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CREDIT USE AND FINANCIAL SATISFACTION
AMONG USU COMMUNITY CREDIT UNION MEMBERS

by

In-Sook Ju

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Home Economics and Consumer Education

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1989

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	
LIST OF FIGURES	
ABSTRACT	
Chapter	
I. INTRODUCTION	1
Statement of the Problem	2
Definition of Terms	3
II. REVIEW OF LITERATURE	4
Attitudes Toward Credit	4
Credit Practices	5
Financial Satisfaction	6
Theoretical Background	9
Hypotheses	12
III. METHODOLOGY	14
Description of Variables	14
Dependent Variable	14
Independent Variables	16
Population and Sample	17
Instrument Development	18
Reliability and Validity	20
Data Collection	21
Data Analysis	21
IV. RESULTS AND DISCUSSION	26
Profile of Respondents	27
Age and Gender	27
Education	28
Household Size	29
Household Income	30
Marital Status	31

Chapter	Page
Number of Earners	32
Savings	33
Housing	34
Total Monthly Credit Payment with Which the Family Money Manager Feels Comfortable	36
Perception of Appropriate Purposes for Borrowing Money	37
Types of Credit Card Payment	37
Number of Credit Cards Used	40
Amount of Monthly Credit Payment	41
Percentage of Monthly Income Used for Credit Payment	42
Feelings about Credit Obligations	43
Financial Satisfaction	44
Analysis of Hypotheses	48
General Hypothesis 1	49
General Hypothesis 2	58
General Hypothesis 3	62
Further Analysis	67
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	74
Summary	74
Conclusions	77
Recommendations	78
REFERENCES	80
APPENDICES	84
Appendix A. Survey Questionnaire	85
Appendix B. First Follow-Up Letter	96
Appendix C. Second Follow-Up Letter	98
Appendix D. Letter of Permission	100

LIST OF TABLES

Table	Page
1. Ages of Respondents	27
2. Gender of Respondents	28
3. Education of Respondents	29
4. Household Size of Respondents	30
5. Household Income of Respondents	31
6. Marital Status of Respondents	32
7. Number of Earners in the Household of the Respondents	32
8. Savings of Respondents	33
9. Home Ownership of Respondents	34
10. Market Value of the Home of Respondents	35
11. Total Monthly Credit Payment with Which the Family Money Manager Feels Comfortable	36
12. Perception of Appropriate Purposes for Borrowing Money	38
13. Comparison of Respondents with Salt Lake Residents on Perception of Appropriate Purposes for Borrowing Money: Percent	39
14. Types of Credit Card Use	40
15. Number of Credit Cards Used	41
16. Amount of Monthly Credit Payment	42
17. Percentage of Monthly Income Used for Credit Payment	43
18. Feelings about Credit Obligations	44
19. Financial Satisfaction of Respondents	45
20. Financial Satisfaction Scale: Percentage	46

Table	Page
21. Financial Satisfaction Scale: Statistics (N=270)	46
22. Financial Satisfaction Scale: Correlation Matrix	47
23. Financial Satisfaction and Age	50
24. Financial Satisfaction and Gender (N=269)	51
25. Financial Satisfaction and Education of the Respondents	51
26. Analysis of Variance of the Respondent's Financial Satisfaction and Educational Level	52
27. Financial Satisfaction and Marital Status	53
28. Correlation Between Financial Satisfaction and Household Size of the Respondents	54
29. Correlation Between Number of Earners in the Household and the Level of Financial Satisfaction	55
30. Financial Satisfaction and Household Income	56
31. Financial Satisfaction and Market Value of the Home	57
32. Correlation Between Financial Satisfaction and Savings	58
33. Correlation Between Financial Satisfaction and Monthly Credit Payment with Which the Family Money Manager Feels Comfortable	60
34. Correlation Between Financial Satisfaction and the Family Money Manager's Perception of Appropriate Purposes for Borrowing Money	61
35. Financial Satisfaction and Types of Credit Card Use	62
36. Correlation Between Financial Satisfaction and Number of Credit Cards Used	63
37. Monthly Credit Payment and Financial Satisfaction	64

Table	Page
38. Financial Satisfaction and Percentages of Household Income Used for Credit Payment . . .	65
39. Financial Satisfaction and Feelings about Credit Obligations	66
40. Analysis of Variance of the Respondent's Financial Satisfaction and Feelings about Credit Obligations	67
41. Hierarchical Regression of Financial Satisfaction	70

LIST OF FIGURES

Figure	Page
1. Family system with managerial subsystem emphasis	10
2. Conceptual model	12

ABSTRACT

Credit Use and Financial Satisfaction Among
USU Community Credit Union Members

by

In-Sook Ju, Master of Science
Utah State University, 1989

Major Professor: Dr. Jean M Lown
Department: Home Economics and Consumer Education

This study investigated the level of financial satisfaction of the family money manager in relation to socio-economic characteristics, attitudes towards credit, and credit practices. The population was members of the USU Community Credit Union. Data were collected with a mail survey questionnaire from a random sample of 500 subjects. After multiple follow-up attempts, the response rate was 55.2 percent.

The dependent variable was financial satisfaction; the independent variables were categorized into three groups: socio-economic characteristics, credit attitudes, and credit practices. The conceptual model of this study hypothesized that there is a relationship between the dependent and independent variables. Age, education, home value, household income, and savings were positively related to financial

satisfaction. Those who felt comfortable with larger amounts of credit payment were associated with higher income levels and higher satisfaction levels. People with favorable attitudes toward borrowing money to pay for houses were more likely to be satisfied with their financial conditions. Convenience credit card users were more satisfied than installment users. Higher debt repayment-to-income ratios were associated with lower levels of financial satisfaction. Respondents' feeling about their credit obligations was the most powerful predictor of financial satisfaction; people who were concerned about their credit obligations were likely to be less satisfied with their financial situations than those who were not. Concern over credit obligations was not highly related to socio-economic characteristics or debt repayment-to-income ratio. Accordingly, 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 financial satisfaction was accounted for by socio-economic characteristics, credit attitudes, and credit practices. Credit practices were more powerful predictors of financial satisfaction than socio-economic characteristics. This result illustrates the importance of credit management as a contributing factor in financial satisfaction.

CHAPTER I
INTRODUCTION

Consumer credit is the means by which many Americans acquire goods and services and pay for them out of future income. In this sense, credit may serve as a mechanism for coordinating the demands of the family life cycle and income cycle to maximize the overall household utility level.

Debt has been described as the American way of life. Consumer installment credit has grown dramatically since World War II, increasing from \$2.5 billion to \$620 billion in 1987 (U.S. Bureau of the Census, 1948; Caplovitz, 1987), and the annual average rate of increase in debt outstanding from 1945 to 1983 was 14.31 percent (Eastwood & Sencidiver, 1985).

The buy now, pay later concept has changed consumption and savings patterns in this country. The total value of emergency funds measured as a portion of household pretax income has fallen considerably, from 16 percent in 1977 to 7 percent in 1983, and savings rate as a percentage of personal income fell from 6 percent at the end of 1983 to less than 3 percent in 1985 (Hayes, 1987).

For all the benefits of using credit, the over commitment of future income can lead to great stress. Personal finance literature advises that obligating over 20 percent of

disposable income to debt payments may exemplify the misuse of credit. With increasing credit, consumers have jeopardized their health, marriages, and jobs because of their debt problems (Caplovitz, 1987). Families have reported that insufficient income to cover debts and lack of money management skills are the major reasons for financial problems (Wright, 1978).

It seems reasonable that those with greater economic resources are better able to cope with economic adversity and obtain higher levels of financial satisfaction than those with fewer resources. However, it is not only the amount of resources that contributes to the level of financial satisfaction. Individual management practices influence the ability to manage a given level of resources effectively (Hira, 1987). Accordingly, money management practices related to credit, including attitudes toward the use of credit, may have a financial impact on individuals and families and affect their level of financial satisfaction.

Statement of the Problem

The purpose of this study was to investigate the relationship between consumer credit use and level of financial satisfaction.

The specific objectives of this study are to:

1. Examine the relationship between socio-economic characteristics and the level of financial satisfaction of the family money manager.

2. Examine the relationship between attitude toward credit and the level of financial satisfaction of the family money manager.

3. Examine the relationship between credit practices and the level of financial satisfaction of the family money manager.

Definitions of Terms

Family money manager is the person who assumes the major responsibility for handling the family's personal finances.

Credit includes household debt composed of mortgage debt and consumer debt.

Financial satisfaction level refers to the difference between the financial situation the family money manager desires and the family's actual situation.

Savings is money saved or invested from present earnings including IRAs and the other retirement accounts.

Household income includes all salaries and other income sources.

CHAPTER II
REVIEW OF LITERATURE

Attitudes Toward Credit

Attitudes of professionals toward household credit have changed over time. In the early literature the use of consumer credit was described as irrational. Eubank (1938) contended that credit is used primarily by those who lack income. According to Mors (1944) consumer credit should be restricted to emergency use only.

However, a theory justifying the use of credit by consumers has been developed. According to the theory, the household can be viewed as a producer of consumption services, and it is rational for households to borrow to expand production to increase the utility of the household (Fisher, 1930; Herendeen, 1974).

In recent years, credit has played an increasingly important role in household finances. Research shows that attitudes about credit use are positive with regard to acquiring or maintaining a level of living, and this is in line with the sustained increase in consumer debt.

According to Bloom and Steen (1987), younger householders are more likely to favor borrowing than older householders,

regardless of the reason. Higher income households have more liberal attitudes toward holding a large amount of debt than less affluent households. Younger persons are more likely to think that credit card use is good than are their elders, and better-educated persons are more likely to approve of credit cards than the less educated. Mandell (1973) found that persons who use credit cards have more favorable attitudes toward credit than those who do not.

Credit Practices

Attitudes toward credit are positively related to credit practices (Danes & Hira, 1986). The recent growth of consumer credit has been attributed to a number of factors: recent economic expansion ("Changes in Consumer Installment Debt," 1987), lending institutions becoming more effective in inducing consumers to borrow, consumers experiencing changes in preferences toward consumption, the emergence of credit cards, new consumer durables, lower growth of real income in the late 1970s, and the proportion of the population between 18 and 45 (Eastwood & Sencindiver, 1985). Compared to other segments of consumer credit, credit cards have been the most rapidly expanding segment of consumer credit during the last decade. Between 1975 and 1981 credit card usage increased by 586 percent, and bank credit cards have been one of the largest areas of growth (Heck, 1983).

Recently borrowers began to use home equity-based debt in place of personal installment loans and other kinds of credit. According to Consumer Reports (Banking Part Three, "1988) home equity loans are relatively inexpensive type of debt compared to personal loans and credit cards. The majority of home owners takes equity loans to consolidate their debts or to finance automobile purchases, vacations, and even investments.

Household debt rises with household income, and households headed by men have about three times as much consumer debt as households headed by women. However, research results are somewhat inconsistent depending upon the characteristics of the sample and research objective; Symthe (1970) found that families with older household heads, higher incomes, and more education are less likely to be in debt than others. Families of employed wives make more monthly credit payments than nonemployed wives families (Noyes, 1982).

