# Cash Flow Management And Credit Use: Effect Of A Financial Information Program

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*The purpose of the study was to examine cash flow and credit use three months after participants completed a series of women's financial information workshops. Being older, having feelings of satisfaction about finances, and using the program workbook were associated with use of a spending plan, a bill paying system, limiting credit card use, and saving regularly. Educators should include discussion of the importance of feelings and attitudes in changing practices related to cash flow and credit use. Participants should be encouraged to complete workbook exercises during and after the workshops.*

**KEY WORDS**: *attitudes, cash flow management, credit*

Women need to become savvy investors and money managers. Although women outlive men by an average of five to seven years, they usually earn less and save less, drop in and out of the labor force, and suffer more financially from divorce. When it comes to finances, women may be less confident of their ability to invest wisely and to plan for the future. Women are more concerned about making ends meet in the present and less confident that they will have enough money in the future (Patterson, 1993). In addition to the particular needs of women in managing money, many families appear to need assistance. Evidence of this is shown by high debt loads, low savings, lack of liquid assets, and increases in credit delinquency, home mortgage foreclosures, and bankruptcy filings (Chang, 1994; DeVaney, 1993, 1994). The need to save for retirement is an additional concern (Malroutu & Xiao, 1995; Merrill Lynch, Pierce, Fenner & Smith Incorporated, 1995). Older women, especially those who are divorced or widowed, are frequently less well-off financially (Wiatrowski, 1993).

To develop new markets for their services, banks, credit unions, insurance and investment firms, and other financial advisors are offering programs on investing, insurance, retirement, and estate planning. Although more financial information has become available, insufficient research has focused on theoretical development and empirical analysis of personal and family financial management (Godwin, 1994). Research on financial management by women is particularly limited. Therefore, the purpose of this study was to examine the effect of workshops on cash flow and credit use from a women's financial information program.

## Background

The purpose of this section is to explain how cash flow management differs from budgeting and to provide a review of recent studies relating to household money management. Cash flow management is the planning,

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implementing, and evaluating involved in allocating income to meet implied or actual financial goals (Godwin, 1994) while budgeting is the ability to estimate the amount of money to be received and spent for various purposes within a given time frame (Leimberg, Satinsky, LeClair & Doyle, 1993). Cash flow management differs from budgeting in that it involves more than planning and record keeping. Cash flow management is an ongoing process to assess current financial status, make financial goals, and keep and analyze records. Credit use is a component of cash flow management.

*Essential Money Management Practices*

Recent studies on cash flow, credit use, and satisfaction with family financial management include those by Bae, Hanna & Lindamood, 1993; Chang, 1994; Davis & Carr, 1992; Davis & Weber, 1990; Godwin, 1994; Godwin & Koonce, 1992; Lown & Ju, 1992; Porter & Garman, 1993; Scannell, 1990. Davis and Weber (1990) identified four essential practices: budgeting, cash flow, comparing budget and cash flow, and developing a balance sheet to estimate net worth. They found that although all households in their sample used at least one practice, only a third (36% ) used all four practices. Estimating net worth was the least used practice. Keeping track of spending was the most commonly used practice, but it was usually done with canceled checks and receipts instead of using a written record of spending. The analysis of why more people didn't use specific practices for managing money was inconclusive. However, 41% reported irregularity in income or spending as an obstacle.

In a study with the same sample, Davis and Carr (1992) showed that households were more likely to have a budget, particularly a written budget, in the earlier years, especially in the expanding stage of the life cycle which was defined as married with oldest child under 13. Retirement age households were least likely to have a written budget but most likely to report that they had a plan for a period of several months. However, the older households said that their spending plan was mainly a mental plan.

Scannell (1990) found that a majority of dairy farm families made a spending plan, kept written records, and stored records. But, of the four recommended practices of budgeting, recording expenses, comparing expenses with the budget, and estimating net worth, they were least likely to estimate net worth. This finding was similar to results obtained by Davis and Weber. The most important finding was that families who used recommended financial management practices were more satisfied and had lower debt-to-asset ratios than other families in the study (Scannell, 1990).

