

PREDICTORS OF ADAPTATION IN
MINISTERS' FAMILIES

By

DIANE L. OSTRANDER

Bachelor of Science
Colorado State University
Ft. Collins, Colorado
1975

Master of Arts
Central Michigan University
Mt. Pleasant, Michigan
1987

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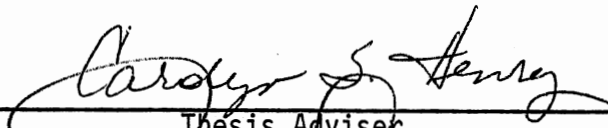
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Diane Lorraine Ostrander

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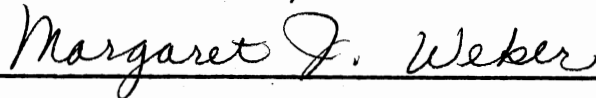
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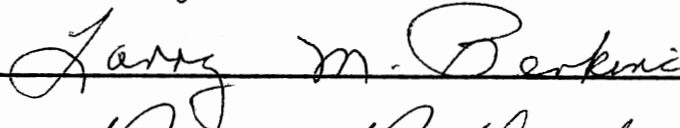
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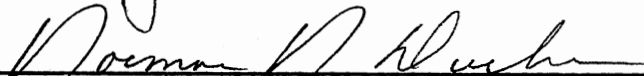


Thesis Adviser









Dean of the Graduate College

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PREDICTORS OF ADAPTATION IN
MINISTERS' FAMILIES
Diane L. Ostrander
Oklahoma State University

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Abstract

The purpose of this study was to develop a path model for explaining adaptation to stress in ministers' families, based on family stress theory. The national sample consisted of 135 ministerial families from five Protestant denominations. The ministers, ministers' spouses, and children between the ages of 8 and 18 independently completed and returned self-report surveys that were mailed to them. Results of the study demonstrated significance of the path model as a means of explaining adaptation to stress in ministerial families.

Introduction

Ministers' families often live in a close-knit work and family environment that requires family members to adapt to stress originating in the ministerial-work system and family relationships (Lee & Balswick, 1989). The parishioner expectations of ministerial family members or frequent absence of the ministerial parent serve as examples of work-family stressors (Gibb, 1986; Lee & Balswick, 1989). Further, the processes of managing such stressors may result in complex transactions to reach adaptation (McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983; McCubbin, Thompson, Pirner, & McCubbin, 1988; Moy & Malony, 1987; Nichols, 1987). Family stress theory provides a theoretical basis for understanding these normative stresses and adaptation in ministerial families (Hill, 1949, 1958; Lourie & Schwarzbeck, 1979; McCubbin & McCubbin, 1987).

It has become evident from the sparsity of research, however, that no model has been developed that adequately explains why some ministerial families successfully negotiate the stress processes involved in their lifestyle while others do not (Lee & Balswick, 1989). A model is needed to (1) aide ministerial families in developing positive adaptation outcomes within the ministerial family lifestyle, (2) serve as a tool for determining which families are at risk for lowered family integration or lowered individual family member social competence, and (3) guide potential interventions with ministers' families. The purpose of this study, therefore, was to develop a model that identified perceptions of stress sources among members of ministerial families, accumulated stressors, hardships and strains, family coherence, family hardiness,

coping skills, and adaptation levels within ministers' families. Further, this study tested the usefulness of this model for predicting adaptation levels in ministerial families.

Stress and Ministers' Families

Lee and Balswick (1989) concluded that little research existed that addressed the unique lifestyle of ministerial families. Burn out and family disintegration outcomes of the stress process, however, have been found to be an increasing concern among ministers' families (Bayer, Kent, & Dutton, 1972; Gibb, 1986; Gross, 1989; Malm, 1987; Posey, 1988; Slack, 1979). Gibb (1986), Hsieh and Rugg (1983), and Lee and Balswick (1989) concluded that additional empirical studies were necessary to assess the factors associated with stress and stress management in ministerial families and how such stress related to family functioning. Specific knowledge of the sources of stress, hardships, and strains in ministers' families and adaptation to such stressors, therefore, merits further investigation (Mace & Mace, 1980, 1982; Slack, 1979).

Family stress theory may be used to describe how ministerial family systems adapt to potential life-changing events (Hill, 1949, 1958; McCubbin & Patterson, 1983). According to Hill's (1958) initial family stress theory model (ABCX) the stressors, (i.e., factor A, or any events creating potential change for ministerial families), emerge from developmental issues, relationships, or unpredictable events (Boss, 1987). Stressors that ministerial families share with many other professionals include an overcommitment to the profession, frequent moves, or the relationship between work and family (Fournier, 1981; Fournier & Englebrecht, 1982; Gibb, 1986; Kanungo & Misera, 1988;

Lee & Balswick, 1989; Mace & Mace, 1980, 1982; Piotrkowski, Rapaport, & Rapaport, 1987). Too close a tie between work and family may result in stress as a result of the inability to distinguish between the work and family systems (i.e., boundary ambiguity; Boss & Greenberg, 1984). Moy and Malony (1987), for example, were among the first to empirically investigate boundary ambiguity in ministerial families that allowed stress to carry over from work into the families (Lee & Balswick, 1989; Moy & Malony, 1987).

Stressors and crises in ministerial families may be modified by family resources (the B factor; Hill, 1958). These resources consist of whatever ministerial families and its members use to address stressors including adequate housing, or a strong faith in God (Briscoe, 1986; Hill, 1958; Mace & Mace, 1982).

Members of a particular ministerial family may perceive the same stressor in different ways (factor C), which may alter the family's response to the stressor (Hill, 1958). For example, when ministers work 70 hours per week they may define their overcommitment as enjoyable since the work gives high need satisfaction (Kanungo & Misera, 1988; Lee & Balswick, 1989; Mace & Mace, 1980). Spouses or children, on the other hand, may define the ministers' long work week as distressing (Mace & Mace, 1982; Ostrander, Henry, & Hendrix, 1990).

The degree of disequilibrium or disorganization ministerial families experience in response to a stressor (i.e., crisis; X) results from interaction between the stressor events, the families and individual resources available to mobilize in response to stress, and the definition of the situation. Crisis symptoms in ministerial families may include feeling overwhelmed, an inability to reorganize,

distancing of family members, or emotional burnout (Gibb, 1986; Gross, 1989; Lavee, McCubbin, & Patterson, 1985; Lee & Balswick, 1989; Yamamoto, Soliman, Parsons, & Davies, Jr., 1987). Another reported point of crisis in ministers' families was emotional burnout where the ministers and families found they could no longer function adequately in the ministerial family role but did not appear to be able to address this issue at the time either (Gross, 1989).

According to McCubbin and McCubbin's (1987) expanded family stress theory (the Double ABCX model), time is an important element to understanding ministerial family stress. Not only is it important to examine the initial degree of disruption resulting from a stressor, but "post-crisis" factors must also be taken into account. For example, frequent moves might not allow time to resolve one moving crisis before another move takes place (Gibb, 1986; Ostrander et al., 1990).

Following a crisis ministerial families begin to respond to the hardships and strains of the crisis, stressors and strains resulting from attempts to cope, or other developmental and unpredictable stressors occurring after a crisis (i.e., pile-up of stressors, aA; McCubbin & Patterson, 1983; McCubbin & McCubbin, 1987; McCubbin et al., 1988). The developmental stage ministerial families are in and the timing of normative changes contributes to the importance of pile-up issues (Garmezy & Rutter, 1983; Tolan, Miller, & Thomas, 1988). For example, the pile-up of stressors might include moving into a new home as children entered adolescence (McCubbin et al., 1988), ministerial parents becoming overcommitted to the profession (Kanungo & Misera, 1988; Mace & Mace, 1982), and increasing family demands from church members (Lee, 1988).

Family life cycle issues are important factors in determining family vulnerability to stressors and may contribute to families' accumulation of stressors, strains, and hardships (McCubbin et al., 1988). For example, younger children perceived life events such as school problems as stressful (Yamamoto, 1979; Yamamoto & Byrnes, 1984; Yamamoto et al., 1987). Such a stressor may be compounded for ministers' children if they experience repeated transitions in schools related to family moves. Further, ministers' adolescent offspring may feel pressured to always have high grades at school (Bayer et al., 1972; Briscoe, 1984).

Previous research indicates as children moved into adolescence their perceptions of stress increased and family vulnerability to stress increased (Yamamoto et al., 1987; McCubbin et al., 1988). Briscoe (1984), Gibb (1986), Kessler (1986), and Ostrander (1987) found the adolescent offspring of ministers perceived many ministry-related stressors such as mobility, congregational expectations, loss of peer support, or the ministerial parents' work schedule to be stressful. Adolescents' perceptions of stress would, therefore, be contributing to the families' accumulation of stressors, strains and hardships.

Existing or newly accessed resources (factor bB) ministerial families use to manage the pile-up are expected to modify families' abilities to respond to stress (McCubbin & Patterson, 1983). Such new resources might include support groups ministers' spouses begin to attend (Harbaugh & Behrens, 1986).

The definition (cC) ministerial family units give to the accumulation of stressors, strains and hardships, the available resources, and the coping strategies used is an important factor in families' responses

to the pile-up of stress (Matheny, Aycock, Pugh, Curlete, & Cannella, 1986; McCubbin & Patterson, 1983). Moy and Malony (1987), for example, found that ministers' families tended to be flexible, viewing their lifestyle as a challenge rather than a hardship which may aide in the adaptation process.

Ministerial families' strengths may also be expected to influence how families approach life events, their coping skills, and their overall adaptation (McCubbin et al., 1988). One family strength, family hardiness, is defined as seeing life as meaningful, defining events as under the family's or its members' control, and seeing life as challenging, which increases the families' adaptability (Antonovsky & Sourani, 1988). Ministers' families in some studies saw their lives as being full of stress but also full of meaning and challenging (DeVries, 1984; Gibb, 1986; Moy & Malony, 1987). Having a high level of meaning in life may indicate ministers' families have strength for facing the normative stressors in their lifestyle (Moy & Malony, 1987).

A second family strength, family coherence, refers to a family's emphasis on loyalty, trust, faith, respect and caring which mitigate the effects of the pile-up of stressors, strains, and hardships (McCubbin et al., 1988). Briscoe (1985) and DeVries (1984) found that members of ministers' families defined their families as strong and as having a lot of loyalty and mutual trust. On the other hand, Malm (1987) found that ministerial families became estranged when the ministry took on increasing importance because family members began to distrust one another and became less respectful and loyal. Whether or not ministerial families have access to effective coping skills and adapt well to change may, therefore, be predicted in part by their

sense of coherence (McCubbin et al., 1988).

Ministerial families who are low in both hardiness and coherence were expected to be more poorly adapted and vulnerable to stress (McCubbin et al., 1988). Lowe's (1985) study of divorcing ministerial couples describes a vulnerable ministerial family. These families often lost both their family stability and the ministers' careers, making adaptation difficult (Slack, 1979).

Some ministerial families are high in hardiness, or meaning in life, but low in family coherence. These families have a strong belief in staying together because their lives mean something as a family, but they lack loyalty and caring (McCubbin & McCubbin, 1987). In such families ministers may spend endless hours in church work and little time with spouses or children (Lee & Balswick, 1989). Platt and Moss (1978) found ministerial wives were committed to their spouses and the ministerial way of life, but perceived their ministerial spouses as lacking in the expression of caring, loyalty, and trust.

Other ministerial families have little hardiness but have a strong sense of family coherence. These families tend to feel out of control of life, fear a move, or wonder if life is worth their effort but they stick together and care a lot about each other (Lee & Balswick, 1989; McCubbin & McCubbin, 1987).

Ministerial families who are high in coherence and hardiness, on the other hand, report a real sense of meaning and see life as something worth living (McCubbin et al., 1988). Gibb (1986) found that ministers' adolescent children saw their lives as highly stressful, but perceived their families as close and their way of life as good and worthwhile.

Coping involves active attempts to manage family or individual stress and is an important aspect of ministerial family adaptation (Boss, 1987; Boss, McCubbin & Lester, 1979). Coping interacts with the pile-up of stressor events, the new and existing resources, the perception, family coherence, and family hardiness in a manner which could be helpful or destructive (McCubbin & Patterson, 1983; Morgan, Owen, Miller, & Watts, 1986). Matheny et al. (1986) also found that adequate coping skills for handling stressors families faced were related to good health and well-being. Ministers' families coped with the pile-up related to low income by nonministerial spouses taking jobs, or the ministers taking a second secular job (Ostrander et al., 1990). Mace and Mace (1980, 1982) theorized that if these choices were based on financial need, increasing work-family interactions only produced greater stress.

According to Hsieh and Rugg (1983) ministers' wives accessed personal coping behaviors that did not require the presence of other people. Exclusion of social support, however, may put these wives at risk for emotional problems (Hsieh & Rugg, 1983). Ostrander et al. (1990) found that physical and mental health were sources of stress for adolescents of ministers' families indicating that coping skills may also be insufficient for the stressors ministers' children face.

Ministerial families may progress through stress management in two ways, both of which affect individual development and family functioning (Elkind, 1982; McCubbin & McCubbin, 1987). First, in the adjustment phase (i.e., level one) ministerial families face stressors that require no major changes in family functioning (McCubbin et al., 1988). Adjustment in ministerial families might include trying to

eliminate high congregational expectations by advertising themselves as "just like other people," assimilating congregational expectations by determining that they match their expectations for themselves and so are not worth a lot of worry, or trying to avoid the congregational expectations by denying that they exist (Lee, 1988; Lee & Balswick, 1989).

When the adjustment in ministerial families is insufficient, however, change becomes necessary. McCubbin and Patterson (1983) called this change adaptation. Adaptation may occur at three social levels: the individual family members, the family systems themselves, or in families' interactions with communities (McCubbin & Patterson, 1983). Bonadaptation in ministers' families occurs if a balance in family functioning is restored after a crisis (Lavee et al., 1985).

In contrast, when change is not successfully negotiated and the stress is at least partially unresolved, maladaptation occurs (McCubbin & Patterson, 1983). Ministerial families who failed to address the pile-up of such issues as the close relationship between the families and the church communities, congregations' expectations, previous moves, or becoming a family with adolescents, enter maladaptation where their sense of well-being and health may be threatened (Gross, 1989; Lavee et al., 1985).

In the adaptation phase, (i.e., level two) ministerial families must call upon their strengths and capabilities, and be able to access new and existing resources so as to be able to manage the accumulation of stressors, strains, and hardships that is required for change to occur (McCubbin et al., 1988). Even though the family goes through maladaptation after experiencing a crisis such as burnout (Gross, 1989),

families may be able to regroup and have a positive outcome (e.g., enhancement of the individual and family integrity, and maintenance of the church-family bond; Gross, 1989; Lee & Balswick, 1989). Such an outcome would indicate the secondary burnout crisis ultimately resulted in bonadaptation (McCubbin et al., 1988). The divorce outcome in ministers' families, though, may leave few resources for bonadapting (Malm, 1987; Posey, 1988; Slack, 1979).

Purpose and Hypotheses

Using the literature review and the demographic characteristics of the sample, the initial purpose of this study was achieved through development of a path model for explaining adaptation in ministerial families (see Figures 1 and 2). An additional purpose of this study was to test this model to determine whether the model explained a significant amount of the variance in adaptation in ministerial families

Insert Figures 1 and 2 about here

in order to better understand why some ministerial families arrived at higher levels of adaptation than others. Testable predictive hypothetical paths used in this study, therefore, are shown as directive arrows in Figure 2. First, it was predicted that there were relationships between the demographic variables (i.e., age of oldest child, number of children, income level, number of moves, and number of participants from each family) and family coherence, hardiness, and adaptation. Second, the pile-up of stressors related to ministerial work and family-community fit and parents' individual perceived stressors were predicted to be related to family coherence, family hardiness, and adaptation. Third, it was hypothesized that family hardiness was a

predictor of family coherence. The fourth hypothesis stated that family coherence and family hardiness were predictors of coping skills and family adaptation. Fifth, the coping skills were expected to be predictors of family adaptation (see Figure 2). Finally, it was hypothesized that the path model was a meaningful explanation of adaptation in ministers' families (see Figure 2).

Methodology

Sample

Five Protestant denominational church address lists were used to select churches from the lower 48 states of the United States. The five denominations represented three branches of Protestant religions: the Episcopal church (i.e., mainline branch); the Church of Christ (i.e., the fundamental branch); and the Free Methodist, Wesleyan and Christian Missionary Alliance (i.e., evangelical branch) (Kuiper, 1964; Latourette, 1965). Letters were sent to the selected churches asking if they employed, or knew of, a minister with a family who might volunteer for this study. The initial selection of churches yielded the following: 400 (i.e., 5.4%) of the 7,360 Episcopal churches; 400 (i.e., 3.1%) of the 12,945 Church of Christ churches; 134 (i.e., 15.2%) of the 880 Free Methodist churches; 134 (i.e., 8.1%) of the 1,659 Wesleyan churches; and 134 (i.e., 9.7%) of the 1,362 Christian and Missionary Alliance churches; for a total of 1,200 churches contacted. This procedure generated 169 volunteer families in which each participating member signed a family consent form, 200 "not interested" returns, and 45 undeliverable requests, for a total of 34.5% of all churches returning some kind of reply to the initial request for volunteers (see Table 1).

Insert Table 1 about here

The Dillman (1978) method of mail surveys was used in corresponding with volunteer families. Initially, each family received a packet containing separate letters of explanation of the study and sealed questionnaires and stamped self-addressed envelopes for all family members who signed the consent form (i.e., minister-blue, minister's spouse-purple, adolescent-yellow, child-green). The parents were informed that they could request a copy of the children's questionnaires by writing to the project director. Each family member was asked to complete their questionnaire and return the form in the self-addressed stamped envelope without consulting or sharing answers with other family members. The families were told, however, that they could discuss the project once all forms had been mailed. A total of 135 of the 169 volunteer families actually participated, for an overall response rate of 80% among the volunteer sample (see Table 1). Of those who responded 42 families were Episcopal, 44 were Church of Christ, and 46 were evangelical. Three failed to note their church affiliation. Means, medians, modes, and standard deviations of descriptive variables including denominational affiliation, number of children, age of children, number of moves family experienced since entering the ministry, number of participants representing the family, and family income level appear in Table 1.

Procedure and Measurement

Four ministerial families were asked to complete the surveys that were developed for this project as a means of testing for readability of the questions and the amount of time the surveys would involve. As a

result of this preliminary check, the questions were reworded into two syllable language suitable for children and one question was deleted from the Stressors of Clergy Children and Couples scale (see Table 2).

Insert Table 2 about here

In an attempt to measure ministerial family perceptions of the stress and adaptation process, a conceptual path model of adaptation in ministers' families was developed (see Figure 1). A path model using regression was then developed (see Figure 2) to address specific variables in this conceptual model. In the path model (see Figure 2) family scores were calculated using individual family member responses to the scales. To match family members for data analysis, the data collected from these individual family members contained a family code number and an identification letter to represent the family member who filled out the scales (e.g., 1a, 1b, 1c, 1d). Participants were assured, however, that these identification numbers and letters would not be used to match their answers with their names or addresses.