Financial Satisfaction

Level of financial satisfaction indicates the difference between the financial situation the household desires to be in and its actual situation. Research has shown that financial satisfaction relies not only upon the objective characteristics such as income and wealth, but also the subjective assessment of those objective conditions, that is,

the standard or base to which those characteristics are compared. Although differing in purpose and methods, most of the research in this field supports this conclusion (Hafstrom, 1983; Ackerman & Paolucci, 1983).

Household solvency status measured by debt-to-income ratio is an objective measurement of household well-being. Mueller and Hira (1984) studied the influence of sociodemographic characteristics and money management practices on household solvency status. They found that money management practices have stronger impacts on the debt-to-income ratio of a household than sociodemographic characteristics. 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. Additionally, Hira (1987) reported that the money manager's age, household size, and housing status are negatively related to the household's solvency status; size of monthly debt payments is positively related to the household's solvency status.

Winter, Bivens, and Morris (1984) examined the effects of subjective assessments and objective indicators of economic well-being on the financial satisfaction of households. The strongest predictor of satisfaction was a subjective indicator about the household's financial situation; those who reported

recent improvement were more likely to rate their situation as good and their satisfaction level as high than those who did not.

Kinsey and Lane (1978) studied the effect of debt on household welfare. They found that if consumers feel uncomfortable about being in debt, increasing debt-asset ratios will increase the probability of feeling worse. However, they concluded that debt can make a contribution to the overall sense of financial well-being of the household if it is used properly.

Hira (1987) studied factors influencing the level of the money managers' satisfaction. He reported that more money managers from smaller households are satisfied with their finances than those from larger households. A larger proportion of married than unmarried or divorced money managers are satisfied. Larger amounts of savings and lower debt-to-income ratios are associated with higher levels of satisfaction. According to a nationwide poll conducted by Liberman Research, Inc. in 1986, people with more money are more satisfied with their financial situation. Financial satisfaction increases with age, even though older people are more worried about their financial futures than are younger people (Goodman, 1986).

Researchers have employed various ways of measuring financial satisfaction. Some have used one question (Hafstrom and Dunsing, 1973; Winter, Morris & Rubio, 1988), while others

have used several items to compute a satisfaction index. Winter et al. (1984) used a satisfaction index that combines scores on three satisfaction measures: satisfaction with current income level, with present standard of living, and with current savings. Davis (1986) developed a comprehensive measurement of financial satisfaction. She found that about 65 percent of the variance in financial satisfaction is accounted for by three elements: consumption level, ability to meet emergency expenses and savings. Satisfaction with savings is a more powerful predictor of overall financial satisfaction than the other.

Krannich, Riley, and Leffler (1988) measured levels of satisfaction with a family's economic circumstances using an index constructed from six items: 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. They reported that inter-item correlations range between .52 and .82, item-to-corrected total correlations are between .62 and .82, and the alpha reliability coefficient for the index is .91.

Theoretical Background

The conceptual framework of the family resource management model developed by Deacon and Firebaugh (1981) provides the theoretical basis for this research (see Figure 1).

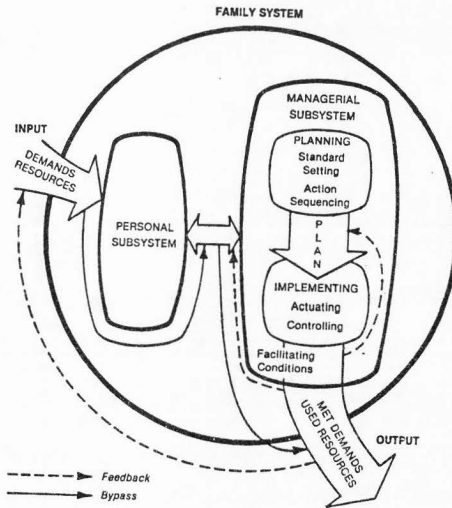


Figure 1. Family system with managerial subsystem emphasis. (Source: Deacon & Firebaugh, 1981, p31)

The model has three components of a managerial subsystem: input, throughput, and output. Input refers to the resources available to households and demands placed upon those resources. Output refers to the satisfaction derived from demands. Throughput refers to the internal process that connects input and output, and the effects of throughput are reflected in how well output coincides with input.

In the Deacon-Firebaugh model, money management practices are part of the throughput subsystem, and the implication is

that the throughput part of family members' money management skills can be a more valuable source of financial satisfaction than the input part of resources and demands.

The Deacon-Firebaugh model is similar to the economic investment theory developed by Fisher (1930) and Herendeen (1974), which suggests that consumers can increase market opportunities and their utility through judicious selection of debts and assets. The implication is that the satisfaction of consumers with low rates of time preference for consumption will not be decreased by debt but rather will be enhanced by the ability to allocate income and consumption over time. The use of debt as a means of obtaining goods and services represents the source of satisfaction, which is the output of the management process.

Permanent income theory may be a useful concept for explaining the use of consumer credit. Milton Friedman (1957) considered consumer purchases as a dynamic view of income. According to the theory, consumers base their consumption decisions not on current income but on the expected flow of income over their lifetimes. Analyses of the Panel Study on Income Dynamics have revealed that substantial income fluctuations are common among American households (Duncan, 1984). Based on the permanent income theory, households maintain their level of living despite income decreases and consume more than their current income because they anticipate higher future income.

These theories infer that money management strategies can contribute to a families' financial satisfaction. Based on the theoretical background, a conceptual model was developed for this study (see Figure 2). Credit attitudes and credit practices were selected from money management components as the throughput part of the model. Socio-economic characteristics were the input and financial satisfaction was the output. Socio-economic characteristics, credit attitudes and credit practices were identified as independent variables and financial satisfaction as a dependent variable. The arrows in the model represent the hypothesized relationships between the independent variables and the dependent variable.

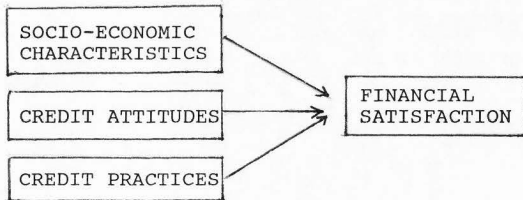


Figure 2. Conceptual model

Hypotheses

Based on the conceptual framework of this study, three general null hypotheses are proposed:

1. There is no relationship between the socio-economic characteristics of the family money manager and level of financial satisfaction.

2. There is no relationship between the family money manager's attitudes toward credit and level of financial satisfaction.

3. There is no relationship between the family money manager's credit practices and level of financial satisfaction.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the family money manager's financial satisfaction in relation to its socio-economic characteristics, attitudes toward credit use and credit practices.

Description of Variables

The dependent variable of this study is the financial satisfaction of the family money manager which is the output of the Deacon and Firebaugh family resource management model (see Figure 1). The independent variables are classified into three categories: socio-economic characteristics, attitudes toward credit use and credit practices. Socio-economic characteristics are the input part and credit attitudes and credit practices are the throughput part of the managerial system.

Dependent Variable

The dependent variable of this study was a multi-item index of financial satisfaction that was used by the W-167 Agricultural Experiment Station project, "Coping with Stress, Adaptation of Non-metropolitan Families to Socioeconomic Changes" (Krannich et al., 1988). Krannich et al. (1988)

reported inter-item correlations for the component items range between .52 and .82; item to corrected total correlations are between .62 and .82; the alpha reliability coefficient is .91.

The index was created by summing six items relating to financial satisfaction scores: level of income, money for family necessities, ability to handle financial emergencies, amount of money owed, level of savings, and money for future needs. Each item was scored from 1 to 6, and the results were index scores ranging from 6 (extreme dissatisfaction) to 36 (extreme satisfaction). Coefficient alpha was calculated for the financial satisfaction multiple-item scale as a measure of internal consistency.

In addition to the financial satisfaction index, a single item measuring satisfaction with overall financial situation (item 14h) was included in the survey questionnaire. The correlation of the scores on the financial satisfaction index to the scores on the single over-all financial satisfaction question was computed. Also previous studies included level of living as one component of financial satisfaction. Thus, in this study one item asking satisfaction with level of living (item 14g) was added to the financial satisfaction items to examine the relationship of satisfaction with level of living to the other components of financial satisfaction scale.

Independent Variables

The three categories of independent variables of this study were: socio-economic characteristics, attitudes toward credit use and credit practices. Variables included in each category were determined based on previous research.

The variables measuring socio-economic characteristics included age, sex, marital status, household size, number of earners in the household, education, household income and savings. Number of earners indicated number of adults in the household who regularly contributed to household income. Household income was household pretax income including all salaries and other income. Savings referred to money saved or invested including IRAs and other retirement accounts.

The variables measuring attitudes toward credit use included total amount of monthly debt payment the family money manager felt comfortable with and the money manager's perception of appropriate purposes for borrowing money. The items measuring credit practices are types of credit cards used, numbers of credit cards used, amount of monthly credit payment, percentage of monthly income used for credit payment and, feelings about credit obligations. Respondents were classified as either convenience users or installment users of credit cards. Convenience users are those who usually pay off the entire balance every month; installment users were those who usually carry over a balance from month to month.

Respondents who sometimes pay off the entire balance and sometimes carry over a balance from month to month are classified as installment users. Monthly credit payments were calculated by summing monthly mortgage, home equity loan and consumer credit payments. Percentage of monthly income used for credit payments was computed as monthly credit payment divided by average monthly household income.

Population and Sample

The population of this study was USU Community Credit Union members whose ages were between 21 and 65. Either Utah state residents or alumnus of USU could be a member. The age criterion was established in order to ensure direct access to the family or individual money manager. The cover letter requested that the survey questionnaire be filled out by the person with the major responsibilities for family finances.

The USU Community Credit Union members was chosen as the population of this study because of ease of access to the mailing list, members were known to have at least a savings account, and the study was sponsored by the USU Community Credit Union.

Five hundred subjects meeting the age criterion were selected at random by computer. The sample represented 6.4 percent of the population.

Instrument Development

The data collection instrument consisted of 36 items: 25 items were analyzed for this study. The remaining items were questions of interest to the Board of Directors of the USU Community Credit Union. The 11 items for the credit union member survey were not included in the data analysis for this study.

The survey questionnaire development was based on previous research and the conceptual framework of this study. A pilot study was conducted to clarify wording and question format; the original questionnaire was submitted for review to five selected faculty members and four graduate students in the department of Home Economics and Consumer Education and five graduate students in a family financial problems class. Directions and wording of questions were revised in response to their recommendations.

Pretesting was conducted to check the comprehensibility of questions and to determine whether the respondents understood the directions. Twenty subjects selected at random by computer from the population were included in the pretesting procedure. A survey questionnaire, cover letter, and metered return envelope were sent to the subjects. After two weeks a follow-up letter was mailed to nonrespondents.

Fourteen (70%) pretest questionnaires were returned; 13 were used to evaluate the instrument. One was undeliverable

because the addressee had moved. It was found that two respondents apparently did not consider mortgage and/or home equity loans as credit obligations. Accordingly, that question was revised.

