## Economic Adjustment Strategies Of Farm Men And Women Experiencing Economic Stress

# **Sharon M. Danes**,<sup>(1)</sup> University of Minnesota **Kathryn D. Rettig**,<sup>(2)</sup> University of Minnesota

The purpose was to examine the adjustment strategies of 337 farm men and women who faced economic stress. Thirty-seven strategies were combined into one total-item scale with four subscales. The four subscales represented increasing and extending money income, decreasing money expenditures, increasing household labor income, and increasing household management income. Regression analyses for the five scales were performed for both genders with economic (money and time adequacy) and human (age, education, perceived income adequacy, and emotional stress) resources as independent variables. Predictors of adjustment strategies differed by gender. Income adequacy perception and perceived emotional stress were both significant for females, but only perceived emotional stress was significant for males. Perceiving their incomes as inadequate increased adjustment activities for all four adjustment strategy scales, for women.

## KEY WORDS: economic adjustment strategies, economic stress, financial counseling

The macro economic environment of Midwest farm households during the last two decades has been characterized by dramatic social and economic changes. Rural areas have shown declining population growth, rising unemployment, falling incomes, and increasing rates of poverty (Flora & Donahue, 1993; O'Hare, 1988). The number of family farms is also decreasing and remaining farmers are finding it increasingly more difficult to retain margins of profit that support business operations, debt service, and family income needs (Bartlett, 1993). Managers of farms with high debt levels are forced to use much of the income for interest payments and this income demand then reduces the amount of money available for family needs (Rosenblatt, 1990). The dramatic reductions in family incomes lead to the pressures and strains that have been identified in the literature as "economic stress" (Conger & Elder, 1994; Elder & Caspi, 1988).

The environmental conditions contributing to income losses and economic stress lead families to initiate various managerial adjustment strategies as a result of these changes (Conger & Elder, 1994; Rosenblatt, 1990), men and women may problem solve around these economic stresses differently (Gray, 1994). Previous studies examining adjustments to economic stressors have tended to focus on one or two rather than a comprehensive set of interpersonal and managerial adjustment strategies. For example, Weigel & Weigel (1990) examined only interpersonal communication strategies and excluded managerial adjustment strategies. The studies examining managerial responses have focused primarily on the three major strategies of increasing incomes by adding additional earners (Bokemeier, Sachs & Keith, 1983; Coughenour & Swanson, 1983; Lyson, 1985), decreasing expenditures by lowering consumption, or mortgaging future income by increasing the use of credit (Caplovitz, 1979, 1981; Conger & Elder, 1994; Elder, Robertson & Ardelt, 1994; Wilhelm & Ridley, 1988a). There are fewer studies that have also examined the adjustment strategies of improving resource productivity through increasing household production incomes, that is, the dollar value of the goods and services produced at home for use by household members (Caplovitz, 1979, 1981; Rettig, 1982; Rettig, Danes & Bauer, 1990; Voydanoff & Donnelly, 1988; Wilhelm & Ridley, 1988a, 1988b).

The studies examining household production strategies have given many different labels for any one particular behavior and have measured the behavior in different ways so that comparisons across studies are difficult. These studies have typically used the adjustment strategies as independent variables associated with outcomes such as economic satisfaction, marital adjustment, or depression (Caplovitz, 1979, 1981; Wilhelm & Ridley, 1988a) but have seldom examined the human and economic resources of men and women and how these

resources are associated with choice of economic adjustment strategies.

The purpose of this paper is to examine the adjustment strategies that are used by farm men and women who are facing changes in resource availabilities. The objective of the research is to explore the relationships of economic and human resource availabilities to the implementation of adjustment strategies such as increasing and extending money incomes, decreasing money expenditures, and increasing resource productivity by increasing household production incomes and how the adoption of these strategies differs by gender.

Research analyses that focus on answering the above questions can provide important insights for financial counselors who frequently work with people who are facing economic stressor events that have caused dramatic changes in income. Changes in family incomes affect the entire family system and it is important that financial counselors learn to think broadly about money issues and critically about how alternative economic adjustment strategies will differentially affect men and women. Choices about adjustment strategies will vary with complexities of the decision situation, the resources of the decision makers, and the decision processes that are used. Decreases in money resources also lead to changes in time use for all family members, but particularly for women. Previous research has documented the role overload of farm women who take off-farm jobs and still maintain responsibilities for farm and home work, caring for family members, and social and civic activities and the dissatisfaction that results from a lack of balance between work and leisure (Danes & Keskinen, 1990; Danes & McTavish, in press; Danes & Solheim, 1993; Rettig, Danes & Bauer, 1993). The present study seeks information that can assist financial counselors in understanding the human and economic resources associated with decisions to use various economic adjustment strategies.

## **Theoretical Framework and Related Literature**

The present study used a family resource management conceptual framework with a human ecological perspective that acknowledges the importance of the environment in influencing human decisions (Rettig, 1993). It views the components of managerial systems to include decision situations, decision makers, and decision processes. Family decisions take place in an environment of interrelated conditions (Danes, 1993; Rettig & Dahl, 1993). The conditions of the agricultural economy around the time of this study brought about reductions in income within family farm businesses due to the high debt levels and low profit margins. The literature investigating the impact of hardships resulting from economic stressor events is extensive and has been growing in the last decade (Conger & Elder, 1994; Elder, Conger, Foster & Ardelt, 1992; Voydanoff, 1990). Previous studies have examined family adjustments to significant income losses due to *depression* (Duncan, Volk & Lewis, 1988; Heffernan & Heffernan, 1986; Turkington, 1986; Keyssar, 1986), *inflation* and *recession* (Caplovitz, 1979, 1981; Hogarth, Krein & Rettig, 1981, 1984; Krein, Hogarth & Rettig, 1983; Rettig, 1982), *unemployment* (Kelvin & Jarrett, 1985; Voydanoff & Donnelly, 1988; Wilhelm & Ridley, 1988a, 1988b), *divorce* (Morgan, 1991), and large scale changes in the size and *structure of the labor force* (Voydanoff, 1984).