The minister, spouse, and children in the family aged 8 to 18 were asked to complete the work and family-community fit scale (SOCC-C), the spiritual and ventilation coping measures and the family adaptation measure (FA; see Table 2). The 19 item SOCC-C, was scored as follows: 0 = did not happen to me, 1 = applies not upset at all, 2 = applies upset a little, 3 = applies upset somewhat, 4 = applies upset quite a lot, 5 = applies upset very very much (Ostrander et al., 1990). The spiritual and ventilation coping variables were based on Patterson & McCubbin's (1982) A-COPE, or Adolescent Coping Scale, the theoretical work of McCubbin et al. (1988), and Lazarus and Folkman (1984). These

variables were scored to reflect how often the family member used the coping mechanism: (1) never, (2) once in a while, (3) sometimes, (4) often, (5) most of the time. For this study Antonovsky and Sourani's 11 item family adaptation scale (FA, $\alpha = .87$; 1989) was expanded to 15 items and worded in two-syllable simple words so elementary aged children could understand and more readily respond to the items. The original 7-point scale was also rescored to ensure child-level understanding. The following categories were used: 1 = no, I am not happy at all, 2 = I am a little unhappy, 3 = I am not unhappy but not happy either, 4 = I am happy, 5 = I am very happy.

The SPSS (1989) "compute" and "if" statements were used to develop family means for each of these measures and these family means were entered into the path model (see Table 3; see Figure 3). To determine

Insert Table 3 and Figure 3 about here

the family means for work and family-community stress, coping, and family adaptation that would be useful in the path model, individual family member means were determined while controlling for the missing items. These individual means were added and then divided by the number of family members who participated (allowing control for the number of family members who filled out the questionnaire; see Table 3).

The minister, spouse, and any children aged 13 to 18 years were also asked to complete the Family Hardiness Index (FHI, $\alpha = .82$; McCubbin & Patterson, 1986; see Table 2) and the Family Coherence scale (FCC, $\alpha = .71$; McCubbin, Larson, & Olson, 1982; see Table 2). The 20 item Family Hardiness Index (FHI) was scored as follows: 0 = false, 1 = mostly false, 2 = mostly true, 3 = true, NA = does not apply.

Family Coherence (FCC) was a four item scale which was scored as follows: SD (strongly disagree), D (disagree), N (neutral), A (agree), SA (strongly agree). The Family Coherence measure, however, was reduced to a three item scale after internal coefficient reliability and construct validity checks, since the item "having faith in God" reduced both reliability and validity. This three item measure was used, therefore, in the path analysis.

Individual means were also determined for family hardiness and family coherence while controlling for the number of missing items. The individual family member means were then added and divided by the number of family members who filled out these surveys allowing for control for the number of family members who completed the questionnaires (see Table 3).

As a final measure of stress, the minister and spouse were asked to complete the Parent Life Event Checklist (PLEC, $\alpha = .92$; Fournier, 1984; see Table 2). The 50 item PLEC was scored as follows: 0 = no, life event did not occur; 1 = yes, life event occurred but was not stressful; 2 = yes, life event occurred and was a little stressful; 3 = yes, life event occurred and was somewhat stressful; 4 = yes, life event occurred and was quite stressful; 5 = yes, life event occurred and was very stressful.

The individual family member means were computed for parent life event stress, while controlling for missing items. The individual means were added, followed by division by number of family members who filled out the life event questionnaire in order to control for number of family members who filled out this survey (see Table 3).

This study, therefore, focused on developing a path model for predicting adaptation levels in ministers' families using family scores which represented several exogenous and endogenous variables. The following demographic variables mentioned in previous articles as important to understanding ministers' families were also used in the path model as exogenous variables entered in block one: age of oldest child in the study, number of times family moved since entering the ministry, family income, number of participants from a family, and number of children in the family (see Figure 2).

Family stress related to the ministerial work role and family-community fit was entered as an exogenous variable in block one in the path analysis as measured by the family means computed from Stressors of Clergy Children and Couples Scale (SOCC-C; see Figure 2) responses. Family means standing for family stress related to parent life event stress as measured by the PLEC (see Figure 2) was also entered as an exogenous variable in block one of the path analysis.

Endogenous variables for block two included family hardiness and family coherence as measured by the family means for the Family Hardiness Index (FHI) and the Family Coherence Scale (FCC; see Figure 2). Block three endogenous variables included family mean scores for spiritual coping and ventilation coping (see Figure 2).

The dependent variable, or the predicted outcome variable for the model entered in block four, was family adaptation which included family-community fit as measured by the family means on the Family Adaptation scale (see Figure 2).

To insure internal consistency reliability the scales were tested for reliability using the Cronbach (1951) coefficient alpha and for

construct validity through the principal components factoring followed by varimax rotation procedure described in the SPSSX User's Guide (SPSS, 1989). The Family Hardiness Index was found to have low reliability ($\alpha = .26$) when tested using instructions for reverse coding in McCubbin and McCubbin (1987). Upon close scrutiny of the conceptualization of the items in the index, it was determined the directions for coding the items were unclear. Several of the items were, therefore, reverse coded, and then the scale was tested for reliability again ($\alpha = .81$; see Table 2). Items recoded included: "life is dull and meaningless," "we tend to do the same things over and over and it's boring," "trouble results from mistakes we make," "we realize our lives are controlled by accidents and luck," "most of the unhappy things that happen are due to bad luck," "it is not wise to plan ahead and hope because things do not turn out anyway," "our work and efforts are not appreciated no matter how hard we work," "we do not feel we can survive if another problem hits us."

Once reliability and construct validity were established, the measures were entered into the regression path analysis procedure for establishing a recursive path model (see Figure 3; Pedhazur, 1982) useful for testing the overidentified model needed for predicting levels of adaptation in ministers' families. An overidentified model specifies at least one independent variable whose relationship to at least one other variable is not tested (i.e., it is assumed there is no direct relationship between these two variables, or the relationship is zero; Pedhazur, 1982). Eight degrees of freedom were used, therefore, to test the overall significance of the overidentified model for predicting adaptation in ministers' families (see Figures 3 and 4; Pedhazur, 1982).

Insert Figure 4 about here

Results

To test for internal consistency reliability of the measures used in the path analysis, Cronbach alphas (Cronbach, 1951) were established for the Stressors of Clergy Children and Couples (SOCC-C) scale, the Parents Life Events Checklist (PLEC), the Family Coherence (FCC) scale, the Family Hardiness Index (FHI), the spiritual and ventilation coping measures, and the Family Adaptation (FA) scale. These reliability tests showed the scales adequate for use in research (i.e., alphas were .80, .87, .59, .81, .55, .53, and .89, respectively; see Table 4). Thus, these measures were used in the initial path model (see Figure 2) for explaining adaptation in ministers' families.

Insert Table 4 about here

Bivariate correlations were performed for each of the variables in the initial path model (see Table 4). Some exogenous variables were significantly related to each other (see Table 4). However, results of the level of tolerance test (.01) indicated that multicollinearity was not sufficient to prohibit entering these variables as independent variables within the same block of a regression procedure (Pedhazur, 1982). Several of the exogenous independent variables and endogenous independent variables were also significantly related to the endogenous dependent variables (see Table 4).

Regression analysis using the exogenous variables in the adaptation path model (see Figure 3) yielded significant negative betas for work

and family-community fit stress and for parent life event stress in relation to family adaptation (see Table 5). Family participant level,

Insert Table 5 about here

and work and family-community fit stress (see Figure 3) demonstrated significant negative betas in relation to family hardiness (see Table 5). No exogenous variables were significant predictors of family coherence (see Table 5). The multiple R, R^2 , F and probabilities for each of these analyses appear in Table 5. The overall regression models predicting family hardiness and adaptation were significant, accounting for 16% and 42% of the variance in the respective models (see Table 5).

Family hardiness, when treated as the independent variable (see Figure 3), was found to demonstrate a significant positive relation with family coherence and family adaptation (see Table 6) but was not

Insert Table 6 about here

a significant predictor of spiritual coping or ventilation coping (see Table 6). The overall family hardiness regression models predicting family coherence and adaptation were significant, accounting for 5% and 10% of the variance in the respective models (see Table 6).

Further, the endogenous variable family coherence (see Figure 3) demonstrated a significant positive relation with family adaptation but was not a significant predictor of spiritual coping or ventilation coping (see Table 6). The overall coherence model predicting adaptation was significant accounting for 6% of the variance. The multiple R's, R^2 's, F's, and probabilities for these regression analyses are reported in Table 6.

As an endogenous variable, spiritual coping demonstrated a significant negative relation to ventilation coping (see Table 6). Neither spiritual coping nor ventilation coping (see Figure 3), however, were significant predictors of family adaptation when treated as the independent variables (see Table 6). The multiple R's, R^2 's, F's, and probabilities for these regression analyses are found in Table 6.

When the adaptation in ministers' families model was subjected to the goodness of fit test, the R^2_m for the recursive model was .7085 (see Figure 3; Pedhazur, 1982). The M for the overidentified model was .615 (see Figure 4; Pedhazur, 1982). The goodness of fit quotient (Q), was equal to .7571 (see Figure 4; Pedhazur, 1982). For the adaptation in ministers' families model with 135 subjects, the test of significance formula yielded a W of 15.35, which was a significant χ^2 statistic, $p < .01$. A significant χ^2 established that the overidentified model explained a significant amount of the variance in the recursive model, indicating the path model was a meaningful explanation of adaptation in ministers' families (Pedhazur, 1982).

Discussion and Conclusions

This study introduced a model for explaining adaptation to stress in ministerial families from the families' overall perceptions that was based upon previous theoretical and empirical works. As an initial step in formulating this model, the scales for measuring the variables in the path model were tested across family members and demonstrated internal consistency reliability. This would indicate the measures used to test the variables in the adaptation model were consistently testing these variables and could be used for testing the path model.

The overall test of the overidentified path model for explaining adaptation in ministerial families showed that the predicted overidentified model explained a significant amount of the total variance in the recursive model. This finding supported the adaptation in ministerial families model as a meaningful explanation of stress and adaptation in ministerial families.

Significant paths between the various blocks of variables in the model support the model's conceptual basis. First, the significant negative betas between work and family-community fit stress with family hardiness and family adaptation, in addition to the significant negative beta between parent life event stress and family adaptation, supported the conceptual basis that stress has a negative effect on ministerial families' levels of hardiness and adaptation. That is, as stress increases, family strength and adaptation level decreases. This study, therefore, supports the validity of concern over stress in the ministerial lifestyle negatively impacting ministerial families' levels of functioning (Gibb, 1986; Lee & Balswick, 1989; Moy & Malony, 1987; Ostrander et al., 1990).

Further, the positive relationship between family hardiness and family coherence and these variables with family adaptation indicates that the stress-adaptation relationship is not a simple cause-effect relationship but may be influenced by other factors. That is, stronger ministerial families who also have a greater sense of family caring and loyalty may be more successful at deterring the negative effects of the stress on family adaptation. Hence, families low in hardiness and coherence may be less able to limit the impact of the stress on their adaptation outcomes. Based on the findings of this study it appears

that ministers' families often perceive themselves to have internal strengths with which to face the stress in their lives and increase their adaptation levels. This study also supports Moy and Malony's (1987) findings that ministers' families emphasize family bonding as a resource to call upon during times of stress.

Ministers' family strengths that emphasize meaningfulness of life or a sense of control over life events may further modify the effects of the stress on adaptation outcomes (McCubbin et al., 1988; Moy & Malony, 1988). In addition a family's sense of affirmation, respect, faith and trust may reduce the effects of stress on the family's integrity (McCubbin et al., 1988). The adaptation of ministerial families may be more difficult when faced with high levels of stress. Family strengths such as hardiness and coherence, however, may mitigate this effect.

The spiritual coping and ventilation coping variables in the model were not significantly related to family hardiness, family coherence, or family adaptation. Both coping measures were, therefore, deleted from the final overidentified model. The impact of coping on the adaptation process, therefore, could not be measured through testing of the adaptation model.

Such results raise conceptual and methodological issues. First, the moderate reliability of the coping measures may indicate the two item measures were not sufficient measures of coping variability in this sample of ministers' families. In addition, single item measures of social support coping (i.e., talking to another family member), physical exercise, accessing external resources, and avoidance were not significantly correlated with the other measures in the path model

requiring their deletion from the initial recursive path model. Hence, the predictive ability of these coping mechanisms with spiritual and ventilation coping, or the other variables in the model, could not be tested.

Upon inspecting the mean scores of the various coping skills, however, it was found that spiritual coping and ventilation coping had very high means, indicating such coping skills were frequently used. This indicates the ministers' families in this study reported accessing spiritual and ventilation coping mechanisms too consistently to allow variability for testing, and did not report using other coping measures adequately enough to impact the adaptation process. This would support previous theoretical work that ministers' families have few coping skills and tend to use prayer and Bible reading to the exclusion of other resources (Hsieh & Rugg, 1983; Moy & Malony, 1987).

Future studies with ministers' families are needed, therefore, to develop a coping scale that reliably tests the coping mechanisms used in these families. Research is also needed that includes the reliable measure of coping to determine its role in the stress and adaptation processes in ministerial families.

Limitations need to be included in determining the model for explaining adaptation in ministers' families. Such limitations include those related to the use of a survey design with a convenience sample for developing the model. Survey designs using volunteer samples may allow several threats to internal validity due to the inability to guarantee who will volunteer to fill out the questionnaires, which of the volunteers will actually complete forms, or if they will ask someone else to complete their forms (selection threat). Differing historical

and geographical events in various parts of the country may also influence responses (history threat). In addition, the Operation Desert Storm Mideast War occurred during the data collection process (historical threat). Further, participating families with members who failed to return their portion of the survey created a mortality threat to internal validity.

The external validity of this study may be limited by use of only five Protestant denominations, although use of denominations to represent the three branches of Protestantism (Latourette, 1965) reduces this threat. Further, the lower response rate from Western states may limit generalizability to churches in this part of the United States.

Another limitation is the moderate reliabilities of the family coherence, spiritual coping, and ventilation coping measures. Testability of these measures in the path model was limited by the chance that they may have been measuring something other than the variables they represented. Family hardiness and coherence, therefore, were entered as separate predictors of spiritual coping, ventilation coping, and family adaptation, reducing the ability to determine the interaction effects of hardiness and coherence on coping and adaptation. As previously mentioned, the coping measures were deleted from the model resulting in the inability to measure the impact of coping on the adaptation process.

In addition to the measuring issues already cited, unclear instructions for scoring the Family Hardiness Index (McCubbin & Patterson, 1986) resulted in a need to conceptually code the hardiness items specifically for this study. Future studies need to test this scale with the scoring procedure used in this study.

In conclusion, the recursive model for explaining adaptation in ministers' families was an attempt to explain as much variance as possible in the relationships between stress pile-up, family hardness, family coherence, coping skills, and family adaptation. Because a recursive model left no degrees of freedom for determining how much of the total variance in the adaptation process the model actually explained, an overidentified model was selected (Pedhazur, 1982). This overidentified model was tested against the recursive model to give a rough estimate of whether the path model explained a significant amount of the variance in the adaptation process with sufficient degrees of freedom for testing the model without overestimation. The χ^2 statistic was not a large statistic, which would indicate little chance of error in the analysis (Pedhazur, 1982). Hence, the adaptation in ministers' family model is a meaningful, although probably not the only, explanation (Pedhazur, 1982) of how ministers' families adapt to the normative stressors they experience in the ministerial lifestyle.

Since this study was one of the first to study the adaptation process in ministers' families, further studies are needed to test variations of this model for accuracy with other ministerial families. Future research is also needed to verify which coping skills are used more by ministers' families, what factors predict the selection of specific coping mechanisms, and how these affect the adaptation process.

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Table 1

Demographic Variables in Predictors of Adaptation in
Ministers' Families

Variable	n	Range	Mean	Median	Mode	SD
Number of family members	317	1-4	6.23	3.00	3.00	5.21
Taking part in study:						
Ministers	135					
Spouses	111					
Adolescents	32					
Children 8-12 years	37					
Denomination	135		2.37	2.00	2.00	1.36
Episcopal	42					
Church of Christ	44					
Free Methodist	21					
Wesleyan	9					
Christian Missionary						
Alliance	16					
Missing	3					
Number of children in family		0-6	2.61	2.50	2.00	1.12
Age of child in study	69	8-18	12.53	12.00	9.00	.45
Number of times family moved	135	0-19	3.60	3.62	3.00	2.00
Family income	135	\$2,000-98,000	\$27,787	24,500	20,000	16,105

SD = standard deviation

Table 2
Instruments Used in Predictors of Adaptation in Ministers' Families

Subject	Variable	Scale	Alpha (Original)	Alpha (Current)	No of Items	Mean	SD	Item Mean
Child aged 8-12 years old	stress	SOCC-C	-	.80	19	32.23	11.99	1.70
McCubbin & Patterson (1982)	coping	Ventilation	-	.53	2	4.92	1.52	2.46
		Spiritual	-	.55	2	8.79	1.32	4.39
Antonovsky & Sourani (1989)	family adaptation	FA	.87	.89	15	58.43	9.29	3.90
Child aged 13 to 18 years old All of the above children's scales plus:								
McCubbin & Patterson (1986)	family hardiness	FHI	.82	.81	20	44.29	6.35	2.21
McCubbin, Larsen & Olsen (1982)	family coherence	FCC	.71	.59	4	16.41	1.92	4.10
Ministerial and nonminis- terial parent: All of the above children's scales plus:								
Fournier (1982)	individual stress	PLEC	.92	.87	50	29.17	20.54	.61
Sociodemographics					13			

SD = standard deviation

Table 3

SPSS Compute and IF Statements Used to Create Family Mean Scores
in Adaptation in Ministers' Families

In computations M = Minister
 S = Spouse
 A = Adolescent aged 13 to 18 years
 C = Child aged 8 to 12 years
 F = Number of Family Members who completed the given scale
 X = Last score in any given scale
 Y = Number of items in scale/2
 Z = number of items in scale
 LE = Less than or equal to
 GE = Greater than or equal to

SCORE = INDIVIDUAL'S SCORE ON EACH ITEM IN THE GIVEN SCALE
 MS = MISSING VALUES
 AVGSCL = AVERAGE SCORE ON SCALE
 SCALE = TOTAL SCORE ON SCALE FOR THE INDIVIDUAL
 MSFAMSCL = MISSING VALUES FOR FAMILY SCORE
 FAMSCORE = Family's mean score on the variable tested with the given scale

To compute family mean scores for questionnaires answered by four family members-minister, spouse and all children aged 8 to 18 participating in the study (i.e., family mean computations for work and family-community fit stress, spiritual coping, ventilation coping, and adaptation):

```
COMPUTE Mscale=sum (Mscore1 to MscoreX)
COUNT MMSX=(Mscore1 to MscoreX) (7,99)
If (MMSX LE Y) Mavgscle=Mscale/(Z-MMSX) COMPUTE MSCALE=Mavgscle*Z
If (MMSX GE Y) MSCALE=99 COMPUTE scale1=sum (Sscore1 to SscoreX)
COUNT SMSX=(Sscore1 to SscoreX) (7,99)
If (SMSX LE Y) Savgscle=Sscale/(Z-SMSX) COMPUTE Sscale=Savgscle*Z
If (SMSX GE Y) SSCALE=99 COMPUTE Ascale1=sum (Ascore1 to AscoreX)
COUNT AMSX=(Ascore1 to AscoreX) (7,99)
If (AMSX LE Y) (Aavgscle=Ascale1/(Z-Amsx) COMPUTE Ascale=Aavgscle*Z
If (AMSX GE Y) ASCALE=99 COMPUTE Cscale1=sum (Cscore1 to CscoreX)
COUNT CMSX=(Cscore1 to CscoreX) (7,99)
If (CMSX LE Y) Cavgscle=Cscale1/(Z-Cmsx) COMPUTE Cscale=Cavgscle*Z
If (CMSX GE Y) CSCALE=99 COUNT MSFAMSCLE=MSCALE, SSCALE, ASCALE, CSCALE (99)
If (MSFAMSCLE LE Y) FAMSCORE=SUM (MSCALE, SSCALE, ASCALE, CSCALE) / (F-MSFAMSCLE)
```