The final questionnaire (Appendix A) was designed to collect data on:

1. Socio-economic characteristics
 - a. age (item 24)
 - b. sex (item 22)
 - c. marital status (item 23)
 - d. household size (item 7)
 - e. number of earners (item 8)
 - f. education (item 25)
 - g. household income (item 6)
 - h. market value of the home (item 10a)
 - i. savings (item 9)
2. Attitudes toward credit use
 - a. monthly credit payment the family money manager feels comfortable with (item 13)
 - b. perception of appropriate purposes for borrowing money (items 18a - 18i)
3. Credit practices
 - a. types of credit card payment (item 17a)
 - b. numbers of credit cards used (item 17b)
 - c. monthly credit payments (items 10b, 10c, 11)

- d. percentage of monthly income used for credit payment (items 6, 10b, 10c, 11)
 - e. feelings about credit obligations (item 12)
4. Financial satisfaction
- a. level of income (item 14a)
 - b. money for family necessities (item 14b)
 - c. ability to handle financial emergencies (item 14c)
 - d. amount of money owed (item 14d)
 - e. level of savings (item 14e)
 - f. money for future needs of family (item 14f)

Reliability and Validity

Reliability refers to the degree of consistency found in repeated measurement of the same phenomenon. Since repeated measurements never exactly equal one another, unreliability is always present to an extent. Validity concerns the extent to which an instrument measures what is intended to measure.

To enhance validity the data collection instrument was based on the conceptual framework of the study. It was reviewed by selected faculty members and graduate students in the department of Home Economics & Consumer Education at USU, and pretested with a subsample of the population. The dependent variable financial satisfaction scale was adapted from the W-167 Agricultural Experiment Station study; the alpha reliability coefficient was reported as .91 (Krannich et al., 1988).

Data Collection

Data were collected following the methods developed by Dillman (1978). The final questionnaire was mailed to the sample of 500 credit union members with a cover letter explaining the purpose of the study and a stamped return envelope. The first follow-up letter (Appendix B) was sent one week after the original mailing. The second follow-up letter (Appendix C) was sent to nonrespondents, along with a replacement survey questionnaire and metered return envelope, three weeks after the original mailing.

One advantage of the sampling method of this study was that all of the survey questionnaires were deliverable to current addresses. Two hundred and seventy-six questionnaires were returned representing a response rate of 55.2 percent. Two questionnaires were returned with almost all items unanswered and were excluded from the analysis of data. Therefore, 274 (54.8%) questionnaires were used in the data analysis.

Data Analysis

Frequency distributions were run on all data. The mean and median were reported as measures of central tendency. Mean is the arithmetic average; median is the value dividing a distribution in half. The median is the preferred measure

in a rank-ordered format with an open-ended upper or lower value. Ranges were reported for ordinal level measures, and standard deviations were measured for continuous-level data as a measure of dispersion.

T test, analysis of variance, and correlation were used to determine if financial satisfaction scores were associated with scores on the independent variables. For all analyses, the significance level was set at .05.

The t test is a statistical procedure to test the difference between the means of two groups. In this study, sex and types of credit card use were dichotomous variables; the t-test was conducted to examine if there was a statistically significant difference in the level of financial satisfaction between males and females or between convenience-type credit card users and installment-type credit card users.

Analysis of variance (ANOVA) is a statistical method for dividing the variation observed in experimental data into different parts, each part assignable to a known source (Ferguson, 1981). ANOVA can be used to test the significance of the difference between a number of group means. Differences between the group means are judged statistically significant by comparing them to the variation within the groups. In this study ANOVA was used to determine whether a significant relationship existed between financial satisfaction and education and feelings about credit obligations.

Correlation is a measure of association between two variables. The measure of association reflects the degree to which variation in the dependent variable is accounted for by the variation in the independent variable. The most common measure of association for interval or ratio-scale data is Pearson's r . Pearson's r represents the magnitude and direction of the linear relationship between two variables; it does not make any assumptions regarding cause and effect relationships. The magnitude ranges from -1.0 to 1.0; the closer to an absolute value of 1, the stronger the relationship. Zero represents no linear relationship, and an absolute value of one means there is a perfect linear relationship between the two variables. The direction of the relationship can be positive or negative. A positive relationship means that as scores in one variable increase, so do scores in the other variable. A negative relationship indicates that as either variable increases the other decreases. The coefficient of determination, r square, refers to the proportion of variance in one variable which is associated with the scores in the other variable.

In this study Pearson's r was employed to determine the relationship between financial satisfaction and nineteen continuous scale independent variables. Some categorical variables were recoded to the category midpoint. Age, household size, household income, number of earners, home value, savings, monthly credit payments with which the family

money manager feels comfortable, the family money manager's perception of appropriate purposes for borrowing money, numbers of credit cards used, monthly credit payment and percentage of monthly income used for credit payment were the variables for which Pearson's r was administered to examine their relationships to the level of financial satisfaction.

Multiple regression analysis is used to examine the variation in a dependent variable as accounted for by a number of independent variables. The multiple regression equation is used to predict scores on a dependent variable from the knowledge of scores in the independent variables. The multiple regression technique is intended for use with interval or ratio-level variables, but dichotomous variables can be used if not too many are included (Wagenaar, 1981). Some statisticians have argued that ordinal-level variables can be used without necessarily biasing the resulting statistics. Interpretation of the multiple R is done by using R square, a multiple coefficient of determination. Conceptually, R indicates the optimum linear relationship between the dependent variable and the independent variables. R square indicates how much of the variance in the dependent variable is explained by a set of independent variables. Beta, the standardized regression coefficient, reveals the unique effect of each of the independent variables on the dependent variable, controlling for the other variables in the

regression equation; beta allows investigation of the relative importance of each independent variable.

In this study, hierarchical multiple regression analysis was conducted. It involved entering groups of variables one at a time to test whether the groups of variables had a significant impact on the dependent variable. The independent variables that had significant relationships to financial satisfaction in the bivariate analysis were retained to be included in the hierarchical regression analysis. Five socio-economic variables, ten credit attitudes variables, and three credit practice variables were included in the hierarchical regression analysis. All categorical variables were recoded to the category midpoints, and dummy variables were created for nominal level variables. Multiple R square and R-square change were examined to determine how much of the variance in scores on financial satisfaction were accounted for by each of the three groups of variables. The beta standardized regression coefficient was used to determine the unique effect of each of the independent variables on financial satisfaction with the effects of all the other variables in the whole regression model eliminated.

CHAPTER IV
RESULTS AND DISCUSSION

The purpose of this study was to examine the financial satisfaction of the family money manager in relation to attitudes toward credit use and credit practices. The population of this study was USU Community Credit Union members whose ages were between 21 and 65.

It is commonly acknowledged by family researchers that it is difficult to convince people to disclose financial information and practices. Accordingly, in this study most of financial questions requested answers on a categorical basis rather than asking for actual figures. Only one respondent wrote on the questionnaire "it's none of your business," and refused to answer household income and savings questions. However, several respondents cut out their identification numbers from the cover sheet of the questionnaire even though anonymity was assured. The reluctance to reveal financial information may account for the lower response rate (55.2 %) in spite the use of multiple follow-up procedures.

Two hundred and seventy-six questionnaires (55.2 %) were returned; 147 questionnaires were received within one week of the original mailing, 77 questionnaires were returned after

the first follow-up letter, and 50 questionnaires were returned after the second follow-up.

Profile of Respondents

Age and Gender

Five hundred subjects were selected from USU Community Credit Union members of ages 21 to 65. The birth-date information was obtained from credit union records. Respondents ranged in age from 21 to over 65, with only one over 65. The median age was between 31 and 40. The age and gender data are summarized in Table 1 and 2.

Table 1

Ages of Respondents

	Number	Percent	Cum. Percent
Under 21	0	0.0	0.0
21 - 30	81	29.6	29.6
31 - 40	90	32.8	62.4
41 - 50	58	21.2	83.6
51 - 60	33	12.0	95.6
61 - 65	8	2.9	98.5
Over 65	1	.4	98.9
Missing	3	1.1	100.0
Total	274	100.0	

Table 2

Gender of Respondents

	Number	Percent
Male	134	48.9
Female	137	50.0
Missing	3	1.1
Total	274	100.0

Education

The highest level of education completed ranged from high school or less to advanced degree. The median educational level of the respondents fell in the "some college" category. Approximately half of the respondents (48%) had completed a bachelor's degree. A higher proportion of the respondents had completed four or more years of college compared with the general Utah population; in 1980, almost 20 percent of the Utah population had completed at least four years of college (Mondrans, Smith & Moss, 1986). The high educational level of respondents may be because many USU Community Credit Union members are employed by or graduated from Utah State University.

Table 3

Education of Respondents

	Number	Percent
High School Graduate or Less	37	13.5
Business or Vocational School	15	5.5
Some College	83	30.3
College Graduate (4yr.)	68	24.8
Advanced Degree(M.S., PH.D., etc.)	64	23.4
Missing	7	2.6
Total	274	100.0

Household Size

Household size refers to the number of individuals supported by household income. Household size of the respondents varied from 1 to 11, with almost four-fifths (80.7%) being five or fewer, and a small percentage (2.6%) being 9 or more. The mean household size of the respondents was 4.11. This is a little higher than the Utah mean; in 1980, the mean number of persons per household in Utah was 3.19 for whites, which is the dominant racial group in the state (Mason, 1986).

Table 4

Household Size of Respondents

	Number	Percent	Cum. Percent
1 - 2	93	34.0	34.0
3 - 4	86	31.4	65.4
5 - 6	64	23.3	88.7
7 - 8	23	8.4	97.1
9 or More	7	2.6	99.7
Missing	1	.3	100.0
Total	274	100.0	

Household Income

Household income consisted of total household income before taxes, including all salaries and other income, for 1988. The reported household income of the respondents ranged from under \$5,000 to \$80,000 or more. The median was in the \$30,000 to \$34,999 range. When each of the category values was recoded to the category midpoint, the mean household income of the respondents was \$34,398. In 1986, the mean household personal income in Utah was \$35,580 (U. S. Department of Commerce, 1987). Therefore, the mean household income of the respondents is very close to the state mean.

Table 5

Household Income of Respondents

	Number	Percent
Under \$5,000	5	1.8
\$5,000 - \$9,999	9	3.3
\$10,000 - \$14,999	23	8.4
\$15,000 - \$19,999	18	6.6
\$20,000 - \$24,999	40	14.6
\$25,000 - \$29,999	24	8.8
\$30,000 - \$34,999	33	12.0
\$35,000 - \$39,999	22	8.0
\$40,000 - \$44,999	30	10.9
\$45,000 - \$49,999	10	3.6
\$50,000 - \$59,999	30	10.9
\$60,000 - \$69,999	9	3.3
\$70,000 - \$79,999	8	2.9
\$80,000 or More	5	1.8
Missing	8	2.9
Total	274	100.0

Marital Status

The majority of the respondents (78.8%) were married. About 14 percent were single, and 4.7 percent of the respondents were divorced.

Table 6

Marital Status of Respondents

	Number	Percent
Single	37	13.5
Married	216	78.8
Divorced	13	4.7
Separated	3	1.1
Widowed	2	.7
Missing	3	1.1
Total	274	100.0

Number of Earners

Number of earners refers to the number of adults who regularly contribute to the household income. Most households had either one or two earners.

