

# Changing Financial Behaviors Through Home Study

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*Parents of young children who participated in a home-study family financial management program reported a change in their financial behaviors following participation in the lessons. These parents, who subscribed to **Money Sense for Your Children** (a six-lesson parent newsletter series), changed the way they teach their children about money, changed the way they think about family money management, and reported doing things differently because of the lessons. The majority of participants indicated that after the lessons they engaged in more of the ten recommended financial management practices than they had previously.*

**Key words:** *Children and money, Financial education, Financial management, Financial socialization, Money attitudes*

Attitudes and behaviors associated with money and its management play key roles in people's lives; but overt, systematic, formalized teaching and learning opportunities are not a usual part of a required regimen - not in our schools, homes or workplaces. When individuals do engage in financial education, participants are usually self-selected. Such audiences are likely to have positive beliefs and supportive attitudes about the material they have studied. When self-selected audiences are engaged in programs based on strong arguments and sound logic, and when participants are empowered to use the information, they are more likely to exhibit behavioral change (Crites & Haldeman, 1994).

Consumer finance socialization is usually acquired by observation and experience (Danes & Dunrud, 1993; Doss, Marlowe & Godwin, 1995; McNeal, 1987; Moschis, 1985). Sherman (1986) concluded that the best results are obtained when exemplary models of money management are extant in the home of the student. Since habitual patterns of spending and saving are established during childhood and adolescence, it is probable that when responsible patterns are modeled and taught at that time, those behaviors will continue into adult life. (Williams & Prohofsky, 1986).

Communication is a critical factor in the acquisition of knowledge, skills, and attitudes about money. Increases

in quality communication about money and its use within the home are associated with enhanced consumer socialization in children (Moore & Moschis, 1981). Turner and Brandt (1978) concluded that children's consumer financial skills increased when they had greater responsibility for money and that older children learned more than younger children. This finding was supported by Sherman (1986) who reported that although having the experience of and responsibility for handling money is necessary for the development of conceptual understanding of money management, the ability to understand and apply a concept is limited by a child's cognitive development. Hence, older children are more likely than younger children to understand money management concepts (Sherman, 1986).

A variety of books and guides are available to help parents teach their children about money and its use. No evidence of the effectiveness of these tools was found in the literature. It is not known whether the parents and children who use such materials actually change financial behaviors. The purpose of this assessment was to determine whether the financial behaviors of parents and children change as a result of parents using a specific set of materials to teach their children about money management.

## Methods and Procedures

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### *Description of the Program*

*Money Sense for Your Children* is a home-study financial management education program for parents who want to teach their children money management concepts. Washington State University Cooperative Extension developed the program, and in Nevada it is distributed through University of Nevada Cooperative Extension. This delivery method was selected because results of a statewide family resource management needs assessment indicated Nevada families preferred to receive educational information in printed format. Each of the six lessons in the program series includes four sections: (1) Main Ideas, (2) Key Words, (3) Lesson, (4) Things to Do. The latter section has activities for the family as well as age-appropriate activities for children by age level (e.g. preschoolers, 6-12 year-olds, and teenagers). The program provides parents with information about financial responsibility and focuses on ten recommended financial behaviors:

1. Family sets financial goals together allowing input from all members.
2. Children understand that they cannot have everything they want.
3. Children understand the difference between a need and a want.
4. Children receive allowances.
5. Children use a spending plan.
6. Children manage allowances without interference.
7. Family avoids using money as a reward or punishment.
8. Children have their own savings accounts.
9. Children save for goals.
10. Children have some understanding of advertising techniques.

Parents subscribe to the six-lesson series and receive a new lesson every two weeks. To encourage parents to use the lessons, a letter from the educator accompanies each mailing. The letter highlights the lesson content, provides current spending data of children relevant to the lesson and suggests additional teaching resources. The initial letter also informs parents that they will be contacted three months after they receive the last lesson to determine the helpfulness of the lessons.

### *Participant Solicitation*

Notices announcing the availability of *Money Sense for Your Children* were published in Extension Newsletters in the Central, Southern, and Western Extension areas of

Nevada. Availability was also announced in several local newspapers and by notices posted in county Extension Offices. In response, 590 families enrolled in the program. Based on earlier findings (Crites & Haldeman, 1994), the authors assumed that the potential participants would have positive beliefs and supportive attitudes about money management.