Research on newlyweds' financial management practices found differences based on income level (Godwin & Koonce, 1992). Low and middle income couples monitored their income and spending and balanced their budget more frequently than high income couples. Low income couples projected their budget more frequently than high and middle income couples. Also, low income couples had more positive attitudes about planning for success and getting ahead and planning for present management than middle or high income couples. Godwin and Koonce (1992) observed that a lower proportion of the low income wives were employed; thus, they may have had more time available for managing cash flow.

*Spending and Saving*

The effect of several factors on spending and saving, i.e., cash flow, has been examined with research using national data sets: the Consumer Expenditure Survey (CEX) and the Survey of Consumer Finances (SCF). Bae et al. (1993) showed that 40% of households in the 1990 CEX spent more than 100% of their take-home incomes. The most important factor related to overspending was low income. Also, overspenders had lower levels of net financial assets than those who didn't overspend. There was not a clear pattern for age and overspending. More educated consumers were more likely to overspend. Chang (1994) studied saving behavior of households using the 1983 and 1986 SCF and found that households with higher income levels had higher predicted savings than those with lower income levels. She found a curvilinear, U shaped relationship between age and saving, but the bivariate relationship between age and saving was not significant. Other variables that were not significantly related to savings between 1983 and 1986 were household size, education, ethnicity, and marital status.

*Financial Satisfaction*

Attitudes are believed to play a major role in shaping behavior (Ajzen & Fishbein, 1980; Engel, Blackwell & Miniard, 1995). Informally, attitudes are defined as likes and dislikes. Attitude traditionally has three components: (a) knowledge and beliefs, (b) feelings, and (c) behavior. Beliefs and feelings are believed to be determinants of attitudes. In turn, attitudes influence behavioral intentions which affect behavior. The extent to which attitudes will predict behavior has long been studied in the social sciences with research dating back to the early 1930s and continuing today (Eagley & Chaiken, 1993; Engel et al. 1995).

Using a random sample of over 500 Virginia citizens, Porter and Garman (1993) showed that perceived levels of financial well-being were associated with amount of income , standard of living, savings and investments, and retirement nest egg. Being able to meet financial emergencies and worrying about repaying debts were found to affect feelings of financial well-being measured by a self-anchoring scale.

Lown and Ju (1992) tested a model of credit attitudes and practices and financial satisfaction with credit union members. The dependent variable was a six item index measuring financial satisfaction. Attitude toward the use of credit was the most powerful predictor of level of financial satisfaction. Those who used credit cards for convenience and those who felt comfortable with large monthly credit payments were more likely to be satisfied. Also, persons who were older, better educated, active savers, with more valuable homes, and higher incomes were more likely to be satisfied with their financial situation. Factors related to lower levels of financial satisfaction were higher debt-to-income ratios and concern over credit obligations.

In summary, previous research shows that although some households record spending and compare expenses to a previously developed budget, many households do not citing lack of income or irregular income as obstacles to having a spending plan. Low income levels were found to be related to both overspending and lack of saving. Older households were less likely and younger households were more likely to make written spending plans. Satisfaction was related to objective measures of financial status, financial practices, and attitude.

*Financial Information Program*

A program to give women the skills and assurance needed to make informed decisions about their finances was piloted by the American Association of Retired Persons Women's Initiative in 1987 (American Association of Retired Persons, 1994). The Women's Financial Information Program (WFIP) began with an emphasis on midlife and older women who were divorced, separated or widowed, and who had limited work experience outside the home. Since its beginning at four pilot sites, WFIP has grown to over 800 sites throughout the United States (American Association of Retired Persons, 1993). Over 150,000 persons have participated in the program since its inception (Hughes, 1996). Officially, WFIP is evaluated only at the end of the program. This study differs from the original version only in its approach to evaluation. In this study WFIP was evaluated with a pre-assessment given at the first session and a post-assessment administered by mail about three months after the program ended.

The primary objectives of WFIP are to enable women to increase their financial management skills, develop confidence in decision-making skills, and gain more control over their lives by taking charge of their finances. To accomplish these objectives, WFIP offers a seven-week series of two hour workshops: (1) goal setting and getting organized, (2) how does your cash flow? (3) banking and credit, (4) insurance, (5) planning for events such as divorce, incapacity or death, (6) investing for retirement, and (7) how and where to get professional help. Each participant receives a workbook to use at home and during the workshop (American Association of Retired Persons, 1992). Each workshop session consists of a lecture by a local expert, a question and answer session between the expert and participants, and discussion of the workbook exercises conducted in small groups with a trained volunteer moderator.