Table 7

Number of Earners in the Household of the Respondents

	Number	Percent
1	126	46.0
2	142	51.8
3	2	.7
4 - 5	2	.7
Missing	2	.7
Total	274	100.0

Savings

The amount of money saved or invested in 1988, including IRAs and other retirement accounts, varied from none to \$25,000 or more, with 54.2 percent of the respondents reporting less than \$2,000. The median was in the under \$2,000 category.

Table 8

Savings of Respondents

	Number	Percent	Percent
None	41	15.5	15.5
Under \$2,000	106	38.7	54.2
\$2,000 - \$3,999	47	17.2	71.4
\$4,000 - \$5,999	29	10.6	82.0
\$6,000 - \$7,999	14	5.1	87.1
\$8,000 - \$9,999	14	5.1	92.2
\$10,000 - \$12,999	11	4.0	96.2
\$13,000 - \$15,999	3	1.1	97.3
\$16,000 - \$18,999	4	1.4	98.7
\$19,000 - \$21,999	0	0.0	98.7
\$22,000 - \$24,999	0	0.0	98.7
Missing	5	1.8	100.0
Total	274	100.0	

Housing

Respondents were asked to estimate the market value of their homes, and this was the only variable providing some indication of household wealth. Previous studies used home equity to measure household wealth, calculated by subtracting the amount of money owed on the mortgage from the assessment of the market value of the home (Winter et al., 1984). However, it was considered to be too unreliable to obtain accurate information regarding the amount of home equity with this mail survey. Accordingly, in this study an estimate of the market value of the home was treated as a representation of family wealth. Almost three-quarters of respondents were home owners (see Table 9).

Table 9

Home Ownership of Respondents

	Number	Percent	Cum. Percent
Own	193	70.4	70.4
Rent	66	24.1	94.5
Some Other Arrangement	12	4.4	98.9
Missing	3	1.1	100.0
Total	274	100.0	

The estimated home value of the owners among the respondents ranged from less than \$20,000 to \$100,000 or more (see Table 10). At the close of 1988, the median price of existing homes in Salt Lake City was \$67,700 (Kiplinger News Letter, 1989). Also the Logan Board of Realtors reported that the median value of the homes sold in Cache Valley during the first quarter of 1989 was \$80,000. The median home value of the respondents was in the \$70,000 to &79,999 category. After each of the category values was recoded to the category

Table 10

Market Value of the Home of Respondents

	Number	Percent	Cum. Percent
Less than \$20,000	9	4.7	4.7
\$20,000 - \$29,999	1	.5	5.2
\$30,000 - \$39,999	2	1.0	6.2
\$40,000 - \$49,999	15	7.8	14.0
\$50,000 - \$59,999	31	16.1	30.1
\$60,000 - \$69,999	38	19.7	49.7
\$70,000 - \$79,999	42	21.8	71.5
\$80,000 - \$89,999	15	7.8	79.3
\$90,000 - \$99,999	19	9.8	89.1
\$100,000 or More	21	10.	100.0
Total	193	100.0	

midpoint, the mean home value estimated by the respondents was \$70,336. The median was \$75,000, which is slightly higher than in Salt Lake City but lower than the homes sold in Cache Valley.

Total Monthly Credit Payment
with Which the Family Money
Manager Feels Comfortable

Respondents were asked to indicate the maximum monthly credit payment including mortgage they felt comfortable with.

Table 11

Total Monthly Credit Payment with Which the Family Money
Manager Feels Comfortable

	Number	Percent
Less Than \$100	25	9.1
\$100 - \$249	31	11.3
\$250 - \$499	57	20.8
\$500 - \$749	69	25.2
\$750 - \$999	49	17.9
\$1,000 - \$1,499	26	9.5
\$1,500 - \$1,999	6	2.2
\$2,000 - \$2,499	3	1.1
\$2,500 - \$2,999	3	1.1
Over \$3,000	0	0.0
Missing	5	1.8
Total	274	100.0

Their responses ranged from less than \$100 to \$2,500-\$2,999. There were no responses in the over \$3,000 category. The median was in the \$500 to \$749 range.

Perception of Appropriate Purposes for Borrowing Money

Respondents were asked if it is all right for someone like themselves to borrow money and pay interest to cover the cost of various items. The responses were different depending upon the purpose for borrowing money. The vast majority of the respondents indicated that credit could most appropriately be used for purchasing a home (95.2%), car (81.8%), education (79.9%), and medical expenses (65.2%). Compared with the responses from a previous study of Salt Lake residents (Noyes, 1982), respondents of this study had more liberal attitudes towards credit use for purchasing cars, whereas they had more conservative attitudes toward borrowing money for medical expenses, furniture, appliances, debt repayment, living expenses, vacation, clothing, holidays, and fur coats or jewelry (see Table 13).

Types of Credit Card Payment

Types of credit card use were categorized into two groups: convenience or installment. Convenience users are persons who usually pay off the entire balance in their credit card account each month; installment users usually carry over

Table 12

Perception of Appropriate Purposes for Borrowing Money

Appropriate Use	Strongly			Strongly	
	Agree	Agree	Mixed	Disagree	Disagree
House	176	81	10	3	0
Car	87	137	34	9	3
Education	67	121	60	13	8
Medical Expenses	34	114	86	26	8
Furniture	9	53	81	78	46
Appliances	10	57	82	74	43
Pay Debts	12	56	77	66	55
Living Expenses	7	39	67	79	73
Vocation	4	25	46	92	98
Clothing	3	21	43	98	98
Holidays	4	24	43	82	110
Fur Coat or Jewelry	2	10	22	56	173

Table 13

Comparison of Respondents with Salt Lake Residents on
Perception of Appropriate Purposes for Borrowing Money:
Percent

<u>Appropriate Use</u>	<u>Strongly Agree or Agree</u>	
	<u>Respondents</u>	<u>S. L. Resident</u>
Car	81.8	67.8
Education	79.9	81.0
Medical Expenses	65.2	90.0
Furniture	23.3	34.7
Appliances	25.3	41.6
Living Expenses	17.1	36.1
Pay Debts	25.6	35.4
Vacation	11.1	13.7
Fur Coat or Jewelry	4.6	1.2

Note: Salt Lake residents did not have 'mixed' category.
(Source: Noyes, 1982)

a balance from month to month, or sometimes pay off the entire balance and sometimes carry over a balance from month to month. Over half of the respondents were installment users, and 31 percent were convenient users (see Table 14).

Table 14

Types of Credit Card Use

	Number	Percent
Convenience User	82	30.8
Installment User	147	55.2
Did not use Credit Cards	37	14.0
Total	266	100.0

Number of Credit Cards Used

Respondents were asked to indicate the number of credit card accounts used at least once in 1988. The credit cards could be retail store credit cards, gasoline credit cards, bank cards, travel and entertainment cards, or any other credit cards. Two hundred and thirty (83.9%) used one or more credit cards; 38 (13.9%) used no credit cards of any type. Two hundred and fifteen (79.4%) used bank cards; 52 (19.4%) used gasoline credit cards; 15(5.6%) used travel and entertainment cards. The total number of credit cards used ranged from 1 to 15. The mean was 3.48, and the standard deviation was 2.94.

Table 15

Number of Credit Cards Used

	Number	Percent
0	38	13.9
1 - 3	117	42.7
4 - 6	72	26.2
7 - 9	29	10.6
10 - 12	9	3.3
13 - 15	3	1.1
Missing	6	2.2
Total	274	100.0

Amount of Monthly Credit Payment

Total monthly credit payment was calculated by summing the amount of money paid in a month for mortgages, home equity loans and other consumer loans. The ranges of monthly credit payments of the respondents were from none to \$3250, with 80 percent carrying less than \$1000. The median was in the \$300 to \$599 category.

Table 16

Amount of Monthly Credit Payment

	Number	Percent
Less Than \$100	30	10.9
\$100 - \$249	31	11.3
\$250 - \$499	69	25.2
\$500 - \$749	59	21.5
\$750 - \$999	34	12.4
\$1,000 - \$1,499	32	11.7
\$1,500 - \$1,999	10	3.6
\$2,000 - \$2,499	5	1.8
\$2,500 - \$2,999	2	.7
Over \$3,000	2	.7
Total	274	100.0

Percentage of Monthly Income
Used for Credit Payment

Monthly credit payment was divided by average monthly household income to compute the proportion of income obligated to debt payment. Debt-to-income ratio was used as a measure of household solvency status in previous studies (Muller & Hira, 1984), and it represented the ratio of total household debt to annual household income. However, actual practices of credit payment in relation to household income can indicate a households' ability to repay debt.

The percentage of income used to repay debt varied from none to over 75 percent. Over two-thirds of the respondents (71.6%) used less than 30 percent of their income to repay debt. The median value was 15 to 29 percent.

Table 17

Percentage of Monthly Income Used for Credit Payment

	Number	Percent
0 - 14	98	35.8
15 - 29	98	35.8
30 - 44	47	17.2
45 - 59	13	4.7
60 - 74	6	2.2
Over 75	12	4.4
Total	274	100.0

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 very concerned or somewhat concerned with their credit obligations. Table 18 summarizes the responses.

Table 18

Feelings about Credit Obligations

	Number	Percent
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

Financial Satisfaction

Respondents' satisfaction with their financial situation was measured on six-point Likert-type scales in relation to 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 family (see Tables 19, 20, and 21). This financial satisfaction scale was used by the W-167 Agricultural Experiment Station study (Krannich et al., 1988). Responses to the six items were combined into a financial satisfaction index, with higher scores representing higher satisfaction. The possible range of scores in the index was from 6 to 36. The mean score of the respondents was 19.8 and the standard deviation was 6.1.

Table 19

Financial Satisfaction of Respondents

<u>Scores</u>	<u>Number</u>	<u>Percent</u>	<u>Cum. Percent</u>
6 - 9	18	6.6	6.6
10 - 13	25	9.1	15.7
14 - 17	43	15.7	31.4
18 - 20	71	25.9	57.3
21 - 24	71	25.9	83.2
25 - 28	28	10.2	93.4
29 - 32	13	4.7	98.1
33 - 36	2	.7	98.9
Missing	3	1.1	100.0
Total	274	100.0	

Table 20

Financial Satisfaction Scale: Percentage

<u>Scale</u>	Extremely Dissatisfied.....				Extremely Satisfied	
	1	2	3	4	5	6
Level of Income	5.9	16.6	23.2	39.9	12.9	1.5
Money for Family						
Necessities	5.2	12.2	27.7	33.2	17.0	4.8
Ability to Handle Financial						
Emergencies	8.9	12.9	26.9	31.4	14.4	5.5
Amount of Money Owed	7.7	13.3	32.8	21.0	14.4	10.7
Level of Savings	17.8	21.9	26.7	22.2	8.9	2.6
Money for Future						
Needs of Family	16.2	19.6	32.8	20.7	8.9	1.8

Table 21

Financial Satisfaction Scale: Statistics (N=270)

<u>Scale</u>	<u>Mean</u>	<u>Std Dev.</u>
Level of Income	3.41	1.13
Money for Family Necessities	3.59	1.20
Ability to Handle Fin. Emergencies	3.47	1.28
Amount of Money Owed	3.53	1.38
Level of Savings	2.90	1.32
Money for Future Needs of Family	2.92	1.26

Inter-item correlations for the satisfaction index ranged from a low of .40 to a high of .81 (see Table 22); corrected item-to-total correlations varied from .58 to .82, indicating that the component items are highly correlated to each other. The alpha reliability coefficient for the index was .89, indicating a high degree of internal consistency of response patterns to the component items.