To compute family mean scores for questionnaires answered by three family members-minister, spouse, and all children aged 13 to 18 participating in the study (i.e., family mean computations for family coherence and family hardiness):

```
COMPUTE (scale1=sum (Mscore1 to MscoreX)
COUNT MMSX=(Mscore1 to MscoreX) (7,99)
If (MMSX LE Y) Mavgscle=Mscale1/(Z-MMSX) COMPUTE MSCALE=Mavgscle*Z
If (MMSX GE Y) MSCALE=99 COMPUTE scale1=sum (Sscore1 to SscoreX)
COUNT SMSX=(Sscore1 to SscoreX) (7,99)
If (SMSX LE Y) Savgscle=Sscale1/(Z-SMSX) COMPUTE Sscale=Savgscle*Z
If (SMSX GE Y) SSCALE=99 COMPUTE AMSX=(Ascore1 to AscoreX)
COUNT AMSX=(Ascore1 to AscoreX) (7,99)
If (AMSX GE Y) (ASCALE=99 COUNT MSFAMSCLE=MSCALE, SSCALE, ASALE (99)
If (MSFAMSCLE LE Y) FAMSCORE=SUM (MSCALE, SSCALE, ASCALE) / (F-MSFAMSCLE)
```

To compute family mean scores for questionnaires answered by two family members-minister and spouse participating in the study (i.e., family mean computations for family parent life event stress):

```
COMPUTE Mscale1=sum (Mscore1 to MscoreX)
COUNT MMSX=(Mscore1 to MscoreX) (7,99)
If (MMSX LE Y) Mavgscle=Mscale1/(Z-MMSX) COMPUTE MSCALE=Mavgscle*Z
If (MMSX GE Y) (MSCALE=99 COMPUTE scale1=sum (Sscore1 to SscoreX)
COUNT SMSX=(Sscore1 to SscoreX) (7,99)
If (SMSX LE Y) Savgscle=Sscale1/(Z-SMSX) COMPUTE Sscale=Savgscle*Z
If (SMSX GE Y) SSCALE=99
If (MSFAMSCLE LE Y)

FAMSCORE=SUM (MSCALE, SSCALE/F-MSFAMSCLE)
```

Table 4

Means, Standard Deviations, Bivariate Correlations, and Cronbach Alphas for Measures in Adaptation Model

Measure	1	2	3	4	5	6	7	8	9	10	11	12
1. Age of the oldest child ^a	1.00	.13	.22	.82**	.06	-.08	-.23	-.11	-.27	-.97**	.28	-.16
2. Number of moves ^a		1.00	.02	.16	.32**	.02	-.18	-.15	.01	.42	-.87**	.08
3. Income ^a			1.00	.09	.01	-.04	-.03	.12	.00	-.71*	.53	.01
4. Family members participated ^a (1 - 4 members)				1.00	-.11	.01	-.04	-.22*	-.11	-	-	-.09
5. Children ^a					1.00	-.24**	-.18*	.19*	.00	-.11	.43	.08
6. Church/Community fit stress ^a						1.00	.42**	-.29**	.09	.39	-.04	-.60
7. Parent life stress ^a							1.00	-.11	-.04	-.47	.40	-.39**
8. Family hardiness ^b								1.00	.25**	-.67	.17	.73**
9. Family coherence ^c									1.00	.24	-.16	.24**
10. Spiritual coping ^d										1.00	-.38	.51
11. Ventilation coping ^e											1.00	-.66*
12. Adaptation ^f												1.00
n	69	109	116	133	132	305	234	262	275	256	299	302
Number of items in scale	-	-	-	-	-	19	48	3	20	2	2	15
Scale Mean	-	-	-	-	-	30.9	30.6	11.8	44.3	8.79	4.92	58.4
Scale SD	-	-	-	-	-	9.7	19.2	1.3	5.4	1.32	1.52	8.2
Item Mean	-	3.61	\$28#	-	2.6	1.8	.6	3.8	2.2	4.39	2.46	3.9
Item SD	-	3.05	\$16#	-	1.12	.7	.4	.6	.3	.17	.09	.6
Cronbach Alpha	-	-	-	-	-	.80	.87	.59	.81	.55	.53	.89

^a = exogenous independent variables in blocks 1, 2, and 13 of path analysis. ^b = endogenous variable acting as an independent variable in blocks 3, 4, 5, and 8. ^c = endogenous variable acting as an independent variable in blocks 6, 7, and 9. ^d = endogenous variable acting as an independent variable in block 12. ^e = endogenous variable acting as an independent variable in blocks 10 and 11. ^f = the endogenous variable that acts only as a dependent variable (see Figure 3).

#Income in thousands of dollars, SD = Standard Deviation.

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

Table 5

Beta Weights for the Regression Analyses for Blocks One, Two, and Three
of the Adaptation in Ministers' Families Path Model

Independent Variable	Family Hardiness	Family Coherence	Family Adaptation
Age of oldest child	.00 (.01)	-.10 (-.06)	-.10 (-.43)
Moves	-.13 (-.24)	.05 (.02)	.11 (.34)
Income	.11 (.00)	.02 (.00)	.00 (.00)
Participants from family	-.18* (-.18)	-.08 (-.02)	-.08 (1.12)
Number of children	.14 (.66)	-.05 (-.06)	-.13 (-.95)
Work and family- Community fit stress	-.23** (-.12)	(-.10) (-.01)	-.57*** (-.48)
Parent life event stress	-.01 (.00)	-.01 (.00)	-.16* (-.07)
Constant	42.76	13.25	82.96
Multiple R	.39	.18	.65
R ²	.16	.03	.42
Adjusted R ²	.11	-.02	.39
F	3.35	.61	13.24
p	.002	.75	.001

Note: Unstandardized beta coefficients are given in parentheses.

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

Table 6

Regression Analyses for Blocks Four to Ten of Adaptation in Ministers' Families Model

Independent Variable	Dependent Variable & Beta	Constant	Multiple R	R ²	Adjusted R ²	F	p
Family Hardiness	Family Coherence .21** (.05)	9.59	.22	.05	.04	6.36	.01
	Spiritual Coping -.11 (-.02)	30.27	.11	.01	.005	1.62	.21
	Ventilation Coping .03 (.006)	21.66	.03	.0008	-.007	.11	.74
	Family Adaptation .31*** (.51)	38.32	.31	.10	.09	14.62	.001
Family Coherence	Spiritual Coping .04 .04	29.16	.04	.001	-.006	.23	.63
	Ventilation Coping -.03 (-.02)	22.18	.03	.0008	-.008	.11	.75
	Family Adaptation .24** (1.49)	40.97	.24	.06	.05	7.89	.01
Spiritual Coping	Ventilation Coping -.39*** (-.47)	35.65	.39	.15	.14	23.32	.001
	Family Adaptation .09 (.81)	34.64	.09	.008	.0004	1.07	.30
Ventilation Coping	Family Adaptation -.11 (-.86)	77.24	.11	.01	.006	1.77	.19

Note: Raw or unstandardized coefficients are given in parentheses.

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

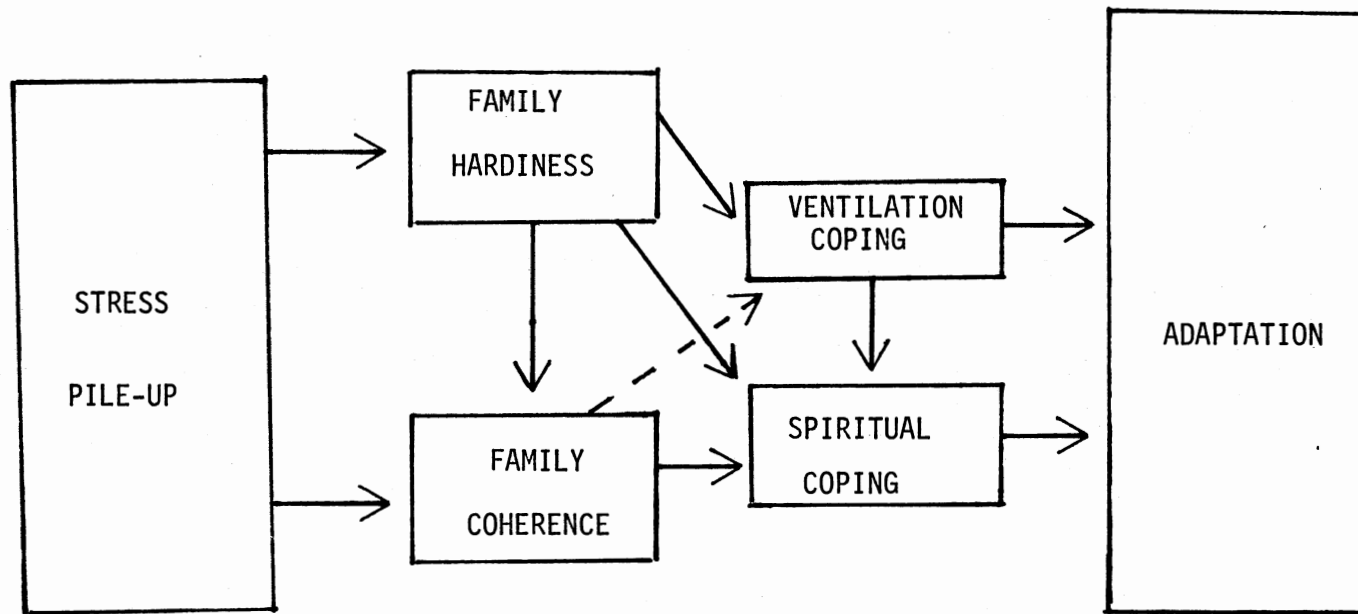


Figure 1. Conceptual Model of Adaptation in Ministers' Families

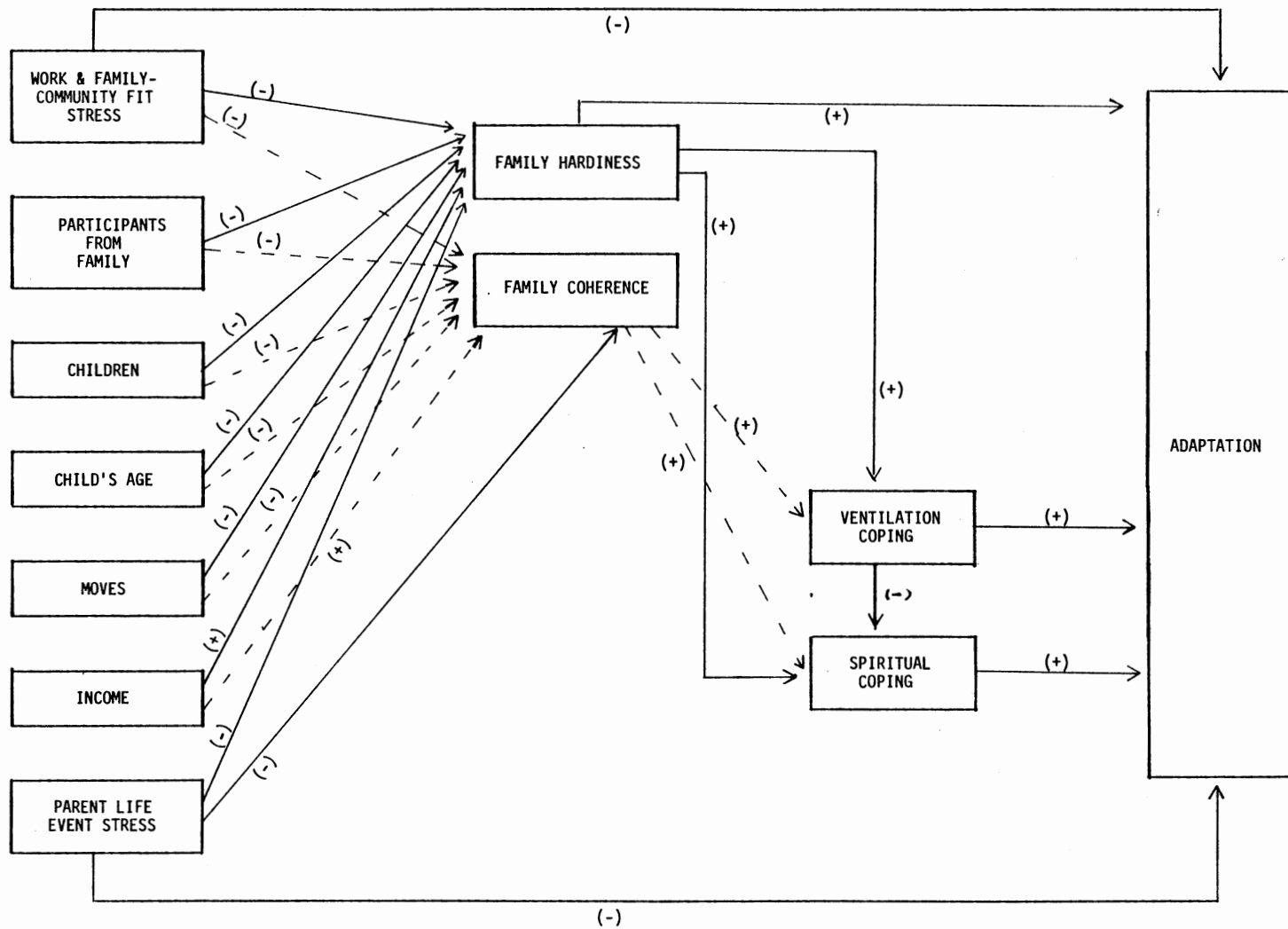


Figure 2. Predicted Path Model of Adaptation in Ministers' Families

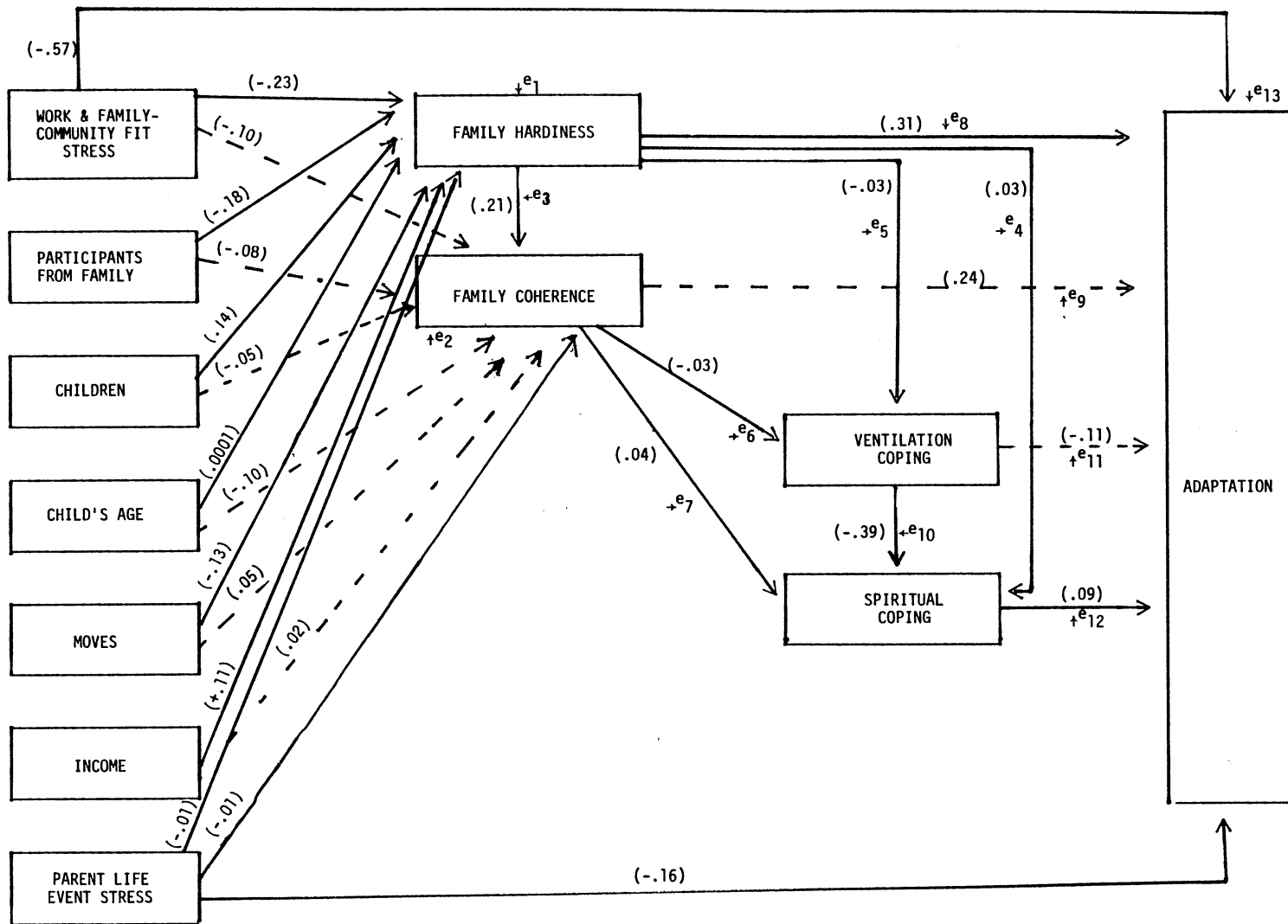
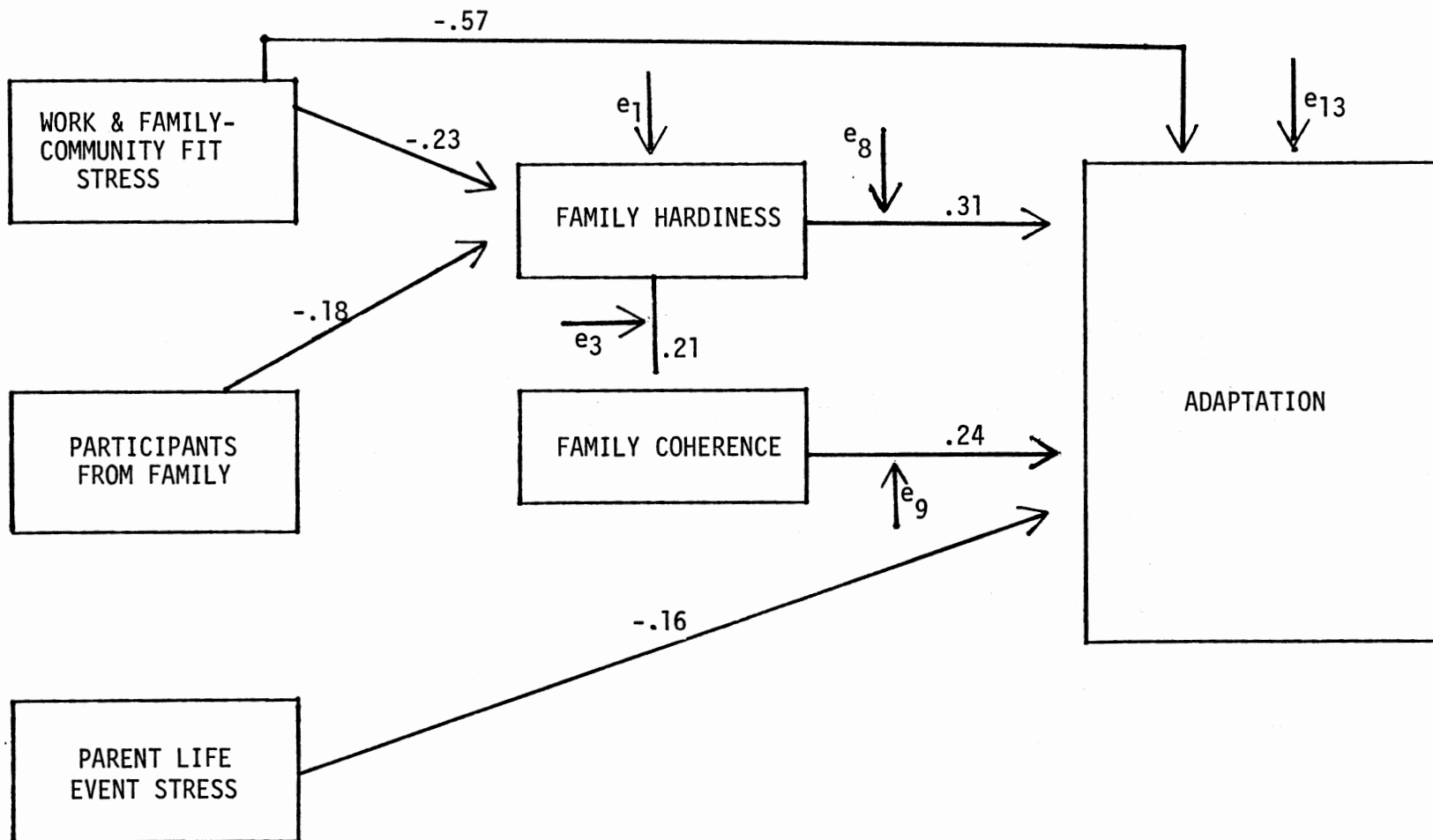


Figure 3. Recursive Model of Adaptation in Ministers' Families



$n = 135; df = 8; \chi^2$ critical value = 14.067; $W = 15.35, p < .01$

Figure 4. Overidentified Path Model of Adaptation in Ministers' Families

APPENDIXES

APPENDIX A

INTRODUCTION AND LITERATURE REVIEW

Stress is a normal part of life for adults, adolescents, and children (Lourie & Schwarzbeck, 1979). Several scholars have observed that levels of stress are increasing in intensity due to the rapid changes in society in this century (Elkind, 1982; Glick, 1988). Family stress theory, a higher middle range theory formulated within the family systems conceptual framework, provides a theoretical model to examine the importance and processes of stress in the family context (Burr, 1973; Hill, 1949, 1958; McCubbin, Cauble, & Patterson, 1982; McCubbin & Figley, 1983; McCubbin & McCubbin, 1989; McCubbin & Patterson, 1983).