*Decision Situation* The decision situation is the presenting problem, conflict, or opportunity that occurs at the *interface* of the environment and the decision-maker where problems are brought to the level of conscious awareness at a particular time and place (Rettig, 1993). The decision situation involves existing resource flexibilities and constraints and perceived risks and consequences (Danes, 1993; Danes & Rettig, 1993a). The presenting problem in the current study is an economic decision situation where scarce money resources needed to be allocated to the multiple goals of business operations, maintenance of physical capital, debt service, and family needs. Scarce time resources needed to be allocated to the multiple goals of farm, market, and household work; consumption and leisure; human capital investment; and transit time. The above demands are present in

all farm family situations, but the stress is compounded when there are dramatic reductions in money income.

The economic resources measured in the present study are based on the assumptions of Juster and Stafford (1985) and Bryant (1990) that time is considered the ultimate scarce resource. Time that is allocated to farm, market, and household production activities ultimately affects incomes available and the access to goods, services, and leisure that determine economic well-being (Fuchs, 1986). Human resources include the affective, cognitive, and psychomotor competencies as well as the energy, age, education, gender, and perceptions of each decision maker.

Taking on an off-farm job is an income-increasing adjustment strategy, often chosen by women, that has an opportunity cost for other family members since it reduces the woman's time available for all other activities such as farm and family work, care of family members, social and civic responsibilities, and leisure (Danes & Keskinen, 1990; Danes & McTavish, in press; Danes & Solheim, 1993). There is less time available for household production activities as a means of extending resources when incomes are reduced. The "time buying" strategies of purchased services (Oropesa, 1993) such as meals away from home and services of laundries and dry cleaners are also less affordable (Nickols & Fox, 1983) in times of reduced income. In other words, when money resources are scarce, there is a shift in the household economy to more labor-intensive operations (Elder & Caspi, 1988) as the household produces more goods and services for its own use rather than purchasing them in the market for cash.

The shift from financial capital-intensive to labor-intensive lifestyles in the Great Depression of the 1930's shifted more of the work to older children (Elder & Caspi, 1988), a strategy that is less possible in current times due to families having fewer children, more individuals living alone, and an aging population with no children left at home. Shifts from capital-intensive to labor-intensive household economies have dramatic effects on time use of women that may not be anticipated at the time economic adjustment strategies are chosen. Family economists and sociologists have documented that the increased labor force work of women in more recent times has not been accompanied by a decrease in household work for women or an increase in household work by spouses and children (Berk, 1985; Nickols & Fox, 1983; Nickols & Metzen, 1982, Sanik, 1981). These inequalities in the household division of labor may also affect women's sense of fairness (Thompson, 1991).

*Decision Maker(s)* The decision maker(s) compare alternative courses of action by weighing the evidence and considering the multiple interacting variables in order to make a judgment about the course of action to select (Rettig, 1993). The perceptions of the decision maker about the situation and his/her own human and economic resources are important factors in arriving at judgments about the course of action to take (Danes, 1993). Indicators of human resources such as age (Danes & Morris, 1989; Strumpel, 1976; Titus, Fanslow & Hira, 1989), education (Godwin & Carroll, 1986; Enevoldson, 1993) perceptions of income adequacy (Hyun, Bauer & Hogan, 1993), and perceived emotional stress (Burr & Klein, 1994) have been found to be important determinants of decision maker's effective adaptations (Weigel, 1988), and financial improvement efforts (Voydanoff & Donnelly, 1988).

Actual annual income has been found to be related to women's preferences for household production activities. Wives in higher income families preferred to spend less time in household production activities (Hiatt & Godwin, 1990). Previous research has also established that knowing the financial resources an individual *has* tells less about a person's financial satisfaction than knowing how he/she *feels* about resource adequacy (Davis & Helmick, 1983; Enevoldson, 1993; Hyun, Bauer & Hogan 1993).

The age and education of a decision maker may also affect perceptions of the decision situation and therefore the economic adjustment strategies that seem possible or reasonable. Danes and Rettig (1993b) reported that older respondents were less likely to intend to change their financial situation. Titus et al. (1989) found older financial managers were less likely to engage in planning behaviors but age was not a significant determinant of decision implementing behaviors. Strumpel (1976) reported that older persons were more likely to abandon or modify goals as time passed. Weigel (1988) reported that older, compared to younger adults, were more likely to analyze the problem, seek information, and talk with family members. Rettig & Danes (1994) found that more highly educated respondents were more likely to engage in cognitive decision making processes.

Voydanoff and Donnelly (1988) also found some gender differences in uses of economic adjustment strategies. Economic distress was related positively to financial improvement efforts. For men, the relationships were strongest for informal economy (5 items such as doing odd jobs, selling personal items, exchanging help with others, buying used goods, and shopping at food co-ops) and family work effort (3 items such as taking a second or third job, working overtime, and adding an additional worker). For women the relationship between economic distress and adjustment strategies were strongest for informal economy, family work effort, and overextension (buy on credit and use savings). Among men, informal economy and family work effort were most likely to be used by those reporting insecurity, employment uncertainty, and unemployment. Among women, use of the informal economy, overextension, and family work effort were most closely associated with respondent's and spouse's employment uncertainty.

*Decision Processes and Alternatives* Decision processes involve cognitive and affective evaluations associated with gathering and analyzing information and weighing the multiple interacting variables to arrive at a judgment and implementing the decisions that are made (Rettig, 1993). The focus of the present study was on decision implementation processes and the alternatives of increasing money income, decreasing money expenditures, and using accessible and existing resources to the extent of their full productivity by increasing household production income. Within each of these alternatives are many behavioral strategies that could be implemented by families.

*Increasing Money Income* The strategies of increasing money income could include adding jobs or earners, working additional hours or years, using savings, selling assets, shifting assets to higher interest rates, or renting portions (or all) of property to others for rental income. One or more strategies for increasing income are typically included in research studies (Caplovitz, 1979, 1981; Conger & Elder, 1994; Danes, 1991; Danes & Rettig, 1993; Danes & Solheim, 1993; Hogarth, Krein & Rettig, 1984; Krein, Hogarth & Rettig, 1983; Rettig, 1982; Rettig, Danes & Bauer, 1990; Voydanoff & Donnelly, 1988).