### *Instrumentation and Data Collection*

A four-page impact evaluation instrument in the form of a questionnaire was developed, reviewed by a panel of financial professionals and pilot tested. The final form was used to determine the results of the home-study program. The questionnaire solicited demographic data including age, gender, ethnicity and marital status of the responding parent; ages of children in the family (listed by gender) and which children participated in the lessons; family income; and level of education of the responding parent. The ten recommended financial practices were listed and respondents were requested to indicate for each practice whether they and their children had already engaged in the behavior before the lessons or whether, as a result of the lessons, they now engaged in the behavior, were working on it, or did not engage in the behavior. A "doesn't apply" category was also provided. Other "yes" or "no" questions asked whether the parent had "changed the way you teach your children about money" and "changed the way you think about family money management." Three months after the last lesson in the *Money Sense for Your Children* series was mailed, the questionnaire was sent to each participating family. Of the 590 mailed, a total of 237 participants completed and returned usable instruments, a 40% response rate.

### *Description of the Sample*

There was little ethnic diversity among the respondents: 80.2% were white, 3.8% were African American, 3.4% were Hispanic, 2.5% were Native American, 2.1% were Asian/Pacific Islander, and 0.4% were other. Eighteen (7.6%) did not respond to the race/ethnic background question. The respondents had attained a relatively high level of education: 79% had completed some college, had a bachelor's degree or had a graduate degree. The median annual income was in the \$35,000-\$50,000 category, and the majority, 84%, was married. Of those who responded, 86% were female. There were 345 children who participated in the lessons, 179 boys and 166 girls.

### **Statistical Analyses**

The goals of the statistical analyses were:

1. To determine through the use of descriptive statistics whether:
  - a. parents changed how they teach their children about money.
  - b. parents changed the way they think about family money management.
  - c. parents are doing anything differently because of the lessons.
2. To use the chi-square test for independence to identify any changes in financial practice behaviors that were dependent on one or more of eight socioeconomic or demographic variables (gender of the respondent, age of the respondent, education level of the respondent, marital status, age group of the youngest participating child, family annual income, residence by Extension area, and whether the residence was urban or rural).
3. To identify which of the financial practice behavioral changes could best predict a total behavioral change score developed for each family, using step-wise multiple regression analyses.

### Findings

#### *Descriptive Statistics*

Of the 237 respondents, 74% (n=175) reported that they had changed the way they teach their children about money. Sixty percent (n=142) changed the way they think about family money management, and 76% (n=180) reported that they do something differently because of the lessons. The majority of the families reported that they were using more of the recommended financial practices as a result of program participation. Table 1 presents the number and percentages of change (or lack of change) for each behavior in six cells: Yes (changed as a result of lessons); Working on it; No (did not change); Already done before class; No response; and Total working on it + Yes.

If the recommended financial practices are placed into three categories of actions/tools, personal understandings and family dynamics, it appears that families found it easiest to implement actions/tools. Almost 54% no longer use money as a reward or punishment, almost 46% save for goals, almost 44% gave children allowances and over 44% set up savings accounts (Table 1). Under the personal understanding category, almost 34% of children now understand why they cannot have everything they want, over 31% have some understanding of advertising techniques and over 27% understand the difference between a need and a want. Items involving family dynamics were least likely to have been implemented at the time of the evaluation. These included letting

children manage their allowances without parental interference (almost 19%) and allowing input from all family members on financial goals (almost 17%). This pattern did not hold true for one action/tool practice, children using a spending plan (over 18%). When the percentages are examined in the Working on it + Yes column, they show that a majority of the families are implementing all of the recommended practices.

#### *Chi-Square Analyses*

The statistical significance of the chi-square test for independence is based on the difference between expected and observed frequencies in each cell. When the test is statistically significant, the two variables are said to be dependent. Seven of the specific financial practice behavior changes were each dependent on one of the socioeconomic/demographic variables. Only statistically significant differences in the practices are reported. Missing cases were deleted list wise from the analyses.

"My children receive allowances" ( $\chi^2 = 12.65$ ;  $df = 6$ ;  $p < .05$ ), "my family avoids using money as a reward or punishment" ( $\chi^2 = 12.50$ ;  $df = 6$ ;  $p = .05$ ), and "my children have their own savings accounts" ( $\chi^2 = 12.68$ ;  $df = 6$ ;  $p = .03$ ) were each dependent on annual family income. The seven income categories from the questionnaire were collapsed for this test into three levels: income under \$25,000; income between \$25,000 and \$50,000; and income over \$50,000. After program participation, more families than expected with an annual income of less than \$25,000 or more than \$50,000 began giving their children allowances as a result of the program. Families in the middle-income group (\$25,000 to \$50,000) are those most likely to be working on providing an allowance. The middle-income families were also those most likely to no longer use money as a reward or punishment. Families with more than \$50,000 were more likely to be working on avoiding the use of money as a reward or punishment and were likely to have started savings accounts for their children as a result of the program. The results for these latter two financial practice behaviors were not significant for the families with incomes of under \$50,000.