As families and their members face stressful events, adjustment and adaptation may be necessary in families. According to family stress theory, family responses to stress include complex transactions involving the individuals in the families, the family systems themselves, and the broader social environment (McCubbin et al., 1988; Moy & Malony, 1987; Nichols, 1987). When faced with stressful events, some individuals and their families successfully manage the stress, while others become overwhelmed by the stressors and strains, and are less able to function (McCubbin et al., 1988; McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983). Approaches to managing family or individual stress are known as coping (Boss, McCubbin, & Lester, 1979). Responses to stress and the subsequent levels of adaptation to the stress have consequences for both individual development and family

functioning (Elkind, 1982; McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983).

Stressors, or events that have the potential to create changes, emerge from a variety of sources such as the developmental issues faced by individuals and the families or unpredictable events (Boss, 1977, 1980, 1987). Further, the relationship between families and work environments have the potential to be a source of stress for families (Fournier, 1981; Fournier & Englebrecht, 1982; Piotrkowski et al., 1987). For example, Moy and Malony (1987) were among the first to empirically study how the ministerial occupation related to ministerial families. Lee and Balswick (1989) indicated additional research is necessary, however, to more fully understand how ministerial families respond to stressors related to the interface of the ministry and family life. The purpose of this study, therefore, was to investigate how perceptions of the accumulation of stressors and strains among members of ministerial families, family coherence, family hardiness, family ventilation coping, and family spiritual coping predicted adaptation levels in ministerial families and to test a model based on these variables for explaining adaptation in ministerial families.

Rationale

Lee and Balswick (1989) concluded that little research existed that addressed the unique lifestyle of ministers and their families including the children. A few studies investigated ministerial families trying to determine why some children in these families burned out, or rebelled against the ministerial lifestyle, while others thrived in the lifestyle (Bayer et al., 1972; Gibb, 1986). Other studies addressed burnout in the minister or spouse (Gross, 1989). Additional knowledge

is needed, however, for aiding ministerial families and their individual family members in developing positive adaptation outcomes to the stressors and strains inherent in the ministerial family lifestyle, and to determine which families may be more at risk and in need of prevention or intervention. In order to provide such a knowledge base, initial studies are needed that investigate predictors of the adaptation outcomes in ministers' families. The proposed research, therefore, focused on how accumulation of stressors in ministerial families with children aged 8 to 18 years old, family hardiness, family coherence, ventilation coping and spiritual coping could be used as predictors of adaptation levels in ministers' families.

Objectives

Family stress theory is a useful framework for explaining phenomena in ministers' families that contribute to the explanation of their level of functioning. Family stress theory, therefore, was used to address the overall purpose of this study, which was to test the theoretical model concerning the degree to which accumulation of stressors, family coherence, family hardiness, spiritual coping, and ventilation coping were able to predict adaptation in ministers' families. Since certain demographic factors have been cited as important in the adaptation process in ministers' families (Gibb, 1986; Mace & Mace, 1980), number of family moves, number of children, age of children who participated in the study, income level and total number of participants from a family were included in the initial conceptual pile-up of stressors. More specifically, the purpose of this study was to test how well the (1) family perceptions (based on the means of perceptions of children aged 8 to 18 years old, the ministerial spouse and the minister) of

accumulation of family stressors related to work and family-community fit predicted family hardiness, (2) family perceptions (based on the means of perceptions of children aged 8 to 18 years old, the ministerial spouse and the minister) of accumulation of family stressors related to work and family-community fit predicted family coherence, (3) family perceptions (based on the means of perceptions of children aged 8 to 18 years old, the ministerial spouse and the minister) of accumulation of family stressors related to work and family-community fit predicted family adaptation, (4) family perceptions (based on the minister and spouse perceptions) of parent life event stress predicted family hardiness, (5) family perceptions (based on the minister and spouse perceptions) of parent life event stress predicted family coherence, (6) family perceptions (based on the minister and spouse perceptions) of parent life event stress predicted family adaptation, (7) family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family hardiness predicted family coherence, (8) family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family hardiness predicted family ventilation coping, (9) family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family hardiness predicted family spiritual coping, (10) family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family hardiness predicted family adaptation, (11) family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family coherence predicted family adaptation, (12) family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family spiritual coping predicted family adaptation,

and 13 family perceptions (based on perceptions of the minister, spouse, and children aged 13 to 18) of family ventilation coping predicted family adaptation. In addition this study tested a regression path analysis model of adaptation in ministers' families based on the work and family-community fit stress, parent life event stress, family hardiness, family coherence, spiritual coping, and ventilation coping for meaningfulness for explaining adaptation in ministers' families.

Statement of the Research Hypotheses

1. A negative relationship was expected between family perceptions of accumulated stressors and strains (i.e., related to work and family-community fit and parent life event issues) and family adaptation.

2. A negative relationship was expected between family perceptions of accumulated stressors and strains (i.e., related to work and family-community fit and parent life event issues) and family hardiness.

3. A negative relationship was expected between family perceptions of accumulated stressors and strains (i.e., related to work and family-community fit and parent life event issues) and family coherence.

4. A positive relationship was expected between family perceived family hardiness and family adaptation.

5. A positive relationship was expected between family perceived family hardiness and family coherence.

6. A positive relationship was expected between family perceived family coherence and family adaptation.

7. A positive relationship was expected between family perceived family hardiness and spiritual coping.

8. A positive relationship was expected between family perceived family hardiness and ventilation coping.

9. A positive relationship was expected between family perceived family coherence and spiritual coping.

10. A positive relationship was expected between family perceived family coherence and ventilation coping.

11. A positive relationship was expected between family perceived spiritual coping and ventilation coping.

12. A positive relationship was expected between family perceived spiritual coping and family adaptation.

13. A positive relationship was expected between family perceived ventilation coping and family adaptation.

14. Relationships between accumulation of stressors and strains (pile-up), family hardiness and family coherence, spiritual coping, and ventilation coping were an overall model that predicted divergent levels of family adaptation.

15. The SOCC-C (see Table 2) scale was expected to be a reliable and valid measure of work and family-community fit stress pile-up.

16. The revised Family Adaptation Scale was expected to be a reliable and valid measure of adaptation.

17. The Family Hardiness and Family Coherence scales were expected to be reliable and valid measures of hardiness and coherence in ministers' families.

18. The spiritual and ventilation coping measures were expected to be reliable and valid measures of coping in ministers' families.

19. The Parent Life Events Checklist was expected to be a reliable measure of stress pile-up in ministers and ministerial spouses.

20. Stress pile-up (i.e., related to work and family-community fit and parent life events) was expected to predict family regenerativity through discriminant analysis.

Definition of the Terms

Bonadaptation is the outcome of the family's attempts to cope with accumulated stressors and strains that are related to strengthened family integrity, increased individual family member and family unit development, or a sense that the family has independence and control over the environmental issue the family has faced (McCubbin & Patterson, 1983).

Church is the local group of people, the subsequent political structure, the ensuing philosophy of religion, and the facility the Protestant minister serves.

Coherence characterizes families' emphasis on loyalty, pride, faith, trust, respect, acceptance, caring and shared values when faced with stressors and strains (McCubbin et al., 1988).

Congregation refers to the group of individuals who participate in some way in the church where the minister works.

Coping is the family's level of skills (i.e., behaviors and strategies) they use to maintain and/or strengthen the organization and stability of the family, keep family emotional balance and well-being, ability to access community and family resources needed to manage the stressful situation, and the attempts to initiate resolution of family hardships and strains brought on by the stressor (McCubbin et al., 1988). For this study coping skills involved spiritual activities such as Bible reading and prayer, and ventilation by way of yelling or blaming.

Family Adaptation is the process by which the family consolidates and brings the family back into a coherent unit that is working with and in support of any of the new changes the family had to institute (McCubbin & Figley, 1983).

Hardiness is defined as the family's internal strengths and durability, which can be seen as the family's internal control of life changes, having a sense of meaningfulness in life, the family's involvement in activities, and the family emphasis on learning and exploring new things (McCubbin et al., 1988).

Hardship refers to factors that enter family systems as a result of the crisis the family recently experienced (McCubbin & Patterson, 1983).

Maladaptation is the outcome of families' attempts to cope with accumulated stressors and strains that are related to lowered family integrity, halting of individual and family unit development, or a loss of family independence and autonomy (McCubbin & Patterson, 1983).

Minister (pastor) is a religious leader practicing in a Protestant branch of the clergy profession.

Minister's Child or Adolescent refers to the biological or adopted offspring of the minister and the minister's spouse.

Minister's Spouse is the spouse of the religious leader.

Parsonage is a home that a congregation owns, that serves as the primary residence of the minister and his/her family.

Pile-up is the accumulation of stressors, strains, and hardships remaining from previous crises, normative transitions, and new stressors entering the family system (McCubbin & Patterson, 1983).

Spiritual Coping is the use of spiritual resources (i.e., prayer, reading of religious materials) in an attempt to address stressors and crises.

Strains are difficulties the family and its members face related to any developmental and/or new unpredictable stressors occurring in

combination with the stressors and hardships due to the crisis experienced (McCubbin & Patterson, 1983).

Stressor refers to events or circumstances that have the potential to create change (McCubbin & Patterson, 1983).

Ventilation Coping is the use of emotional release (i.e., yelling, blaming) in an attempt to address stressors and crises.

REVIEW OF THE LITERATURE

Theoretical Rationale

Adaptation in ministers' families can be explained through the Family Stress Theory, a higher middle range theory based in the Family Systems conceptual framework. This theory describes how family systems and their individual members handle life events that could result in potential changes in the family or the individual family members (Hill, 1949, 1958). Hill's (1958) initial Family Stress Theory Model (ABCX) contained four components. The A stood for any events creating potential change for the family and its members. Stressors that ministerial families share with many other professionals that are by-products of the occupational-family interaction might include over-commitment to the profession, frequent moves, or too close of a relationship between work and family (Boss et al, 1979; Gibb, 1986; Kanungo & Misera, 1988; Lee & Balswick, 1989; Mace & Mace, 1982).

In addition to the actual stressors experienced by families, Hill (1958) posited that the impact of stressors on families is modified by the resources, or the b factor. The family's crisis meeting resources are represented by anything the family and its members used to address the stressor. These resources might include adequate housing, or a strong faith in God (Briscoe, 1986; Mace & Mace, 1982).

Further, Hill (1958) postulated that the definition a family gives (factor c) to a stressor impacts the family response to the stressor. For example, Kanungo and Misera (1988) found that overcommitted workers

perceived more need satisfaction at work, and so viewed their over-commitment positively. Lee and Balswick (1989) and Mace and Mace (1980) determined that ministers worked an average of 70 hours per week, and so may be a part of the working world that perceives a great deal of satisfaction from the work role.

Finally, Hill's (1958) model included the x factor, or the degree of disequilibrium or disorganization resulting from the interaction of the stressor event (A), the family and individual resources used to handle the event (B), and the definition of the situation, or C. Work-related crises ministerial families, along with other families and their members, may experience include a move for which the family and individuals were not prepared (Gibb, 1986; Lavee et al., 1985; Lee & Balswick, 1989; Yamamoto et al., 1987).

McCubbin and Patterson (1983) expanded Hill's (1958) original model of family stress and gave it the Double ABCX Model of Family Adaptation and Adjustment title. These scholars retained Hill's original ABCX model of family stress to describe events occurring before a crisis. In addition, McCubbin and Patterson (1983) added the dimension of time as an important element to understanding family stress, adding a "post-crisis" stage. Initially following the crisis the family begins to respond to the hardships from the crisis and may face a pile-up (aA) of stressors and strains that result from other developmental and unpredictable stressors or that result from attempts to cope (McCubbin & Patterson, 1983). The relative importance of different kinds of stressors in the pile-up depends upon factors such as the developmental stage of the family and the timing of normative changes in the life cycle (Garmezy & Rutter, 1988; Tolan, Miller, & Thomas, 1988).

Ministerial families often face a variety of stressors that may accumulate to cause strains or hardships. For example, if a family moved into a new home when the children were entering adolescence (McCubbin et al., 1988), the ministerial parent became overcommitted to the profession (Kanungo & Misera, 1988; Lee & Balswick, 1989; Mace & Mace, 1982), while the members of the church expected to be highly involved with the family and its members (Lee, 1988) the ministerial family would face what McCubbin and Patterson (1983) called pile-up of stressors and strains.

Any existing or newly accessed resources (bB) the family and its individual members used to manage the accumulation of stressors, strains, and hardships are expected to modify the family's ability to respond to stress (McCubbin & Patterson, 1983). Such new resources include a support group the minister's spouse begins attending regularly (Harbaugh & Behrens, 1986).

The definition the family members give to the accumulation of stressors, strains and hardships, the resources available for addressing this pile-up, and the coping strategies used to address this accumulation (i.e., cC) are important factors in the family response to stress (Matheny et al., 1986; McCubbin & Figley, 1983). Moy and Malony (1987), for example, found that ministers' families in their sample tended to be flexible, viewing their lifestyle as a challenge. An alternative definition of the situation would be expected to mediate the family's response to stressors.

Boss (1987) proposed that coping or attempts to mobilize when faced with stress, is an important aspect of family adaptation. Coping interacts with the pile-up of events, the new and existing resources,

and the perception in a manner which could be helpful or destructive to the family (McCubbin & Patterson, 1983; Morgan et al., 1986). Matheny et al. (1986) found that having adequate coping skills to handle the stressors a family faced was related to good health and well-being. Ministers' wives tended to use coping skills that they could access without needing others (Hsieh & Rugg, 1983). Hsieh and Rugg (1983) postulated that having only the self-oriented coping skills to address needs was detrimental to the women. Coping skills that involved gaining social support were additional assets these ministers' wives needed to ensure good mental and emotional health (Hsieh & Rugg, 1983).

The final part of McCubbin and Patterson's (1983) Double ABCX Family Adaptation and Adjustment Model was adaptation (xX). Adaptation may occur at three social levels: the individual family member, the family level, or in the family's interaction with the community (McCubbin & Patterson, 1983). Families use adjustment to address minor stressors by trying to eliminate the stressor, assimilate the stressor, or avoid the stressor through use of denial, or perhaps substance abuse. Ministerial families may try to eliminate high congregational expectations by advertising themselves as "just like other people" (Lee & Balswick, 1989). They may try to assimilate the congregational expectations stressor by determining that they match their expectations for themselves and so are not worth a lot of worry (Lee & Balswick, 1989). Or they may try to avoid the congregational expectations by denying that they exist (Lee, 1988).

The adaptation (xX) phase occurs when adjustment using old responses is unsuccessful and the family and its members find they must effect some kind of change in order to adapt to the accumulation of hardships,

stressors, and strains (McCubbin & Patterson, 1983). If the family and individual family members successfully meet the needs arising from the stressors, the result will be a balance in family functioning with enhanced individual and family integrity and well-being (i.e., bonadaptation) (Lavee, McCubbin, & Patterson, 1985). If, however, change is not successfully negotiated, leaving the accumulation of stress at least partially unresolved, then maladaptation occurs (McCubbin & Patterson, 1983). Symptoms of maladaptation include lower family integrity, as the accumulation of stressors, hardships and strains outweigh the family's abilities to meet these demands. The family's sense of well-being is threatened, and physical and psychological health problems may appear (Lavee et al., 1985).

Ministers' families may address the pile-up of stressors, strains, and hardships related to a stressor of low income by the non-ministerial spouse taking a job, or the minister taking a second secular job. Mace and Mace (1982) theorized that bonadaptation would not occur when either of these choices were based on financial need, since adding more work-family interactions to an already overwhelmed family produces greater stress.

McCubbin and McCubbin (1987) proposed that factors beyond the Double ABCX model of family adjustment and adaptation needed to be considered to more fully understand family adaptation to stress. Hence, they extended Family Stress Theory to develop the Typology Model of Family Adjustment and Adaptation (i.e., the T-Double ABCX Model of Family Stress).

The pile-up, or accumulation phase includes family life cycle issues, which play a part in determining the family's vulnerability to

stressors (McCubbin et al., 1988). Such life stage contributions may be due to the individual child's or adolescent's stress that contributes to the family's accumulation of stressors, strains, and hardships. Younger children, for example, perceived life events as stressful in Yamamoto et al.'s (1987) study. When ministerial families have children, then, the stress levels may increase because the children are also expressing concern or acting in ways related to the family's stressors. Ministers' children, for example, found having to move to be very stressful because of having to start a new school (Briscoe, 1984).

Yamamoto et al. (1987) also found that as children approached age 12 their perceptions of stress connected with life events increased. Further, McCubbin et al. (1988) found that families at the adolescent life cycle stage were more vulnerable than families at other stages. Hence, the findings of Briscoe (1984), Gibb (1986), Kessler (1986), and Ostrander (1987) showing that adolescent ministers' children perceived many ministry-related stressors such as mobility, congregational expectations, loss of peer support, or the ministerial parents' work schedule as highly stressful was consistent with Yamamoto's (1987) and McCubbin et al.'s (1988) research results. The ministerial family's adolescent's perceptions of stress would, therefore, be contributing to the family's accumulation of stressors, strains and hardships.

