Reluctance to reveal financial information may account for the low response rate despite use of multiple follow-up procedures. Based on a review of the literature on non-response bias DeMaris and Jackson (1986, p. 461) concluded that in studies on topics such as this, "nonrespondents and respondents tend to be demographically similar, and nonresponse bias may be expected to pose little threat to the substantive conclusions."

# Description of Respondents

Respondents are evenly divided by gender and ranged in age from 21 to 65; the mean age is 37.5 years. The median educational level is completion of some college. Household size ranged from 1 to 11; the mean was 4.11 persons. The mean household income was \$34,398.

The majority of the respondents (78.8%) were married; 14.0% were single, and 4.7% were divorced. Forty-six percent of the households had one earner; 51.8% had two earners in the household (X = 1.62).

Savings refers to the amount of money saved or invested by the household of the family money manager in 1988, including IRAs and other retirement accounts. Amounts of savings ranged from none to \$20,000, with 54.2% of the respondents reporting less than \$2,000. The mean amount of savings was \$3316.

Seventy percent of respondents were home owners. An estimate of the market value of their homes was used as a proxy for wealth. Market values ranged from under \$20,000 to over \$100,000. The mean value was \$70,336.

Respondents were asked to indicate the maximum monthly credit payment, including mortgage, with which they felt comfortable. The median amount was in the \$500 to \$749 category. Regarding suitable uses of credit, respondents indicated the most appropriate use was for purchasing a home (95.2%), car (81.8%), education (79.9%), and paying medical expenses (65.2%).

Credit card use was reported by 230 respondents (83.9%); 38 (13.9%) did not use credit cards. Bank cards were the most commonly used credit card (n = 215; 79.4%); 52 (19.4%) used gasoline credit cards and 15 (5.6%)reported using travel and entertainment cards. The mean number of credit cards was 3.48. Over half of the respondents (55.2%) were installment credit card users; 30.8\% were convenience users.

# Credit Obligations

The monthly credit obligation was calculated by summing the amount for mortgages, home equity loans and all other consumer loans. Amounts ranged from none to \$3250, with 80% owing less than \$1000. The median obligation was \$300 to \$599.

The monthly credit obligation was divided by monthly household income to compute the proportion of income obligated to debt payment. The percentage of income used to repay debt varied from none to over 75%. Over two-thirds of the respondents (71.6%) used less than 30% of their income to repay all debt, including mortgages. The median debt-to-income ratio was in the range of 15 to 29%.

# Feelings About Credit Obligations

Respondents were asked: "How do you feel about the amount of credit you are using, considering the repayment of all your credit obligations including mortgages and home equity loans?" Approximately half of the respondents (52.9%) were somewhat or very concerned about meeting their credit

## **Credit Use and Financial Satisfaction** obligations (see Table 1).

# Financial Satisfaction

The scores on the financial satisfaction index ranged from 6 to 36 with higher scores representing higher satisfaction. The mean score was 19.8 (just slightly below the midpoint of the scale); the standard deviation was 6.1. The alpha reliability coefficient was .89, indicating a high degree of internal consistency in responses.

# Table 1 Feelings about Credit Obligations

	Number	%	
Very Concerned	28	10.2	
Somewhat Concerned	117	42.7	
Not at all Concerned	106	38.7	
No Credit Obligations	12	4.4	
Missing	6	2.2	
TOTAL	274	100.0	

# Testing the Model

The dependent variable in the model was the financial satisfaction score of the family money manager. The independent variables were categorized into three subsets: socio-economic characteristics, attitudes toward credit and credit practices. Categorical data were recoded to the category midpoint to convert to interval scale data. The .05 level of significance was employed.

# Socio-economic Characteristics

First, the relationship between the socio-economic characteristics and level of financial satisfaction of the family money manager was examined. For the following variables there was no significant difference in financial satisfaction: gender, marital status dichotomized as married or single (never married, divorced, separated, or widowed), household size and number of earners.

Pearson r (.1899, p<.001) revealed a significant positive relationship between age and financial satisfaction. Analysis of variance revealed significant differences in financial satisfaction among the five educational groups with the highest educational level being most satisfied. Pearson's r (.3836, P<.0001) indicated a positive relationship between household income and financial satisfaction. Pearson r also showed a positive link (.2961, P<.0001) between the market value of the home and financial satisfaction. The Pearson correlation coefficient between savings and financial satisfaction (.4465, P<.0001) indicated a positive relationship.

# Attitudes Toward Credit Use

Respondents reported the maximum monthly credit payment with which they felt comfortable, including mortgage, home equity loans and consumer credit. Responses varied from less than \$100 to \$3000. When category values were recoded to midpoints the mean was \$639.59. Pearson r (.2187, P < .0001) indicates that feeling comfortable with a larger monthly credit obligation is related to a higher financial satisfaction score.

Respondents indicated their feelings regarding borrowing money to pay for various items: house, car, education, medical expenses, furniture, household appliances, to pay debts, living expenses when income is reduced, vacation, clothing, holidays and fur coat or jewelry. Financial satisfaction scores were compared to responses to the purposes for borrowing money. Nine purposes for borrowing money were found to have significant relationships to level of financial satisfaction.