*Decreasing Money Expenditures* Strategies for decreasing expenditures would include reducing consumption by using less, delaying expenditures, or reducing the quality of purchased goods. The alternative of decreasing expenditures is more complicated to describe than the income-increasing alternative because there may be a conceptual overlap with the strategies that increase resource productivity. Caplovitz (1979, 1981); Conger and Elder (1994); Hogarth et al. (1981, 1984); Krein et al., (1983); Rettig (1982); and Rettig et al. (1990) also studied strategies classified as reduction of expenditures. Lowering consumption was a universal response to economic stress for all income levels, particularly food, clothing, entertainment, vacations, and dental and medical care (Caplovitz, 1981; Danes, 1988; Rettig, Danes & Bauer, 1990).

*Improving Resource Productivity* The alternative of increasing resource productivity depends upon managerial competencies such as planning, resource conservation, resource substitutions and alternate uses, resource exchanges, and resource investments (Danes, Winter & Keefe, 1987; Rettig, 1982). The resource substitution of

time and human skills for money resources in order to maintain family goals requires more time spent in activities that increase household labor and management incomes. Household labor income is the dollar value of goods and services created within the home for the use of the household members (Andrews, 1935). Household management income is the dollar value of "advantages accruing to a family from wise planning, organizing, and administering its affairs or from the decision-making functions of the enterpriser at the head of the undertaking" (Andrews, 1935, p. 69).

The research on economic adjustment strategies has measured both labor and management income components, but with differing labels for strategies and without distinguishing these conceptual categories. Voydanoff and Donnelly (1988) had items that would correspond to household management income in the "financial management," and "informal economy" scales and items that correspond to household labor income in the "do-it-yourself" scales. The financial items included keeping records in order to budget money, decide what is most important to spend money on, and make advance plans about how to use money. The informal economy items involved shopping at co-ops, buying used goods at garage sales, exchanging help with others, selling personal items (increasing income), and doing odd jobs to earn money (increasing income). The do-it-yourself items included doing household repairs, grow fruit and vegetables, and making clothing.

Caplovitz (1979, 1981) labeled the strategies of "increasing efficiency" as those that included the shopping strategies of coupons and sales (household management income). The "self-reliance" strategy was defined as doing for oneself what formerly was done by others (household labor income) such as repairing one's own car, making one's own clothes, painting one's house. The third efficiency strategy was sharing with others (resource pooling) such as food co-ops, exchanging clothing. The self-reliance strategies were used most by those who were the most hard-hit by inflation (Caplovitz, 1981).

# **Assumptions Underlying the Analyses**

The review of literature has supported the assumptions that dramatic decreases in money incomes will lead to adjustment strategies that are more time and labor-intensive (Caplovitz, 1979, 1981; Rettig, Danes & Bauer, 1990; Voydanoff & Donnelly, 1988). These strategies require more careful attention to management and more human energy allocated to household work. This household work is a burden that most often falls on women (Berk, 1985; Nickols & Metzen, 1982, Sanik, 1981) who in farm families are already experiencing role overload (Danes & Keskinen, 1990; Danes & McTavish, in press) and thus may be an issue of fairness (Thompson, 1991). The adjustment strategies that are chosen will vary with the decision situation in the family setting and with the resources of the decision makers. The severity of economic stress will lead to more intensive and extensive use of economic adjustment strategies (Voydanoff & Donnelly, 1988) due to the decreasing perception of income adequacy. Increasing household management and labor incomes will be strategies that are least preferred by people whose incomes are more adequate and by younger women who have more education (Rettig & Danes, 1994) and also higher incomes (Hiatt & Godwin, 1990) as well as less established habits and preferences for household work. The research questions for the study were: How are the availabilities of economic and human resources of decision makers related to their decisions to implement various economic adjustment strategies? and Do these resource availabilities and implementation of economic adjustment strategies differ for men and women?

## Methods

*Sampling Procedures* The population for the study was completed cases of Mandatory Farm Credit Mediation in Minnesota. Questionnaires were mailed to completed cases in 29 randomly selected counties. The response rate was 42% of all households contacted. The 337 individuals in the sample for this study were assumed to be

under economic stress because there was a default on a loan in each case and participation in the mediation process was mandatory by state law. Further evidence of economic stress was provided by their low income levels. The median adjusted gross income (\$6,319) was lower than the national farm household income (\$21,655) for that same year (US Bureau of Census, 1988).

The respondents were primarily Caucasian (97%) and of German and Norwegian descent. They represented mainly Protestant (65%) or Catholic (25%) religions. Most respondents were in a first marriage (84%) with a mean duration of 26 years that had produced three to four children. Many respondents no longer had children living at home (38%). The majority of people were still actively farming (72%) at the time of the survey. Farming operations were owned primarily by individuals (84%), compared to partnerships (12%), or corporations (3%). Some foreclosures had occurred (29%), repossession resulted (9%), or bankruptcy had been filed (16%). Thirty-seven percent of the respondents worked off the farm.

*Measures of the Dependent Variables* The dependent variables were adjustment strategies that were indicators of the implementation of resource allocation decisions. These strategies are different ways that people adjust to changes in income and income demands. The strategies were developed by theoretical criteria and verified by factor and reliability analyses. Four subscales were created to represent various modes of resource adjustment: increasing and extending money income, decreasing money expenditures, increasing household labor income, and increasing household management income. A fifth scale was created which included all of the strategies in each of the previous subscales to represent the construct of economic adjustment.

Respondents were presented with the following instructions before answering the questions about adjustments:

People adjust in different ways when there are changes in income or expenses. We would like to know what strategies you have used since you received the Mediation notice. Think about any changes you may have made in your personal financial management since you entered mediation. These strategies do not apply to your business operation.

The response scale ranged from 0 to 6 with these answers: not done before or after mediation (0), done a lot less since mediation began (1), done less since mediation began (2), still done with the same amount of frequency (3), done more since mediation began (4), done a lot more since mediation began (5), and done the most that can be done (6). The internal consistencies measured by Cronbach's alpha coefficients are reported in Table 1.