The family's strengths influences how the family approaches life's events, the coping skills they have access to, and their overall adaptation level (McCubbin et al., 1988). Family hardiness is defined as seeing life as meaningful, defining events as under the family's or its members' control, and seeing life as challenging, which increases

the family's adaptability (Antonovsky & Sourani, 1988). Ministers' families see their lives as being full of stress but also of meaning. Those families who see life as more meaningful than others possess the family hardiness strength and may have the adaptability to live with a highly stressful lifestyle (DeVries, 1984; Malony, 1985). Thus ministerial families who see their lifestyle as challenging, yet meaningful may be expected to experience greater adaptation.

A second family strength, family coherence, is included in the T-Double ABCX Model of Family Stress (McCubbin et al., 1988). Family coherence, or a family's emphasis on loyalty, trust, faith, respect and caring, was also seen as mitigating the effects of the pile-up of stressors, strains, and hardships (McCubbin et al., 1988). Briscoe (1986) and DeVries (1984) found that members of ministers' families defined their families as strong and having a lot of loyalty and mutual trust. On the other hand, Malm (1987) found that ministerial families became estranged when the ministry took on increasing importance, as family members began to distrust one another, and became less respectful and loyal. Whether or not the ministerial family has access to effective coping skills and adapts well to change, then, may be expected to be predicted by their sense of coherence (McCubbin et al., 1988).

McCubbin et al. (1988) used the family strengths of family hardiness and coherence to develop a regenerative family typology. McCubbin et al. (1988), found families low in both hardiness and coherence were poorly adapted, and these families were identified as vulnerable to stress. Lowe's (1985) study of divorcing ministerial couples may describe a vulnerable ministerial family. These families often lost both their family stability and the minister's career (Slack, 1979).

Thus, meaning in their lives becomes clouded and the family loyalty is lost (Slack, 1979).

The second regenerative family type, secure families, are families with high hardiness, or meaning in life, but low family coherence (McCubbin & McCubbin, 1987). Secure ministerial families have a strong belief in staying together because their lives mean something as a family, but they lack loyalty and caring. In such families, the minister may spend endless hours in church work, spending very little time with the spouse and children (Lee & Balswick, 1989).

Durable families, on the other hand, have low hardiness and high family coherence (McCubbin & McCubbin, 1987). These families tend to feel out of control of life, fear a move, or wonder if life is worth their efforts, but they stick together and care a lot about each other. The ministerial families represented by the spouses in Platt and Moss's (1978) study may fit into this category, as the wives reported commitment to their spouse and the ministerial way of life, but a significant number of the wives found the lack of an expression of caring, loyalty and trust from the ministerial spouse a great disappointment.

The final typology based on family hardiness and coherence is the regenerative family (McCubbin et al., 1988). These families have a real sense of meaning in their lives and see life as something worth living. Regenerative ministerial families believe their lives and what they do with them will make a difference in the world (i.e., family hardiness). Further, these families emphasize family caring and loyalty. An example of regenerative families may be found in Gibb's (1986) study. Several of the ministers' adolescent children in Gibb's (1986) study saw their lives as highly stressful, but perceived their

families to be close and their way of life to be good and making an important contribution to the world.

McCubbin et al. (1988) proposed a two level model of family progression through stress management. First, in the adjustment phase (i.e., level one) families may face stressors that require no major changes in family functioning. During the adjustment phase families call upon their strengths and capabilities, and use existing resources to adjust to minor stressors without any real change in family functioning (McCubbin et al., 1988). Moy and Malony's (1987) finding that ministers' families tend to be flexible would indicate that the families in their sample had some strengths that would aid in adjusting to minor individual and family stressors. Their flexibility may be useful in predicting resolution of issues revolving around minor stressors.

In the family adjustment phase, family vulnerability, (V) refers to whether the family has dealt successfully with previous stressors so that their strengths, capabilities, and resources can now be organized to manage the current stressor (McCubbin et al., 1988). Family vulnerability helps to determine whether the stressor remains minor. As a result of failing to resolve old issues, vulnerable families will have fewer and fewer strengths, capabilities and resources for new stressors (McCubbin et al., 1988). These families, therefore, are vulnerable and any stressor may become a major crisis (McCubbin et al., 1988). Ministerial families, for example, who fail to address the close relationship between their family and the church community, the congregation's expectations, the previous moves, and becoming a family with adolescents, will be vulnerable and may go through what Gross (1989)

defined as "burnout" in the ministry. With resources gone and the family unable to reorganize, physiological and emotional symptoms may appear, and the pile-up from a burnout crisis intrude upon the family (Gross, 1989).

In the adaptation phase, (i.e., level two) families face major change in family functioning and must call upon their strengths and capabilities, and be able to access new and existing resources so as to be able to manage the accumulation of stressors, strains, and hardships that is required for the change to occur (McCubbin et al., 1988). In the adaptation phase of the model, McCubbin et al. (1988) exchange the vulnerability (V) concept for a family regenerativity concept (R). Even though families go through a crisis such as burnout (Gross, 1989), some families manage to regroup and have a positive outcome (e.g., enhancement of the individual and family integrity, and maintenance of the church-family bond) (Gross, 1989; Lee & Balswick, 1989). These families probably had high levels of regenerativity. Such an outcome was referred to as bonadaptation by McCubbin et al. (1988).

Families who fail to maintain individual integrity, family integrity, or are experiencing deterioration of the family-church (community) relationship would be dealing with what McCubbin et al. (1988) called maladaptation. Some ministerial couples, for example, draw further and further apart as the minister becomes more and more involved in the ministry. More and more stressors are added as the couple uses denial as a coping skill to handle the poor marital relationship problems. Divorce finally comes, and for many denominations, so does the end of the clergyperson's career (Malm, 1987; Posey, 1988; Slack, 1979).

Stress and Adaptation in Ministers' Families

Stress and adaptation in ministers' families is based in the unique family lifestyle these families experience as a result of their close bond with the ministerial profession. Klink's (1969) work is useful in understanding how the ministerial family's adaptation issues relate to the work-family bond or family issues, and how family stress theory is helpful in explaining their adaptation outcomes. He states that "It is not, proper, I think, to remain so isolated in our own problems as to assume blithely that we are the only profession or vocation with problems . . . but we need, I think, to find some concept useful for describing and understanding some of the problems which bother us" (Klink, 1969, pp. 13, 14). Ministers' families not only face occupationally-related issues, they also face normative developmental issues associated with their stage of the family life cycle (McCubbin et al., 1988; Murtaugh & Zetlin, 1988). Family stress theory is a useful model for describing adaptation to both developmental and unpredictable family stressors and strains (Boss, 1987; Burr, 1973; Hill, 1949; Lavee, McCubbin, & Patterson, 1985; McCubbin & Patterson, 1983; McCubbin & McCubbin, 1987). In order to understand how family stress theory may be utilized to examine adaptation in ministers' families, however, the theory, developmental issues for family members, work-family issues merit consideration. The first section of the review, therefore, provides a detailed description of the history and components of family stress theory. The second section reviews how stress among various family members (i.e., children, adolescents, and parents) predicts family adaptation to stress in ministers' families. The next section presents an overview of work-family issues that are

relevant to ministerial families. The final section of the paper integrates the literature on family stress theory, work-family issues, and child developmental issues to predict adaptation in ministers' families.

Family Stress Theory

Hill (1949, 1958) began the theoretical work toward describing how family systems and their individual members respond to life events that could result in potential changes in the family or the individuals in the family. Hill (1949, 1958) developed the ABCX Model of family stress, the foundation of family stress theory. Hill (1949, 1958) defined stressors (A) as events creating the potential for change in the family unit and its members. Resources (B) referred to the things family members had available to manage the stressors such as high self-esteem, social support, or finances (Hill, 1949, 1958). Hill (1949, 1958) also determined that how a family and its individual family members defined the event would be important in the impact of the stressor (C). The X stood for the crisis, or state of disequilibrium or disorganization that the interaction of stressor events, level of resources, and definition of the event could result in (Hill, 1958). Matheny et al. (1986) defined crisis as the gap between perceived stressors and perceived resources that would result in hardships and further problems. Stress was seen as the emotional by-product of the interaction between the family system and its environment, or the by-product of the interaction of the stressor event, the level of resources, the definition of the stressor event, and the crisis (Matheny et al., 1986).

Burr (1973), Boss (1977, 1980, 1987), and Boss and Greenberg (1984) further developed and expanded the family stress theory, with Boss (1987) suggesting that coping was also a separate interacting variable. In a review of family stress scholarship, McCubbin, Joy, Cauble, Patterson, Comeau, and Needle (1980) concluded that the majority of family stress research in the previous decade focused on identifying family characteristics and resources that predicted variation in responses to stress. In addition, McCubbin et al. (1980) proposed that coping was really a part of the family stress process, and that additional empirical studies were necessary to explore the role of coping in how families handled stress.

McCubbin and Patterson (1983) expanded the ABCX Model of the family stress theory to the Double ABCX Model of Adjustment and Adaptation, which addressed the issues families deal with following a crisis. These scholars retained Hill's (1958) original ABCX Model of family stress as the "pre-crisis" stage of family stress. In addition, McCubbin and Patterson (1983) added the dimension of time as an important element to understanding family stress, adding a "post-crisis" stage. Initially following the crisis the family begins to respond to the crisis. Yet their response may be modified by a pile-up (aA) of stressors, hardships and strains that result from other developmental and unpredictable stressors and the results of attempts to cope (McCubbin & Patterson, 1983).

The relative importance of different kinds of stressors involved in the pile-up depends on several factors. Two of these factors are the developmental stage the family is in and whether normative changes occurred at the expected time in the life cycle (Garmezy & Rutter, 1988;

Tolan et al., 1988). Normative changes resulting from the developmental stages were seen as those that required time to prepare for, which the family feels some control over, and that involves no serious element of danger, and that change the interaction of the family (Boss, 1980; McCubbin & Figley, 1983). Non-normative changes are those in which the family has little or no time to prepare and feels they have little control over (McCubbin & Figley, 1983).

Any existing or newly accessed resources (bB) the family and its individual members used to handle the accumulation of stressors and strains were also expected to modify the families' ability to respond to stress. Family flexibility may be a resource for ministers' families (Moy & Malony, 1987). The definition the family members gave to the accumulation of hardships, stressors, and strains, the resources available for addressing this pile-up, and the coping strategies used to address this accumulation, (cC, or perception) was expected to be an important factor in the family response to stress (Matheny et al., 1986; McCubbin & Patterson, 1983).

Boss (1987) proposed that coping or attempts to mobilize resources when faced with stress is an important aspect of family adaptation. Coping interacts with the pile-up of events, the new and existing resources, and the perception in a manner which would be helpful or destructive to the family system and its family members (McCubbin & Patterson, 1983; Morgan et al., 1986).

The final part of McCubbin and Patterson's (1983) Double ABCX family stress theory model was adaptation (xX). Adaptation may occur at three social levels: the individual family member level, the family system level, or the family's interaction with the community level (McCubbin & Patterson, 1986).

A person or family system may attempt to adjust to the accumulation of hardships, stressors and strains by resisting change by using the current set of behaviors or interactions. One or more of three processes may be used to adjust without changing: elimination, assimilation, and avoidance-denial (McCubbin & Patterson, 1983). Elimination refers to the process of family members attempting to simply rid themselves of the stressor. For example, when a professional's family is faced with the inherent accumulation of stressors and strains associated with a residential relocation, the family simply turns down the move.

When using assimilation the family and its members uses current behaviors to handle the accumulation. In this instance the ministers' families and/or its family member(s) may see moving as their family lifestyle and address the accumulation the same way they always do (Gibb, 1986).

When using avoidance the family and its members attempt to sidestep or deny the accumulation of stressors and strains, hence, they do not address them. In the moving example, the move is not acknowledged as reality by the family and its member(s), and so they fail to address the issues involved in the move. Any of the above adjustments are used by families and their members to handle the accumulation of stressors and strains in a productive manner. Even denial can be beneficial if the event faced brings about a level of stress the family and its member(s) find impossible to handle at the moment. When these processes are used to result in a positive outcome, the final stage of the stress process is not necessary (McCubbin & Patterson, 1983).

The adaptation phase (xX) occurs when adjustment using old responses was unsuccessful and the family and its members find they must effect some kind of change in order to adapt to the accumulation of hardships, stressors and strains (McCubbin & Patterson, 1983). If the family and individual family members successfully meet the needs arising from the stressors, the result will be a balance in family functioning with enhanced individual and family integrity and well-being (i.e., bonadaptation; Lavee et al., 1985). If, however, the change is not successfully negotiated, leaving the accumulation of stress at least partially unresolved, then maladaptation occurs (McCubbin & Patterson, 1983). Symptoms of maladaptation include lower family integrity, as the accumulation of stressors, hardships and strains outweigh the family's abilities to meet these demands. The family's sense of well-being is threatened, and physical and psychological health problems may appear (Lavee et al., 1985).

Lavee et al. (1985) empirically tested the Double ABCX model using a sample of Army families facing a relocation crisis. Results of the study indicated that issues left remaining from previous crises affected the level of hardships and strains following a current crisis, and that current family resources affected the adaptation process Lavee et al. (1985).

McCubbin and McCubbin (1987) proposed that factors beyond the Double ABCX model of family stress needed to be considered to more fully understand family adaptation to stress. Hence, they extended the family stress theory model to develop the Typology Model of Family Adjustment and Adaptation (i.e. the T-Double ABCX of Family Stress). McCubbin et al. (1988) explained how the Double ABCX was expanded to

offer a more complete explanation of the adaptation process over the life cycle. The pile-up, or accumulation phase included normative, or family life cycle issues, which played a part in determining the family's vulnerability to stressors (McCubbin et al., 1988). McCubbin et al. (1988) proposed a two level model of family progression through stress management. First, in the adjustment phase families may face stressors that require no major changes in family rules, roles, or patterns of behavior. During the adjustment phase, then, families call upon their characteristics, capabilities, and strengths to adjust to minor stressors without any real change in family functioning (McCubbin et al., 1988). Vulnerability (V), or the family's susceptibility to stress, determines how well the family and the individual family members adjust to the stressor.

When events occur that require a major change in family functioning, the family moves into the adaptation phase where the family utilizes existing strengths and capabilities that are needed to handle the pile-up of demands resulting from the stressor (McCubbin et al., 1988). Family Regenerativity (R), (i.e., the family's ability to rebound following a crisis), on the Adaptation level of the model is determined by the interaction of the accumulation of stressors and strains and the family's typology (i.e., a composite of family strengths, capabilities, and characteristics. Families who have high levels of strengths and capabilities will adapt better than those who do not (McCubbin et al., 1988).

Typologies that McCubbin et al. (1988) developed include regenerative families, resilient families, rhythmic families and traditionalistic families. McCubbin et al. (1988) found that families who

functioned most adequately were best described as enduring families. These families were highly regenerative, resilient and rhythmic (McCubbin et al., 1988). This study, however, will focus on the characteristics that McCubbin et al. (1988) used for developing the regenerative family typology: family hardiness and family coherence. These characteristics will, therefore, be described in more detail in this literature review. The regenerative typology will be described also since it relates to determining whether the regenerative family types can be predicted in ministers' families through use of the ministerial family stress level and demographic variables that will appear as a table for future research use.

The regenerative family typology is made up of two dimensions, family hardiness and family coherence. Family hardiness is defined as a family's stamina as characterized by having a sense of control over life events encountered and their resultant hardships, a sense of purpose in life, an involvement in life's happenings, and a dedication to discovering new and challenging experiences (McCubbin et al., 1988). Moy and Malony (1987) suggest family strengths may be important in predicting the ministerial family adaptation level. Hence, family hardiness may be viewed as an important component of the adaptation process in ministers' families.

Family coherence is "the family's emphasis on acceptance, loyalty, pride, faith, trust, respect, caring and shared values in the management of tension and strain" (McCubbin et al., 1988, p. 41). Moy and Malony (1987) also found that ministerial families were highly bonded, which may be a strength for adapting to stress. Family coherence, therefore, needs further investigation to determine its role in enhancing the

adaptation process in ministers' families.

McCubbin et al. (1988) identified four family types based upon combinations of hardiness and coherence. First, families with low levels of both hardiness and coherence are described as vulnerable and tend to use blaming and emotional display to cope with stressors, suggesting an external locus of control. In addition, vulnerable families indicate little meaning in life and do not feel affirmed. Further, these families are less likely to try new things, appearing complacent and habitual in their responses (McCubbin et al., 1988).

Secondly, families with low levels of family coherence and high levels of family hardiness are known as secure families. Secure families use emotional outlets for dealing with problems with minimal loyalty or acceptance of other family members, combined with a sense of control over life's events and have a sense of purpose in life. In addition, they also enjoy trying new things and so may be active participants, rather than complacent. However, under stress, these families tend to not support one another and show less caring, loyalty and tolerance of the difficulties faced (McCubbin et al., 1988).

Next, families with low levels of hardiness and high levels of coherence are known as durable families. Durable families share with the vulnerable family the lack of a sense of purpose and meaning in life, feel little appreciated, and are complacent, discouraging family members from learning new things. Yet durable families have a faith in their ability to cope, emphasizing the development of faith, trust, respect and emotional calm in crisis. Thus, durable families have few internal strengths but balance this inadequacy with a set of coping behaviors that include approaching problems calmly, developing faith,

trust, caring and respect (McCubbin et al., 1988).

Finally, families with high levels of family coherence and hardiness are known as regenerative families. These families approach problems through developing trust, respect, faith, and caring while remaining calm. They also have a sense of purpose and meaning in life (McCubbin et al., 1988).

In studying a cross-sectional sample to discover any patterns of the regenerative family typology across the life cycle, McCubbin et al. (1988) found that the number of regenerative couples with school age and adolescent children was greater than those that were scored as vulnerable, secure or durable. There were fewer regenerative families with school age and adolescent children, however, than those groups in the single, couple, or empty-nest stages of the life cycle. Couples with adolescent children had significantly more vulnerable families than families with younger children, or couples with no children (McCubbin et al., 1988).

The T-Double ABCS family stress theory model (McCubbin et al., 1988), as described above, is an extensive theory describing the adaptation to stress process in great detail. Due to research limitations only part of this theory will, therefore, be used in this research project as a means of describing adaptation to accumulation of stressors, hardships and strains in ministers' families. This study, then, will focus on the following components of the T-Double ABCS family stress theory model: accumulation of stressors, hardships, and strains (i.e., pile-up), family hardiness, family coherence, family coping (i.e., specifically spiritual coping and ventilation coping mechanisms) and adaptation.

Stressors in Ministerial Children

Although the primary focus in family stress theory is the family unit, stressors facing individual family members serve as stressors for the family unit (Minuchin, 1974). Further, the ability of a family to adapt to stress includes the coping abilities of individual family members (McCubbin & Patterson, 1986). A review of the literature concerning family stress theory demonstrates minimal empirical examination of the role of the individual family member in family adaptation to stress. Nichols (1987) proposed the individual family member's qualities and coping behaviors enhance or harm the outcome of a family's adaptation to stress.

Perhaps the least researched individuals in ministers' families whose qualities and coping behaviors contribute to families' adaptation level are children aged 8 to 18 years. Childrens' perceptions of stressors in general, however, have not been investigated adequately (Yamamoto, 1979). Amato and Ochiltree (1987) determined that child-answered surveys were a reliable source of family information for researchers and clinicians that is not being used.