# Credit Practices

Types of credit card use were categorized into two groups: convenience (30.8%) or installment (55.2%). The result of the T-test was statistically significant (T = 6.80, p<.000); convenience users (X = 24.4) were significantly more satisfied than installment users (X = 18.0). Pearson r indicated no relationship between the number of credit cards used and financial satisfaction.

The mean monthly credit payment of the respondents was approximately \$643 (S.D. = \$540). Pearson r (-.1812) indicated a negative relationship between percentage of income devoted to debt repayment and financial satisfaction (p < .002).

Respondents identified the degree of concern (very concerned, somewhat concerned, not at all concerned or no credit obligations) about their credit obligations. Analysis of variance revealed significant differences among the

four groups (F ratio = 42.29, 3 d.f., F Prob. < .0000). Mean financial satisfaction scores ranged from 12.3 for the very concerned to 23.4 for those respondents who were not at all concerned.

# **Regression Analysis**

In the initial hypotheses tests 18 of the 24 independent variables were found to be significantly related to financial satisfaction. Of the 18 variables, six were socio-economic characteristics, ten concerned attitudes toward credit use and three related to credit practices.

To test the hypothesized relationships in the conceptual model, hierarchical regression analysis was used. The hierarchical form of multiple regression analysis involves entering groups of variables one at a time to test whether each group has a significant effect on the dependent variable. The coefficient of determination (R square) indicates how much of the variance in financial satisfaction scores is explained by the independent variables. The standardized regression coefficient (beta) indicates the unique effect of each variable when the effects of all the other variables are eliminated. The betas were used to examine the relative importance of the independent variables.

Variables that were not interval or ratio in scale were converted to dummy variables (two categories). These were: types of credit card use (convenience use or installment use), education (persons with less than a four-year college education and persons with bachelors' or advanced degrees) and feelings about credit obligations (concerned with credit obligations or not concerned).

Three blocks of variables were analyzed one at a time in hierarchical regressions (see Table 2). The coefficient of determination (R square) of .2287 for socio-economic characteristics indicates that 22.87% of the variance in financial satisfaction is attributable to socio-economic characteristics. When credit attitude variables were introduced into the regression, the R square increased to .3012 indicating that 7.25% of the variance in financial satisfaction was explained by the addition of the credit attitudes variables. Credit practice variables explained an additional 21.9% of the variance in financial satisfaction scores.

The betas indicate the relative importance of each variable in explaining the variance in financial satisfaction scores. The betas in Table 2 represent the unique effect of each variable on financial satisfaction when all three groups of variables are included in the regression analysis.

The results of the hierarchical multiple regression analysis support the

hypothesized relationship in the conceptual model of this study. Respondents concern (feelings) about their credit practices is the most important variable determining financial satisfaction (beta = -.4145).

The correlations among socio-economic variables were examined for interaction effects. Household income was moderately related to savings and home value. When household income was excluded from the multiple regression, R square was .50, which is close to the R square in the hierarchical regression (.5203). This suggests that income interacts with other variables such as amount of savings, value of home and age which generally increase through the life cycle. Income is typically linked to education as well.

# Summary and Discussion

The purpose of this study was to examine socio-economic variables, attitudes toward credit use, and credit practices in relation to financial satisfaction to test a preliminary model based on the Deacon and Firebaugh (1988) family resource management model. Eighteen independent variables were found to be significantly related to the financial satisfaction of the family money manager: five socio-economic characteristics, ten credit attitudes, and three credit practice variables. This study adopted a comprehensive approach to credit obligations by including all monthly credit payments including mortgages and home equity loans.

# Table 2

Hierarchical Regression of Financial Satisfaction

Variable	r	R Square	R Square Change	Beta
		1	U	
Socio-Economic Age	.193	.2287	.2287**	.0665
Home Value Household Income Savings	.192 .231 .384 .424			.0022 1120 .2289* .1378*
Credit Attitudes Credit Payment/ Felt Comfortable	.239	.3012	.0725*	.0367
Attitudes on House	- 246			- 1532*
Education Vacation	.098 .123			.0419 0510
Living Expenses To Pay Debts	.167 .303			.0315 .0103
Furniture Clothing	.153 .130			.0973 .0820
Appliances	.184 .149	5203	7101**	.0243 0473
Debt-to-Income Feelings Credit Card Use	160 566 .447	.5205	.2171	0452 4145** .2003*

\* P < .05 \*\* P < .001 df 18/185

*Note*: Dummy variables were created for credit card use: convenience user (1) or installment user (0); education: less than a four year college (0) or bachelor's degree or advance degrees (1); feelings about credit obligations: respondents who were concerned (1) or who were not concerned (0).