*Increasing and Extending Money Income* The behavioral strategies in the Increasing and Extending Money Income scale included the 12 strategies reported in Table 1. When the items were summed, the range was 11 to 66 with a mean of 36 and an alpha internal consistency of .78 for the index.

*Decreasing Money Expenditures* The Decreasing Money Expenditures scale included ten items that involved reducing consumption by using less, delaying expenditures, or reducing the quality of purchased goods. The range of the summed scores was 11 to 56 with a mean of 31 and an alpha internal consistency of .72 for the index.

*Increasing Household Labor Income* Direct production of goods and services in the home for the family's own use included eight strategies The range for the scale was 4 to 48 with a mean of 25 and a reliability coefficient

of .78 for internal consistency.

*Increasing Household Management Income* Increasing Household Management Income consisted of seven behavioral strategies. The sum of these items had a range of 9 to 42, a mean of 26, and a reliability coefficient of .72 for the index.

*Economic Adjustment Strategies* Economic Adjustment Strategies included all 37 strategies in each of the four previous subscales. The summed 37 items had a range of 52 to 190, a means of 118, and a reliability coefficient of .91 for the scale.

*Measures of the Independent Variables* The independent variables represented the economic and human resources that were available to the respondents for making resource allocation decisions. The economic resources were time adequacy and income adequacy. The human resources included education, age, perception of income adequacy, and perceived emotional stress.

*Economic Resources* The time adequacy variable represented the time that was available to perform the various family economic adjustment activities. The variable was created by taking the total number of hours within a week (168 hours) minus the sum of hours spent in each of the following activities: sleep, work on the farm, and work at off-farm jobs. In other words, total weekly sleep hours and total weekly work hours were subtracted from total hours in a week. The result was an estimate of available time. Hours spent in sleep and farm work were requested from respondents by season (winter, spring, summer, and fall) and then the average was calculated. For jobs worked off the farm, the number of jobs were identified by respondents and then the hours worked per week and the weeks worked per year were identified for each job. Respondents were given space to identify up to three jobs. The above information was used to calculate the average hours worked per week off the farm.

Table 1

Economic Adjustment Strategy Scales (.91\*)

(Deleted for Web version)

The equation for work hours was:

[(hours\*week)<sup>job1</sup>+(hours\*weeks)<sup>job2</sup>+(hours\*weeks)<sup>job3</sup>]/52.

The range of the time adequacy variable was 2.25 to 129.75; the mean was 73.26.

The money that might be available for performing the economic adjustment strategies was estimated by using a created variable to control for the income demands of household size. The variable was labeled "income adequacy" since it represented the degree to which money income provided a level of living that was lower or higher than the requirements of minimum subsistence indicated by poverty level income. A review of the literature and justification for alternative measures of income adequacy can be found in Elder et al. (1988, 1992) and Kushman and Ranney (1990). The variable was created by taking the adjusted gross income from line 32 of

the federal tax form and dividing it by the poverty level income for the household size for the same year to provide the income-to-needs ratio. The mean for the variable was .745, median 1.04 (*SD*=7.55).

*Human Resources* Education was measured by the number of years of schooling completed by the respondent and ranged from 2 to 21 years with a mean of 12 years or completion of high school. The average age of the respondents was 49 years with a range from 23 to 78 years.

Respondents were asked how they felt about the adequacy of their income. Conceptually, the variable represented the perceptions the respondents held about their income adequacy. The respondents could answer: (1) not at all adequate (19%), (2) can meet necessities only (43%), (3) can afford some of the things wanted (32%), (4) can afford about everything wanted (4%), (5) can afford about everything wanted and still save money (2%). The mean was 2.3 which falls in the category of "can meet necessities only."

The measure of perceived emotional stress was an index created from five questions. Respondents were asked how they felt since they received the mediation notice. The five items provided for their responses were: hopeless; under strain and pressure; anxious or upset; downhearted; and tired, worn out, or exhausted. The possible answers were "never" (coded 0), "rarely" (1), "sometimes" (2), "often" (3), or "always" (4). The range of the scale scores was from 3 to 20 with mean and median of 12, standard deviation 3.27, and internal consistency of .82 for the index.

#### Analyses

Preliminary analyses for the study involved the use of frequencies, cross-tabulations, principal components factor analysis, reliabilities, and correlations. The factor and reliability analyses were used to verify the various economic adjustment scales. Ordinary least squares regression was used in the study and was possible because the scores on each of the dependent variables were normally distributed across all possible scores. The regression analyses consisted of five different equations for each gender, one for each of the economic adjustment subscales and one for the scale which included the entire group of economic adjustment strategies.

#### Results

*Adjustment Activities* Table 1 reports the activities that were included in each of the four adjustment strategies subscales: increasing and extending money income, decreasing money expenditures, increasing household labor income, and increasing household management income. The activities that increase household labor income and household management income both increase resource productivity.

The activities in the Increasing Money Income subscale that were done "more" or "a lot more" (over 40% of the time) were turning down heat in winter (42.7%), shopping in discount stores (43.3%), and buying on sale (48.1%). Exchanging resources or services were done less often (32.6% to 44.5%). Buying fewer clothes and buying things in quantity were the two activities that were done less than other activities within this subscale.

The Decreasing Money Expenditures subscale indicated that delaying major purchases was done the most it could be done in 35% of the cases and "more" or "a lot more" in 39.7% of the cases. Delaying doctor

appointments (46.3%) and car repairs (36.5%) were also strategies that were frequently adopted after Mediation. Cutting vacation costs (16.0%) and using free entertainment and parks (17.5%) were least often done.

The strategies in the Increasing Household Labor Income subscale were frequently done with the same frequency as before Mediation in almost half the cases. The strategies that were done "more" or "a lot more" since Mediation were doing own home repairs (39.8%) and vehicle repairs (33.2%). Sewing clothes and raising animals for meals were seldom used strategies.

