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Credit, Saving, and Insurance Practices Influencing Satisfaction With Preparation for Financial Emergencies Among Rural Households

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A family resource management framework was used to develop a model of relationships between socioeconomic variables, financial management practices, and satisfaction with preparation for financial emergencies. This *study examined direct and indirect effects of socioeconomic charac-teristics and mediating effects of financial management practices variables on satisfaction with preparation* for *financial emergencies. A sample of* 297 money *managers was randomly selected* from *two rural counties of a midwestern state. Results showed that households'*monthly *income was the only socioeconomic variable thai had a significant direct effect on satisfaction with preparation for financial emergencies, whereas the effects of other socioeconomic variables were mediated through theeffects of financial management practices. Financial management practices such as the managerial behavior index, monthly saving, and the* number *of insurance types had* significant *positive effects on satisfaction with preparation for financial emergencies. Monthly debt* payment *hada significant but negative effect on satisfaction. The managerial behavior index and monthly debt payment had both direct and indirect effects on satisfaction with* preparation *for financial emergencies. Their indirect effects were mediated through monthly saving. Monthly saving and the number of insurance types showed only direct effects on satisfaction with* preparation *for financial emergencies.*

Many factors affect the economic well-being of today's American families. These factors include changing job markets, high unemploy-ment, cutbacks in government assistance programs, increased use of consumer credit, changes in the purchasing power of the dollar, and sophisticated consumer markets. Clearly, financial decision making for families has become more complex (Bailey, 1987). A better under-standing of family economic behavior is needed to help families

maintain their economic well-being (Schnittgrund & Baker, 1983). Hira and Mueller (1987) reported that improved money management practices help families cope with financial difficulties and meet family needs. Wilhelm, Iams, and Rudd (1987) emphasized that assessing family economic well-being is an important matter for those concerned with evaluation, policy analysis, and empirical research.

Illness, property losses, and death are among personal risks that may lead to financial difficulties for a family. Coping with these events requires a family to have financial resources for emergency expenses. Families can take specific steps to prepare themselves to meet emergency expenses and to reduce negative consequences. According to Deacon and Firebaugh (1988), having a method for handling risk is one of the components of the family financial management process. Therefore, preparation for financial emergencies is an important part of the family financial management process, and thus achieving satisfaction with preparation for financial emergencies is an important goal for families.

The purpose of this study is to develop a model of relationships between socioeconomic characteristics, financial management practices, and satisfaction with preparation for financial emergencies. The study focuses on examining direct and indirect effects of socioeconomic characteristics and mediating effects of financial management practices on satisfaction with preparation for financial emergencies. This type of analysis can provide deeper insights into the relationships among these three categories of variables and can help test the theoretical model in the area of family resource management. Finally, the results of this study will be useful to professionals in their efforts to help families increase their preparation for financial emergencies.

REVIEW OF LITERATURE

According to Deacon and Firebaugh (1988), a family is a system consisting of three major elements: input, throughput, and output. With regard to the first two, they stated that

> the input of basic systems consists of matter, energy, and information. Those specific forms of matter, energy, and information entering the family system are classified as resources and demands. As the family uses resources to meet demands, both the resource changes and the demand responses leave the family system and enter the environment as output. The process of changing the inputs of matter, energy, and information is called throughput, or transformation. (p. 16)

Output was classified into demand responses and resource changes. They explained these concepts as follows:

> On the demand side, the degree to which expected results have been achieved is reflected in the sense of satisfaction and fulfillment that has accompanied the scope of decisions and actions relating to allocation of available funds—such as contributing to causes, providing for personal enrichment experiences, purchasing and consuming goods and services, protecting against or meeting crisis, and providing for the anticipated wants and needs of the future. On the resource side, results are summarized by how well money has been utilized in combination with other resources to provide for the present and the future. (p. 153)

Many researchers have applied the Deacon and Firebaugh model of family resource management to study family financial management. Some researchers examined direct effects of socioeconomic (input) variables on financial management (throughput) variables (Garrison & Winter, 1986; Godwin & Carroll, 1986). Others investigated the relationship between input and output variables (Davis & Helmick, 1985; Davis & Schumm, 1987). Heck (1983) and Hira (1987a, 1987b) examined the combined effects of input and throughput variables on output of managerial behavior without testing the throughput variables as intervening variables between input and output.