## Purpose

The focus of this study was to examine factors affecting behavior related to cash flow management and credit use. The empirical analysis focused on the second and third sessions of WFIP entitled "How does your cash flow?" and "Banking and credit: Tools for your cash flow system". The cash flow session included: preparing a cash flow statement, identifying leaks, planning a reserve fund, developing a personal allowance, and preparing a spending plan. The banking and credit session included: where to bank, where to invest your reserve fund, give yourself credit, and do's and don'ts of lending and borrowing. Based on previous research, it was hypothesized that demographic, attitudinal, and program-related factors would contribute to change in financial practices.

## Methodology

*Survey Instrument*

The design of the study included a pre-assessment given at the beginning of the series and a post-assessment administered by mail about three months after the program ended. The assessments, i.e., the survey instruments, were developed and tested prior to use. The post-assessment attempted to determine whether participants made changes in knowledge, attitudes, and behavior as a result of the financial education program. The pre-assessment consisted of the following sets of questions: 10 on feelings about finances, 19 on satisfaction with finances, and 8 on age, education, marital status, employment, and income. An example of the feeling and satisfaction questions would be: "I feel comfortable about the way I spend money" and "I am satisfied with my current level of savings". The post-assessment consisted of questions on: financial feelings and financial satisfaction which corresponded to the pre-assessment, and also questions on practices adopted, effect of speakers, other participants, and workbook exercises.

*Variables and Analysis*

The dependent variables were the probability of change in financial practices. The survey instrument asked if the following practices had been accomplished during or since WFIP: (a) developed or revised a spending plan, (b) set up and used a bill paying system, (c) started or added to an emergency fund, (d) identified and/or reduced spending leaks, (e) obtained credit in my own name, (f) limited use and/or reduced balances on credit card accounts, and (g) began saving on a regular basis or increased regular savings. The responses were coded as 1 if the practice was accomplished during or since the workshops or was currently working on it, and 0 if otherwise.

Logistic regression was used to determine factors affecting change in behavior. Logit is the appropriate method to investigate what variables are related to a binary dependent variable (Maddala, 1992, p. 327). In order to obtain a parsimonious yet efficient set of predicting variables, the regression analysis with stepwise search procedure was used (Neter, Wasserman & Kutner, 1989). Data were analyzed using SPSS (Statistical Package for the Social Sciences).

Independent variables consisted of the three groups of factors which could be expected to impact cash flow and credit use as a result of participating in WFIP: demographic, attitudinal, and program-related factors. Demographic factors included age, education, marital status, employment, and personal and household income. Other factors that might affect behavior were feelings and attitudes related to finances. Questions on feelings were answered from 1, Strongly disagree, to 4, Strongly agree. Questions on attitudes were answered from 1, Very dissatisfied to 6, Very satisfied. Each scale was summed to form an index which measured respondents' financial feelings and financial attitudes after participating in WFIP. Other independent variables were program attributes: the influence of the speakers for sessions on cash flow and credit, members of the small groups, the impact of the workbook exercises on these topics, and the completion of all workbook exercises. See Table 1 for measurement of variables.

## Findings

*Characteristics of Participants*

All participants in WFIP in Indiana, Nevada, Utah and Virginia during Fall 1993 and Spring 1994 were included in the study. The pre-assessment was completed by 815 participants and 382 returned the post-assessment giving an overall response rate of 47%. After matching the pre- and post-assessments, there were 196 usable assessments for a final response rate of 24%. On the pre-test, participants in each county were asked to identify themselves by the last four digits of the Social Security number. If participants neglected to provide the last four digits on the post-test, matching of pre- and post-tests was impossible. Descriptive statistics of the participants who completed both pre- and post-assessments are shown in Table 1.

Respondents were asked about their demographic characteristics using categories. Analysis showed that 57% were aged 18 to 54 and 43% were 55 and over. Thirty percent had completed college. Seven out of 10 were married. Slightly over half were employed either full or part-time. Six out of ten had personal income between $10,000 and $30,000. Seventy-six percent had household income of $30,000 suggesting that a large proportion had more than one income.

