

# Expectation of Future Financial Condition: Are Men and Women Different?

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*Expectation of future financial condition can be a powerful motivator of an individual's financial management. This study found no difference in male and female financial managers' expectation of future financial condition. There were some differences in the determinants of expectation. For both sexes, positive relationships were found between expectation of financial condition in 5 years and (a) general locus of control, (b) financial locus of control, and (c) perception of present financial condition compared to 5 years ago. Age was inversely related. For females, education and satisfaction with level of consumption also were related positively.*

KEY WORDS: *future financial expectation, gender differences*

## Introduction

What an individual expects to happen in the future can be a powerful motivating force for whatever action the individual takes in the present. Campbell, Converse, and Rodgers (1976) define expectation as what a person "feels he is likely to attain in the fairly immediate future." Expectation of future financial condition can lead to increased or

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decreased economic well-being. Expectation of improved financial condition resulting from financial management strategies can encourage a person to practice such strategies even more. Or, expectation of increased income can motivate a person to spend on the premise that finances will be better so spending can be indulged. On the other hand, expectation of no improvement, or even a decline, can encourage or discourage use of financial management strategies. One person might see the situation as hopeless so does not bother to manage, while another person might be motivated to use financial management strategies as a way of coping with adversity.

Campbell, Converse, and Rodgers (1976) noted the importance of expectations in the study of quality of life. From their studies of household discretionary income and the Index of Consumer Sentiment, Katona, Strumpel, and Zahn (1971) concluded that consumers' perceptions and extent of optimism and confidence about future economic improvements are powerful explanatory factors of consumer behavior. Further, Katona (1976) found that respondents who thought their financial condition was better off compared to 5 years ago and would be better off in 5 years showed progress in their economic condition and standard of living. Currently, there is renewed interest in studying expectation of future financial condition as a reference-point variable<sup>1</sup> influencing economic well-being (Davis & Helmick, 1985; Porter & Garman, 1990). Because expectation of future financial condition can influence economic well-being positively or negatively, the purpose of this study is to develop a better understanding of this reference-point variable.

van Raaij (1991) indicates that consumer expectations influence individual consumer behavior, such as saving, borrowing, and spending. Thus, consumers who have optimistic views about their personal finances are likely to spend and save more. With respect to financial planning, we assume that people who have optimistic expectations are more likely to behave positively in financial planning activities.

Optimistic expectation of future financial condition is likely to be difficult to maintain in a declining economic climate. Thus, it is important to understand what influences financial expectations of individuals in such an economic climate. Declining opportunities in rural areas in recent years provide such a setting. Consequently, this study focuses on a rural population.

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### Background Information

Little research has been conducted on expectation of future financial condition. Rather, this variable has been treated as an independent variable to help explain other variables. Katona (1976) found that a person's buying intentions were influenced positively by perception that he/she is making progress. Mammen, Helmick, and Metzen (1983) studied perceived income adequacy and found that expectation of financial condition in 5 years was negatively related for both husbands and wives, but significant only for husbands. Hayhoe (1990) found a negative relationship between expectation of financial condition in 5 years and perceived economic well-being (composite of several variables measuring satisfaction with finances); however, the relationship was significant for wives but not for husbands. Although the dependent variables in the latter two studies are slightly different, both are measures of economic well-being. For purposes of the study reported here, the findings indicate the important role of expectation of future financial condition in economic well-being.

Expectation of future financial condition was treated as a dependent variable in a study by Bailey and Lown (1992). Using analysis of variance, they found significant relationships for education and income. There was an inverse relationship for income with the highest income respondents having the most pessimism about the future. This may be a reflection of age because income peaks prior to retirement so an expectation of financial condition in 5 years may include an expected drop in income. Including age as a variable in future research might help explain this relationship. Bailey and Lown also found that those with a college degree expected their financial condition to be worse in 5 years, and those with some college expected a better financial condition.

Wilhelm and Varcoe (1991) summed two variables, perception of present financial condition compared to 5 years ago and expectation of financial condition in 5 years, to create a measure of overall financial progress for their dependent variable. Obviously, they assumed that perception of the past is related to expectation of the future. Another way to view this relationship, though, is that perception of past financial condition influences expectation of future financial condition. If a person is better off today compared to 5 years ago, it is reasonable to expect that he/she will be better off in the future than in the present. In fact, Katona (1976) found such a relationship in his early studies. Wilhelm and Varcoe were interested primarily in how money attitudes influence financial progress;

thus, few objective indicators were tested in favor of more social-psychological variables. But, both objective and subjective indicators were in the final regression model suggesting that future research should include both types of variables as well.