In most of the previous studies, inputs of managerial systems were conceptualized as age, household size, income, education, employment status, and marital status (Beutler & Mason, 1987; Buehler & Hogan, 1986; Davis & Helmick, 1985; Davis & Schumm, 1987; Garrison *&* Winter, 1986; Godwin & Carroll, 1986; Heck, 1983; Hira, 1987a, 1987b; Jeries & Allen, 1986; Schnittgrund & Baker, 1983; Titus, Fanslow, & Hira, 1989).

The throughput processes have been defined and measured in a variety of ways: planning/ budgeting record keeping, saving, having credit, debt repayment, and possessing one or more insurance types (Beutler *&* Mason, 1987; Dollar, 1983; Heck, 1983; Hira, 1987a, 1987b; Hira & Mueller, 1987, Jeries & Allen, 1986; Ohrt, 1986; Peck & Stewart, 1985; Sahlberg, 1977; Schnittgrund & Baker, 1983; Titus et al., 1989). Garrison and Winter (1986) developed an index of managerial behavior, which consisted of 14 items on a Likert-type scale. These items described activities thought to be part of effective managerial behavior. Respondents were asked to identify how close their behavior was to that described in each statement. Titus et al. (1989) divided the throughput process into planning and implementing activities. A planning index was constructed from 10 items, and an implementing

index was. constructed from 14 items. Godwin and Carroll (1986) constructed a scale of financial management behavior consisting of 18 items related to family financial management practices. Heck (1983) conceptualized the throughput process based on whether the respondents viewed themselves as planners or whether they planned a specific task.

Some researchers have conceptualized output of managerial behavior in terms of satisfaction with a specific domain of the family financial situation, such as satisfaction with financial management Genes & Allen, 1986), satisfaction with savings (Davis & Schumm, 1987), satisfaction with level of living (Hafstrom & Dunsing, 1973), and satisfaction with amount of money (Heck, 1983). Other researchers used several domains of the family financial situation and computed a satisfaction index (Beutler & Mason, 1987; Davis & Helmick, 1985; Hira, 1987a; Titus **et** al., 1989).

The previous studies, however, did not reach a consensus regarding the effects of some input variables on output of financial management. Some studies indicated that money managers with higher income were more likely than those with lower income to be satisfied with their financial status (Beutler & Mason, 1987; Titus et al., 1989). Others found that income did not have a significant effect on satisfaction with financial status (Davis & Helmick, 1985). Differences in variable specifications might have been a reason for these inconsistencies. Davis and Helmick (1985) measured income as an ordinal variable with 12 levels, while others measured income as a dollar amount (interval variable). Titus et al. (1989) concluded that older money managers were more satisfied with their financial status than were younger money managers, whereas Beutler and Mason (1987) found that age did not have any association with level of living satisfaction. Age in the Titus et al. (1989) study referred to the age of household head only; in the Beutler and Mason (1987) study, age was defined as the age of the household head and spouse.

Beutler and Mason found that education had a positive relationship with level of living satisfaction. However, Heck (1983) and Hira (1987a) found that education was not significantly related to satisfaction with financial status. Similarly, the relationship between household size and satisfaction is not consistent across studies. The varying sample sizes may explain the differences in findings. Beutler and Mason (1987) analyzed 665 households, as compared to 200 households analyzed by Titus et al. (1989) and Heck (1983). Titus et al. (1989)

found a negative relationship between household size and satisfaction with financial status, whereas Beutler and Mason (1987) and Hira (1987a) found an insignificant relationship between household size and satisfaction with financial status. Titus et al. (1989) developed a satisfaction measure using several variables, whereas Beutler and Mason (1987) used a single-item measure of satisfaction.

Heck (1983) analyzed 200 households and found that employment status was insignificantly related to satisfaction with the amount of money held. Beutler and Mason (1987) examined 665 households and found that married money managers were more satisfied with their level of living than were unmarried money managers.

Several studies have reported mixed findings on the relationship between throughput and output variables. Huguley (1976) and Heck (1983) reported that planning behavior, defined as a specific task planned ahead of time, significantly influenced the output of managerial behavior. Titus et al. (1989) found that planning practices, an index constructed from several variables, had no significant effect on satisfaction with financial status. Differences in planning and output measurements may explain these inconsistencies. Huguley (1976) concluded that money managers who practiced planning behavior were more likely to achieve a higher level of satisfaction with family living. Heck (1983) found that money managers who practiced planning behavior were more satisfied with their amount of money than were those who did not practice.

Hira (1987a), Ohrt (1986), and Dollar (1983) reported similar findings regarding the relationship between monthly debt payments, amount of money saved, and satisfaction with financial status. They found that money managers who made smaller monthly debt payments saved a larger amount of their income and were more satisfied with their financial status than were those who made higher monthly debt payments and saved a lower amount of their income. They also reported that having major medical insurance had no relationship to satisfaction with financial status.