The alpha reliability for the scales which measured financial feelings and financial satisfaction after WFIP were .90 and .89, respectively. T-tests on paired samples of respondents who completed both the pre- and post-assessments were done to assess whether feelings and attitudes changed as a result of WFIP. The means of the financial feelings indices were: 25.66 and 30.32, before and after WFIP, respectively. The t-test for paired samples showed that the responses for feelings were significantly different ($p < .001$, $T = 12.33$).

For the financial attitude indices, the means were: 30.3 and 32.7, before and after WFIP, respectively. The t-test for paired samples showed that satisfaction was significantly different ($p < .001$, $T = 4.70$). In sum, participants experienced change in feelings and attitudes toward finances as a result of WFIP; however, the change was more distinct for feelings. Changes which were observed in the feelings questions---confidence in managing money, easier to make financial decisions, ability to set financial priorities, and others--- are likely to take place in advance of attitude and behavioral change. Satisfaction questions are concerned with topics---money available for emergencies, amount owed, level of savings---that take time to resolve.

Table 1
Descriptive Statistics

| | Range | N | Percent | Mean (SD) |
|---|---|---|---|---|
| *Dependent Variables* | | | | |
| Developed spending plan | 1 = Yes, 0 = other | | | .55 (.50) |
| Set up bill paying | 1 = Yes, 0 = other | | | .24 (.43) |
| Started emergency fund | 1 = Yes, 0 = other | | | .44 (.50) |
| Identified leaks | 1 = Yes, 0 = other | | | .67 (.47) |
| Credit in own name | 1 = Yes, 0 = other | | | .22 (.41) |
| Limited credit card use | 1 = Yes, 0 = other | | | .34 (.47) |
| Began regular savings | 1 = Yes, 0 = other | | | .41 (.49) |
| *Independent Variables* | | | | |
| *Demographic* | | N | Percent | |
| Age=18-44 | | 66 | 33.7 | |
| Age=45-54 | | 46 | 23.5 | |
| Age=55 and over | | 84 | 42.9 | |
| Education < = 12 | | 46 | 23.5 | |
| Education= some college | | 91 | 46.4 | |
| Education=BS or more | | 59 | 30.1 | |
| Marital status= married | | 135 | 68.9 | |
| Marital status= other | | 61 | 31.1 | |
| Employed | | 101 | 51.5 | |
| Not Employed | | 95 | 48.5 | |
| Personal income < $10,000 | | 33 | 16.8 | |
| Personal income = $10-$30,000 | | 121 | 61.7 | |
| Personal income > $30,000 | | 42 | 21.4 | |
| Household income < $30,000 | | 45 | 23.0 | |
| Household income=$30-$50,000 110 | | 56.1 | | |
| Household income> $50,000 | | 41 | 20.9 | |
| | Range | | | Mean (SD) |
| *Attitudinal* | | | | |
| Feelings after WFIP | 10-40 | | | 30.3 (3.7) |
| Satisfaction after WFIP | 8-48 | | | 32.6 (8.3) |
| *Program-related* | | | | |
| Cash Flow Speaker | 1-4 None to most influence | | | 1.8 (0.7) |
| Credit Speaker | 1-4 None to most influence | | | 1.9 (0.8) |
| Small group | 1-4 None to strong influence | | | 2.7 (0.9) |
| Wkbk. Cash Flow | 1-4 None to great impact | | | 2.0 (0.8) |
| Wkbk. Credit | 1-4 None to great impact | | | 2.1 (0.8) |
| Wkbk. during | 1-5 None to all | | | 2.8 (1.0) |
| Wkbk. since | 1-5 None to all | | | 3.9 (1.0) |

A table comparing the characteristics of those who completed only the pre-assessment with those who completed both pre-and post-assessments is provided in the Appendix. Married participants and those with higher household incomes were more likely to complete both assessments. Those who were employed were less likely to complete both assessments. The means of the financial feelings scale was significantly different showing that those who agreed with the feelings statements were more likely to complete both assessments. When items on the scales were examined, those who were more confident about managing money and about spending money were more likely to complete both assessments. Finally, those who were more satisfied with level of household income, amount of money owed, and amount available for family necessities completed both assessments.