Wilhelm and Varcoe (1991) divided their sample of financial managers into two groups: (a) male managers and (b) female managers. Regression results were somewhat different for the two groups. Financial progress was more positive for female managers with higher debt levels, higher scores on the money retention scale, and lower scores on the money inadequacy scale. Male managers, though, indicated more positive financial progress with higher scores on the money obsession scale and with a lower number and intensity of money problems. They also had the same results for the money inadequacy scale and total debt as the female managers, but the money retention scale variable was not in the final regression model for male managers. Wilhelm and Varcoe explained that the money retention scale measures "difficulty in making spending decisions, concern over costs, and feelings of guilt over spending money" (p. 196). A similar variable could be financial locus of control in which the respondent indicates his/her financial condition depends on own control of the condition.

Wilhelm and Varcoe's (1991) findings of differences in the determinants of expectation of financial condition for men and women is consistent with Cottle's (1976) observations. He found differences between men and women in the perception of time, which, in turn, affect expectations. Women perceive time as continuous, but men see time as discontinuous. For women, the present is a time of having things, while men are oriented more toward having in the future. Thus, differences between men and women in satisfaction with various aspects of present finances (net worth, level of consumption, etc.) could be expected based on these findings. Differences could be a matter of the importance of these variables or could be in terms of relationship direction. For example, satisfaction with level of consumption (material things) could have a higher beta weight in a regression model for women than in a regression model for men but beta weights in both models have the same direction. Or, the beta weight could be positive for women and negative for men. Cottle also found that women's intelligence scores were related more positively with future orientation, or expectations, than for men. Educational level could be a substitute variable for intelligence scores. For both men and women, general locus of control was related positively to expectation of the future.

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### Objectives and Hypotheses

Based on the preceding background information, two objectives were developed for this study. The first objective is to examine differences in expectation of financial condition in 5 years of male and female financial managers. The second objective is to determine socioeconomic and social-psychological influences of male and female financial managers' expectation of financial condition in 5 years.

The null hypothesis for the first objective is that there will be no difference between men and women financial managers in expectation of financial condition in 5 years. The alternative hypothesis is that men will be more likely than women to have a positive expectation of the future. For the second objective, the null hypothesis is that the socioeconomic and social-psychological variables will have no influence on the dependent variable, expectation of financial condition in 5 years. Predicted relationships for each independent variable are listed in Table 1.

### Methods

#### *Sample and Data Collection*

Data for this study were collected as part of the regional project, "Family Resource Utilization as a Factor in Determining Economic Well-being of Rural Families" (NC-182). The sample was drawn from rural counties in eight states; these states are Arizona, California, Illinois, Indiana, Iowa, Kansas, Michigan, and Minnesota. Rural counties were defined as counties where 20% or more of the employed or self-employed persons living there were engaged in agriculture, livestock, forestry, mining and/or fishing. Rural counties in each state were arranged by per capita income change for 1979-85. One county was selected randomly from the top quartile and identified as a sustaining/growing county. A second county was selected from the bottom quartile and identified as a county where income was declining. Two counties were selected in this way for each state. The random sample of households in each county was obtained from a professional sampling service.

A mail survey was conducted in spring 1988. A modified Dillman (1978) technique was used to increase response rate, which typically is low in rural areas. An advance postcard informing households of the survey was mailed,

Table 1.  
 Predicted relationships, Hypothesis 2

<u>Socioeconomic variables</u>	Male	Female
Age	!	!
Education	+	+
Household income	!	+
Personal income	!	+
<u>Social-psychological variables</u>		
General locus of control	+	+
Satisfaction with total family income	!	+
Satisfaction with level of consumption	!	+
Satisfaction with resources available to meet a financial emergency	!	+
Satisfaction with family net worth	!	+
Financial locus of control	+	+
Perception of present financial condition compared to 5 years ago	+	+

followed shortly by the questionnaire. Postcards were sent about a week later to encourage response. Those still not responding were sent a second questionnaire. Final sample size was 2,510 which represented an overall response rate of 36.3% and a range of 30.2% to 56.3% for individual states.