Yamamoto (1979) became interested in children's perceptions of stressors as a means of determining the sources of stress for children. Subsequent studies (Yamamoto, 1987; Yamamoto & Byrnes, 1984; Yamamoto & Davis, 1982; Yamamoto & Felsenthal, 1982; Yamamoto & Phillips, 1981) have found that children from different social classes and nationalities perceive many of the same events as stressful. These events included having to move and beginning a new school (Yamamoto et al., 1987). Yamamoto and Davis (1982) found that older children reported more stressors and tension than children from 8 to 10 years old. Yamamoto

and Felesenthal (1982) found that adult perceptions of children's stressors and the amount of stress the children experienced did not correspond with the children's views of their stressors and stress levels.

Children's development may be affected by families adaptation processes, also. Elkind (1982), for example, found that maladaptation resulted in arrested child developmental processes. Small, Eastman, and Cornelius (1988) also found that families with only children were less well adapted and had lower levels of social competence.

Families with children in adolescence were found to be the most vulnerable, yet the adolescents' contributions to this difficult adaptation period was not adequately addressed in McCubbin et al. (1988). McCubbin and Patterson (1986), however, theoretically addressed the normative accumulation of stressors, strains and hardships along with the adolescents' coping behaviors. Small et al. (1988) compared families with younger children, early adolescents, and older adolescents, and found that those with the early adolescent family members were the most stressed indicating a curvilinear relationship between children's developmental age and family stress. McCubbin and Patterson (1986) determined that adolescent stress might emerge when families' abilities, or communities' abilities to meet the adolescents' needs are not sufficient. The adolescents' coping strategies may also inhibit or aide their individuals and family's adaptation outcomes (McCubbin & Patterson, 1986).

Daniels and Moos (1990) found that depressed adolescents reported more acute and chronic stressors and fewer social supports from friends, relatives, school or immediate family members, indicating the importance

of understanding the perceptions of adolescents as well as adults. Tolan et al. (1988) found that the clinical adolescent subjects in their study of overall adolescent functioning perceived daily hassles as being significantly more stressful than the control groups, indicating hindered psychological functioning. Female adolescents consistently reported stressors as more demanding than males (Tolan et al., 1990), which also supports the hypothesis that individual perceptions vary and contribute to the overall family adaptation process.

Evidence of effective adaptation for children includes adolescent identity development, understanding one's uniqueness within the family, having social competence and peer support, and increasing ability to make decisions (Peterson & Leigh, 1990). Conversely, maladaptation might be evidenced by the child being overly controlled by their peers, a loss of social competence, dependency on others, being tied too closely to the parents or not close enough, or role confusion for the child, or emotional problems (McCubbin & Patterson, 1986; Garmezy & Rutter, 1983).

This study, then, incorporated children's perceptions of accumulated stressors, family hardiness, family coherence, spiritual coping, ventilation coping and family adaptation. It was hoped a better understanding of predictors of adaptation in ministers' families could be developed by gathering information from children of ministerial parents as well as the ministers and ministers' spouses.

Work-Family Issues

Klink (1969) theorized that adaptation to work stressors is similar across many occupations. Pleck, Staines, and Lang (1980) found that 35% of their large sample of couples perceived somewhat to a lot of

conflict between work and family life, while only 24% saw none at all. The following review of the work-family literature, then, highlights some of the issues appearing in recent research projects concerning the impact of work upon families.

Englebrecht and Nies (1988) predicted that people would increasingly realize that work and family mutually impact one another. Kanungo and Misera (1988), for example, found that involvement in either the work or home sphere positively covaried with the satisfaction potential in the given sphere, where if one's need satisfaction was met at work, then there was less investment in the home life. Pleck et al. (1980) also found that occupational positions requiring high levels of mental work were related to exhaustion and irritability interference in family life. Fowlkes (1977) also demonstrated a very tight bond between the work and family life of professional families who were likely to be in high mental work positions. Lorch and Crawford (1983) found that professional men included their wives in their occupational realm, with men in some professions more apt to do this than in others. Thus, the wife faced expectations from both the profession and community (Lorch & Crawford, 1983).

Voydanoff and Donnelly (1989) found that men and women did not differ in their perceptions of strains and satisfactions associated with work and family role interactions. Bolger, DeLongis, Kessler, and Wethington (1989), on the other hand, found a significant link between occupational stress in one spouse and reports of home-related stress by the other spouse. Husbands of employed wives, however, showed no more symptoms of marital discord and stress than husbands of those not employed outside the home (Booth, 1979). Professional

men's wives, though, were known to contribute significantly to the success of the professional husbands' careers, which may increase the impact of work-related stressors on the family (Fowlkes, 1977).

Professional women were more involved with the family than professional men, which suggests that the professional woman may view occupational accumulation spill-over into the family as more intrusive (Madill, Brintnell, MacNab, Stewin, & Fitzsimmons, 1988). Because the professional women had similar work and home-family commitments, they reported higher frustration levels than professional men (Madill et al., 1988). The frustrations may be a result of the woman carrying the major responsibility for reconciling her and her husband's work schedules with the family life (Kingston & Nock, 1985).

Small and Riley (1990) found that spouses of the employed persons perceived a greater relationship between occupational issues and parent-child relationships, than employed persons. Kingston and Nock (1985) found, however, that as time commitment to work increased in two career couples, both spouses spent less and less time with their children. Moen and Dempster-McClain (1987) found that most of the perceived work-family interference was most strongly related to a desire for a different, or shorter work schedule.

Social support may act as a buffer against work-related family stress when families use this as a coping mechanism (McCubbin et al., 1988). LaRocco, House, and French (1990) found, however, that in order for social support to be effective in reducing the impact of stress, the support had to come from the same realm as the stress (i.e., a family-related stress required family-related social support source and a work-related stress needed a work-related social support source) if

adaptation was to be maximized. Although there is research concerning the interrelation of work and family issues, many issues remain unexplained (Englebrecht, 1983; Englebrecht & Neiss, 1988; Fournier & Englebrecht, 1982). Lee and Balswick (1989) and Hartley (1978) contend that families of persons in many other professional roles (i.e. military officers, doctors, corporate executives) may face an accumulation of stressors, hardships, and strains that may parallel those of ministerial families. Thus the integration of work-family research and ministerial family research may aid in understanding some of the issues among ministerial families. Other professional families, however, may or may not be as directly and strongly connected with the occupation as ministerial families (Lee & Balswick, 1989; May & Malony, 1987). Therefore, additional research specifically focusing on ministers and their families is necessary (Daniel & Rogers, 1982; Lee & Balswick, 1989).

Developmental and Work-Family Issues in Adaptation in Ministers' Families

The purpose of this section of the literature review was to integrate general developmental and work-family issue literature within the family stress context in an attempt to explain adaptation in ministers' families. Each selection of the model that was used in this study is, therefore, presented with supporting literature.

Pile-up

Pile-up, or the accumulations of stressors, strains and hardships may include the role strain, financial problems, and scheduling problems from work (Voydanoff & Kelly, 1984). These stressors also appear in the ministerial family. In addition, ministers' families may

experience a pile-up of stress associated with the fast-pace and competing sets of expectations associated with the ministerial lifestyle (Mace & Mace, 1980). Both normative and unique stressor pile-up such as lack of privacy may add to family difficulties (Lee, 1988; Lee & Balswick, 1989).

Accumulation of Stressors from Direct Occupational Issues. Issues related to mobility in military professions (Rodriquez, 1980), or corporate executive families (Boss et al., 1979) are also potential stressors for ministers' families. There is a lack of research, however, regarding how the mobility process relates to other issues for families (Richards, Donohue, & Gullotta, 1985). The combination of frequent changes in the work environment, home and community often yields an accumulation of stressors, however, for ministers' families (Richards et al., 1985). Further, upon moving the family may experience a combination of positive transitions into new opportunities and grieving the losses of the former home and community adding hardship to the mobility stressor (Bozarth-Campbell, 1982). Third, loss of a family pet may occur as a result of the move, and pets are seen as an important part of a family's sense of well-being for many families (Albert & Belcroft, 1989; Ostrander, 1987).

Not only do family systems experience stress, individual family members including children have accumulated hardships from a family move (Briscoe, 1984; Gibb, 1986; Yamamoto et al., 1987). Repeated episodes of starting a new school or familiarizing themselves with a new community (as is often the case in the ministry), may interfere with the completion of children's grief over the loss of the familiar (Bozarth-Campbell, 1982). Gibb (1986) found that some of the

adolescents in ministers' families expressed fear about getting close to any friends, because they did not want to go through the pain of saying good-bye again.

Boundary ambiguity is the inability to distinguish between what belongs within the family and what is external due to a tight bond with the external system such as work. Such bonding within the ministerial family and ministerial profession present pile-up stressors for the ministerial families (Lee, 1988; Lee & Balswick, 1989). Boss and Greenberg (1984) found that boundary ambiguity developed from two sources. First, an external source may exist, such as certain cultural norms, that prevents the family from gaining all the information it needs to resolve the boundary ambiguity. Second, families may have rules within their family system that prevents them from addressing the boundary ambiguity, and so it is never resolved (Boss & Greenberg, 1984).

Ministers' families face expectations from denominational sources and local churches (Lee, 1988) to accept, rather than resolve the boundary ambiguity existing between the ministerial family and the church-family system (Lee, 1988). In addition, individual families may deny and prevent the resolution of the boundary ambiguity between the family and church (Lee & Balswick, 1989).

Accumulations of stressors, strains, and hardships evolving from boundary ambiguity may include conflicting congregational expectations of the ministerial family and family members' behaviors. Congregational expectations refers to pressures from the congregational members to mold the ministerial family into the type of people each member wants as a ministers' family (Gibb, 1986). Trying to be someone, or acting like

someone one is not can be very stressful and can result in emotional trauma (Harbaugh, 1987).

Congregational expectations may require a complex juggling act by the ministers to try to please everyone (Hansen, 1984; McGinnis, 1969). Trying to fill all these expectations may leave ministers feeling incompetent in the occupational roles (Mace & Mace, 1980).

Congregational expectations have been shown to be defined as the greatest source of stress for ministerial couples, with some couples feeling owned by their congregations (Brereton, 1972; Mace & Mace, 1980, 1982; Muck, 1984; Muck, Pawley, & Robbin, 1981; Muck & Shelley, 1984). These ownership feelings may especially result when the ministerial couple fails to develop a sense of their own identity (Lee & Balswick, 1989). Presnell (1977) found that ministerial spouses expected high congregational expectations. Mace and Mace (1982) found that ministers' wives perceived more stress from congregational expectations than their clergy husbands. This divergency in perception may add to pile-up of stressors when ministerial spouses sense that the congregation expects more from themselves or the children than from the ministerial spouse, or it becomes a source of conflict in the family (Presnell, 1977).

The children of ministers are influenced by congregational expectations, also (Bouma, 1981; Briscoe, 1984; Gibb, 1986; Lee & Balswick, 1989). Hearing church members publicly criticize their parents was perceived as stressful by adolescents of clergy families (Briscoe, 1984). These youths also felt people from the church expected them to have perfect behavior (Briscoe, 1984).

The lack of privacy, or feeling as if one lives in a glass house for all to watch, is another hardship attributed to the pile-up of families' close relationship with the church (Lee & Balswick, 1989). Ministers' wives reported high levels of stress as a result of the lack of privacy (Hsieh & Rugg, 1983). Further, the age of the child may determine the level of the stress felt due to lack of privacy, as privacy needs increase as the child gets older, and older children perceive stressors to be more upsetting (Honig, 1986; Yamamoto, 1987). It was not surprising, therefore, that ministers' adolescent children perceived high levels of stress attributed to lack of privacy (Gibb, 1986; Kessler, 1986).

Ministerial families may experience a sense of not knowing who they are due to the extreme flexibility of the family's boundaries (Moy & Malony, 1987). This flexibility may be adaptive at times, but becomes stressful over time when it interferes with families' identity development (Moy & Malony, 1987). Noyce (1980) found that ministers' spouses reported insecurity in that they were angry toward spouses who were highly involved in the church system, but also felt guilty for this anger, because, after all, church work is God's work.

The unique relationship ministers' families share with the church sometimes results in the church and family competing for the energy of one or more members of the ministerial family (Chikes, 1968). Ministers, ministers' spouses, or ministers' children are also sometimes considered responsible for whatever problems that arise in the church-family relationship (Lee & Balswick, 1989).

Church members who participate in ministerial families in a family position may be defined as aiding or interfering in the family system

(Ostrander, 1987). Such interference may be seen as the church family impinging upon the couple or parent-child relationship (Ostrander & Henry, 1989, 1990; Scanzoni, 1965). The couples in Scanzoni's (1965) study did not define the church work as interfering when the couple had a sect-related (church work oriented) approach to the ministry. In these couples the expectation was that of course the ministerial needs should come first, even to the point of scheduling last minute meetings during family times (Scanzoni, 1965). When the couple defined the church work as secondary to the family (church-oriented couples), the church work was seen as intruding in upon the family when the minister was required to put church activities before family activities (Scanzoni, 1965). On the other hand, Ostrander and Henry (1989) found that the adolescent members of the clergy family did not perceive the church as significantly impeding upon the parent-child relationship.

Sharing work schedule problems with employees from other occupations (Kingston & Nock, 1985), ministers' families are also faced with multiple stressors and strains resulting from long work hours, unending work days, and work schedules that prevent the ministerial parent from being home when the rest of the family is home (Hartley, 1978; Hartung, 1976; Lee & Balswick, 1989; Mace & Mace, 1982; Ostrander & Henry, 1989; Platt & Moss, 1976; Presnell, 1977; Scheur, 1981; Valeriano, 1981).

Malm (1987) found a deterioration in the marital relationship when the ministerial career took on more and more of the family's time and commitment. Ministers' wives saw their husbands' work schedule as a major concern and source of stress and conflict (Hartley, 1978; Valeriano, 1981). In addition, Merrill (1985a, 1985b) found case studies in which the minister became so busy with church work that the

nonministerial spouse had to make an appointment to see the ministerial spouse. Ministerial spouses reported disappointments as the work schedule kept the ministerial spouse away from home (Platt & Moss, 1976). Therefore, too little time was seen as an overarching problem for ministers' spouses (Presnell, 1977).

Boss et al. (1980) and Lavee et al. (1985) found that parental absence resulted in multiple problems for military families and corporate executive families such as an inability to let the absent family fully rejoin the family when the absent parent did want to get more involved. Stover (1983) theorized that the parental work schedule would mean high parental absence and accumulation of hardships resulting from such absence, since the average minister worked 70 hours a week (Lee & Balswick, 1989; Mace & Mace, 1982). The family and church expectations, however, help determine whether the parental absence in ministers' families was accepted or became a stressor (Scanzoni, 1965).

Other general problems also arise from the ministerial work schedule including interrupted mealtimes, as parishioners stopping over, or tending to call during mealtimes (Gibb, 1986; Hsieh & Rugg, 1983; Ostrander, 1987). Calls at all hours of the night, a problem shared with doctors (Lorch & Crawford, 1983), potentially results in lack of sleep and irritability (Hartley, 1978). Perhaps underlying the work schedule issue is the issue of the ministerial spouses' sense of priorities (Mace & Mace, 1980, 1982; Scanzoni, 1965). When the children's needs were not placed above the ministerial career priorities, children were apt to use acting out behaviors to get their parents' attention (Bouma, 1981).

Incomes among ministers vary greatly depending on the denomination they serve in, the size of the church, the income of the church members, and the negotiating ability of the minister (Mace & Mace, 1980). Financial problems may be directly related to ministers' inability to negotiate for an adequate income due to an inability to distinguish between the church and family needs, resulting in a feeling of being victimized by the church (Mace & Mace, 1980).

The church, in their expectations of the ministers' family may also fail to offer adequate income (Lee & Balswick, 1989). Even with housing and benefits, incomes may be insufficient for meeting needs of families with children (Lee & Balswick, 1989; Ostrander, 1987).

Ministers did not report much concern over low incomes, as they were dedicated to their ministry, but many of the ministers in Mace and Mace's (1980) study left a parish to increase their income in hopes of better supporting their families. Hartley (1978) pointed out that the ministers' wives marital satisfaction scores were closely correlated with higher income levels, but less than three percent of the wives in the study reported such an income.

Ministers' children may also experience strains and hardships resulting from financial problems. Bayer et al. (1972) found that adolescents in ministers' families worried about financial problems at home. Dobson and Hindson (1983) suggested that because most ministers live on a stringent budget, the children do not have much spending money which contributes to peer relationship difficulties when the children are unable to buy things seen as necessary in the peer group.

Accumulation of Stressors from Family Issues. The family system

serves as a positive function in occupational satisfaction for ministers. When ministers face occupational crises, then, positive adaptation to the crisis includes adapting to the impact of the crisis on their families' lives (Brown, 1970). Bomberger (1974) and Seidelin (1964) agree that nothing has shaped the Protestant movement as much as the fact the clergy were allowed to marry and family life became an integral part of the ministerial profession. Lee and Balswick (1989) found that the lives of the ministers' family were, indeed, intertwined with the lives of the families in the congregation. As the relationship between the church and family became closer, the family had difficulty distinguishing emotions about the church and the family (Bowen, 1987). Families who were unable to distinguish between church and family issues, however, might have felt the church was taking advantage of them (Lee & Balswick, 1989). A key area of stress pile-up for ministers, therefore, is conflict between the loyalty to the ministerial calling and loyalty to the ministerial family (Scanzoni, 1965).

When ministers' wives were surveyed by Platt and Moss (1978) results indicated many spouses were disappointed in the relationship they had with their ministerial spouses. Malm (1987) found that the ministerial spouses who became increasingly involved in the ministry tended to begin to push the nonministerial spouse out of the shared ministry role and then viewing the spouse as less spiritual. As the nonministerial spouse responded by becoming even less involved in the ministry, less and less common ground existed between the two spouses. Eventually the ministerial couple was estranged and the couple chose divorce to resolve their relationship problems (Malm, 1987).

Presnell (1977) found that marital problems that had arisen were not addressed before marital deterioration had progressed beyond repair and divorce became the natural result. Some scholars expect this trend to increase (Dann, 1980; Hutchison & Hutchison, 1980), even though divorce is viewed by many clergy as their ultimate nightmare because of its devastating effects on their occupation as well as the family (Stream, 1980). Yet, denominational leadership and churches often deny and provide little help for the increasing numbers of divorced ministerial families (Morgan, 1987). Thus lack of resources to help in healing, often add to the pile-up of the divorce crisis (Lowe, 1985; Posey, 1988). They often ask for counseling, but adequate counseling for their situation is lacking (Morgan, 1987). The financial situation for the female ex-spouse and the children can be difficult, as the minister's benefits (should the minister even be allowed to continue in the ministry) are not available to the family anymore (Slack, 1979). The housing that was provided by the church may also be taken away, basically leaving the wife and children to find a new home. Due to the poor retirement plans for ministers, and low Social Security benefits from generally low ministerial income, the wife has very little, if any retirement benefits to draw on either (Andrews, 1981). No research exists to address divorced male spouses of ministers.

Couple stressors and strains adding to the pile-up of stressors in ministers' families were addressed in a few studies. First, Hartley (1978) in a study of ministers' wives from six denominations (United Methodist, Disciples of Christ, American Baptist, Lutheran Church of America, Protestant Episcopal, and United Presbyterian), found a significant amount of the wives (19%) were dissatisfied with

the amount of time they spent with their husbands, and the lack of shared activities. However, 82% were satisfied. No differences in relationship satisfaction were found among the denominational groups.

Barber (1985) also found that ministerial couples' marital satisfaction and lay couple marital satisfaction were not significantly different. The expectation that the ministers' marriage was to be an example of high marital satisfaction for the congregation may, therefore, create hardships (Barber, 1985). Harbaugh and Behrens (1986) found that ministers' spouses were generally satisfied with their spouses choice of the ministry as a career, but desired an improved standard of living with their ministerial spouses. Thus, while wives of ministers were generally satisfied with their husband's occupation, the standard of living associated with the occupation was often viewed as a stressor.