*Develop or Revise Spending Plan*

Stepwise logistic regression was used to analyze the effect of the independent variables on financial practices related to cash flow and credit use. Results of the final step for all regression equations are shown in Table 2, i.e., only variables which were statistically significant are shown. The first question asked whether participants had developed or revised a spending plan. About half (55%) accomplished this as a result of WFIP. Attitudinal factors and the workbook exercises were determinants of using a spending plan. The negative sign for the financial feeling index suggested that those who were less satisfied about finances had developed or revised spending plans. The positive sign for the satisfaction index suggests that those who developed or revised the spending plan were more satisfied with their financial status as a result of WFIP. Two of the variables for use of the workbook affected the probability of use of a spending plan: the exercise for the session and completion of workbook exercises since the session. During the workbook exercise for the cash flow session, a cash flow statement is prepared and then a spending plan is developed. Apparently the process of recording and evaluating income and outflow during the workshop is useful. Also, those who continue to complete workbook exercises after WFIP are motivated to use a spending plan as part of their financial management.

*Set Up Bill Paying System*

The second research question was about setting up a system to pay bills on time. One-fourth (24%) started this practice as a result of WFIP. Age was positively related to setting up and using a system for bill paying. As participants mature and move through the life cycle, the need and ability to keep records is likely to increase. Household income was positively related to the probability of using a bill paying system. Having more income suggests that bills can be paid on time and this may encourage participants to become better organized. Compared to those who were employed, those who were not employed were less likely to have a system for paying bills on time. Those who continued to complete workbook exercises after WFIP were more likely to set up a bill paying system.

*Start or Add to Emergency Fund*

Starting or adding to an emergency fund was accomplished by 44% of respondents. The findings are similar to those reported for the bill paying system. Age of participants was positively related to probability of starting or adding to an emergency fund. The significance of the variables for the use of the workbook apparently heightened participants' awareness of the need for emergency funds. The exercise for the cash flow session and completing exercises since WFIP were associated with use of a reserve for emergencies. The negative sign for completed workbook during WFIP shows that those who did few, if any, exercises were less likely to use an emergency fund.

*Identify Spending Leaks*

About two-thirds of participants who completed both pre- and post-assessments adopted the identification of spending leaks. Two variables for use of the workbook were significantly associated with this behavior: the cash flow exercise and completing exercises since WFIP. Workbook activities related to spending leaks included a checklist for plugging cash flow leaks and information about sales traps. But, information in each of the seven workshops is related to efficient use of resources so the workbook provides a comprehensive guide to identification of spending leaks. For example, keeping track of expenses, setting goals, insurance shopping guidelines, do's and don'ts of lending and borrowing, and reviewing investment alternatives are techniques to assist a participant to improve money management. The cumulative effect of completing the entire workbook is reinforced by this finding.

*Obtain Credit in Own Name*

Only 22% reported making a change in obtaining credit in one's own name. The only variable that was significantly related to adoption of this financial behavior was marital status. Those who were not married were less likely to adopt this behavior suggesting that they had already established credit in their own name.

*Limit Number or Use of Credit Cards*

One-third of participants indicated that they limited the number or use of credit cards after WFIP. Age, the satisfaction index, and completion of the workbook exercise for credit use were significantly associated with the probability of change in credit card use. Those who were older were more likely to change credit card behavior suggesting that as a result of WFIP, participants examined and altered their credit card use. The workbook exercise for Credit includes information about the cost of credit, managing credit cards, and checking credit history. It is possible that participants had never been exposed to a comprehensive lesson on credit use until they participated in WFIP.

*Begin to Save Regularly*

Four out of ten participants began to save regularly or increased regular savings. Age, the satisfaction index, the speaker for Credit, and completion of workbook exercises since WFIP were predictors of the probability of saving regularly. As age increased, participants were more likely to save regularly. The effect of the age variable is consistent with the results for age for several of the practices: the bill paying system, the emergency fund, and limiting the number or use of credit cards. There was a positive association with satisfaction and saving regularly. The significance of the variable for speaker of the credit session emphasizes the importance of the local expert who is invited to provide information on banking, investing the reserve fund, lending and borrowing. Finally, the completion of workbook exercises since WFIP significantly effects saving regularly indicating that continuing to examine and evaluate one's finances has positive outcomes.