Self-administered questionnaires consisting of questions about financial, demographic, and personality variables were used to collect data. Respondents were the household financial managers defined by each

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household as the adult in the household who dealt with household finances.

### *Variables*

The dependent variable was expectation of financial condition in 5 years and was measured by asking the financial manager, "Thinking of the future, 5 years from now, do you expect that your financial condition will be . . .?" Possible responses formed a 5-point Likert scale and ranged from 1=much worse to 5=much better. The distribution was skewed normally which meant that the variable could be used as a dependent variable.

The socioeconomic independent variables were quantifiable and related to, or a combination of, social and economic factors. These variables included financial manager's (a) age, (b) number of years of education, (c) household income, (d) personal income, and (e) gender. Age<sup>2</sup> and education were measured on a continuous scale. Household income was defined as 1987 total, before tax income shared by the family or household. Personal income was before-tax income of the financial manager. Income was collected in ranges rather than continuously so it was recoded to the midpoint for each range and divided by the lowest midpoint. This yields a proportional scale that can be used in regression analysis.

The social-psychological independent variables were quantifiable and related to, or a combination of, social and psychological factors. They were (a) satisfaction with current total family income, (b) satisfaction with level of consumption (material things; e.g., food, clothing, housing, and transportation), (c) satisfaction with resources available to meet a financial emergency, and (d) satisfaction with amount of family's net worth (all assets minus debts). Responses were coded on a 5-point Likert scale, where 1=very dissatisfied and 5=very satisfied. Perception of present financial condition compared to 5 years ago was measured with the same scale as the dependent variable. General locus of control was measured by asking the respondent to indicate level of agreement with the statement, "When I make plans, I am almost certain that I can make them work." Financial locus of control was operationalized based on the level of agreement with the statement, "My financial situation depends on my control of the situation." Both variables were coded on a 5-point Likert scale, where 1=strongly disagree and 5=strongly agree.

### *Statistical Analysis*

Chi-square analysis was used to test differences between male and female financial managers concerning expectation of financial condition in 5 years (Hypothesis 1). Multiple regression analysis was used to test the predicted relationships in Hypothesis 2. Regression models were developed for male and female financial managers separately. All analyses were done on the IBM-PC with SPSS/PC+ statistical software.

Because multicollinearity can be problematic in multiple regression analysis, the independent variables were submitted to correlation analysis. Variables with  $r \geq .6$  were identified as too highly correlated to be run in the same multiple regression model.

Two stages were used in the multiple regression analysis. In the first stage, all independent variables were used but several regressions were run to avoid placing highly correlated variables in the same equation. All variables with a t-ratio of .10 or greater were dropped after this stage. The second stage consisted of multiple regression analysis using the retained variables from Stage 1.

## Results and Discussion

### *Sample Characteristics*

Mean ages of men and women in the total sample were 52 and 51 years, respectively. Median household income was \$25,555 for male financial managers and \$21,578 for female financial managers. Mean level of education for both men and women was 13 years. Nearly all families in the sample were white. Seventy-one percent of the male respondents and 62% of the female respondents were married. Number of children living at home (any age) ranged from 0 to 6; 58% of the sample had no children living at home. A slightly larger percentage of all male respondents (64%) than all female respondents (50%) were employed or self-employed.

### *Male and Female Expectations*

Table 2 gives the Chi-square analysis results for the first hypothesis. The null hypothesis that there will be no difference between male and female financial managers in expectation of financial condition in 5 years was accepted. Further, more respondents (43% of males and 44% of females) answered that they expected their financial condition to be about the same in 5 years than



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Table 2.  
Male and Female Expectations about Financial Situation  
in 5 Years, Chi-square Analysis, n=2372

Expectation of Financial Condition in 5 Years	<i>Gender</i>			
	Male	(%)	Female	(%)
Much worse	29	(2.5) <sup>a</sup>	38	(3.2) <sup>b</sup>
Worse	123	(10.5)	129	(10.8)
About the same	503	(42.9)	532	(44.4)
Better	368	(31.4)	357	(29.8)
Much better	150	(12.8)	143	(11.9)
Totals	1173	(100.1) <sup>c</sup>	1199	(100.1)

$\chi^2=2.21$ ; d.f.=4; n.s.

<sup>a</sup>Figures in parentheses are the percentage of males.

<sup>b</sup>Figures in parentheses are the percentage of females.