**Table 1.**  
Participation in Recommended Financial Practices (N = 237)

Practice	Yes (changed as a result of lessons)	Working On It	No (did not change)	Already Done Before Class	No Response	Total Working On It + Yes
My family discusses our financial goals and allows input from all members	40 (16.9%)	108 (45.6%)	28 (11.8%)	43 (18.1%)	18 (7.6%)	148 (62.5%)
My children understand why they cannot have everything they want	80 (33.8%)	96 (40.5%)	8 (3.4%)	50 (21.1%)	3 (1.3%)	176 (74.3%)
My children understand the difference between a need and a want	65 (27.4%)	116 (48.9%)	12 (5.1%)	37 (15.6%)	7 (3.0%)	181 (76.3%)
My children receive allowances	103 (43.5%)	27 (11.4%)	45 (19.0%)	45 (19.0%)	17 (7.2%)	130 (54.9%)
My children use a "spending plan"	43 (18.1%)	108 (45.6%)	57 (24.1%)	7 (3.0%)	22 (9.3%)	151 (63.7%)
My children manage their allowances without my interfering	44 (18.6%)	89 (37.6%)	60 (25.3%)	10 (4.2%)	34 (14.3%)	133 (56.2%)
My family avoids using money as a reward or punishment	127 (53.6%)	31 (13.1%)	20 (8.4%)	41 (17.3%)	18 (7.6%)	158 (66.7%)
My children have their own savings accounts	105 (44.3%)	24 (10.1%)	43 (18.1%)	55 (23.2%)	10 (4.2%)	129 (54.4%)
My children save for goals	108 (45.6%)	48 (20.3%)	43 (18.1%)	23 (9.7%)	15 (6.3%)	156 (65.9%)
My children have some understanding of advertising techniques	74 (31.2%)	81 (34.2%)	43 (18.1%)	20 (8.4%)	19 (8.0%)	155 (65.4%)

**Table 2.**  
Total Number of Participating Children in Each Age Group Who are the Youngest Child in the Family

Age Group	Number that are the Youngest Child in the Family	Total Number of Participating Children in the Age Group
0 - 4 Years	25	25
5 - 11 Years	138	220
12 - 15 Years	22	74
Over 15 Years	11	26
Data missing	41	

"Children save for goals" was significantly associated with the parent's level of education ( $\chi^2 = 15.44$ ;  $df = 6$ ;  $p = 0.02$ ). For this analysis, educational levels were collapsed into three categories: high school through

trade school, some college, and college graduate or graduate degree. Parents in the category with the highest level of education were those most successful in having their children save for goals as a result of the program (54%). For children of parents with less than this level of education, more than would be expected were still working on this practice (some college 13%, high school or trade school 27%) or did not engage in the practice after completing the lessons (some college 29%, high school or trade school 20%).

"Children understand they cannot have everything they want," "children understand the difference between a need and a want," and "children manage allowances without interference" were associated with the age of the youngest participating child in the family. The numbers of children who are the youngest participating child in their family in each age group are presented in Table 2. When the age of the youngest child was 12 years or older, the program was effective in helping them understand why they cannot have everything they want. The families with a youngest child under the age of four were those most likely to still be working on this behavior. Families with the youngest child over the age of 12 were also most likely to have developed the ability

to tell the difference between wants and needs. Families with children under the age of 12 were likely to still be working on this concept. As the age of the youngest participating child increases, it is more likely that the children are allowed to manage their allowances without interference.

#### *Regression Analysis*

Stepwise multiple regression was used to identify which of the specific 10 financial practice behavior changes could best predict a total behavior change score. In this application of multiple regression, 100% of the variance should be explained. Behavior change scores were calculated by assigning points for responses to each financial practice behavior change question. When the behavior was already engaged in before the program, the response was scored 1. When the family was working on behavior change, the response was scored 2. When behavior changed as a result of program participation, the response was scored 3. When none of these occurred, the response was scored 0. The sum of scores for all responses was the family behavior change score. Missing cases were deleted listwise from the regression analysis. The purpose of this analysis was to enable educators to identify the behaviors which explain the greatest portion of the variance and consequently are the most beneficial to emphasize in a financial management education program.

The summary of the analysis is presented in Table 3. Initiation of five of the 10 recommended practices accounted for 80% of the variance in behavior change scores. The two factors that made the most difference in changing financial management behaviors were helping children to understand the difference between wants and needs and encouraging children to use a spending plan. Establishing savings accounts for children, avoiding the use of money as a reward or punishment, and giving children an allowance were other important factors associated with greater changes in money management behavior.