## Discussion

The information gained from the study is useful for financial management educators and counselors as they plan similar programs. The findings suggest an association between participation in the program and change in behavior and attitudes. Any change may be a combination of participation and something else in the environment, but participation is one factor associated with observed change.

As participants' age increased, they were more likely to set up a system for paying bills on time, start or add to an emergency fund, limit credit card use, and increase regular savings. The effect of age reinforces the life-cycle concept, that people are more likely to save when retirement is near and consumption demands particular to young families are met. The finding for age was consistent with Chang (1994) and Lown and Ju (1992).

As income increased, participants were more likely to have a system for paying bills on time. Lown and Ju (1992) found that those with higher incomes were more satisfied with credit use. However, among newlyweds, low and middle income couples were more likely to monitor income and spending (Godwin and Koonce, 1992). The fact that Bae et al. (1993) found that lower income households were overspenders could indicate that low income households had a lack of income or irregular income. Irregular income was identified as an obstacle to making a spending plan (Davis and Weber, 1990).

Financial feelings and satisfaction were expected to impact behavior. Participants who expressed disagreement with feelings about money were more likely to develop a spending plan. Participants who expressed more satisfaction with finances were more likely to develop a spending plan, limit credit card use, and save regularly. These findings support previous results that found significant relationships between satisfaction and financial management practices (Godwin & Koonce, 1992; Lown & Ju, 1992; Porter & Garman, 1993; Scannell, 1990).

Significant findings for program-related factors were concentrated on use of the workbook. The workbook apparently helps participants to develop written plans and evaluate their own financial situation. It was important to complete the exercises on cash flow and credit *and* all the exercises during the workshop series. The findings for the program-related factors are comparable to the results on the use of a spending plan and budget by Davis and Carr (1992), Davis and Weber (1990), and Scannell (1990).

## Implications

Limitations of the study include the lack of a random selection of subjects and the number of participants. The purpose of the study, to evaluate program effectiveness, does not lend itself to a random selection or the use of a control group. Also, participants, especially in Nevada, are likely to move frequently and be less likely to complete a series of seven weekly lesson and respond to a mailed survey three months after the workshops. Although no figures are available, participants in each of the three states in the study often repeat the workshops explaining that participating in the workshops was a motivating factor and that they "couldn't learn all they needed to know the first time around". Future research could attempt other measures of evaluation such as focus groups or telephone interviews.

Table 2
Logit coefficients: Factors associated with Probability of Accomplishing Financial Practice

| | Spending Plan n = 189 | Paying Bills n = 193 | Emerg. Fund n = 188 | Identify Leaks n = 186 | Obtain Credit n = 188 | Limit Cards n = 188 | Began Savings n = 196 |
|---|---|---|---|---|---|---|---|
| *Demographic* | | | | | | | |
| Age | | 0.75** | 0.67*** | | | 0.43* | 0.49* |
| Education | | | | | | | |
| Married | | | | | -.98* | | |
| Employed | | -0.97* | | | | | |
| Personal income | | | | | | | |
| Household income | | 0.82** | | | | | |
| *Attitudinal* | | | | | | | |
| Feelings | -0.15** | | | | | | |
| Satisfaction | 0.06** | | | | | 0.05* | 0.05* |
| *Program-related* | | | | | | | |
| Small group members | | | | | | | |
| Speaker for Cash Flow | | | | | | | |
| Wkbk. for Cash Flow | 0.78** | | 0.44** | 0.65** | | | |
| Speaker for Credit | | | | | | | 0.48* |
| Wkbk. for Credit | | | | | | 0.54* | |
| Workbook during | | | -0.49** | | | | |
| Workbook since | 0.42* | 0.38* | 0.39* | 0.39* | | | 0.41* |
| Constant | -1.12 | -2.77** | -2.05* | -3.61*** | 2.01*** | -2.81*** | -4.63*** |
| Chi-Square | 50.70*** | 33.64*** | 29.05*** | 19.64*** | 5.42* | 25.45*** | 29.81*** |

* p < .05, ** p < .01, *** p < .001

Change in attitude and behavior related to credit card use should be a concern of future researchers. About a fifth of participants said they obtained credit in their own name and one-third said they limited use of credit cards after WFIP. The survey did not obtain information about paying bills in full each month, talking to creditors, checking their credit history, or feeling that credit card use was already under control. Another direction for future research is to gain more information about participants' perceived barriers managing cash flow. Some participants have indicated that barriers such as communicating about money with a spouse kept them from making changes. Finally, it would be useful to look at differences between participants who had accomplished a practice before taking WFIP and those who planned to do it in the future or who didn't plan to do it.