Nonministerial spouses often tended to criticize their ministerial spouses for placing the care of others outside the family before the care of themselves and the children (Presnell, 1977). The wives in Presnell's (1977) study complained that their husbands were quick to respond to helping other female church members, but failed to help them when they had the same problem. Despite the failure to get positive help from the husband, Platt and Moss (1978) found that the ministers' wives in their study turned overwhelmingly to their husbands for aid in times of need. Troost (1978) theorized that reaching out to the ministerial spouse did not mean help was there, as the ministerial spouse was not available to pastor their own family. A lack of time for fulfilling spousal roles as well as occupational roles may leave spouse needs unfulfilled, which contributes toward marital dissatisfaction and stress in these families.

Chikes (1968) felt that the ministers and their spouses may be suffering such frustrations and unhappiness due to personal or professional identity confusion that complicated the marital relationship. Lee and Balswick (1989) explained that the church can divert attention from a couple's marital problems by confusing the church identity with the couple identity, allowing for the accumulation of unresolved issues. Inability to distinguish marital issues that need addressing, therefore, may contribute to marital disharmony and stress.

Nonministerial spouses in some research perceived that ministerial spouses had given up the parental role while children were still in the home (Presnell, 1977). This left parenting to the nonministerial spouse (Presnell, 1977). Pile-up from playing both parenting roles included loneliness and role ambiguity (i.e., inability to determine what one's role really is) for the ministerial spouse (Hsieh & Rugg, 1983).

Small et al. (1990) found that children who were acting out also had fathers with higher stress levels. The mother's stress level, on the other hand, was related to the adolescent's desire for autonomy (Small et al., 1990). Children, on the other hand, perceived their ministerial parents as being unavailable, even when present, if church members were also present (Briscoe, 1984). They also felt there was no relaxed day off, as Saturday was often seen as the ministers' family's biggest work day (Briscoe, 1984). Female adolescents were shown to experience more stress accumulation than males (Bayer et al., 1972; Ostrander & Henry, 1989).

In Gibb's (1986) study 100% of the adolescents answered that their parents' treatment of them was fair. Bayer et al. (1972) and Kessler (1986) found, however, that the ministerial couple tended to have very

high expectations of their children. Bouma (1981) saw this as the parents putting unnecessary pressures on their children. The couple, then, may be passing on their children unrealistic expectations (Bouma, 1981). In discussing these parental expectations, Conway and Conway (1984) stated that "Pastors are perhaps the most guilty for setting up standards that in the end strangle everyone in the home" (p. 85).

Individual Family Member Contributions to Accumulation of Stressors, Strains and Hardships in Ministers' Families. Individual stressors, strains and hardships of the ministerial family's members contribute to the family's level of stressors. Ministers themselves may have personal problems such as some becoming compulsive workers (workaholics; Lee & Balswick, 1989). This behavior may be more likely when ministers sense higher levels of congregational expectations or the work is rewarding (Kanungo & Misera, 1988; Mace & Mace, 1982). Some ministers also have an identity crisis due to the many expectations he or she faces (Johnson, 1970; Ostrander et al., 1990), and their perception that they and their family must be perfect (Sinclair, 1982). Presnell (1977) determined that the abstract ideal of purity, goodness, and self-denial in ministers' roles often creates ambivalence, concealed anger, and a denial of competitive drive.

Ministers who live with constant urgency cues such as "I shoulds" and "I oughts," or who have an extreme feeling of responsibility evolving from the concept that one is engaged in the world's most important work may demonstrate minister's stress through decreased mental health (Kildahl, 1961). McGinnis (1969) also found that ministers tended to be loners who keep their emotional experiences to themselves. They also attempted to resolve any emotional issues through their own personal

or family resources, which may be inadequate for the ministers' needs (McGinnis, 1969). Andrews (1981) and Schuer (1981) found that ministers rarely asked for counseling, since others seek counseling from them. The understanding that self-help is all that is needed, or that one cannot ask for external help, therefore, may be contributing to the stress pile-up.

Female ministers may be faced with a unique set of individual stressors. Rogers, Richmond, and Rayburn (1988) found that female ministers were especially vulnerable to role overload. They also had stressors related to being treated as a novelty, or not be accepted seriously as a clergy member (Rayburn, Richmond, & Rogers, 1988c). Rogers et al. (1988) found that some church members refused to attend church when the female minister was preaching, or refused to take communion from the female clergy member. Female clergy may also be experiencing discrimination in hiring (Rayburn, Richmond, & Rogers, 1988a).

Rayburn et al. (1988c) determined that male ministers had higher stress levels from role ambiguity, role boundary problems, and vocational strains than female ministers. Married clergy were also shown to have higher levels of stress associated with role insufficiency, role ambiguity, boundary stress, responsibility, vocational strain, psychological strain, role overload, physical problems, and personal issues (Rayburn et al., 1988b). The most stressed clergy couples were those where both the husband and wife were in the ministry, especially if they served the same congregation (Rayburn et al, 1988d).

Two other individual problems have been noted in previous literature. First, if a church failed (i.e., closed its doors, the

minister was likely to personalize the failure due to the close relationship with the occupational system. In turn this emotional distress spilled over into the family (Brown, 1970). Second, as stress increases ministers often become increasingly involved in occupationally-related activities as a means of addressing the stress. Later, as symptoms of burnout appear ministers tend to totally disengage from activities (Gross, 1989).

Ministers' spouses also have individual events that may add to the accumulation of stressors, strains, and hardships in the family system. For example, ministers' wives also feel lonely and isolated in many instances (Harbaugh & Behrens, 1986; Niswander, 1982). Due to the nature of the ministry, the ministerial spouses may have a large group of superficial relationships and appear to have many friends, but the spouse was apt to have no confidant, or someone to really trust enough to confide in (Niswander, 1982). Nonministerial spouses may also experience role confusion and a lack of personal identity, which may add to families' stress (Hartung, 1976; Hsieh & Rugg, 1983).

Nonministerial spouses are increasingly employed outside the family and church (Dann, 1980). Niswander (1982) found employed spouses reluctant to leave their own employment when the minister was asked to move. The relationship between the spouses' employment, the family and the church has not been researched, however (Lee, 1988).

In a similar manner, ministers' offspring face both development issues and stresses associated with the parental occupation (Yamamoto, 1987). For example as youth move into adolescence, stressors might include the physiological and emotional upheaval of adolescence, identity development, emotional or mental health problems, peer group

issues, school grades, extracurricular school pressures, and concern about college and career choices (Ostrander & Henry, 1990).

Gibb (1986) found no evidence that the level of stress for ministers' children had decreased in recent years. Briscoe (1986) proposed that peer knowledge of the adolescent's parental occupation affected the relationship the youth had with peers. Peers of ministerial children may assume the ministers' children are perfect, or not someone one would want to date due to their perceptions of the ministerial occupation (Briscoe, 1986). In contrast Lee (1988) contended that such conclusions are not substantiated through empirical research, and that little is known about how the ministers' children define themselves as they relate to their peer group.

DeVries' (1984) survey of ministers' wives perceptions of their children demonstrated that ministers' wives had higher expectations of their children than lay mothers and were more concerned about being respected by their children. The ministerial mothers in the survey also reported that they saw their children as less rebellious and having higher self-esteem, but they also handled stress less well than other children and adolescents. DeVries (1984) proposed that the degree of satisfaction and enjoyment of the ministers' child was higher and expressed openly, however, which may be the protective factor that enhanced social competence in the children despite the high levels of stress the children experienced,

In summary, ministers' families experience a wide variety of stressors and hardships that contribute toward their pile-up of stress. These come from outside the family system, within the system itself, and within the individual family members in the system. Family

hardiness may aid ministers' families in adapting to the stressors in a way that will enhance the family and individual integrity in the family. Family hardiness will, therefore, be discussed next in this literature review.

Family Hardiness in Ministers' Families. Family hardiness is described as the family's durability and strengths, including a sense of control over life's events, strains, and hardships, having a sense of meaningfulness in life, being involved as a family in activities, and being committed as a family to exploring new things (McCubbin et al., 1988). Those who perceived family life as comprehensible and meaningful were better adapted (Antonovsky & Sourani, 1988). Grace and Schill (1986) found those who felt they had a sense of control over life events were better at adapting to accumulated stressors than those who did not. Also, some families were resilient and seemed less vulnerable to stress, indicating the presence of protective family strengths (Doyle, Gold, & Moskowitz, 1984).

Hardiness has not been directly addressed in the literature concerning ministers' families. Little is known, therefore, about the strengths in these families that are related to family hardiness. Studies have shown that ministers and their spouses describe their lives as being full of stressors and strains, and yet they have the durability and strength to live and grow amidst these events (DeVries, 1984; Malony, 1985). In contrast, the high rate of burnout and the increasing rate of divorce in ministerial families indicates that some ministerial families have greater access to internal strengths than others (Brown, 1970; Gross, 1989; Posey, 1988).

Family Coherence in Ministers' Families. In addition to family

hardiness, family coherence is a family strength addressed by family stress theory. Family coherence is the family's emphasis on acceptance of family members, loyalty to and pride in family members, faith, trust, respect, caring, and shared values in the management of tension and strain (McCubbin et al., 1988). Antonovsky and Sourani (1988) found those with a high sense of coherence also had high adaptation levels. Those who saw life events as manageable were more likely to experience bonadaptation, which suggests coherence acts as a buffer for the effects of stress (Antonovsky & Sourani, 1988). Those who had a tendency to expect demands to be manageable were able to search out appropriate available resources for addressing the issue. Hence, one was able to transform one's potential resources into actuality (Antonovsky & Sourani, 1988).

Hsieh and Rugg (1983) found ministers' spouses tended to isolate themselves when under stress. They do look to their ministerial spouses for help when problems come up, though (Hsieh & Rugg, 1983). Ministers have also been depicted as loners, who rely only on themselves when facing hardships (Andrews, 1981). Ministers' adolescents have been depicted as not developing deep relationships outside the family system, but appear to have a strong relationship with parents (Briscoe, 1984; Gibb, 1986). In interviews with adolescents in ministers' families Briscoe (1986) found the youth she reported shared the meaning of life with their parents, had a strong spiritual life together as a family, and were a strong family. Such surveys suggest an isolated ministerial family unit that may be very dependent upon each other, and so may be very loyal, but empirical research is necessary to examine this issue.

Coping in Ministers' Families. A complete model of stress must also incorporate the coping process as it affects the adaptation outcomes of potentially stressful events (Matheny et al., 1986). Coping requires two kinds of definitions (1) primary definitions of the seriousness of the issues at hand, and (2) defining whether one's resources are sufficient for meeting the demands (Lazarus, 1981). Folkman and Lazarus (1980, 1986) defined coping as the flexible intellectual and behavioral efforts of the family members to manage specific external and internal demands that are perceived to be taxing or exceeding available resources. Boss et al. (1979) similarly described coping for families by explaining that coping was any strategies used to handle stress, or a complete range of patterns of behavior used by functional, stressed families.

Mathaney et al. (1986) found that being able to cope effectively with stressor accumulation was a major factor in determining one's health and well-being. Garmezy and Rutter (1983) found that just knowing that a person was using a coping behavior was not enough, however, as some coping did not enhance health and well-being. Rather these coping behaviors led to poor outcomes, or maladaptation (Garmezy & Rutter, 1983). The greater the perception of coping responses, however, the greater the adaptation outcome (Folkman, Lazarus, & Dunkel-Schetter, 1986). Thoits (1986) found that when a person accessed social support groups as a means of coping, these resources also suggested a variety of coping behaviors to attempt to help the person, but these attempts may actually lower the confidant's usefulness to the person with the problem. This may, therefore, actually lower adaptation level.

McCubbin and Patterson (1983) suggested that families who cope

effectively realize that changes are necessary in the family structure over time. The two purposes coping serves in these changes include regulating the emotions and stress surrounding an event, and managing the actual event. In environments characterized by high levels of such demands and low social support, a greater variety of coping strategies are employed to handle the events (Parkes, 1986).

Contrary to popular belief, Folkman and Lazarus (1980) found that males and females used similar coping mechanisms. Parkes (1986) determined that coping responses were significantly related to individual differences, specific aspects of the environment in which the stressor event had occurred, and the particular nature of the stressor.

Different researchers have divided these coping mechanisms into categories with different names. Roth and Cohen (1986) for example, divided coping into two categories: avoidance and approach coping. These researchers found that avoidance coping, such as denial or sleep, were used when some control over a stressor was possible, which ultimately resulted in maladaptation when an issue needed active coping behaviors. If approach coping such as confrontation, on the other hand, was used when no control was possible, anxiety and depression resulted. Hence, avoidance coping is beneficial when control is not possible (Roth & Cohen, 1986). Roth and Cohen (1986) also found that as avoidance coping was increasingly used, these behaviors became increasingly emotionally costly to the individual. Holohan and Moos (1986) found such avoidance/denial coping evolved into negative psychological problems.

Matheny et al. (1986) identified two categories of coping: preventive and combative coping. Preventive coping included such behaviors as avoiding potentially stressful events, lowering one's expectations of one's resources so that they are more likely to be seen as adequate in the time of need, changing behavior patterns that are stress-producing, (i.e. stop expecting the worst in one's life), and increasing one's resources (Matheny et al., 1986). Combative coping, on the other hand, included becoming aware of potentially stressful events and reaction patterns to such events, organizing and planning the effective use of one's resources, learning to tolerate stressors one can not eliminate, and attacking or eliminating the stressor event (Matheny et al., 1986).

Sue (1986) divided coping into emotion-focused and problem-focused behaviors. Emotion-focused coping responses do not change anything, but they make people feel better. Problem-focused behaviors attempt to instigate change (Lazarus, 1981; Sue, 1986). Problem-solving coping was also negatively correlated psychological symptoms, indicating its usefulness in positive adaptation (Folkman, Lazarus, Gruen, & DeLongis, 1986).

Matheny et al. (1986) identified several coping behaviors: (1) cognitive reframing, (2) problem-solving, (3) tension reduction, (4) use of social skills, (5) self-disclosure/catharsis, (6) structuring or organizing coping resources and planning how to use them should they be needed, (7) seeking information about one's stressors, (8) stress monitoring-learning how one handles stress, (9) assertive responses such as expressing views up front, (10) avoidance/withdrawal, (11) suppression/denial, and (12) self-medication-alcohol or drug use. These categories of coping behaviors were similar to those adolescent coping behaviors

named by McCubbin & Patterson (1983): (1) ventilating feelings, (2) seeking diversions, (3) developing self-reliance, (4) developing social support, (5) solving family problems, (6) avoiding problems, (7) seeking spiritual help, (8) accessing close friends, (9) looking for professional help, (10) exerting physical energy, (11) using humor, and (12) using some form of relaxation. Due to the lack of a coping measure adequate for use with ministers' families, this study concentrated on two of these categories: ventilating feelings (i.e., ventilation coping), and seeking spiritual help (i.e., spiritual coping).

Literature concerning coping in children is scarce, but some researchers have investigated how adolescents cope. Reischl & Hirsch (1989) found that adolescents used different coping behaviors depending on whether the student was academically or socially oriented. The most effective coping mechanisms for academic students were academically-related, whereas the most effective coping mechanisms for socially-oriented students was socially-oriented coping (Reischl & Hirsch, 1989). Therefore, the effectiveness of a particular coping behavior was dependent upon its congruence with the particular adolescent's perception of themselves (Reischl & Hirsch, 1989).

Fitting into the corporate lifestyle, or accepting this lifestyle as inevitable, a challenge, or even enjoyable were all found to be coping styles in the corporate lifestyle that predicted positive adaptation. As with these corporate families, or other professional families, ministers' families may use such coping behaviors to handle the accumulation of stressors, strains, and hardships that they face. Moy and Malony (1987) found that ministers' families were extremely flexible, and flexible families, according to Lewis (1986), cope better with

stressors because they have greater internal resources for dealing with them. Harbaugh (1987), however, suggested that ministerial families were not necessarily accessing their abundant coping resources. She suggested self-care for family members, self-awareness of each family member, and a socioemotional support system were necessary coping resources for the clergy family that were not being adequately implemented (Harbaugh, 1987).

McGinnis (1969) found that denial or confrontation of parishioners with a problem were the main coping behaviors ministers used. In Smith's (1972) study 67% of the ministers did not seek any outside help for stressors. They might confide in a fellow minister or their spouse, but mostly used their clergy superiors, if anyone (Platt & Moss, 1976; Smith, 1972). Rayburn et al. (1988c) found that female ministers used more positive coping behaviors to handle ministry-related stress than male ministers, including verbal or emotional coping. The male ministers tended to use physiological coping behaviors (jogging, etc.; Rayburn et al., 1988c). Other male ministers coped with overidentification with their ministry by redefining their role as minister to lower its importance, while redefining the family role as very important to increase its importance in their lives (Noyce, 1980). Hansen (1984) also found those ministers who insisted on a written job description from their congregation were less stressed by conflicting expectations.

Ministers' wives, on the other hand, reported using their husbands exclusively as their social support (Platt & Moss, 1976; Smith, 1972). The spouses also used denial to cope with the loneliness they felt (Niswander, 1982), or the fear of being forced to play the traditional ministers' spouse (Brereton, 1972). Hsieh and Rugg (1983) found that

ministers' wives used coping behaviors that could be done alone, including prayer and trusting God (90.3% used reading the Bible, 96.8% used prayer, 87% relied on the Holy Spirit). Dependence on religion was the main anxiety-reducing coping behavior for wives (Hsieh & Rugg, 1983). The wives showed a lack of social support as none of the women in the study acknowledged use of any of the social support coping behaviors mentioned in Hsieh and Rugg's (1983) adaptation of McCubbin, Boss, Wilson, and Dahl's (1979) coping inventory. As such, the coping responses actually reinforced the wives' isolation and inflated their loneliness (Hsieh & Rugg, 1983).

Adaptation in Ministers' Families. Adaptation is the family's recovery from crisis indicating a level of family and individual family member functioning has been reached (McCubbin et al., 1988). Bonadaptation results if family and individual family member integrity is restored, allowing for adequate development of social competence in the family. Bonadaptation may not be possible if the resources are not available for meeting the family's needs. The difficulty of achieving bonadaptation also depends on the adaptability of the individual family members in the family, and the situational factors that are being dealt with (Roth & Cohen, 1986). However, it is at least as equally important to understand the origins of healthy adaptation as to understand pathology, or maladaptation (Antonovsky & Sourani, 1988).

Family structures are constantly changing over the life cycle as a process of adaptation is a normal part of every family's life (Boss, 1980). It is difficult to measure adaptation to stress since it occurs in the context of new stressors and coping attempts (Antonovsky & Sourani, 1988). The pre-crisis organizational structure of families

has been found to be a significant predictor of adaptation levels (Lewis, 1986). Lazarus (1981) found the most adaptable people were those who had access to problem-solving coping strategies and knew how to change what could be changed, and who could use denial as a coping device to positively define the situation when nothing could be done about it. Families who experience bonadaptation have harmonious family functioning which offers emotional security for all family members including the children (Niemi, 1988).

Individuals and families most vulnerable to maladaptation were found to be more likely to have a poor sense of trust, and hence, underdeveloped social support resources (Grace & Schill, 1986b). They may also be more apt to use negative coping strategies (i.e., denial, alcohol consumption; Folkman & Lazarus, 1986). Maladapted individuals may also have depressive symptoms and feel threatened by a multitude of real or imagined stressors (Folkman & Lazarus, 1986).