The relationship between input and throughput variables showed mixed results. Differences in throughput definitions and measurements are some of the factors that may explain these findings. Garrison and Winter (1986) found that income and education significantly and positively influenced the effectiveness of managerial behavior, whereas household size, sex, and age did not. Titus et al. (1989) reported that age significantly and positively affected planning behavior but did

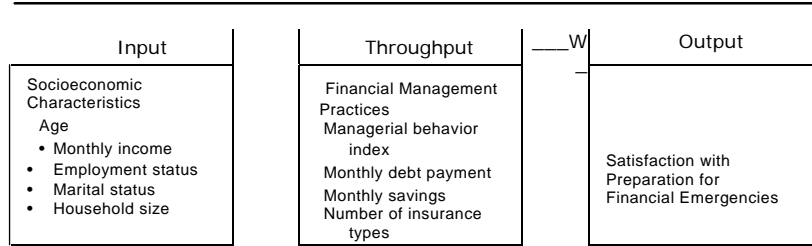| Input	Throughput	___W	Output
Socioeconomic Characteristics Age • Monthly income • Employment status • Marital status • Household size	Financial Management Practices Managerial behavior index Monthly debt payment Monthly savings Number of insurance types	_	Satisfaction with Preparation for Financial Emergencies

Figure 1: The **conceptual** framework adapted from Deacon and **Firebaugh (1988)**.

not influence implementing behavior. Furthermore, they found that income had a significant and positive impact on implementing behavior but had no effect on planning behavior. Titus et al. also found that household size did not have a significant influence on either planning or implementing behaviors.

Based on the review of literature, it can be concluded that further studies are needed to examine the relationships among socioeconomic (input), financial management practices (throughput), and output of financial management variables in a single model. An examination of these interactions in a single model is important to gain more understanding and deeper insights about direct and indirect effects of socioeconomic characteristics and the mediating effects of financial management practices on output of financial management variables. Further studies need to use an appropriate statistical method and different measurements of financial management and output variables in order to enrich empirical support for the family resource management model.

A THEORETICAL MODEL

Figure 1 presents a conceptual framework for this study based on the theoretical model developed by Deacon and Firebaugh (1988). As shown, family resource management consists of three major elements: input, throughput, and output. Inputs represented by socioeconomic characteristics are conceptualized to influence throughput and output. Throughput processes represented by financial management prac-

tices are conceptualized to influence output of family resource management (satisfaction with preparation for financial emergencies).

HYPOTHESES

Based on the theoretical model and the literature review, the following hypotheses were tested to achieve the objective of the study:

1. Age, monthly income, employment status, marital status, and household size influence the managerial behavior index of money managers.
2. Age, monthly income, employment status, marital status, household size, and the managerial behavior index affect monthly debt payment.
3. Age, monthly income, employment status, marital status, household size, the managerial behavior index, and monthly debt payment influence monthly saving.
4. Age, monthly income, employment status, marital status, household size, the managerial behavior index, monthly debt payment, and monthly • saving affect the number of insurance types held by a household.
5. Age, monthly income, employment status, marital status, household size, the managerial behavior index, monthly debt payment, monthly saving, and the number of insurance types affect money managers' satisfaction with preparation for financial emergencies.

Figure 2 shows a fully recursive path model describing hypothesized relationships. Throughput variables represented by the managerial behavior index, monthly debt payment, monthly saving, and the number of insurance types are hypothesized to intervene between input and output variables. Input variables represented by age, monthly income, employment status, marital status, and household size are hypothesized to influence each of the throughput variables and satisfaction with preparation for financial emergencies (output

variable). Each of the throughput variables is hypothesized to affect the output variable.