<sup>c</sup>Totals do not sum to 100 due to rounding.

answered any other response. The next most frequent response was an expectation of better financial condition by 31% of the males and 30% of the females. Thirteen percent of the males and 12% of the females expected their financial condition to be much better. Slightly more than 10% of both males and females expected their financial condition to be worse than the present and a small percentage (3%) expected it to be much worse.

Assuming that better and much better responses indicate optimism, we can conclude that 44% of the males and 42% of the females were optimistic about the future, with males being slightly more optimistic than females. Likewise, females were only slightly more pessimistic with 14% responding worse or much worse compared to 13% of males answering this way. Those responding about the same could be either optimistic or pessimistic. For example, if financial condition was poor in the past and is expected to be about the same in 5 years, this response reflects a

pessimistic view. If financial condition was good in the past and is expected to be about the same in the future, this response reflects an optimistic view. Data were not available to determine optimism/pessimism of those responding about the same so significant differences between male and female financial managers could not be ascertained. Such an analysis would be insightful. Although no difference in expectation was found in this research, the optimism/pessimism associated with expectation could be different for males and females. Optimism/pessimism is likely to be important in influencing how an individual manages finances. Thus, optimism/pessimism about future financial condition is important to include in future studies, especially studies of gender differences.

*Influences of Male and Female Expectations*

First, a correlation matrix of all independent variables was determined, for males and females separately. Six variables were highly correlated ( $r \geq .6$ ) in the male subsample and 4 in the female subsample. Four variables were the same in both subsamples: (a) satisfaction with total family income, (b) satisfaction with level of consumption, (c) satisfaction with resources available to meet a financial emergency, and (d) satisfaction with amount of family's net worth. The two additional variables in the male subsample were personal income and household income.

Given the intercorrelations, 8 different regression equations were run in Stage 1 for male and female financial managers separately. Even though personal income and household income were not highly correlated for the females, these two variables were not run in the same regression equations for the female subsample to be consistent with the equations run for the males.

Based on the adjusted  $R^2$  and number of variables meeting the .10 level criteria, two regression models were chosen for the final regression. The model for male financial managers included (a) financial locus of control, (b) general locus of control, (c) age, and (d) perception of present financial condition compared to 5 years ago. The model for females included (a) satisfaction with level of consumption, (b) education, (c) financial locus of control, (d) age, (e) general locus of control, and (f) perception of present financial condition compared to 5 years ago.

The final regression results for both males and females are shown in Table 3. The adjusted  $R^2$  is very similar for both males (.305) and females (.328); both are highly significant ( $p \leq .0001$ ). Four of the same

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independent variables are in both models, and each variable has the same sign in both models. Age is the most important influence as it has the largest beta coefficient in each model. The final model for female financial managers has two significant variables that do not appear in the model for the males. These are education and satisfaction with level of consumption. Thus, there are some differences between male and female financial managers in terms of what influences their expectation of financial condition in 5 years.

In the model for male financial managers, all variables except financial locus of control were significant at the .0001 level. The results indicate that expectation of financial condition in 5 years was more positive for younger than older males. Expectation improved as the respondent perceived present financial condition compared to 5 years ago more positively. There were positive relationships with both general locus of control and financial locus of control, indicating that expectation was better the more the respondent agreed with the statements, "When I make plans, I am almost certain that I can make them work" and "My financial situation depends on my control of the situation." Financial locus of control had a significance level of .06, just slightly higher than the alpha level of .05 set for this study. Further study of this variable as a determinant of future expectation is suggested.

All variables in the model for female financial managers were significant at least at the .05 level. As with males, expectation was more positive for younger than older females. Expectation was greater when perceived present financial condition compared to 5 years ago was positive, satisfaction with level of consumption was higher, and respondent's education was higher. It was higher also when there was more agreement with both the financial locus of control and general locus of control statements.

Hypothesis 2, that socioeconomic and social-psychological variables will have no influence on expectation of financial condition in 5 years, was rejected. Both socioeconomic and social-psychological variables were in the final regression model for males and females. Not all of the predicted relationships were significant; however, all the significant coefficients were in the predicted direction and consistent with findings of previous studies.