The Increasing Household Management Income subscale indicated that planning spending carefully and clarifying priorities about money use were two strategies the respondents performed "more" or "a lot more" since mediation (55.8% and 60.8% respectively). The other activities were performed more ("more" and "a lot more"); 32.1% of the respondents indicated they planned meals more and 46.2% coordinated trips to town more. For two strategies within this subscale, slightly over 10% of the respondents did not perform those strategies. Those were involving children in financial discussions (12.2%) and helping children learn financial matters (11.6%).

*Correlations* Table 2 includes the Pearson Product Moment correlations. The results indicated that respondents who perceived their incomes as inadequate did more of all four types of adjustment activities than those who perceived their incomes as adequate [increasing and extending money income (r = -.20, p < .001); decreasing money expenditures (r = -.16, p < .01); increasing household labor income (r = -.24, p < .001); and increasing household management income (r = -.16, p < .01)]. The correlation coefficients among the adjustment subscales were low enough so that it is clear that no two scales measured the same concept.

There was a positive correlation between perceived emotional stress and each of the economic adjustment subscales, as well. The higher the perceived emotional stress reported by the respondents, the more they performed each type of economic adjustment strategy. In comparing the correlations of income adequacy perception and perceived emotional stress with the economic adjustment strategy subscales, the correlation for perceived emotional stress is higher except in the case of increasing household labor income where the correlation with income adequacy perception is higher.

Results indicated a positive relationship between time availability and age (r = .14, p < .01); the older respondents in the sample had potentially more time available to allocate to adjustment strategies. Respondents with more potential time to allocate to adjustment activities did more activities that increased household management income (r = .12, p < .05).

The people who had higher levels of education were younger (r = -.34, p < .001). Respondents with higher education were less likely to implement adjustment activities that increased household labor income (r = -.12, p < .05). Those respondents who were older also perceived that their incomes were less adequate (r = -.25, p < .001). The older respondents used more household management income strategies than those who were younger (r = .15, p < .01). Of the independent variables only income adequacy perception was statistically correlated with perceived emotional stress.

*Regressions* The regression analyses were performed separately for males and females because one of the research questions concerned gender differences in implementing adjustment strategies and also because in

preliminary analyses, there was a positive correlation between the gender variable and the various economic adjustment strategies. Results are reported in Table 3.

For females, each of the regression equations had a statistically significant F-score. The variables explained the highest amount of the variance for the equation with the full economic adjustment scale. Of the subscales, the independent variables in the equation explained the most amount of the variance for increasing household labor income (13.7%), followed closely by increasing money income (13.2%), decreasing money expenditures (12.5%), and increasing household management income (10.6%).

Income adequacy perception and perceived emotional stress were both significant for females, but only perceived emotional stress was significant, in most cases, for males. The beta coefficients for perceived emotional stress were higher for males than females. Those female respondents with a lower score on the income adequacy perception variable performed more of all types of economic adjustment strategies. The higher the perceived emotional stress of the respondents, the more likely they will perform all types of economic adjustment activities.

At least one other independent variable in each equation was significant for females, but it differed by the type of economic adjustment activity. In the case of increasing money income strategies, those women with less education or those who were younger performed more of these types of adjustment strategies. The time adequacy variable was statistically significant for decreasing money expenditures. Women who had more time available performed more economic adjustment strategies that focused upon decreasing money expenditures. Women with less education were more likely to perform activities that increased household labor income, and it was the older women who performed the adjustment strategies that targeted increasing household management income. For the full scale, it was education that was significant. When all the adjustment activities are combined, it was women with less education who performed more overall economic adjustment strategies.

The results were different for males. This is not entirely surprising because the economic adjustment strategies that comprise the scales include those that either gender could do but traditionally tend to be performed more by women than men. Three equations had statistically significant F-scores.

The variables explained 9.5% of the variance in the increasing money income scale, 8.8% of the variance in the decreasing money expenditures scale, and 8.7% of the variance in the full scale. In each equation, the only independent variable that was significant was perceived emotional stress. The higher the level of perceived emotional stress, the more the men would perform adjustment strategies within the categories of increasing money income and decreasing money expenditures, but not the strategies of increasing household labor or household management income.

## Summary

The purpose of the study was to examine the adjustment strategies of a sample of economically stressed farm men and women who were facing changes in resource allocations. Four subscales for economic adjustment strategies were developed: increasing and extending money income, decreasing money expenditures, increasing household labor and increasing household management incomes. The study also investigated the impact of economic and human resources in predicting the performance of various types of strategies for both genders. The conclusions from the regression analyses on this particular sample are that many of the assumptions underlying the study were confirmed. Perceived economic stress was predictive of the extensive use of economic adjustment strategies for both men and women. A perception of income inadequacy predicted the extensive use of adjustment strategies for women. Increasing household management income was a preferred strategy for older women and those with more emotional stress and not by those who had perceptions of higher income adequacy. Emotional stress was the only significant predictor of increasing household management income for men. Increasing household labor income was a preferred strategy for women with fewer years of education, women with perceptions of income inadequacy, as well as women with higher levels of emotional stress and for men with serious concerns about income adequacy. The time costs for women of increasing household production incomes seemed apparent since there were different resource-adjustment relationships for men and women.

## **Discussion and Implications**

There are implications from the findings of this study for financial educators, financial counselors, trainers of financial counselors, and researchers. The list of individual strategies in this study could be used as a checklist to help students or clients of financial educators or financial counselors to find ways to face changes in income loss. Caplovitz (1981) found that lowering consumption was a universal response to one type of income loss, rising inflation. Quite a few respondents in this study had already been utilizing several strategies that decreased money expenditures or increased household labor income; however, a substantial proportion of the sample performed activities within these scales to a greater extent after receiving a Mandatory Farm Credit Mediation notice, a motivation for further change. The strategies that increased household management income were those which were performed to the greatest degree to try to address the decrease in available resources. Those strategies that increased or extended money income were also performed by many people to a greater extent as available resources declined.

It was not surprising that more of the variance in the use of various types of economic strategies was explained for women than men because time studies indicate that they spend more time addressing household management issues. The female respondents with higher levels of education performed strategies that increased/extended money income or increased household income less than those with few years of education. Women with higher education tend to be employed off the farm so that they would have less potential time to perform the activities. In the same line of thinking, those people who had more potential time performed strategies that increased household management income. Having more potential time also increased the likelihood that women would perform activities that decreased money expenditures.