#### **Discussion**

Parents used a series of newsletters to teach their children lessons that encouraged the use of ten recommended financial management practices. A follow-up evaluation was used to determine results of program participation. The majority of the parents reported that they had changed the way they teach their children about money and the way they think about family money management. They also reported that they now do things differently because of the lessons. The

program also was successful in helping families increase their use of recommended financial management practices. For each recommended financial practice, the majority of respondents reported that they were using the recommended behavior or were working on using it. The greatest number of respondents reported a change for "my family avoids using money as a reward or punishment." Of the 237 respondents, 54% indicated that they now avoid using money as a reward or punishment as a result of participation in the program (Table 1).

The majority of the children in this study were in the 5-to-11-year-old group (Table 2). Danes (1994) stated that most parents believe that very young children (less than nine years of age) are ready for the financial experiences of receiving an allowance and opening a savings account. Having the experience and responsibility of handling money is necessary for the development of a conceptual understanding of money management (Sherman, 1986). Before the program, parents may not have perceived that their younger children could manage their allowances without interference, or that they could use a spending plan. The authors found that a statistically significant result of program participation was the number of families who reported that they were working on these two practices.

Children of parents who were in the category with the highest level of education were more likely to save for goals as a result of program participation. The association between level of education and changing goal setting behavior would be an important topic for further study and should be taken into consideration when planning educational programs involving goal setting. Perhaps the concept and process of goal setting and the role goal setting plays needs to be more clearly defined and explained for audiences with lower educational levels.

Understanding the difference between wants and needs and understanding why you can't have everything you want were dependent upon the age of the youngest child participating in the program. Change was more successful for these behaviors as the age of the youngest child increased. All of the findings associated with the age of the youngest child provide evidence of the importance of cognitive development in developing strong money management behaviors. Danes and Dunrud's (1993) indication that children as young as three can be taught about money management may support the need for early introduction of the vocabulary

and use of money management terminology. Introducing young children to abstract concepts such as planning and saving through concrete activities will encourage them to progress to the understanding and use of the concepts at an earlier age.

**Table 3.**  
Summary Table for Stepwise Multiple Regression with Behavior Change Score as Dependent Variable.

Step	Variable	Beta	R <sup>2</sup>	F (Eqn)	Significance
1	My children understand the difference between a need and a want	.1595	.3327	84.756	.000
2	My children use a "spending plan"	.2176	.5286	94.751	.000
3	My children have their own savings accounts	.2344	.6601	108.758	.000
4	My family avoids using money as a reward or punishment	.2126	.7457	122.451	.000
5	My children receive allowances	.2323	.8083	140.013	.000
6	My children have some understanding of advertising techniques	.2167	.8644	175.240	.000
7	My children save for goals	.2344	.9069	228.265	.000
8	My children manage their allowances without my interfering	.2269	.9446	347.603	.000
9	My family discusses our financial goals and allows input from all members	.1863	.9795	860.152	.000
10	My children understand why they cannot have everything they want	.1695	1.000	*	*
	Constant	-1.2435E-14			

Of the ten financial management practices recommended in *Money Sense for Your Children*, five appear to make the most difference in changing financial management behaviors. These five practices in the order of their importance are: help children understand the difference between wants and needs, encourage children to use a spending plan, establish savings accounts for children, avoid the use of money as a reward or punishment, and give children an allowance. It appears that giving children their own money, some tools to manage it and not linking money to any other behavior except for managing it are key to changes in behavior. Four of these five practices are actions/tools and one is personal understanding. While five of the recommended practices accounted for 80% of behavior change (R<sup>2</sup> for Step 5 in Table 3), that does not eliminate the need for teaching the

other five practices. Future research needs to examine the distinctions between the actions/tools, personal understandings and family dynamics and why actions/tools are easiest to implement.

### Conclusions

Financial education for the family is needed and one way to present this education is through a learn-at-home format. Home-study financial education for families with young children provides benefits for both parents and children. It initiates financial education when children are at a receptive age; encourages parents to model positive behaviors; and gives opportunities for hands-on activities and conversations about money and its use.

Since children can begin to learn about getting, spending, and saving money when they can talk in sentences (Danes & Dunrud, 1993), young families with children should be targeted for money management education. Home-study programs such as *Money Sense for Your Children* will encourage money management socialization efforts and provide the opportunity for parents to expand their knowledge while teaching their children. This assessment supports the proposition that parents who self-select to participate in such programs are successful in teaching financial management concepts to their children and instituting the use of recommended financial management behaviors.

As with any home-study or informal educational program, how much of the material is used and how the material is presented is beyond the control of the educator and was not examined in this assessment. Future studies could examine the level of participation and its impact on learning. Future studies could also explore how educators can influence parents to participate more fully. Did receiving a personalized cover letter with each lesson increase parents' participation level? Would telephone or e-mail contacts encourage lesson completion and application? The results of this program evaluation show that a learn-at-home methodology does work. This delivery method should receive more consideration by educators.

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