Table 3.  
Final Regression Results for Male and Female Financial  
Managers' Financial Expectations in 5 Years

Variables	Beta Coefficients	
	Males <sup>a</sup>	Females <sup>b</sup>
Age	-.38****	-.48****
Education		.05*
General locus of control	.11****	.07**
Satisfaction with level of consumption		.09***
Financial locus of control	.05	.08**
Present financial condition compared to 5 years ago	.28****	.17****
R <sup>2</sup> *	.30****	.33****

<sup>a</sup>n=1136

<sup>b</sup>n=1135

\*p# .05

\*\*p# .01

\*\*\*p# .001

\*\*\*\*p# .0001

Older financial managers were more pessimistic about their future financial condition, regardless of whether they were male or female. This is quite logical because health problems and costs increase and income decreases as people age. Further, as Katona (1975) pointed out, levels of expectation are influenced somewhat by personal experiences. Since older financial managers have had more experiences than younger managers, their personal experiences can make it more difficult for them to think about the future positively.

One kind of personal experience is perception of present financial condition compared to 5 years ago. As Katona (1975) found, results of

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this study showed that respondents who said their present financial condition compared to 5 years ago was improved also saw their future financial condition in a positive way. This was true for both male and female financial managers. This result suggests that the reference-point measurement is a good indicator for future financial expectation as well as for constructing a conceptual model of economic well-being as suggested by Porter and Garman (1990) and Davis and Helmick (1985). In fact, the relationship suggests that expectation of financial condition in 5 years probably is an intervening variable between perception of present condition compared to 5 years ago and economic well-being. This should be explored in future research in this area.

Both general and financial locus of control were important predictors for males and females. This is consistent with research by Cottle (1976) and Wilhelm and Varcoe (1991).

Education and satisfaction with level of consumption were important predictors of future expectation of female financial managers but not male financial managers. This is consistent with Cottle's (1976) findings about differences in time perceptions of men and women.

### Conclusions and Implications

Financial management educators and financial counselors want to motivate individuals to actively plan finances to enhance their economic well-being. Because expectation can be a powerful motivator, it is important to understand what influences expectation of future financial condition. This study makes an important contribution in this area.

First, although male and female financial managers do not differ in expectation of financial condition in 5 years, they do have differences in what influences expectation. Educators and counselors need to be aware of these differences as they work with individuals. Second, both socioeconomic and social-psychological variables are influential. This is strong support for handling attitudes, satisfactions, values, etc., in counseling and education, not just teaching basic skills like setting up a budget or net worth statement. Third, this study focused on a rural sample. This is especially important because rural areas have experienced economic hardships in recent years. Although this enables study of expectation of future financial condition among a potentially pessimistic group of people, it does limit the generalizability of the results. The analysis should be replicated on an urban sample.

We indicated at the outset of this research that expectation of future financial condition could result in either increased or decreased economic well-being. Katona's (1976) research cited earlier certainly indicates that a positive outlook leads to increased economic well-being. But, we did not set out to show such a relationship. Rather, our research, particularly the multiple regression results, provides some implications for financial counselors and educators. These can help professionals understand potential impediments to financial progress or can be used to help individuals gain a positive expectation about future financial condition.

One finding from the multiple regression analysis is that it may be necessary to work harder with older, than younger, individuals to overcome pessimistic attitudes about future financial condition. The very real prospect of diminished resources during retirement years seems to interfere with some individuals' planning abilities because of their focus on employment income that has ceased. Often these individuals can be helped to see opportunities for income other than from full-time employment. Some need help identifying available community resources.

If present financial condition compared to a previous time is perceived as worse off, the individual needs help to find positive aspects of the past. What kinds of events caused the pessimistic perception and why are important in predicting what types of financial events might affect present and future financial management. Specific and careful planning, then, could change predicted household financial difficulties in a positive way. In a different situation, perception may be focused only on rising expenses, for instance, which may not be very detrimental to economic well-being if income has been rising also. Helping individuals to see their financial situation in an objective light can put things into a more realistic perspective and enable constructive financial planning. Helping individuals gain a feeling of both general and financial locus of control is important. Since specific and realistic financial planning and goal setting lead to an increase in financial locus of control, financial counselors and educators can recommend a concrete financial plan to individuals. Through this planning process, individuals gain financial management skills and learn how these skills give them control over their lives.