Table 2

Pearson Product Moment Correlations Between Independent Variables and Economic Adjustment Strategies

(deleted for Web version)

Table 3

Regression of Economic Adjustment Scales on Resources

The findings from this study present a caution to financial counselors and trainers of financial counselors. Often, financial counselors are too quick to suggest time intensive strategies in order to reduce the expenditures of dollars available; these types of strategies often have a greater impact on females in the household than males. Perhaps the initial target adjustments might be strategies that directly reduce consumption, being cognizant of equity in the effect on both genders.

Time has a high cost and there is a tradeoff between the cost of the time to perform many of the adjustment strategies and the money savings that might result. The degree of expected savings will differ from individual to individual because of circumstances like health status of the individual or skill level needed for a particular adjustment activity. The preferences of the individual must also be considered because if there is no desire to perform a particular adjustment strategy, there is a high likelihood that it will not be done.

The perception of income adequacy had a major effect in predicting the performance of economic adjustment strategies for both genders, but particularly for females. Those people who perceived their incomes as inadequate were more likely to perform economic adjustment activities. The other human resource that was a predictor of the use of the strategies was perceived emotional stress. Those respondents who had higher emotional stress performed the economic strategies to a greater extent. This relationship was stronger for males then females in all the strategy categories except increasing household labor. These findings was similar to that of Voydanoff and Donnelly (1988) who found that economic distress positively related to financial improvement efforts.

Men and women cope with stress differently and approach problem solving differently (Belle, 1987; Gray, 1994; Rettig, Danes & Bauer, 1993; Tannen, 1990). It is important that financial counselors keep this difference in mind as they address financial problem solving with clients. If you are working with a couple and you are denying these real differences, this may only compound the confusion already caused by the problem (Tannen, 1990). Anxiety of males often emanates from not knowing what action to take at the realization of the lack of balance between income and expenditures, whereas, a feeling of knowing there is a lack of sufficient income is the focus of the anxiety of females. When a man is upset about a problem, he generally will want to do something about it; finding a solution is his priority. A woman will also act to solve the problem, but her initial tendency will be to first talk about it. While she needs to express thoughts, feelings, and values simultaneously to searching for alternatives, it is through a man's action-oriented problem solving approach that he sorts out his thoughts and concerns, clarifies his values and priorities and develops a plan (Gray, 1994).

These gender differences are important on two levels. The financial counselor needs to become aware of their own problem solving approach and, then, must become cognizant of the potential problem solving orientation of clients, often influenced by their gender. Trainers of financial counselors would be wise to include such topics as the problem solving gender difference in addition to the technical information about finances and financial services within their training workshops for financial counselors.

The findings of this study present some challenges for financial educators and counselors, as well. These findings beg for a more systemic approach to financial counseling. A systemic approach might be more integrative of the cognitive and affective arenas of life. It might mean moving from a more prescriptive approach using primarily information about finances and financial services to one which involves more critical thinking which might include a balance among the economic strategies suggested and the recognition of the gender differences in problem solving.

People will most likely do only what they perceive is needed, so feelings, attitudes, beliefs and understandings are vital to the financial counseling process. An example is how people often respond to an income loss. The expenditure adjustment often comes slower than the income loss might warrant (Burk, 1968; Danes & Stumme, 1995; Bae, Hanna & Lindamood, 1993). Many people tend to deny what has happened, at first, but as resources become more scarce and more crises occur, people become more willing to make adjustments. Those people under greater levels of economic pressure may be more highly motivated to make changes in their financial situations than individuals who are experiencing higher levels of economic security (Danes & Morris, 1989; Danes & Rettig, 1993b). Through a careful questioning process the financial counselor might probe as to when the income loss occurred, what are the perceptions of income adequacy, what are the skills and preferences of the individual, what is the potential time available to perform adjustment strategies, and what strategies the person has already incorporated. Having this kind of information enables the financial counselor to suggest adjustment strategies that are more finely tailored to the characteristics of a particular client.

It is also the approach that might be used if the financial counselor perceives that the client is oriented toward communication and then problem solving. If the client is an action problem solver, then more quickly analyzing what has been done and determining what actions are remaining alternatives may be a more appropriate approach. In a subsequent session, this type of person may want to process what occurred after having had time to think through what was happening to them affectively. Openness to diversity in problem solving approaches is critical in the financial counseling approach.

This study has used family resource management as its conceptual foundation rather than stress theory which has been much more prominent in the economic adjustment strategy literature. The conceptual framework has been closely integrated with the empirical procedures within the study. It also has included measures of household labor and management income (Andrews, 1935), as well as the more common measures of decreasing money expenditures and increasing and extending money income. Much more research is needed using family resource management theory as the conceptual foundation and using the four conceptualized scales that were the focus of this study.

There were several pieces of information that were unavailable for this study that would be essential to include in future studies; including them might increase the amount of variance explained by the strategies performed. The level and kind of assets, including savings on which people could draw upon was not included. The timing of business expenses and family crises that could create further demands on the limited resources was also not available. But most of all, combining all the components of the subscales into one economic adjustment scale would increase the explanation of the variance in economic adjustment. However, since the descriptive information about the subscales had not yet been explained anywhere and gender differences surfaced while performing the analyses, that was the emphasis of this study.

# References

Andrews, B. R. (1935). *Economics of the household: Its administration and finance, rev. ed.* New York: MacMillan.

Bae, M., Hanna, S. & Lindamood, S. (1993). Patterns of overspending in U.S. households. *Financial Counseling and Planning*, *4*, 11-30.

Bartlett, P. F. (1993). *American dreams, rural realities: Family farms in crisis*. Chapel Hill, NC: University of North Carolina Press.

Belle, D. (1987). Gender differences in the social moderators of stress. In R.L. Barnett, L. Beiner, & G.R. Baruch (Eds.), *Gender and stress* (pp. 257-277). New York: Free Press.

Berk, S. F. (1985). *The gender factory: The apportionment of work in American households*. New York: Plenum.