PROCEDURES

The Data

Data for this study were collected from two systematically selected rural counties of a midwestern state. Rural counties were identified as having 20% or more employed persons involved in agriculture,
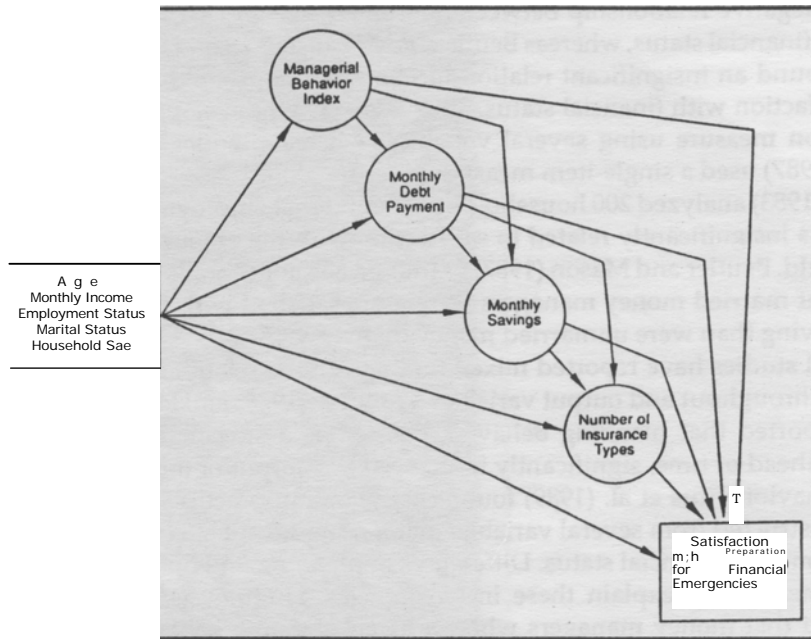
Figure 2: A fully recursive path model.

livestock, forestry, mining, and fishing. A random sample of households was identified through the use of a commercial mailing list.

Data were collected through a mail survey during spring 1988. Respondents were the self-designated money managers and the other adult, if any, in the household. Questionnaires were mailed to 900 randomly selected residents of two selected counties. There were 297 usable questionnaires received from the money managers and 170 from the other adults in the household, producing a response rate of 33%. This study used only the 297 completed questionnaires from money managers.

Variables

Three sets of variables were used in the study: socioeconomic characteristics as input, or independent, variables; financial management practices as throughput, or intervening, variables; and satisfaction with preparation for financial emergencies as an output, or dependent, variable.

Input Variables

Resource input variables used were age as an indicator of experience, monthly income as a measure of financial resources, employment status as an important source of financial resources, and marital status as an indicator of single- or dual-headed household. The demand input variable was household size as a proxy for motivation to consume (Davis & Schumm, 1987). Age of money manager was defined as the age in years at the time of the interview. Monthly income was measured as the dollar amount of after-tax monthly income received by all household members. Employment status was defined as money managers' participation in the labor force at the time of the interview. This was a dummy variable coded 1 for employed or self-employed and 0 for not employed. Similarly, marital status was also treated as a dummy variable. It was coded 1 for married and 0 for unmarried. Household size was defined as the number of persons living in the household.

Financial Management Practices Variables

Financial management practices consisted of four variables: the managerial behavior index, monthly debt payment, monthly saving, and number of insurance types.

The managerial behavior index was a scale constructed from six variables that described financial management behavior: save regularly for goals, record where money is spent, keep bills and receipts, discuss finances without getting upset, make plans on how to use time, and do things when they need to be done. Respondents were asked to indicate the frequency of each activity. Responses were measured on a Likert-type scale ranging from 1 to 5, varying from least frequently *to most frequently.* An index was developed to measure managerial behavior by summing the scores for each item. The reliability coefficient for this index (Cronbach's alpha) was .62.

Monthly debt payment was the proportion of monthly income used to pay installment debt. Monthly saving was the proportion of monthly income saved. The number of insurance types was determined by asking respondents to indicate types of insurance they had from among eight common types of insurance: general health or HMO, health catastrophe, life, disability, automobile, house, disaster (flood, earthquake), and liability.

Satisfaction with Preparation
for Financial Emergencies

The respondents were asked to describe how satisfied they were with the resources they had available to meet financial emergencies. The satisfaction level was measured by using a 5-point Likert-type scale ranging from 1 *(very dissatisfied)* to 5 *(very satisfied).*

Statistical Analysis

A Pearson correlation analysis was used to examine the direction and strength of the relationships between variables. Path analysis was used to test the proposed model describing the relationships between input, throughput, and output variables. Path analysis is a series of multiple regression analyses to test causal relationships among dependent and independent variables. Each regression equation produces path coefficients that are standardized regression coefficients (beta). Agresti and Finlay (1986) stated that "the path coefficients show both the relative strength of association between variables, controlling for other variables in the sequence, and the sign of the influence" and "most path models will have variables that are dependent on some other variables but are, in turn, causes of other dependent variables. These variables are sometimes called intervening variables since they occur in sequence between other variables" (p. 513). In addition, path analysis enables researchers to decompose the effect of one variable on another into its direct and indirect effects. Given the objective of the study and the conceptual model (see Figure 1), path analysis appeared to be the most appropriate method of analysis.