For women, assistance in feeling satisfied with level of consumption is indicated by the results reported here. Perhaps understanding level of consumption versus level of living<sup>3</sup> would raise that level. By focusing on non-material aspects of life like relationships and freedoms, level of consumption becomes less important and any dissatisfaction is likely to

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diminish because of lowered importance. Finally, encouraging women to increase their education is appropriate per these findings. For instance, they can be advised to attend adult education courses to gain knowledge of financial management matters.

Expectation of future financial situation seems to be a fruitful area of further research in relation to financial planning. This study has contributed to knowledge of similarities between men and women as well as differences between men and women in terms of influences of expectation. This study has suggested programming considerations for financial counseling and education. Further research could add many more.

### Endnotes

1. *A REFERENCE-POINT VARIABLE IS ONE IN WHICH THE PRESENT SITUATION IS ASSESSED IN TERMS OF THE SITUATION AT ANOTHER POINT IN TIME, EITHER IN THE PAST OR IN THE FUTURE.*
2. *FOLLOWING A REVIEWER'S SUGGESTION, WE ALSO TESTED THE MODEL WITH A QUADRATIC TERM FOR AGE BUT FOUND NO SIGNIFICANT DIFFERENCE. THUS, WE RETAINED THE LINEAR FORM USED IN THE ORIGINAL ANALYSIS.*
3. *LEVEL OF CONSUMPTION CONSISTS OF ALL THOSE GOODS AND SERVICES AN INDIVIDUAL CURRENTLY POSSESSES, USES, OR COULD USE. LEVEL OF LIVING GOES BEYOND LEVEL OF CONSUMPTION. IN ADDITION TO GOODS AND SERVICES, LIVING INCLUDES ALL OTHER NON-MATERIAL ASPECTS OF AN INDIVIDUAL'S LIFE SUCH AS RIGHTS, FREEDOMS, RELATIONSHIPS, WORKING CONDITIONS, ETC. (DAVIS, 1945).*

### References

- Bailey, W. C., & Lown, J. M. (1992). A cross cultural examination of the etiology of attitudes toward money. *Proceedings of the 1992 Conference of the Southeastern Regional Association of Family Economics-Home Management* (pp. 66-74). Columbus, OH: The Ohio State University.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Cottle, T. J. (1976). *Perceiving time*. New York: John Wiley.

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- Davis, E. P., & Helmick, S. A. (1985). Family financial satisfaction: The impact of reference points. *Home Economics Research Journal*, 14, 123-131.
- Davis, J. S. (1945). Standards and concept of living. *American Economic Review*, 35, 1-15.
- Dillman, D. A. (1978). *Mail and telephone survey*. New York: Wiley.
- Hayhoe, C. R. (1990). Perceived economic well-being and active participation in financial decision making. In R. O. Weagley (Ed.), *Annual Proceedings of the Association for Financial Counseling and Planning Education* (pp. 188-203). Columbia, MO: University of Missouri.
- Katona, G. (1975). *Psychological economics*. New York: Elsevier.
- Katona, G. (1976). Persistence of belief in personal financial progress. In B. Strumpel (Ed.), *Economic means for human needs* (pp. 83-105). Ann Arbor, MI: Institute for Social Research, The University of Michigan.
- Katona, G., Strumpel, B., & Zahn, E. (1971). *Aspirations and affluence*. New York: McGraw-Hill.
- Mammen, S., Helmick, S. A., & Metzen, E. J. (1983). Factors affecting perceived adequacy of income. In M. M. Dunsing (Ed.), *Proceedings of the Symposium on Perceived Economic Well-being* (pp. 40-50). Urbana, IL: Illinois Agricultural Experiment Station.
- Porter, N. M., & Garman, E. T. (1990). A conceptual framework for measuring financial well-being. In R. O. Weagley (Ed.), *Annual Proceedings of the Association for Financial Counseling and Planning Education* (pp. 142-152). Columbia, MO: University of Missouri.
- van Raaij, W. F. (1991). The formation and use of expectations in consumer decision making. In T. S. Robertson & H. H. Kassarian (Eds.), *Handbook of consumer behavior* (pp. 401-418). Englewood Cliffs, NJ: Prentice-Hall.
- Wilhelm, M. S., & Varcoe, K. (1991). Assessment of financial well-being: Impact of objective economic indicators and money attitudes on financial satisfaction and financial progress. In S. M. Danes (Ed.), *Proceedings of the Association for Financial Counseling and Planning Education* (pp. 184-201). St. Paul, MN: University of Minnesota.