Bokemeier, J. L., Sachs, C. & Keith, V. (1983). Labor force participation of metropolitan, nonmetropolitan, and farm women: A comparative study. *Rural Sociology*, *4*, 515-539.

Bryant, W. K. (1990). The economic organization of the household. New York: Cambridge University Press.

Burk, M. C. (1968). Consumption Economics. New York: Wiley.

Burr, W. R. & Klein, S. R., and Associates. (1994). *Reexamining family stress: New theory and research*. Thousand Oaks, CA: Sage Publications, Inc.

Caplovitz, D. (1981). Making ends meet: How families cope with inflation and recession. *Annals of the American Academy of Political and Social Science*, 456, 88-98.

Caplovitz, D. (1979). *Making ends meet: How families cope with inflation and recession*. Beverly Hills, CA: Sage.

Conger, R. D. & Elder, G. H. Jr. (1994). *Families in troubled times: Adapting to change in rural America*. New York: Aldine de Gruyter.

Coughenour, C. M. & Swanson, L. (1983). Work statuses and occupations of men and women in farm families and the structure of farms. *Rural Sociology*, *4*, 23-43.

Danes, S. M. (1993). Middle-generation among couple decision making patterns. In R. von Schweitzer (Ed.), *Cross cultural approaches to home management* (pp. 307-331). Boulder, CO: Westview.

Danes, S. M. (1991). Locus of control, gap between standard and level of living, and satisfaction: A path model. *Home Economics Research Journal*, *19*(4), 282-291.

Danes, S. M. (1988). *Minnesota farm women: Who are they and what do they do?* St. Paul, MN: Minnesota Extension Service, University of Minnesota.

Danes, S. M. & Keskinen, S. M. (1990). The extent of off-farm employment and its impact on women. *Human* Services in The Rural Environment, 14, 10-14.

Danes, S. M. & McTavish, D. (In press). Role involvement of farm women. Family and Economic Issues.

Danes, S. M. & Morris, E. W. (1989). The factors affecting a family's plan to change its financial situation. *Lifestyle: Family and Economic Issues*, *10*, 205-215.

Danes, S. M. & Rettig, K. D. (1993a). Farm wives' business and household decision involvement in times of economic stress. *Home Economics Research Journal*, *21*(3), 307-333.

Danes, S. M. & Rettig, K. D. (1993b). The role of perception in the intention to change the family financial situation. *Journal of Family and Economic Issues*, *14*(4), 365-389.

Danes, S. M. & Solheim, C. (1993). Satisfaction and role quality perceptions of farm women employed off the farm. *Journal of Family and Economic Issues*, *14*(2), 115-143.

Danes, S. M. & Stumme, P. (1995). *Adjusting to suddenly reduced income*, BU-6499-E, St. Paul, MN: Minnesota Extension Service, University of Minnesota.

Danes, S. M., Winter, M. & Keefe, D. R. (1987). Nonmarket interfamily transfers and the quality of life: A study of Mexican Americans living in Michigan. *Family Perspective*, *21*, 119-132.

Davis, E. & Helmick, S. A. (1983). Family financial satisfaction: Determinants and correlates. In M.M. Dunsing (Ed.), *Proceedings of the Midwest Symposium on Perceived Economic Well-being* (pp. 27-39). Urbana, IL: Illinois Agricultural Experiment Station, University of Illinois.

Duncan, S. F., Volk, R. J. & Lewis, R. A. (1988). The influence of financial stressors upon farm husbands and wives' well-being and family life satisfaction. In R. Marotz-Baden, C. B. Hennon, T. Brubaker (Eds.), *Families in rural America: Stress, adaptation and revitalization*. St. Paul, MN: National Council on Family Relations.

Elder, G. H. Jr., Conger, R. D., Foster, E. M. & Ardelt, M. (1992). Families under economic pressure. *Journal of Family Issues*, 13, 5-37.

Elder, G. H. Jr. (1974). Children of the great depression. Chicago: University of Chicago Press.

Elder, G. H. Jr. & Caspi, A. (1988). Economic stress in lives: Developmental perspectives. *Journal of Social Issues*, 44(4), 25-45.

Elder, G. H. Jr., Robertson, E. B. & Ardelt, M. (1994). Families under economic pressure. In R. Conger & G.H. Elder, Jr. (Eds.), *Families in troubled times: Adapting to change in rural America* (pp. 79-103). New York: Aldyne de Gruyter.

Enevoldson, B. L. (1993). Factors that influence a rural financial manager's satisfaction with current economic well-being and ability to achieve success and get ahead. Unpublished Doctoral Dissertation, University of Minnesota.

Flora, C. B. & Donahue, G. (1993). Legacy and change in rural America. Sociology of Rural Life, 13, 1-8.

Fuchs, V. (1986). Sex differences in economic well-being. Science, 232, 459-464.

Godwin, D. D. & Carroll, D. D. (1986). Financial management attitudes and behavior of husbands and wives. *Journal of Consumer Studies and Home Economics*, *16*, 17-96.

Gray, W. (1994). What your mother couldn't tell you and your father didn't know. New York: Harper-Collins.

Heffernan, W. D. & Heffernan, J. B. (1986). Impact of the farm crisis on rural families and communities. *The Rural Sociologist*, *6*, 160-170.

Hiatt, A. R. & Godwin, D. D. (1990). Use of time and preferences for time allocation among urban, employed, and married women. *Lifestyles: Family and Economic Issues*, *11*, 161-181.

Hogarth, M., Krein, S. & Rettig, K. D. (1984). Fighting inflation: Urban and rural strategies. *The Journal of Extension*, 22(2), 13-18.

Hogarth, J., Krein, S. & Rettig, K. D. (1981). *Inflation in Illinois: How families cope*. Family and Consumption Economics Bulletin 116. Department of Family and Consumer Economics. The University of Illinois at Urbana-Champaign.

Hyun, E. M., Bauer, J. W. & Hogan, M. J. (1993). Resource adequacy perception and marital satisfaction of rural wives and husbands: A nonrecursive model. *Journal of Family and Economic Issues*, *14*, 215-236.

Juster, T. F. & Stafford, F. P. (1985). *Time, goods, and well-being*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan.