The following five multiple regression equations were developed to test the hypotheses:

$$Y1 = f(X1 \ldots X5)$$
$$Y2 = g(X1, \ldots X5, Y1)$$
$$\mathbf{Y3 = h(X1 \ldots X5}, Y1, Y2)$$
$$Y4 = i(X1, \ldots X5, Y1 \ldots Y3)$$
$$Y5 = j(X1, \ldots X5, Y1, \ldots Y4),$$

where
   X1   age
   X2 = monthly income
   X3 = employment status
   X4 = marital status

X5 = household size
Y1 = managerial behavior index
Y2 = monthly debt payment
Y3 = monthly saving
Y4 = number of insurance types
Y5 = satisfaction with preparation for financial emergencies.

The first step in examining the relationships between input, through-put, and output variables was to test a fully recursive model. This model hypothesized a path from each input variable to each through-put and output variable and from each throughput variable to each output variable. The second step was to determine the reduced model from the full model which included only the significant path coefficients. Finally, direct and indirect effects of input variables were calculated to determine the importance of the throughput intervening variables.

RESULTS AND DISCUSSION

Table 1 presents the descriptive statistics for all variables included in the model. The average money manager was 50 years old, married, and employed. Both males and females were equally represented. The average monthly net household income was $1,532, with a median of $1,300. Monthly income ranged from $200 to $6,750. The average household size was 2.8 persons.

Managerial behavior index scores ranged from 10 to 30, with a mean of 23 and a median of 24. On average, households in this sample used 18.8% of their monthly income to pay for their installment debt. On the other hand, they saved, on average, 9.5% of their monthly income. The number of insurance types held by households ranged from one to seven, with a mean of five. Approximately 41% of the money managers were satisfied with their preparation for financial emergencies, whereas 35% were dissatisfied.

Table 2 presents a correlation matrix for all variables in the model. According to the correlation results, age, monthly income, and marital status were positively and significantly related to satisfaction with preparation for financial emergencies. There were no significant correlations between employment status, household size, and satisfaction level. Managerial behavior, monthly saving, and the number of insurance types were significantly and positively related to satisfaction level. Monthly debt payment was significantly and negatively

TABLE 1: **Mean, Median, and Standard Deviation of Variables**

Variable	Mean	SD	Median	Percentage
Age (in years)	49.7	17.0	47	
Month income (in dollars)	1,531.9	989.3	1,300.0	
Employed				60.0
Married				73.0
Household size	2.8	2.0	2	
Sex				
Female				49.0
Male				51.0
Managerial behavior index	23.2	4.4	24.0	
Monthly debt payment				
Percentage	18.8	17.0	4.6	
Amount (in dollars)	251.7	291.2	186.0	
Monthly saving				
Percentage	18.8	18.1	16.4	
Amount (in dollars)	144.5	215.6	50.0	
Number of insurance types	4.7	1.4	5	
Satisfaction with preparation for financial emergencies				
Satisfied				40.7
Neutral				24.2
Dissatisfied				35.0

associated with satisfaction level. None of the correlation coefficients was too large to indicate a problem with multicollinearity in the regression analyses.

**Predictors of Managerial Behavior Index**

Figure 3 presents a path diagram and path coefficients for the reduced model. A significance level of .05 was employed to select variables entered in the reduced model.

The managerial behavior index was significantly and positively influenced by two input variables: age *(b = .142, p < .05)* and monthly income *(b = .207, p < .001)*, whereas other socioeconomic variables were not significantly related. The R^2 of *.06 (p < .007)* indicated that 6% of the variability in the managerial behavior index was explained by the age of money managers and the household's monthly income. Older money managers and those from households with higher monthly incomes used more managerial practices than did younger money managers and those from lower-income households. Similar

TABLE 2: Correlation Matrix Among All Variables

	1	2	3	4	5	6	7	8	9
1. Age									
2. Monthly income	—12"								
3. Employment status	—54"	**.24"**							
4. Marital status	.05	.34"	.16—						
5. Household size	—.35"	.16"	.27—	.40—					
6. Managerial behavior index	.05	.23"	G6	.08	—.02				
7. Monthly debt payment	—35"	.22"	.29—	.14"	.19"	—.02			
8. Monthly saving	.10	.55"	.02	.20"	—.08	.32"	.02		
9. Number of insurance types	—.01	.23"	.29"	.37"	.16•	.16"	.16**	.10	
10. Satisfaction with preparation for financial emergencies	.23"	.36"	—.01	.13•	—.09	.36**	—18"	.53"	.26"