The results suggest that persons with the following characteristics are most likely to be satisfied with their financial situation: older, better educated, those with more valuable homes, higher incomes, active savers, persons who feel comfortable with large monthly credit payments, and persons who use their credit cards for convenience rather than installment buying. Factors related to lower levels of financial satisfaction include: higher debt-to-income ratios and concern over credit obligations.

Regression analysis revealed that financial satisfaction was affected not only by socio-economic characteristics but by attitudes towards credit use and credit practices. This result supported the hypothesized relationships between the independent and dependent variables represented in the conceptual model of this study (see Figure 1).

Respondents' subjective attitudes toward their use of credit was the most powerful predictor of financial satisfaction level; it had a greater impact on the level of financial satisfaction than the money manager's socio-economic characteristics, general credit attitudes, or actual behaviors regarding credit use. This finding, which is consistent with previous research on subjective factors influencing financial satisfaction (Ackerman & Paolucci, 1983; Davis & Helmick, 1983; Winter, Bivens, & Morris, 1984), suggests that attitudes toward credit use and obligations should be examined and evaluated in conjunction with objective measures such as debt-to-income ratios.

Despite low debt-to-income ratios (15-29% including mortgages), more than half of the respondents were concerned about their credit obligations. Data were collected near the end of the longest post war economic expansion yet respondents revealed considerable concern regarding their current credit obligations. There were no local or regional economic forces such as high unemployment or plant closures to explain this concern. Perhaps recent increases in credit obligations affected the financial satisfaction measure.

# Suggestions for Future Research

Future studies should include reference point variables as recommended by Davis and Helmick (1985). Similar studies should be conducted to determine if the results are replicable with larger, more diverse samples from different regions of the country. The conceptual framework should be tested further, adding more variables to the model.

In this study, concerns over credit use had a strong influence on financial satisfaction. It appears that concerns over credit obligations are not strongly related to socio-economic characteristics or debt-to-income ratios. Studies should be conducted to compare the money management practices of persons who are concerned with their credit obligations to the practices of those who are satisfied with their credit use and debt load. Since the data were collected during a period of economic prosperity a replication during a recession could provide a valuable contrast. This would be particularly true if the study were replicated with the same subjects to provide longitudinal data.

# Implications for Financial Counselors

The most significant predictor of financial satisfaction was the respondent's feelings about their financial situation. Thus financial counselors might use the question "How do I feel about my credit obligations?" in promoting their services. Particularly in a university community a print advertisement might be designed like a multiple choice question to include 4-5 response choices with instructions to those who answer "uncertain" or "concerned" to contact the counselor for a financial assessment. Since people in debt tend to wait until their situation is desperate and difficult to resolve before they seek help, advertising should be geared to potential clients who are concerned but are not on the brink of bankruptcy. A similar promotional campaign could be used by Cooperative Extension educators to advertise their financial management programs. Low to moderate income renters who are installment credit users is a prime target market for both counselors and educators.

Assessing the client's feelings about their financial situation should be among the first steps in the financial counseling process. This study confirms previous research supporting the importance of subjective measures of financial satisfaction. Used in conjunction with the measurement of financial ratios (Lytton, Garman & Porter, 1991), a financial satisfaction measure will provide more complete data for the counselor who needs to be aware of the client's perceptions as well as their balance sheet. A financial satisfaction measure would provide insight as to the client's motivation to change their situation. Use of the same satisfaction measure at a later date in an exit interview at the end of the counseling process shed light on the effectiveness of the counseling techniques.

# Implications for Educators

This study supports the value of teaching students a comprehensive credit management strategy. If money managers have specific plans to manage their consumer and mortgage debt they are more likely to be satisfied with

their financial situation than if they make separate decisions on each credit transaction. Further, building savings while repaying debt may enhance financial satisfaction since adequate savings is an important component of financial management and satisfaction. Maintaining a sense of control over their credit obligations appears to be a key factor influencing financial satisfaction. In addition, convenience users of credit cards were more satisfied than installment users. This finding supports a basic principle of personal finance to charge only what can be paid at the end of the month. Educators can emphasize the link with financial satisfaction when they teach about using credit cards.

Since few consumers are likely to calculate a debt-to-income ratio educators can emphasize simple tests for consumers to help them assess their use of consumer credit. While a debt ratio may be a valuable guide for identifying credit problems, a student's response to the question "How do I feel about my credit obligations?" may be a more effective way to pinpoint the teachable moment.

College students often express negative attitudes toward debt while incurring large amounts of consumer debt in the form of credit card balances, car loans, and education loans. By comparing the human capital investment aspects of education debt to the higher interest credit card debt which is often used to purchase consumables such as restaurant meals or depreciating non-durables, educators can assist students in making wise credit decisions.

Education does not always imply the need to change behaviors. With the relatively low debt-to-income ratios of these respondents, their level of concern about their credit obligations seems unwarranted. For some consumers, learning to analyze their credit obligations and put them into perspective (related to income and assets) may result in higher levels of financial satisfaction. Like Hira Fanslow, and Titus (1989) this study found dissatisfaction when objective measures indicted financial health. If this lack of satisfaction is due to lack of knowledge, further financial management education is needed.

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