Table 22

Financial Satisfaction Scale: Correlation Matrix

	2	3	4	5	6
1 Level of Income	.7018	.4121	.4009	.4235	.4908
2 Money for Family Necessity		.6117	.5720	.5760	.6334
3 Ability to Handle Fin. Emergencies			.5465	.6332	.6604
4 Amount of Money Owed				.5983	.6386
5 Level of Savings					.8081
6 Money for Future Needs of Family					

A single item of overall financial satisfaction was included in the survey questionnaire to be compared with the financial satisfaction index scores. Scores on the overall financial satisfaction item ranged from 1 (extremely dissatisfied) to 6 (extremely satisfied). The mean was 3.49, and the standard deviation was 1.13. The Pearson-product

moment correlation coefficient between the scores on overall financial satisfaction and the scores on the financial satisfaction index was .82. This indicates that about 67.2 percent of variation in the scores on overall financial satisfaction can be accounted for by variation in the composite financial satisfaction scores. This high correlation indicates that one single overall financial satisfaction may be as good as a multi-item satisfaction index. However, the proximity of the items in the questionnaire should be considered, since it is likely that respondents tend to answer consistently.

Analysis of Hypotheses

The t test, analysis of variance, and Pearson's r correlation were used to analyze the hypotheses. For all statistical analysis the level of significance was set at .05 to determine whether the results were statistically significant or not.

The dependent variable was the level of financial satisfaction of the family money manager. Scores from six different satisfaction items were combined to create a financial satisfaction index. The possible range of scores in financial satisfaction index was from 6 to 36, with higher scores representing higher levels of satisfaction. The independent variables had three subsets: socio-economic characteristics, attitudes toward credits and credit

practices. The socio-economic category included the family money manager's age, sex, education, marital status, household size, number of earners, household income, savings and market value of the home. Attitudes toward credit use variables were the maximum monthly credit payment with which the family money manager feels comfortable and the family money manager's perception of appropriate purposes for borrowing money. Credit practice variables included types of credit card use, number of credit cards used, amount of monthly credit payment, percentage of monthly income used for credit payment and feelings about credit obligations.

There were three general null hypotheses; under the three general hypotheses, specific null hypotheses were proposed to conduct a significance test for each of the independent variables.

General Hypothesis 1

There is no relationship between the socio-economic characteristics of the family money manager and the level of financial satisfaction.

Hypothesis 1a. There is no relationship between the family money manager's age and level of financial satisfaction.

Each age category value was recoded to the category midpoint to convert the categorical data into ratio-scale

data. The mean age of the respondents was 37.54 years, and the standard deviation was 11.02.

Pearson's r was used to examine the degree of relationship between age and financial satisfaction of the respondents. There was a statistically significant relationship between age and financial satisfaction of the family money manager, and the null hypothesis was rejected (see Table 23). However, an r square of .0361 indicates that only 3.61 percent of variance in financial satisfaction can be explained by age. The positive relationship means that older people are more likely to be satisfied with their financial conditions than younger people. Previous studies reported similar results (Symthe, 1970; Winter et al., 1984; Goodman, 1986).

Table 23

Financial Satisfaction and Age

	Case	Pearson's r	Prob.	r square
Age	271	.1899	.001	.0361

Hypothesis 1b. There is no relationship between gender of the family manager and level of financial satisfaction.

The t-test was conducted to examine the relationship between gender and financial satisfaction level. The calculated t-value was 1.38, but it was not a statistically significant result (see Table 24).

Table 24

Financial Satisfaction and Gender (N=269)

	Case	Mean	Std Dev	T-Value	Prob.
Male	134	20.2836	5.920	1.38	1.69
Female	135	19.2593	6.269		

Hypothesis 1c. There is no relationship between the education of the family money manager and the level of financial satisfaction.

Educational levels of the respondents were divided into five categories (see Table 25).

Table 25

Financial Satisfaction and Education of the Respondents

	Case	Mean	Std Dev
High School Graduate or Less	36	20.7778	5.7625
Business or Vocational School	15	19.8000	4.7839
Some College	83	17.8092	6.3773
College Graduate (4 yr.)	68	19.7794	4.8678
Advanced Degree	63	22.0635	6.7319
Total	265	19.8415	6.1241

Analysis of variance was used to measure any significant differences among the five education groups regarding level of financial satisfaction (see Table 26). There was a

statistically significant relationship between education of the family money manager and financial satisfaction level. The null hypothesis was rejected. However, previous studies have reported that level of education has no bearing or negligible relationship to level of financial satisfaction (Americans and their Money, 1984; Winter et al., 1984).

Table 26

Analysis of Variance of the Respondent's Financial Satisfaction and Educational Level

<u>Source</u>	<u>df</u>	<u>Sum of Squares</u>	<u>Mean Squares</u>	<u>F Ratio</u>	<u>F Prob.</u>
Between Groups	4	686.3683	171.5921	4.8415	.0009
Within Groups	260	9214.9751	35.4422		
Total	264	9901.3434			

Hypothesis 1d. There is no relationship between marital status of the family money manager and level of financial satisfaction.

Responses to the marital status were categorized into five areas: single (never married), married, divorced, separated, and widowed. Since the number of people in each category was not of sufficient size to yield accurate statistical results, respondents were grouped into two categories: married or single. Single includes never married,

divorced, separated, and widowed people.

The t test was employed to determine whether financial satisfaction is associated with marital status. The result was not statistically significant (see Table 27). However, Hira (1987) reported that married money managers are more likely to be satisfied with their financial conditions than unmarried or divorced money managers.

Table 27

Financial Satisfaction and Marital Status

	Cases	Mean	Std Dev	T-Value	Prob.
Married	214	20.1168	6.142	1.85	.066
Single	55	18.4182	5.833		

Hypothesis 1e. There is no relationship between household size and the financial satisfaction of the family money manager.

Respondents indicated the number of people supported by their household income. Number of household size varied from one to eleven. The mean was 4.11 and standard deviation was 6.13 (see Table 28).

Pearson's r was computed to measure the degree of association between household size and the level of financial

satisfaction of the family money manager. Pearson's r was $-.0918$, and the result was a chance occurrence under the null hypothesis.

Table 28

Correlation Between Financial Satisfaction and Household Size of the Respondents

	Case	Pearson's r	Prob.	r Square
Household Size	271	$-.0918$.066	.0084

Hypothesis 1f. There is no relationship between number of earners in the household and the level of financial satisfaction of the family money manager.

Number of earners in the household referred to number of adults who regularly contributed to the household income. Number of the respondents varied from one to five. Forty-six percent of the respondents had one earner, and 51.8 % had two earners in the household. The mean was 1.62, and the standard deviation was .8533 (see Table 29).

Pearson's r was $-.0175$, indicating a negative relationship between the two variables. However, relationship was not statistically significant.

Table 29

Correlation Between Number of Earners in the Household and the Level of Financial Satisfaction

	Case	Pearson's r	Prob.
Number of Earners	271	-.0175	.461

Hypothesis 1g. There is no relationship between household income and the level of financial satisfaction of the family money manager.

Household income of the respondents was reported in fourteen categories ranging from under \$5,000 to \$80,000 or more. Each category value was recoded to the category midpoint. The mean household income of the respondents was \$34,398, and the standard deviation was \$17,987.

Pearson's r was used to determine the degree of relationship between household income and financial satisfaction of the family money manager. The calculated r indicates a moderate relationship between the two variables. The coefficient of determination (r^2) indicates that about 14.7 % of the variance in the scores on financial satisfaction can be explained by the scores on household income. The result was statistically significant, and the null hypothesis was rejected (see Table 30). There was a statistically significant relationship between household

means that higher household income is associated with higher levels of financial satisfaction of the family money manager.

Previous research supports this significant positive relationship between household income and financial satisfaction. Winter et al. (1984) reported the Pearson's r between household income and financial satisfaction is .286 which is significant at the .05 level. Winter, Morris, and Rubio (1988) reported a correlation between household income and financial satisfaction is .24.

Table 30

Financial Satisfaction and Household Income

	Case	Pearson'r	Prob.	r Square
Household Income	266	.3836	.000	.1471

Hypothesis 1h. There is no relationship between home value and the level of financial satisfaction of the family money manager.

Market values of the homes of the respondents ranged from under \$20,000 to over \$100,000. Each category value was recoded to the category midpoint. The mean value of the home of the respondents was \$70.336, and the standard deviation was \$23,279.

The correlation coefficient between the market value of the home and financial satisfaction was statistically significant. The coefficient of determination indicates that about 8.77 percent of the variation in scores on financial satisfaction are associated with value of the home. The positive relationship indicates that people with more valuable homes are more likely to be satisfied with their financial situations.

Table 31

Financial Satisfaction and Market Value of the Home

	Case	Pearson's r	Prob.	r square
Home Value	191	.2961	.000	.0877

Hypothesis 1h. There is no relationship between savings and the level of financial satisfaction of the family money manager.

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. Responses ranged from none to \$25,000 or more. Each category was recoded to the category midpoint. The mean amount of savings was \$3315.99, and the standard deviation was \$4323.94.

The correlation coefficient between savings and financial satisfaction indicates a moderate relationship (see Table 32).

The coefficient of determination (r square) of .1994 indicates that 19.94 percent of variance in the scores on financial satisfaction can be accounted for by amount of savings. The positive relationship indicates that higher savings levels are associated with higher levels of financial satisfaction.

This result is consistent with the findings of previous research. Hira (1987) reported a larger proportion of money managers with more money saved are more satisfied with their financial situation than those with less money saved. Winter et al. (1984) reported that the correlation between savings and financial satisfaction is .437.

Table 32

Correlation Between Financial Satisfaction and Savings

	Case	Pearson's r	Prob.	r square
Savings	267	.4465	.000	.1994

General Hypothesis 2

There is no relationship between attitudes toward credit use and the level of financial satisfaction of the family money manager.

Hypothesis 2a. There is no relationship between the monthly credit payment the family money manager feels comfortable with and the level of financial satisfaction of the family money manager.

Respondents reported the maximum monthly credit payment with which they feel comfortable, including mortgage and consumer credit. Responses varied from less than \$100 to the \$2,500 to \$2,999 category. Each category value was recoded to the category midpoint. The mean was \$639.59, and the standard deviation was 474.46.

Pearson's r was used to determine whether there is a relationship between the monthly credit payment with which the family money manager feels comfortable and the level of financial satisfaction. Pearson's r for the two variables was .2187 (see Table 33). The coefficient of determination (r square) was .048; 4.8 % of the variance in scores on financial satisfaction is explained by the scores on the monthly credit payment with which the family money manager feels comfortable. The positive relationship indicates that larger monthly credit payments with which the family money manager feels comfortable are related to a higher financial satisfaction level. This result is statistically significant and the null hypothesis was rejected. However, Pearson's r between household income and the monthly credit payment with which the money manager feels comfortable was .57. This correlation implies that

persons with more income may feel comfortable with larger amount of credit payment.