•$p < .01$; "$p < .001$, both two-tailed.
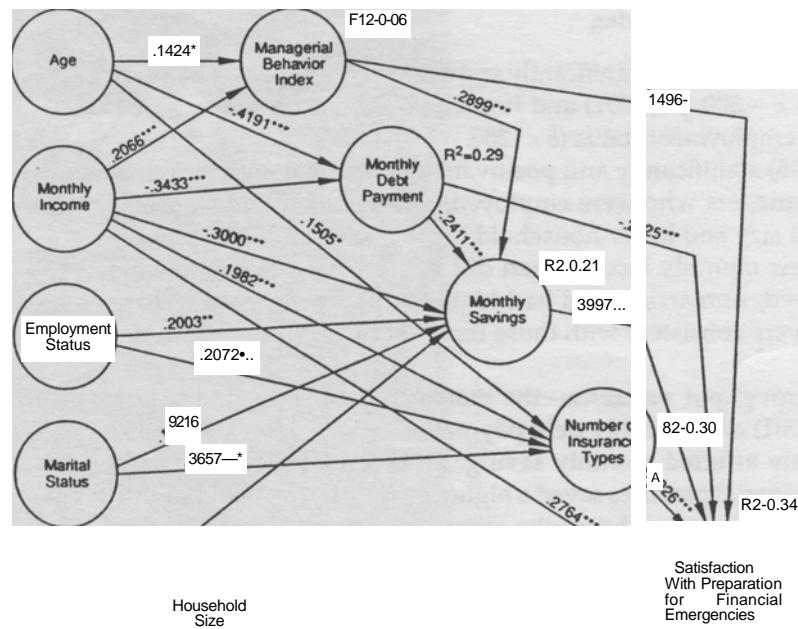
Figure 3: Reduced model with significant coefficients.
NOTE: *p<.05; ⁻p<-01; —P<.001.

findings were reported in previous studies (Garrison & Winter, 1986; Titus et al., 1989).

Predictors of Monthly Debt Payment

Monthly debt payment was significantly and negatively affected by age *(b = —.419, p < .001)* and household monthly income *(b = —.343, p < .001)*. These two variables predicted 29% of the variance in the proportion of monthly income used to pay installment debt *(R' = 0.29, p < .000)*. Older money managers and those from households with higher monthly income used a smaller proportion of their monthly income to pay installment debt as compared to younger money managers and those from lower-income households. Similar findings were reported by Washberg (1988), who found a negative effect of age on size of monthly debt payment.

Predictors of Monthly Saving

Monthly saving was significantly and negatively affected by monthly income *(b = -.300,* p < .001) and household size *(b = -.168,* p < .05). However, employment status *(b = 200, p < .01)* and marital status *(b = .193,* p < .05) significantly and positively influenced monthly saving. Money managers who were employed, married, and had a smaller household size and lower household income saved a larger proportion of their monthly income than did money managers who were unemployed, unmarried, and had higher household income. These findings were consistent with those reported by Davis and Schumm, (1987).

Two throughput variables—the managerial behavior index *(b .290,* p < .001) and monthly debt payment *(b = -.241, p < .001)*—also significantly affected monthly saving. Money managers who used more managerial practices saved a higher proportion of their monthly income as compared to those who employed fewer managerial practices. Money managers who used a larger proportion of their monthly income to pay installment debt saved a lower proportion of their monthly income than did those who used a smaller proportion of their income to pay installment debt. All the variables used in the model predicted 21% of the variance in the proportion of income saved *(R' = 0.21, n.s.)*

Predictors of Number of Insurance Types

The number of insurance types held by household money managers was significantly and positively influenced by four input variables: age *(b = .150,* p < .05), monthly income *(b = .192, p < .001),* employment status *(b = .207,* p < .001), and marital status *(b = .366,* p < .001). Older money managers and those who had higher household monthly income held a greater number of insurance types than did younger money managers and those who had lower household monthly income. Employed and married money managers, as compared to unemployed and single money managers, had a larger number of insurance types. These findings were different from those found by Ohrt (1986). In her study, no socioeconomic variable affected respondents' possession of major medical and disability insurance.

The number of insurance types reported by money managers was not affected by the managerial behavior index, monthly debt payment, and monthly saving. Approximately 30% of the variance in the

number of insurance types was explained by the predictors in the model $(R' = .30, p < .0001)$.