When financial management programs are planned, it is important to target them to audiences who will benefit from the information. An appeal to feelings and attitudes about finances and credit use may encourage those who are not satisfied with their current financial status to participate. During the workshop series, it is important to reinforce on a regular basis the likelihood that feelings and attitudes will change after exposure to new information. Examination of the characteristics which differentiated those who completed only the post-assessment and both pre- and post-assessments may help educators understand and motivate more participants to complete the series.

In contrast, some WFIP participants may have unmet needs, become dissatisfied, and not continue the series. If those who enroll for WFIP are already good money managers, their needs may not be met by the workshop series. They may have been looking for a program on investing or retirement planning instead of learning to track cash flow, start an emergency fund, and limit the use of credit. Program announcements should clearly communicate what will be included in the series.

Also, the findings support the need for participants to have experiential activities as part of the learning process. Findings suggest that participants who were actively involved in recording and analyzing financial information were more likely to change behavior. As explained in the workbook, the cash flow statement serves as a foundation for most of the lessons. Consistency in completing exercises also predicted change in financial management practices.

## Appendix

T-tests for Pre-Assessment and both Pre- and Post-Assessments

| | Only Pre- | Pre & post | |
|---|---|---|---|
| | Mean | Mean | p-value |
| *Demographics* | | | |
| Age | 1.76 | 1.94 | 0.296 |
| 1 = 18-44 | | | |
| 2 = 45-54 | | | |
| 3 = 55 and over | | | |
| Education | 2.01 | 2.06 | 0.992 |
| 1 = less than or = 12 | | | |
| 2 = some college | | | |
| 3 = BS or more | | | |
| Marital status | 0.57 | 0.66 | 0.000*** |
| 1 = married | | | |
| 0 = other | | | |
| Employment | 0.67 | 0.54 | 0.000*** |
| 1 = employed | | | |
| 0 = other | | | |
| Personal income | 1.91 | 1.95 | 0.966 |
| 1 = less than $10,000 | | | |
| 2 = $10,000-$30,000 | | | |
| 3 = more than $30,000 | | | |
| Household income | 1.81 | 1.87 | 0.032* |
| 1 = less than $30,000 | | | |
| 2 = $30,000-$50,000 | | | |
| 3 = more than $50,000 | | | |
| *Financial feelings* | | | |
| 1 to 4 (Strongly Disagree to Strongly Agree) | | | |
| Confident managing money | 2.63 | 2.65 | 0.006** |
| Anxious about finances | 2.65 | 2.66 | 0.262 |
| Comfortable about spending | 2.54 | 2.70 | 0.000*** |
| Easy to make decisions | 2.36 | 2.39 | 0.867 |
| Confident to set priorities | 2.56 | 2.61 | 0.064[a] |
| Know where to get assistance | 2.44 | 2.38 | 0.185 |
| Ability to solve problems | 2.64 | 2.68 | 0.523 |
| Identify appropriate goals | 2.63 | 2.69 | 0.031* |
| Achieve goals I set | 2.70 | 2.74 | 0.519 |
| Skills to positively affect | 2.58 | 2.57 | 0.780 |
| Index of financial feelings | 25.77 | 26.06 | 0.027* |
| *Financial satisfaction* | | | |
| 1 to 6 (Very Dissatisfied to Very Satisfied) | | | |
| Level of household income | 3.62 | 3.94 | 0.001*** |
| Money for family necessities | 3.67 | 3.94 | 0.022* |
| Money for family emergencies | 3.09 | 3.35 | 0.224 |
| Current level of savings | 2.83 | 3.09 | 0.647 |
| Amount of money owed | 3.53 | 4.02 | 0.048* |
| Amount for future needs | 2.99 | 3.17 | 0.867 |
| Way money handled in family | 3.59 | 3.84 | 0.061[a] |
| Who handles family money | 4.40 | 4.49 | 0.169 |
| Index of financial satisfaction | 27.74 | 29.80 | 0.189 |

[a] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

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