Table 33

Correlation Between Financial Satisfaction and Monthly Credit Payment with Which the Family Money Manager Feels Comfortable

	Case	Pearson's r	Prob.	r square
Monthly Credit Payment Felt Comfortable With	269	.2187	.000	.0478

Hypothesis 2b. There is no relationship between the family money manager's perception of appropriate purposes for borrowing money and the level of financial satisfaction of the family money manager.

Respondents indicated their feelings regarding borrowing money and paying interest to cover the cost of 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. The responses varied from 1 (strongly agree) to 5 (strongly disagree) according to the purposes for borrowing money.

A correlational technique was employed to examine the relationship between scores on financial satisfaction and scores in each of the purposes for borrowing money. Table 34 summarizes the degree of relationship between financial satisfaction and the family money manager's perception of appropriate purposes for borrowing money.

Table 34

Correlation Between Financial Satisfaction and the Family
Money Manager's Perception of Appropriate Purposes for
Borrowing Money

Appropriate Purposes	Case	r	Prob.	r square
House	269	-.2457	.000	.0604
Car	269	.0346	.286	.0012
Education	268	.1096	.037	.0120
Medical Expenses	267	.0549	.186	.0030
Furniture	266	.1744	.002	.0304
Appliances	265	.1581	.005	.0250
To Pay Debts	265	.3136	.000	.0983
Living Expenses	264	.1859	.001	.0346
Vacation	264	.1508	.007	.0227
Clothing	262	.1285	.019	.0165
Holidays	262	.1437	.010	.0206
Fur Coat and Jewelry	262	.0768	.108	.0059

* P < .05

Nine purposes for borrowing money were found to have significant relationships to level of financial satisfaction. Borrowing to pay for a house is the only variable that was related negatively to the level of financial satisfaction, indicating persons who tended to agree with borrowing money for buying a house are more satisfied with their financial situation. Persons with favorable attitudes toward borrowing

money for education, furniture, appliances, to pay debts, living expenses when income is reduced, vacations, clothing, and holidays scored lower levels of financial satisfaction.

General Hypothesis 3

There is no relationship between credit practices and the level of financial satisfaction of the family money manager.

Hypothesis 3a. There is no relationship between types of credit card use and the level of financial satisfaction of the family money manager.

Types of credit card use were categorized into two groups: convenience or installment. The t-test was administered to determine if the means in the two groups were significantly different. The result was statistically significant, and the null hypothesis was rejected (see Table 35).

According to Ethridge (1982), installment users were more likely to have lower incomes and have a higher number of children under 18. In addition, installment users were more likely to feel it is difficult to save ahead to buy consumer durables.

Table 35

Financial Satisfaction and Types of Credit Card Use

	Mean	Std Dev	T-Value	Prob.
Convenience User	24.3659	7.62	6.80	.000
Installment User	17.9524	5.153		

Hypothesis 3b. There is no relationship between number of credit cards used and the level of financial satisfaction of the family money manager.

Respondents reported the number of credit cards used at least once in 1988. The number of credit cards used ranged from zero to fifteen. Pearson's r was used to investigate if the level of financial satisfaction is related to the number of credit cards used. The result is a likely chance occurrence under the null hypothesis (see Table 36).

Table 36

Correlation Between Financial Satisfaction and Number of Credit Cards Used

	Case	Pearson's r	Prob.	r square
Number of Cards	268	.0440	.347	.0019

Hypothesis 3c. There is no relationship between total monthly credit payment and the level of financial satisfaction of the family money manager.

Respondents were asked to report their monthly mortgage payment, monthly home equity loan payments, and consumer credit payments. Each category value was recoded to the midpoint of the range. The amount of total monthly credit payment was computed by summing the three monthly credit

payments (see Table 37). The mean monthly credit payment of the respondents was approximately \$643 and the standard deviation was \$540.34.

Correlation was measured to determine the degree of association between monthly credit payment and the level of financial satisfaction. Pearson's r showed that the result is not statistically significant under the null hypothesis (see Table 37).

Table 37

Monthly Credit Payment and Financial Satisfaction

	Mean	r	Prob.	r square
Monthly Credit Payment	642.95	.0239	.347	.0006

Hypothesis 3d. There is no relationship between financial satisfaction and percentage of household income used for credit payment.

The total monthly credit payment was divided by average monthly household income to compute percentage of household income used for credit repayment. The mean percentage of income used for credit payments was 25.69, and the standard deviation was 45.94; an average of 25 percent of household income was obligated to debt. The large standard deviation indicates that the scores of the respondents are spread far from the mean.

A correlation analysis was conducted to examine the degree of relationship between financial satisfaction and percentage of household income used for credit payment (see Table 38). The negative relationship indicates that larger proportions of income used to repay debt are associated with lower satisfaction levels. The result was statistically significant and the null hypothesis was rejected. Deluca and Bowers (1985) reported that higher debt repayment-to-income ratios are associated with convenience type of credit card use.

Table 38

Financial Satisfaction and Percentage of Household Income Used for Credit Payment

	Case	r	Prob.	r Square
Percentage of Income Used for Credit Payment	264	-.1812	.002	.0328

Hypothesis 3e. There is no relationship between financial satisfaction and feelings about credit obligations.

Respondents identified feelings they had about the amount of credit they were using, considering the repayment of all their credit obligations and including mortgage and home equity loans. Responses included very concerned, somewhat

concerned, not at all concerned, don't have credit obligations and don't know. Five respondents in the don't know category were eliminated from the data analysis for two reasons: the number of people was not of sufficient size to yield accurate statistical results and the content of the category did not add any meaning to the purpose of this study. Results are summarized in Table 39.

Table 39

Financial Satisfaction and Feelings about Credit Obligations

<u>Response</u>	<u>Case</u>	<u>Mean</u>	<u>Std Dev</u>
Very Concerned	28	12.2500	4.5593
Somewhat Concerned	117	18.3419	5.6678
Not At All Concerned	106	23.4151	5.3468
No Credit Obligations	12	22.5833	5.7281
Total	263	19.9316	6.4704

Analysis of variance was administered to determine if there were any significant differences among the four groups regarding the proportion of variance explained in scores on financial satisfaction. The calculated F-value was 37.4500. There were statistically significant differences among the four groups regarding financial satisfaction level, and the null hypothesis was rejected (see Table 40). Scores on

financial satisfaction are significantly related to how concerned respondents are about their credit obligations.

Table 40

Analysis of Variance of the Respondent's Financial Satisfaction and Feelings about Credit Obligations

<u>Source</u>	<u>df</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F Ratio</u>	<u>F Prob.</u>
Between Groups	3	3371.325	1123.7752	42.2918	.0000
Within Groups	258	6401.4721	24.8119		
Total	261	9772.7977			

Further Analysis

As a result of initial hypotheses tests, 18 of the 24 independent variables were found to have a statistically significant relationship to the level of financial satisfaction. In this study, the independent variables were categorized into three groups; socio-economic characteristics, attitudes toward credit use and credit practices. Of the eighteen variables, six variables were socio-economic characteristics, ten variables were attitudes toward credit use, and three variables belonged to the credit practices group. The variables in socio-economic characteristics which had significant relationships with financial satisfaction were age, education, household income, market value of the home and

savings. In the credit attitudes category, the amount of money the family money manager feels comfortable with, the family money manager's perceptions of appropriate purposes for borrowing money on house, education, furniture, household appliances, to pay debts, vacation, clothing, holidays and living expenses when income is reduced were the variables that were related to the level of financial satisfaction. In the credit practices category, types of credit card use: convenience versus installment, percentage of household income used for credit payment and feelings about credit obligations were significantly associated with financial satisfaction.

In an effort to better understand the hypothesized relationships in the conceptual model of this study, hierarchical regression analysis was administered. The hierarchical form of multiple regression analysis involves entering groups of variables one at a time to test whether the groups of variables have a significant effect on financial satisfaction. The hierarchical regression analysis allows the investigation of the variation in scores on financial satisfaction as accounted for by socio-economic characteristics, attitudes towards credit use, and credit practice variables. The coefficient of determination (R square) indicates how much of the variance in scores on financial satisfaction is explained by the independent variables involved in the regression model. The standardized

regression coefficient (beta) indicates the unique effect of that variable with the effects of all the other variables eliminated. The betas were used to examine the relative importance of the independent variables to identify the variable having the greatest impact on financial satisfaction. The significance of the coefficients was calculated by using the t statistic for the standardized regression coefficient and the F-ratio for the coefficient of determination.

The use of multiple regression presupposes that the variables involved are interval or ratio scales. All of the eighteen variables which were ascertained to have a significant relationship to financial satisfaction were included in the hierarchical regression analysis. Variables that were not interval or ratio in scale were converted to dummy variables; types of credit card use, education and feelings about credit obligation were dummy variables. The two groups of credit card users were convenience user (1) or installment user (0). The education level was dichotomized by the standard of bachelors' degree; persons with less than a four-year college education (0) and persons with bachelors' or advanced degree (1). Feelings about credit obligations were classified into two groups: people who were concerned with credit obligations (1) or people who were not (0).

Three blocks of variables were analyzed one at a time in hierarchical regressions. Table 36 reveals the results.

Table 41

Hierarchical Regression of Financial Satisfaction

<u>Variable</u>	<u>r</u>	<u>R Square</u>	<u>R Square Change</u>	<u>Beta</u>
Socio-Economic		.2287	.2287	
Age	.193			.0665
Education	.192			.0022
Home Value	.231			-.1120
Household Income	.384			.2289
Savings	.424			.1378
Credit Attitudes		.3012	.0725	
Credit Payment Felt Comfortable	.239			.0367
Attitudes on House	-.246			-.1532
Education	.098			.0419
Vacation	.123			-.0510
Living Expenses To Pay Debts	.167			.0315
Furniture	.303			.0103
Clothing	.153			.0973
Holidays	.130			.0820
Appliances	.184			.0243
	.149			-.0473
Credit Practices		.5203	.2191	
Debt Payment-to- Income	-.160			-.0452
Feelings	-.566			-.4145
Credit Card Use	.447			.2003

* P < .05

** P < .001

df 18/185

Note. Dummy variable was created for credit card use: convenient user (1), and installment user (0); education: less than a four year college (0), and bachelor's degree or advance degrees (1); feelings about credit obligations; people who were concerned (1), and people who were not (0).

The coefficient of determination (R square) of .2287 in socio-economic characteristics indicates the proportion of variance in financial satisfaction attributable to the variables in socio-economic characteristics group; 27.87 percent of the variation in financial satisfaction was explained by age, education, market value of the home, household income and savings all together. This is a statistically significant result at the .05 significance level.

When credit attitude variables were introduced into the regression, the R square changed from .2287 to .3012. R square change was .0725: 7.25 percent of the variance in financial satisfaction was explained additionally by the credit attitudes variables. This is a significant result, indicating that the increment added to the explained variance in financial satisfaction by the credit attitudes variables is statistically significant.

There was a dramatic change in R square when credit practice variables¹ were entered into the regression analysis.