Predictors *of* Satisfaction With
Preparation for Financial Emergencies

Monthly income *(b = .276, p < .001)* was the only input variable that had a significant impact on satisfaction with preparation for financial emergencies. Money managers who had higher household monthly income reported a higher level of satisfaction with their preparation for financial emergencies than did those with lower household monthly income. Titus et al. (1989) and Beutler and Mason (1987) reported similar findings. The presence of insignificant coefficients for some input variables may indicate multicollinearity problems in the model (linear association between input variables). The effect of multicollinearity is that the coefficient estimates tend to have large sampling errors and may not appear significantly different from zero. According to Judge, Hill, Griffiths, Lutkepohl, & Lee (1982), multicollinearity becomes a serious problem when the correlation coefficient between two independent variables is greater than .80. The correlation coefficients among socioeconomic (input) variables (see Table 2) indicate that the greatest correlation coefficient (.54) was between age and employment status. Thus the model may be affected by multicollinearity, but it is not a serious problem.

Satisfaction with preparation for financial emergencies was also significantly and positively influenced by three throughput variables: the managerial behavior index *(b = .149, p < .05),* monthly saving *(b = .399, p < .001),* and the number of insurance types *(b = .193, p < .001).* However, it was negatively affected by monthly debt payment *(b = −.252, p < .001).* Money managers who exercised more managerial practices were more satisfied with their preparation for financial emergencies than were those who exercised less. Money managers who used a larger proportion of their income to pay installment debt were less likely to be satisfied with their preparation for financial emergencies. Several other researchers have found similar findings (see Beutler & Mason, 1987; Hira, 1987a; Titus et al., 1989).

Money managers who saved a higher proportion of household monthly income were more satisfied with their preparation for financial emergencies. This is consistent with the finding reported by Davis and Schumm (1987). Similarly, money managers who had a greater number of insurance types were more satisfied with their preparation

TABLE 3: Decomposition of Direct, Indirect, and Total Effects of Input and Throughput Variables on Output of Satisfaction Level

Dependent Variable	Independent Variable	Total Effect	Direct Effect	Indirect Effect
Managerial behavior index	Age	.1424	.1424	
	Monthly income	.2066	.2066	
Monthly debt payment	Age	-.4191	-.4191	
	Monthly income	**-.3433**	-.3433	
.Monthly saving	Employment status	.2033	.2033	
	Monthly income	-.1573	-.3000	.1426
	Marital status	.1928	.1928	
	Household size	-.1679	-.1679	
	Managerial behavior	.2899	**.2899**	
	Monthly debt payment	-.2412	-.2412	
Number of insurance types	Age	.1505	.1505	
	Employment status	.2077	.2077	
	Monthly income	.1982	.1982	
	Marital status	.3657	.3657	
Satisfaction with preparation for financial emergencies	Age	.2134		.2134
	Employment status	.1212		.1212
	Monthly income	.093	.2764	.093
	Marital status	.1475		.1475
	Household size	-.067		-.067
	Managerial behavior	.2654	.1496	.1158
	Monthly debt payment	-.3499	-.2535	-.0964
	Monthly saving	.3997	.3997	
	Number of insurance types	.1926	.1926	

for financial emergencies than those who had a smaller number of insurance types. However, Hira (1987a) found that carrying major medical and disability income insurance did not influence satisfaction level. Hira's study measured satisfaction level as an index-constructed from eight variables describing financial aspects of the family. All independent variables in the model explained about 34% of the variance in satisfaction with preparation for financial emergencies *(R'* .34, n.s.).

Direct and Indirect Effects

Table 3 shows the decomposition of total effects of predictors of satisfaction with preparation for financial emergencies. The decom-

position of total effects indicated that there were indirect as well as direct effects between input, throughput, and output variables. Monthly income was the only input variable that had direct and indirect effects on the satisfaction (output) variable. Its indirect effect was mediated by four throughput variables: the managerial behavior index, monthly debt payment, monthly saving, and number of insurance types.

Age, employment status, household size, and marital status variables had only indirect effects on satisfaction. The indirect effect of age was mediated by three throughput variables: the managerial behavior index, monthly debt payment, and number of insurance types. The indirect effects of employment status and marital status were mediated by monthly saving and number of insurance types. The indirect effect of household size was mediated by monthly saving.

The managerial behavior index and monthly debt payment scores had both direct and indirect effects on satisfaction with preparation for financial emergencies. Their indirect effects were mediated by monthly saving. However, monthly saving and number of insurance types showed only direct effects on satisfaction.

CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to investigate direct and indirect effects of socioeconomic (input) variables and mediating effects of financial management practices (throughput) variables on satisfaction with preparation for financial emergencies (output variable) of money managers from two rural counties of a midwestern state. Path analysis was used to test the causal model of the relationship between input, throughput, and output variables. The results of the analysis were supportive of the proposed model. However, only some of the input variables hypothesized to influence throughput and output variables were significant.

The results indicated that the significant predictors of the managerial behavior index and monthly debt payment were age and monthly income. Monthly saving was significantly predicted by monthly income, employment status, marital status, household size, the managerial behavior index, and monthly debt payment. The number of insurance types was significantly affected by age, monthly income, employment status, and marital status. Income was the only socioeconomic (input) variable that had a significant effect, both direct and

indirect, on satisfaction with preparation for financial emergencies. Income had a significant impact on money managers' satisfaction with their preparation for financial emergencies. The amount of monthly income affected not only the family's regular expenses but also resources available for financial emergencies. Other socioeconomic variables such as age, employment status, marital status, and household size did not have significant direct effects on satisfaction with preparation for financial emergencies. Their effects on the satisfaction level were mediated through the effect of financial management practices {throughput) variables.

Financial management practices contributed significantly to the money managers' satisfaction with their preparation for financial emergencies. Input variables such as income are important for meeting family goals; however, financial management practices (throughput) variables as the process of transforming inputs into output are also important.

The managerial behavior index represents money managers' financial management practices. These practices include saving regularly for goals, recording spending, keeping bills and receipts, and discussing finances. These practices determine money managers' preparation for financial emergencies. Monthly debt payment reduces financial resources for regular expenses as well as the proportion of income saved. Therefore, it directly determined satisfaction with preparation for financial emergencies and indirectly did so through the effect of monthly saving.

The family's practice of saving regularly is an important managerial behavior. Saving is one method of accumulating funds to be used for future expenses or to meet financial emergencies. The greater the proportion of income saved, the larger the size of such funds. Therefore, the greater the amount of saving, the more satisfied the money managers are with their preparation for financial emergencies. Insurance is a mechanism used for reducing risk of a financial loss. Buying insurance coverage can be viewed as one method of risk management because it transfers risks to another party who agrees to reimburse the insured persons for financial losses incurred. Generally speaking, the larger the number of insurance types and the larger the types of risks covered, the more satisfied the money managers are with their preparation for financial emergencies. However, it is important that an appropriate type and amount of insurance coverage is selected to meet specific needs.

Although the results of this study validate the theoretical framework, these results should be used with caution. As stated earlier, the samples in this study were drawn from two rural counties of a midwestern state. Caution should be taken in making generalizations to a larger population. Although the conclusions made in this study are consistent with some findings of previous studies, it is important to analyze samples from different geographical areas.

Results support the conclusion that satisfaction with preparation for financial emergencies (output) is mostly influenced by household managerial behavior. Although the findings are supportive of the theoretical model, future studies need to redefine and remeasure financial management practices variables and identify other possible underlying managerial processes. The study used six variables to represent managerial behavior. These variables were measured by the frequency of occurrence of a behavior. Furthermore, this study only examined the number of insurance types that households had and did not analyze the adequacy and the appropriateness of the insurance coverage. Future studies may focus on exploring the appropriateness and adequacy of management practices. Understanding appropriate management practices will help families increase their financial well-being, given available personal and material resources.

Satisfaction with preparation for financial emergencies was conceptualized as an output of family resource management. Future studies might focus on the examination of managerial behaviors as resources when the family is not satisfied with preparation for financial emergencies or use satisfaction as an input variable and explore satisfaction with other aspects of financial status.

The results of this study will be useful to educators, extension specialists, financial counselors, and financial institutions (such as banks, savings and loans, and credit unions) to help consumers increase their satisfaction level with household finances. Courses and programs should include such topics as the importance of the proportion of income used to pay installment debt, the proportion of income saved, and appropriate types and amount of insurance. Specific topics might include skills of estimating the costs incurred for not making full

fupayments on credit card bills, different rates of interest and their effect on cost of borrowing, and understanding consumers' rights and responsibilities as borrowers. Because financial institutions provide a number of services for customers, such as several types of savings accounts and borrowing vehicles, they play an important role in

helping consumers make informed selections from a variety of available saving and borrowing options.

Financial counselors and educators should provide programs and courses that help consumers (a) develop the skills necessary to identify financial and personal risks and (b) acquire sufficient knowledge to select appropriate and adequate insurance coverage for their financial security. The insurance industry can encourage families to meet their financial security goals by providing more information concerning choices and options of insurance types available.

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