Kelvin, P. & Jarrett, J. E. (1985). *Unemployment: Its social psychological effects*. London: Cambridge University Press.

Keyssar, A. (1986). *Out of work: The first century of unemployment in Massachusetts*. Cambridge: Cambridge University Press.

Krein, S., Hogarth, J. & Rettig, K.D. (1983). Family adaptation to economic change. *The Illinois Journal of Consumer Education*, *1*(1), 6-11.

Lyson, T. A. (1985). Husband and wife work roles and the organization and operation of family farms. *Journal of Marriage and the Family*, 47, 759-764.

Morgan, L. A. (1991). *After marriage ends: Economic consequences for midlife women*. Newbury Park, CA: Sage Publications, Inc.

Nickols, S. V. & Fox, K. D. (1983). Buying time and saving time: Strategies for managing household production. *Journal of Consumer Research*, *10*, 197-208.

Nickols, S. V. & Metzen, E. (1982). Impact of employment upon husband's household work. *Journal of Family Issues*, *3*, 199-216.

O'Hare, W. P. (1988). *The rise of poverty in rural America*. Washington, D.C.: Population Reference Bureau, Inc.

Oropesa, R. S. (1993). Using the service economy to relieve the double burden: Female labor force participation and service purchases. *Journal of Family Issues*, *14*, 438-473.

Rettig, K. D. (1982). Strategies for fighting inflation. Illinois Research, 26, 5-7.

Rettig, K. D. (1993). Family problem-solving and decision-making as central processes of family life: An ecological framework for family relations and family resource management. In B.H. Settles, R.S. Hanks, & M.B. Sussman (Eds.), *American families and the future: Analysis of possible destinies* (pp. 187-222). New York: The Haworth Press.

Rettig, K. D. & Dahl, C. M. (1993). Impact of procedural factors on perceived justice in divorce settlements. *Social Justice Research*, *6*, 301-324.

Rettig, K. D. & Danes, S. M. (1994). Economic adjustments to perceived stress. In T. Mauldin (Ed.), *Proceedings of the American Council on Consumer Interests* (pp. 128-135). Minneapolis, MN.

Rettig, K. D., Danes, S. M. & Bauer, J.W. (1993). Gender differences in perceived family life quality among economically stressed farm families. In U.G. Foa, J. Converse, Jr., K.Y. Tornblom, & E.B. Foa (Eds.), *Resource theory: Explorations and applications* (pp. 123-155). San Diego, CA: Academic Press.

Rettig, K. D., Danes, S. M. & Bauer, J. W. (1990). *Adjustments of farm families to economic stress* (Minnesota Report 229-1990, AD-MR-3994). St. Paul, MN: Minnesota Agricultural Experiment Station, University of Minnesota.

Rosenblatt, P. C. (1990). *Farming is in our blood: Farm families in economic crisis*. Ames, IA: Iowa State University Press.

Sanik, M. (1981). Division of household work: A decade of comparison-1967-1977. *Home Economics Research Journal*, *10*, 175-180.

Strumpel, B. (1976). Economic lifestyles, values and subjective welfare. In B. Strumpel (Ed.), *Economic means for human needs* (pp. 19-66). Ann Arbor, MI: Institute for Social Research, University of Michigan.

Tannen, D. (1990). You just don't understand: Women and men in conversation. New York: William Morrow.

Thompson, L. (1991). Family work: Women's sense of fairness. Journal of Family Issues, 12, 181-196.

Titus, P. M., Fanslow, A. M. & Hira, T. K. (1989). Net worth and financial satisfaction as a function of household money managers competencies. *Home Economics Research Journal*, *17*, 309-318.

Turkington, C. (1986). Farm women and stress. American Psychological Association Monitor, 17(6), 18-19.

US Bureau of the Census, jointly with the Department of Agriculture. (1988). *Rural & Rural Farm Population:* 1987 (Current Population Reports, Series P-27, No. 61). Washington, D.C.: US Government Printing Office.

Voydanoff, P. (1990). Economic distress and family relations: A review of the eighties. *Journal of Marriage and The Family*, *52*, 1099-1115.

Voydanoff, P. & Donnelly, B. W. (1988). Economic distress, family coping and quality of family life. In P. Voydanoff & L.C. Majka (Eds.), *Families and economic distress: Coping strategies and social policy* (pp. 144-156). New York: The Fress Press.

Voydanoff, P. (June, 1984). Economic distress and families: Policy Issues. *Journal of Family Issues*, 5(2), 273-288.

Weigel, R. R. (1988). Coping with economic stress: Implications for helping professionals. *Lifestyles: Family and Economic Issues*, 9, 367-382.

Weigel, D. J. & Weigel, R. R. (1990). Family satisfaction in two-generation farm families: The role of stress and resources. *Family Relations*, *39*, 449-455.

Wilhelm, M. S. & Ridley, C. (1988a). Unemployment induced adaptations, relationships among economic responses and individual marital well-being. *Lifestyles: Family and Economic Issues*, 9, 5-20.

Wilhelm, M. S. & Ridley, C. A. (1988b). Stress and unemployment in rural nonfarm couples: A study of hardships and coping resources. *Family Relations*, *37*, 50-54.

1. <sup>1</sup>Sharon M. Danes, Associate Professor, Department of Family Social Science, College of Human Ecology, University of Minnesota, 290 McNeal Hall, 1985 Buford Avenue, St. Paul, Minnesota 55108. Phone: (612) 625-9273. FAX: (612) 625-4227.

Email: sdanes@che2.che.umn.edu.

2. <sup>2</sup>Kathryn D. Rettig, Professor, Department of Family Social Science, College of Human Ecology, University of Minnesota, 290 McNeal Hall, 1985 Buford Avenue, St. Paul, Minnesota 55108. Phone: (612) 625-7745. FAX: (612) 625-4227.

Email: krettig@che2.che.umn.edu.

\*Research was supported by the Minnesota Agricultural Experiment Station Projects 52-055, 52-054, 52-058 and the Minnesota Extension Service. The authors wish to thank Dr. Jean W. Bauer for research collaboration and Susan Keskinen and Cathy Schulz for research assistance.