1: Credit practice variables explained about 39 percent of variance in financial satisfaction in the multiple regression equation. In the hierarchical multiple regression, the R square change due to the addition of credit practice variables was reduced to .22 because of the interaction effects between socio-economic characteristics, credit attitudes, and credit practice variables.

By including credit practice variables, 21.91 percent of the variance explained in financial satisfaction was added (see R square change in Table 35). This is a statistically significant increase in R square.

The betas indicate the relative importance of each variable in terms of contribution to variance explained in financial satisfaction. The betas in Table 35 represent the unique effect of each variable on financial satisfaction when all the three groups of variables are included in the regression analysis. The variables with a statistically significant impact on financial satisfaction level were household income, savings, attitudes toward credit use for house, feelings about credit obligations, and types of credit card use. Increases in household income and savings made a contribution to financial satisfaction. Persons who tended to disagree with borrowing money for houses were more likely to be less satisfied with their financial situations than those who did not. Convenience credit-card users scored higher than installment users on the financial satisfaction scale. Persons who were concerned with their credit obligations had lower financial satisfaction levels than those who were not.

The results of the hierarchical multiple regression analysis support the hypothesized relationship in the conceptual model of this study; there is a statistically significant relationship between socio-economic

characteristics, credit attitudes, and credit practices and financial satisfaction. The beta for feelings about credit obligations suggests that respondents' concern about credit obligations is the most important variable explaining financial satisfaction.

The correlations among socio-economic variables were examined in considering interaction effects. Household income was moderately related to savings and home value. When excluding household income from the multiple regression, R square was about .50, which is close to the R square in the hierarchical regression. This result indicates that income has interaction effects with the other variables in the multiple equation.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the relationship between socio-economic characteristics, attitudes toward credit use, and credit practices and the dependent variable, the level of financial satisfaction of the family money manager. A summary of the objectives, procedures, and results are included in this chapter. Conclusions based on the results and recommendations concerning future research are presented.

Summary

A sample of five hundred subjects was selected at random by computer from USU Community Credit Union members. Data were collected with a mail survey questionnaire; the response rate was 55.2%. Respondents divided into male and female almost by half, and the mean age was 37.5 years. Twenty-four independent variables were grouped into three categories for the data analysis. The categories and the number of the variables in each category were: socio-economic characteristics, 9; attitudes toward credit use, 10; credit practices, 5. The t test, Pearson product-moment correlation

coefficient, and analysis of variance were administered to test the hypothesized relationship between the dependent variable and the independent variables.

Eighteen independent variables were found to significantly related to the level of financial satisfaction. Of the 18 variables, 5 were in the socio-economic characteristics category, 10 were in the credit attitudes category, and 3 variables were concerned with credit practices. The results are summarized as:

1. Older respondents are more likely to be satisfied with their financial situations than younger respondents.
2. Higher educational levels are associated with higher levels of financial satisfaction.
3. Respondents with more valuable homes are more likely to be satisfied with their financial conditions.
4. Higher income levels are related to higher financial satisfaction levels.
5. Respondents who saved the most money during the previous year are more satisfied with their financial satisfaction than those who saved less money.
6. Feeling comfortable with large monthly credit payment is associated with higher levels of financial satisfaction.
7. People with favorable attitudes toward borrowing money for houses are more likely to be satisfied with their financial situations. However, positive attitudes toward borrowing money for education, furniture, household

appliances, debt repayments, living expenses, vacation, clothing, and holidays are related to lower financial satisfaction.

8. Higher debt-to-income ratios are related to lower levels of financial satisfaction.

9. People who are concerned about their credit obligations are likely to be less satisfied with their financial situations than those who are not.

10. Convenience credit card users were more satisfied than installment users.

Three groups of independent variables with a significant relationship to financial satisfaction were included in the hierarchical regression analysis. Each of the three categories of the independent variables had a significant impact on the level of financial satisfaction. Therefore, financial satisfaction level 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 2): respondents's socio-economic characteristics, credit attitudes and credit practices have a significant relationship with financial satisfaction. A person's feeling about credit obligations was the most powerful predictor of financial satisfaction.

Conclusions

Financial satisfaction may not be a simple function of physical resources. Those with more financial resources can be more satisfied with their financial conditions than those who lack the resources. However, previous studies have found that respondents' subjective assessments of their financial situations are more powerful in explaining levels of financial satisfaction than objective measures of wealth.

Family-management research and economic theories imply that the use of consumer credit can contribute to financial satisfaction. However, excessive use of credit has been reported as a major source of family stress.

In this study, credit practice was more important factor in explaining financial satisfaction than socio-economic characteristics. Respondents' concern over credit use 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, credit attitudes, or actual behaviors regarding credit use. This result implies that subjective attitudes about credit use are more important predictor of financial satisfaction than an objective measurement of family debt burden such as debt-to-income ratio. This is an important finding when considering previous research has relied on debt-to-income ratio as an indicator of financial well-being. A debt-to-

income ratio may not measure accurately the respondent's sense of well-being.

A credit management strategy should be incorporated into financial goals and plans. If money managers have specific plans to manage debt, they may not worry so much about credit obligations. Getting a sense of control over the credit they are using may be a crucial factor in consumer credit use and in family financial satisfaction. In this study, credit practices were more important in explaining financial satisfaction than socio-economic characteristics.

Recommendations

Based on the findings of this study, the following suggestions are made for future research.

1. Similar studies should be conducted to determine if the results of this study are replicable. They might employ a different data collection instrument, such as person-to-person interview, or they might choose subjects living in an urban area: the majority of respondents in this study resided in Logan, Utah, which is a small city in a rural area.

2. A proposed conceptual model containing the same categories of variables should be tested in a different manner. This model should test socio-economic characteristics as independent variables with credit attitudes and credit practices as intervening variables between socio-economic

characteristics and the dependent variable, financial satisfaction.

3. 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 their socio-economic characteristics or debt repayment-to-income ratios¹. Studies should be conducted to investigate what kinds of money management practices are used by persons who are concerned with their credit obligations and by those who are not.

4. In this study, the correlation between a multi-item financial satisfaction scale and one single overall financial satisfaction was .82. Further study is suggested to examine if there are any changes in the correlation if single overall question is placed apart from the six satisfaction scale. if this high correlation is replicable then the one item will be a more efficient way to measure financial satisfaction.

1. Correlation between financial satisfaction and feelings about credit obligations, controlling for socio-economic characteristics was .578. Pearson's r between feelings about credit obligations and debt repayment-to-income ratio was .148.

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APPENDICES

Appendix A: Survey Questionnaire

USU COMMUNITY CREDIT UNION MEMBER SURVEY

Q-1 Where do you currently do most of your banking? (Circle one)

1. USU Community Credit Union
2. Savings and Loan
3. Commercial Bank
4. Other Credit Union
5. Other, please specify_____

Q-2 When selecting a financial institution, how important are the following factors? (Rank in order of importance 1 through 7, with 1 being the most important)

- ___ Convenient location
- ___ Accounts and services available
- ___ Friendliness
- ___ Savings rates
- ___ Loan rates
- ___ Convenient hours
- ___ Amount of modern technology used (ATM, Telephone Teller, etc.)

Q-3 Please rate the USU Community Credit Union (good, fair, or poor) on the following factors. (Circle one number for each factor)

	<u>GOOD</u>	<u>FAIR</u>	<u>POOR</u>
Convenience of main office.....	1	2	3
Convenience of branch office.....	1	2	3
Accounts and services available.....	1	2	3
Friendliness of staff.....	1	2	3
Savings rates.....	1	2	3
Loan rates.....	1	2	3
Convenient hours.....	1	2	3
Other.....	1	2	3

Please specify_____

Q-4 Have you used the services of a financial planner within the past five years? (Circle one)

1. No
2. Yes

Q-4a (If yes) did you pay a fee for this service?

1. No
2. Yes

Q-5 To what extent do you feel a financial planner could help you improve your money management? (Circle one)

1. Not at all
2. A small amount
3. A moderate amount
4. A great deal

Q-6 What was your total household income before taxes, including all salaries and other income, in 1988?

- | | |
|-------------------------|--------------------------|
| 1. Under \$5,000 | 8. \$35,000 to \$39,999 |
| 2. \$5,000 to \$9,999 | 9. \$40,000 to \$44,999 |
| 3. \$10,000 to \$14,999 | 10. \$45,000 to \$49,999 |
| 4. \$15,000 to \$19,999 | 11. \$50,000 to \$59,999 |
| 5. \$20,000 to \$24,999 | 12. \$60,000 to \$69,999 |
| 6. \$25,000 to \$29,999 | 13. \$70,000 to \$79,999 |
| 7. \$30,000 to \$34,999 | 14. \$80,000 or more |

Q-7 How many individuals in your household, including the people in a college or in a nursing home, were supported by the income reported in Q-6?
_____NUMBER

Q-8 How many adults in your household regularly contributed to your household income in 1988?
_____NUMBER

Q-9 How much of your household income, if any, was saved or invested during the last twelve months including IRAs and other retirement accounts? (Circle one)

- | | |
|--------------------|-----------------------|
| 1. None | 7. \$10,000 - 12,999 |
| 2. Under \$2,000 | 8. \$13,000 - 15,999 |
| 3. \$2,000 - 3,999 | 9. \$16,000 - 18,999 |
| 4. \$4,000 - 5,999 | 10. \$19,000 - 21,999 |
| 5. \$6,000 - 7,999 | 11. \$22,000 - 24,999 |
| 6. \$8,000 - 9,999 | 12. \$25,000 or more |

Q-10 Do you own or rent your home? (Circle one)

- | | | |
|--------|---------------------------|--------------|
| 1. Own | 2. Rent | |
| | 3. Some other arrangement | (Go to Q-11) |

If you own, please continue with Q-10a then Q-10c

Q-10a What is the value of your home? That is, about how much do you think it would sell for if it were for sale? (Circle one)

- | | |
|-------------------------|-------------------------|
| 1. Less than \$20,000 | 6. \$60,000 to \$69,999 |
| 2. \$20,000 to \$29,999 | 7. \$70,000 to \$79,999 |
| 3. \$30,000 to \$39,999 | 8. \$80,000 to \$89,999 |
| 4. \$40,000 to \$49,999 | 9. \$90,000 to \$99,999 |
| 5. \$50,000 to \$59,999 | 10. \$100,000 or more |

Q-10b Do you have a mortgage? (Circle one)

1. No
2. Yes

(If yes) What is your monthly payment? (Circle one)

- | | |
|--------------------|-------------------|
| 1. Less than \$100 | 5. \$400 to \$499 |
| 2. \$100 to \$199 | 6. \$500 to \$599 |
| 3. \$200 to \$299 | 7. \$600 to \$699 |
| 4. \$300 to \$399 | 8. \$700 or more |

Q-10c Do you have a home equity loan?

1. No
2. Yes

(If yes) What is your monthly payment? (Circle one)

- | | |
|--------------------|-------------------|
| 1. Less than \$100 | 5. \$400 to \$499 |
| 2. \$100 to \$199 | 6. \$500 to \$599 |
| 3. \$200 to \$299 | 7. \$600 to \$699 |
| 4. \$300 to \$399 | 8. \$700 or more |

Q-11 Excluding all mortgages and home equity loans, what is your average monthly credit payment (i.e. car loan + personal loan + credit card debt)? (Circle one)

- | | |
|----------------|--------------------|
| 1. None | 5. \$500 - 749 |
| 2. Under \$100 | 6. \$750 - 999 |
| 3. \$100 - 249 | 7. \$1,000 - 1,999 |
| 4. \$250 - 499 | 8. \$2,000 or more |

Q-12 Considering the repayment of all your credit obligations including mortgages and home equity loans, how do you feel about the amount of credit you are using? (Circle one)

1. Very concerned
2. Somewhat concerned
3. Not at all concerned
4. Don't have any credit obligations
5. Don't know

Q-13 Including mortgage payments, what is the maximum monthly credit payment you are comfortable with (mortgage + home equity loan + car loan + personal loan + credit card debt)? (Circle one)

- | | |
|--------------------|----------------------|
| 1. Less than \$100 | 6. \$1,000 - \$1,499 |
| 2. \$100 - \$249 | 7. \$1,500 - \$1,999 |
| 3. \$250 - \$499 | 8. \$2,000 - \$2,499 |
| 4. \$500 - \$749 | 9. \$2,500 - \$2,999 |
| 5. \$750 - \$999 | 10. Over \$3,000 |

Q-14 Please indicate your level of satisfaction for the items in this section using the following scale.

- | | |
|----------------------------|-------------------------|
| 1 = Extremely Dissatisfied | 4 = Somewhat Satisfied |
| 2 = Very Dissatisfied | 5 = Very Satisfied |
| 3 = Somewhat Dissatisfied | 6 = Extremely Satisfied |

(please circle one number in each row)

How Satisfied Are You With	Extremely Dissatisfied.....	Extremely Satisfied
A. Your level of income.....	1 ... 2 ... 3 ... 4 ... 5 ... 6	
B. Money for family necessities..	1 ... 2 ... 3 ... 4 ... 5 ... 6	
C. Your ability to handle financial emergencies.....	1 ... 2 ... 3 ... 4 ... 5 ... 6	
D. Amount of money you owe (mortgage, loans, credit cards)	1 ... 2 ... 3 ... 4 ... 5 ... 6	
E. Level of savings.....	1 ... 2 ... 3 ... 4 ... 5 ... 6	
F. Money for future needs of family	1 ... 2 ... 3 ... 4 ... 5 ... 6	
G. Your level of living.....	1 ... 2 ... 3 ... 4 ... 5 ... 6	
H. Your over-all financial situation	1 ... 2 ... 3 ... 4 ... 5 ... 6	

Q-15 Have you borrowed money or used credit in the past 5 years?

1. No (Go to Q-17)
2. Yes

Q-16 Please use the table below to indicate the purposes of the loan and the types of institutions you have borrowed from during the last 5 years. (Circle the number of your response and leave blank if not applicable)

	<u>Finance Company</u>	<u>Savings & Loan</u>	<u>Commercial Bank</u>	<u>USU CU</u>	<u>Retailer/ Dealer</u>	<u>Other CU</u>	<u>Other</u>
HOUSE.....	1	2	3	4	5	6	7
CAR.....	1	2	3	4	5	6	7
EDUCATION...	1	2	3	4	5	6	7
FURNITURE...	1	2	3	4	5	6	7
HOUSEHOLD... APPLIANCES	1	2	3	4	5	6	7
PAY DEBITS...	1	2	3	4	5	6	7
MEDICAL EXPENSES....	1	2	3	4	5	6	7
VACATION....	1	2	3	4	5	6	7
CLOTHING....	1	2	3	4	5	6	7
HOLIDAYS.... (GIFTS, ETC.)	1	2	3	4	5	6	7
FUR COAT OR. JEWELRY	1	2	3	4	5	6	7
OTHER REASON	1	2	3	4	5	6	7

Please specify _____

Q-17 Do you use one or more credit cards currently?

1. No (Go to Q-18 on next page)
2. Yes (Go to Q-17a on next page)

Q-17a If you use credit cards, do you usually pay off your entire balance every month or do you usually carry over a balance? (Circle one)

1. Usually pay off entire balance every month
2. Sometimes pay off entire balance, and sometimes carry over a balance from month to month
3. Usually carry over a balance from month to month

Q-17b Please indicate the number of credit card accounts you presently have and used at least once in 1988.

- a. Department store or other store credit cards (Penney's, ZCMI, Sears, etc.) _____ NUMBER
- b. Gasoline credit cards _____ NUMBER
- c. Bank cards (Visa, Master Charge, etc.) _____ NUMBER
- d. Travel & entertainment cards _____ NUMBER
- e. Credit cards other than above _____ NUMBER

Q-18 Would you say it is all right for someone like yourself to borrow money and pay interest to cover the cost of the following expenditures? (Circle one number in each row)

	Strongly Agree	Neutral	Disagree	Strongly Disagree	
	<u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Disagree</u>	
a. House.....	1	2	3	4	5
b. Car.....	1	2	3	4	5
c. Education.....	1	2	3	4	5
d. Furniture.....	1	2	3	4	5
e. Household appliances.	1	2	3	4	5
f. Pay debts.....	1	2	3	4	5
g. Medical expenses.....	1	2	3	4	5
h. Vacation.....	1	2	3	4	5
i. Clothing.....	1	2	3	4	5
j. Holidays (gifts, entertainment, etc.).	1	2	3	4	5
k. Fur coat or jewelry..	1	2	3	4	5
l. Living expenses when income is reduced....	1	2	3	4	5

Q-19 The following list represents the services available at the USU Community Credit Union. Please circle the appropriate response.

	<u>I have</u> <u>used this</u> <u>service</u>	<u>I plan</u> <u>to use</u>	<u>I don't</u> <u>plan to</u> <u>use</u>	<u>I am</u> <u>not</u> <u>sure</u>	<u>I don't</u> <u>know</u> <u>about</u>
Regular Checking (NOW) Account	1	2	3	4	5
Regular Savings Account.....	1	2	3	4	5
Money Market Checking.....	1	2	3	4	5
Liquid Asset Account.....	1	2	3	4	5
Overdraft Protection.....	1	2	3	4	5
Direct Deposit.....	1	2	3	4	5
Automatic Transfer.....	1	2	3	4	5
Certificate of Deposit.....	1	2	3	4	5
Traveler's Checks.....	1	2	3	4	5
Credit Union Loans.....	1	2	3	4	5
Payroll Deduction.....	1	2	3	4	5
Individual Retirement Accts..	1	2	3	4	5
Credit Card.....	1	2	3	4	5
Handibank Services.....	1	2	3	4	5
Auto or Homeowners Insurance..	1	2	3	4	5
Mortgage Loans.....	1	2	3	4	5
24 Hour Telephone Tellers.....	1	2	3	4	5
Safe Deposit Boxes.....	1	2	3	4	5
Life Insurance.....	1	2	3	4	5
Annuities.....	1	2	3	4	5
Mutual Funds.....	1	2	3	4	5
Discounted Auto Purchasing....	1	2	3	4	5

Q-20 In the past, how have you found out about the services offered at the USU Community Credit Union? (Circle all that apply)

1. Television and/or Radio Ads
2. Newspaper Ads
3. Newsletters and brochures
4. Word of mouth
5. Employee contacts
6. Other

Please specify _____

Q-21 Rate the following financial institutions (1-4 with 1 being the best) regarding safety, savings rates and loan rates.

	<u>What you consider to be most safe</u>	<u>Pays most on savings</u>	<u>Charges least on loans</u>
Savings and Loan.....	_____	_____	_____
Bank.....	_____	_____	_____
Credit Union.....	_____	_____	_____
Money Market Fund.....	_____	_____	
Consumer Finance Co...			_____

Finally, we would like to ask a few questions about yourself to help with analysis of the results.

Q-22 Your sex. (Circle one)

1. male 2. female

Q-23 Your present marital status. (Circle one)

1. Single (Never Married)
2. Married
3. Divorced
4. Separated.
5. Widowed

Q-24 Your age. (Circle one)

- | | |
|-------------|-------------|
| 1. Under 21 | 4. 41 to 50 |
| 2. 21 to 30 | 5. 51 to 60 |
| 3. 31 to 40 | 6. 61 to 65 |
| | 7. Over 65 |

Q-25 Your education. (Circle one)

1. High school graduate or less
2. Business or vocational school
3. Some college
4. College graduate (4 yr. degree)
5. Advanced degree (M.S., Ph.D., M.D., LL.D., etc.)

Q-26 Employment status of yourself and your spouse if applicable. (Circle one in each column if applicable)

YOU

1. Employed full time
2. Employed part time
3. Not employed

SPOUSE

1. Employed full time
2. Employed part time
3. Not employed

Q-27 Are there additional accounts or services you would like to see the USU Community Credit Union offer? If so, please describe.

Q-28 Please make any comments that would help the USU Community Credit Union serve you better.

Thank you for your cooperation in filling out this survey. Your contribution to this effort to improve services for USU Community Credit Union members is greatly appreciated.

Please put this questionnaire in the enclosed self-addressed envelope, and mail as soon as possible.

Appendix B: First Follow-Up Letter

Dear credit union member:

Two weeks ago a questionnaire seeking your opinions concerning credit use and financial satisfaction as well as credit union services was mailed to you. Your name was drawn in a random sample of USU Community Credit Union members.

If you have already completed and returned it to us please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative sample of the members it is extremely important that yours also be included in the study if the results are to accurately represent the opinions of members.

Thanks very much for your help.

Sincerely

IN-SOOK JU

Appendix C: Second Follow-Up Letter

Dear Credit Union Members:

About three weeks ago I wrote to you seeking your opinion on credit use and financial satisfaction as well as USU Community Credit Union services. This study has been undertaken to better understand member's needs and improve services for members.

I am writing to you again because of the significance each questionnaire has to the usefulness of this study. Your name was drawn in a random sample of USU Community Credit Union members. In order for the results of this study to be truly representative of the opinions of members it is essential that each person in the sample return their questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially

IN-SOOK JU

Appendix D. Letter of Permission

August 31, 1989

Dr. Francille Firebaugh
 College of Human Ecology
 MVR
 Cornell University
 Ithaca, NY 14850

Dear Dr. Firebaugh:

I am in the process of finishing up the final details on the theses of a graduate student who has returned to Korea.

We are requesting your permission to include the attached material as shown. I will include acknowledgements and/or appropriate citations to your work as shown and copyright and reprint rights information in a special appendix. The bibliographical citation will appear at the end of the manuscript as shown. Please advise me of any changes you require.

Please indicate your approval of this request by signing in the space provided, attaching any other form or instruction necessary to confirm permission. If you charge a reprint fee for use of your material, please indicate that as well. If you have any questions, please call me at (801) 750-1569.

Thank you for your cooperation,



Jean M. Lown, Ph.D.
 Associate Professor

I hereby give permission to In-Sook Ju to reprint the following material in her thesis.

Description: Family system with managerial subsystem emphasis.
 Deacon, R., & Firebaugh, F. (1981) Family resource management: Principles and applications. Boston: Allyn & Bacon, Inc., p. 31.

(Fee) _____

(Signed) _____