Adaptation in the general research area of work-family issues has not been well addressed. Adaptation in ministers' families also needs further empirical analysis. Noyce (1980) concluded that most ministers and their families managed to strike a healthy balance between the ministry work and family roles; so, that each helped to nourish the other rather than harming it. In a survey of ministers in California, Blackmon (1984) found ministers reported happy marriages and families that benefited from their ministerial lifestyle indicating bonadaptation. McAllister (1982) also found that ministers had significantly higher self-concept and adjustment profiles than their control sample. Maladaptation also seemed to be relatively minor among those ministers surveyed by Ellison and Mattila (1983). Merrill (1985b) stated that

the key to staying well-adapted, even to the point of joy, was to remain sensitive to the church members' needs while not allowing them to enslave oneself or the ministerial family.

Moy and Malony (1987) found that due to the nature of the ministerial profession, family adaptation required a lot of flexibility in the family, indicating families who did not have the internal strengths to handle constant change would be unable to adjust to such a lifestyle. Families who were required to be extremely flexible over long periods of time, however, were suspect to pathology (Moy & Malony, 1987). When congregational expectations were dismissed as simply unrealistic, Muck and Shelly (1989) proposed that the family and minister would lose its sense of meaning in life and ability to be the leader(s) of the congregation. Burnout was perhaps one of more severe symptoms of maladaptation (Daniels & Rogers, 1990; Gross, 1989). Burnout appears to be more prevalent in the helping professions such as the ministry (Muck, 1984).

Harbaugh and Behrens (1986) determined that the better adapted ministers' spouses in their study had ten characteristics in common: (1) they were hopeful, believing Christ to really be with them and caring about their situation, (2) they saw the tough times as having meaning and purpose (i.e., coherence), (3) they defined change as opportunity, (4) they were less likely to feel isolated, (5) they trusted others and identified with them, (6) they trusted themselves to have the ability to meet new challenges (i.e., hardiness), (7) they cared about and for themselves, (8) the Bible and prayer was a regular part of their lives, (9) their faith was a resource used when dealing with accumulations of stressors and hardships, (10) they would marry a

pastor again if they were given a second chance. In their empirical study of female ministerial spouses, though, Warner and Carter (1984) found that these women were suffering from emotional exhaustion, indicating maladaptation was occurring at the individual level, while the minister was prone to burnout, which also indicated maladaptation. Conflicting findings such as these indicate that insufficient information is available at this time for determining how well ministerial spouses are adapting to the ministerial lifestyle.

Myths about ministers' children have, for many years, depicted these offspring as being totally maladjusted (Gibb, 1986). Bayer et al. (1972), however, established that of those minister's adolescents who entered college, most were well adapted and doing well. Gibb (1986) quoted a prominent church leader as saying that only 10-15% of all ministers' children were maladjusted; leaving the majority to be well adapted in the family and fitting into the church community. Most of the 25 college students who responded, Gibb's (1986) study, were appreciative of the lifestyle they grew up in, and felt they fit in well in the family-church community.

Conclusions

Stress is a normal part of everyday life for individuals and their families, because change is inevitable, and stress is a byproduct of these changes (Lourie & Schwarzbeck, 1979). The family stress theory (Hill, 1958; Burr, 1973; McCubbin & Patterson, 1983) is a useful tool in understanding the stress and adaptation processes in individuals and families. The T-Double ABCX is especially a useful model in understanding adaptation to stressor accumulation in families within many occupations (McCubbin et al., 1988). Several components of this model,

therefore, were used in this study of ministers' families in an attempt to better understand their unique lifestyle: pile-up, family hardiness, family coherence, coping, and adaptation.

Klink (1969) theorized that many stressors in ministers' families were similar to those in families in other occupations. Due to the entanglement of the work and family issues in ministerial families, (Lee, 1988; Lee & Balswick, 1989), however, ministerial families and individual family members may adapt to accumulations of stressors, strains and hardships in ways not easily understood from research with other work-family issues. The variety of stressors and their resultant strains and hardships in this unique family is only partially shared by other professions (Hartley, 1978). Little is known about coherence, hardiness, and coping in the ministerial family and its members. An investigation of how such factors can predict adaptation was needed. This study, therefore, examined how the level of stressors, hardships and strains, family hardiness, spiritual coping and ventilation coping predicted adaptation in ministerial families.

There were several hypotheses that this study was based on. First, as family level of stressors, hardships, and strains related to work and family-community fit and parent life events increased, family level of hardiness, coherence, and adaptation were expected to decrease. Second, as family hardiness increased, family coherence, and family adaptation were expected to increase. Third, as family coherence increased, family adaptation was expected to increase. Fourth, as family hardiness increased spiritual coping and ventilation coping were expected to increase. Fifth, as family coherence increased spiritual coping and ventilation coping were expected to increase.

Sixth, as spiritual coping and ventilation coping increased, family adaptation was expected to increase. Finally, stress pile-up, family hardiness, family coherence, spiritual coping, and ventilation coping were expected to yield a model that was a meaningful explanation of adaptation in ministers' families.

APPENDIX B

METHODOLOGY

This study examined predictors of adaptation in ministers' families, as measured by the level of family adaptation. Exogenous variables of primary interest were the family accumulation of stressors and strains related to the ministerial work role and family-community fit, and the ministers' and spouses' accumulation of recent individual stressors and strains. In addition, selected demographic variables were included as exogenous independent variables and used as predictors: age of the oldest child in the family participating in this study (age 8 to 18), number of moves, family income, number of participants from the family, and number of children in family. Family coherence and family hardiness as reported by the participating family members, ventilation coping, and spiritual coping skills were endogenous variables, acting as both independent and dependent variables in the model. The dependent variable, family adaptation, served as the predicted outcome variable.

Research Design

This study used a survey design with a convenience sample of ministers' families. Specifically, self-report questionnaires were used to measure perceptions of personal, work-related and family-community fit stressors, family coherence, family hardiness, spiritual coping, ventilation coping, and family adaptation. A survey design was the method of choice because the research determined relationships among

variables that had already occurred and could not be manipulated (Kidder & Judd, 1986). Further, the goal of the research was to predict rather than show causality and to increase external validity (e.g. generalizability) as much as possible (Kidder & Judd, 1986).

This study also used multiple perceptions of family measures (i.e. several family members were asked to complete the same questionnaires), providing a more complete description of the family variables than when using only one family member. Use of results from several family members helped to lower the bias of the results, resulting in a more complete measurement of the constructs involved in the study (Kidder & Judd, 1986). Increasing the completeness of the measurement of the constructs also enhanced the internal validity of the study (Kidder & Judd, 1986).

Pilot Study

Four ministerial families were asked to fill out the original surveys to test for readability of the surveys. This testing also aided in assessing whether the survey was short enough to ensure completion of all questions, and the amount of time the survey took to complete. In the pilot study the children were also asked how much help they received in filling out their questionnaires to ensure the children's ability to understand their questions. As a result of the pilot study children's questions were rewritten in simpler language of two syllables or less and one question was deleted.

Selection of Subjects

To create a national convenience sample from several denominations for this study denominational address lists were used to randomly select 400 churches from each of the three branches of Protestantism

for a total of 1,200 churches. The population sampled included one mainline denomination (i.e., Episcopal, which had 7,360 churches of which 400 or about 5.4% were used), one fundamental denomination (i.e., Church of Christ, which had 12,945 churches of which 400 or about 3.1% were used), Wesleyan (i.e., which had 1,659 churches, of which 134, or 8.1% were used), Free Methodist (i.e., which had 980 churches, of which 134, or about 15.2% were used), and Missionary Alliance (i.e., which had 1,362 churches, of which 134, or about 9.7% were used) (Kuiper, 1964; Latourette, 1965). To select the sample, the total number of Episcopal, Church of Christ, and the combination of evangelical churches was divided into four geographical areas (see Table 7).

Insert Table 7 about here

The number of Episcopal and Church of Christ churches in each area was divided by 100 to determine which church address would be chosen to send the initial contact letter to. The Wesleyan, Free Methodist, and Christian Missionary Alliance church addresses in each area were combined and then divided by 100 to also come up with 400 addresses in the evangelical branch of Protestantism. This resulted in approximately every 74th church being selected for the initial contact, while controlling for geographical area.

A letter was sent to the church addresses requesting whether the ministers and their families affiliated with that church would be interested in participating in a study about how ministerial families managed stresses and changes in their lives, or if the family knew of another ministerial family who might be interested in such a study. Of the 1,200 churches contacted, 45 participation requests were returned

by the postal service, 200 responded that they were not interested in participating, and 169 responded that they would like to volunteer to help with a study of stress and adaptation in ministers' families, which yielded a 34.5% response rate for the churches contacted (see Table 5).

If the family was interested in participating, they were asked to complete, sign, and return the consent form enclosed with the initial request for participants and return it in the self-addressed stamped envelope. The form asked brief questions to assess whether the family met the sample selection criteria: (1) if the minister was currently pastoring a church and the position held, (2) if the minister was married, (3) if there were biologically-related or adopted children and adolescents in the home, (4) the ages of the children and adolescents, (5) the family's name, (6) the family's address, and (7) if the family was willing to participate in this study. They were also asked if they would be interested in participating in future research.

Families willing to participate in the study were sent separate letters of explanation of the study and sealed questionnaire packets containing separate color-coded questionnaires for each family member who signed the consent form which included self-addressed stamped envelopes for each family member (i.e., minister-blue, minister's spouse-purple, adolescent-yellow, child-green). The parents were informed that they could request a copy of the questionnaires that the children and adolescents were completing so that they could know what the children were being asked. Each family member was asked to complete their questionnaire without consulting other family members and to

return their results in the self-addressed envelope without sharing their answers with anyone before mailing their forms. Further, the families were told that they could discuss the project once all forms had been mailed. A total of 135 of the 169 volunteer families actually participated, for an overall response rate of 80% among the volunteer sample (see Table 7).

Data Collection

The individual sealed questionnaire packets contained a letter explaining the purpose of the study, and separate questionnaires to be completed by the minister (blue), nonministerial spouse (purple), adolescent (yellow), and child (green). In addition, separate self-addressed stamped envelopes were provided for each of the four family members to return the questionnaires to the investigator.

In the cover letter the ministers' families were informed that this was the study they had agreed to participate in about how ministers' families manage stresses and changes in life. They were reminded that they recently signed a consent form, and were again reassured of confidentiality and anonymity. They were further reassured that the identification numbers on the questionnaires were for the computer analysis only (e.g., 1a, 1b, 1c, 1d), and did not appear on anything that could lead to matching of responses with the participants' names and addresses. The parents were also requested to cooperate in ensuring their child and/or adolescent's confidentiality and anonymity by not looking at their children's answers or asking them questions. Ten days following the initial mail out of the packets a follow-up postcard was sent to all families. Ten days following this reminder card, a thank you card for being in the study was mailed to each family (Dillman, 1978).

The researcher was responsible for the returned questionnaires. As responses were returned, the data was coded by matching family members' anonymous identification numbers (e.g., 1a, 1b, 1c, 1d) on the questionnaires and entered in the mainframe computer so that they could be analyzed using the SPSS (SPSS, 1988) package.

Instrumentation

The following description of instruments that measured the different variables in the study is outlined in Table 2, which appears in the article section of the dissertation.

Insert Table 2 about here

Family scale means, standard deviations and item means also appear in Table 2. In addition, copies of all questionnaires appear in Appendix D.

The minister and ministerial spouse were asked to complete a sociodemographic sheet. This sheet asked if the minister was currently employed by a church, the gender of the minister, whether the non-ministerial spouse was employed, gender of nonministerial spouse, ages of the minister and spouse, ages of children aged 8-18, area of the United States of the family residence, and the number of times moved since entering the ministry (see Table 7). Further, the 8-18 year old children were asked to determine how much allowance and personal earnings they received each week, and how many times they had moved since Kindergarten (see Table 7).

To measure the accumulation of stressors and strains, two survey questionnaires were used. Each family member (i.e., children aged 8 to 18, the minister, and the ministerial spouse) completed the Stressors of Clergy Children and Couples scale (SOCC-C, a modification of the

Stressors of Clergy Children Inventory (Ostrander et al., 1990; see Table 2). The ministerial spouse and the nonministerial spouse also filled out the Parent's Life Events Checklist (Fournier, 1984; see Table 2). The adults were also asked to complete the Family Consensus subscale from Profiles (Fournier, 1984; see Table 2). However, it was discovered upon return of the questionnaires that the printing company had failed to print three of the five questions for the Profiles scale, and so this scale was deleted from the analysis. Family means for the Stressors of Clergy Children and Couples, and the Parents Life Events Checklist scales were computed to use in the path analysis.

To measure family coherence, children 13 to 18 years old, the minister and the nonministerial spouse were asked to complete the Family Coherence scale (FCC, McCubbin et al., 1988; see Table 2). Family means were established for the family coherence measure which were used in further analyses.

To measure family hardiness children aged 13 to 18 years old, the minister, and the nonministerial spouse were asked to complete the Family Hardiness Index (FHI, McCubbin & Patterson, 1982; see Table 2). Family means were computed on the Family Hardiness Index and were used in further analyses.

To measure the level of coping skills, the minister, nonministerial spouse and all children between 8 and 18 years old were asked to report how often they used each of a list of spiritual and ventilation coping skills. This list was taken from the A-COPE (Patterson & McCubbin, 1982; see Table 2), but scoring was changed from yes or no to (1) never, (2) once in a while, (3) sometimes, (4) often, (5) most of the time to determine how often the specific coping skills were used. Again, family

means were found for the spiritual and ventilation coping measures. These means were used in further analyses.

To measure family adaptation, all members of the family were asked to complete a revised version of the Family Adaptation Scale (Antonovsky & Sourani, 1989; see Table 2). A total overall family mean score was also computed for the family adaptation variable which represented the family's adaptation level in further analyses.

Stressors of Clergy Children and Couples (SOCC-C). The Stressors of Clergy Children and Couples (SOCC-C; see Table 2) was a new instrument based on the Stressors of Clergy Children Inventory (SOCC; Ostrander, Henry, & Hendrix, 1990). This 19 item Likert-type instrument utilized the following response categories: (0) does not apply, (1) applies, not upset, (2) applies, little upset, (3) applies, somewhat upset, (4) applies, quite upset, and (5) applies, very very upset. The SOCC-C measured stress related to the ministerial work role and the family-community fit. Since this was a new instrument, the SOCC-C was tested for internal consistency reliability (Cronbach alpha = .80; Cronbach, 1951, see Table 8) and construct validity (principal components factoring followed by varimax rotation, Norusis, 1988; see Table 8). The instrument was tested for concurrent validity through comparison with Fournier's (1984) Parent Life Events Checklist through a bivariate correlation analysis. The Pearson correlation coefficient showed the SOCC-C scale to be significantly related to the Parents' Life Events Checklist ($r = .42$; $p < .01$ level).

Family Coherence. Family Coherence (McCubbin et al., 1988) was a four item scale using a 5-point Likert response set (strongly disagree, disagree, neutral, agree, strongly agree). The Family Coherence Scale

had previously established internal consistency reliability of .71 (McCubbin, Larsen, & Olsen, 1987). Internal consistency reliability for this sample was moderate ($\alpha = .59$; see Table 9) after one item was deleted (i.e., "having faith in God"). Construct validity was also established for the Family Coherence scale once this item was deleted (i.e., "having faith in God" did not load on the coherence factor; see Table 9).

Family Hardiness Index. The Family Hardiness Index (McCubbin & Patterson, 1986; McCubbin et al., 1988; see Table 10) was a measure of such family internal strengths as the family's internal control over life changes, having a sense of meaningfulness in life, an involvement in activities, and the family emphasis on learning and exploring new things. This Likert scale contained 20 items that utilized the following categories: (0) false, (1) mostly false, (2) mostly true, (3) true and (NA) does not apply. NA was scored as 0 for the analysis. Items 1 (trouble results from mistakes we make), 3 (our work and efforts are not appreciated no matter how hard we try and work), 8 (we do not feel we can survive if another problem hits us), 10 (life seems dull and meaningless), 14 (we tend to do the same things over and over again and it's boring), 16 (it is better to stay at home than go out and do things with others), 19 (most of the unhappy things that happen are due to bad luck), and 20 (we realize our lives are controlled by accidents and luck) were reverse coded for the analysis. This reverse coding resulted in the items being coded as follows: (0) true, (1) mostly true, (2) mostly false, (3) false, and (NA) does not apply. The scale had a previously established internal consistency of $\alpha = .82$ (Cronbach, 1951; see Table 2). Internal consistency

reliability with this sample was established ($\alpha = .81$; see Table 10).

Family Adaptation. The Family Adaptation Scale (FA) was developed by Antonovsky and Sourani (1989) as a means of measuring family members' perceptions of their adaptation to life events. This was an 11 item scale with a seven point Likert-type scale measuring the degree of satisfaction with their adaptation to life events: (1) I'm completely satisfied, (2) I'm very satisfied, (3) I'm quite satisfied, (4) I'm somewhat satisfied, (5) I'm somewhat unsatisfied, (6) I'm quite unsatisfied, (7) I'm completely unsatisfied.

Due to the adult level wording of the Family Adaptation scale, the questions were reworded in children's language with two syllables or less. The Likert scale used responses that were reworded to range from: (1) no, I am not happy at all, (2) I am a little unhappy, (3) I am not unhappy but I am not happy either, (4) I am happy, (5) I am very happy in order for all family members to answer the questions on the Family Adaptation questionnaire. In order to more adequately test for family-community fit (the FA scale had one question addressing this issue), four new questions were also developed and added to the FA scale for this study.

The original Family Adaptation scale had previously established internal consistency reliability of .87 (Antonovsky & Sourani, 1989, see Table 2). As a result of the alterations made to the scale for this study, however, the scale was tested for internal consistency reliability ($\alpha = .89$; see Table 2) and construct validity (see Table 11). The modified Family Adaptation scale was, therefore, both reliable and valid.

Parent Life Event Checklist. The Parent Life Event Checklist (PLEC; Fournier, 1984; see Table 2) was a 50 item scale developed to assess parents' perceptions of stressful individual life events. The scale was originally scored on a 0 to 3 Likert-type scale: (0) No, life event did not occur, (1) yes, life event occurred but was not stressful, (2) yes, life event occurred and was stressful, (3) yes, life event occurred and was highly stressful (Fournier, 1984). To use this scale as a comparison tool for the SOCC-C scale, the scoring was changed to that used on the SOCC-C (0 = does not apply, 1 = applies not upset, 2 = applies little upset, 3 = applies somewhat upset, 4 = applies quite upset, 5 = applies very very upset). This scale had a previously established internal consistency reliability of .92 (Fournier, 1984). Internal consistency reliability for this sample after the scoring modification was .87 (see Table 12).

Construct validity for the PLEC scale was questionable, since the correlation matrix it was based upon was unstable (these factors appear in Table 12). The factors, were therefore, treated as subscales and tested for internal consistency reliability and construct validity. The Work-Family Threatening Events subscale internal consistency reliability ($\alpha = .87$) and construct validity are shown in Table 13. Internal consistency reliability ($\alpha = .57$) and construct validity of the Marital Security Threats subscale appear in Table 14. Internal consistency reliability ($\alpha = .68$) and construct validity for the Health Issues subscale appear in Table 15. Internal consistency reliability ($\alpha = .72$) and construct validity for the Parenting subscale are in Table 16. The Personal Securities subscale internal consistency reliability ($\alpha = .62$) and construct validity are reported in Table 17.

Coping Measures. For the purpose of this study two coping scales were used: spiritual coping and ventilation coping (see Table 2). These two item scales yielded internal consistency reliability coefficients of .55 and .53, respectively. Each coping skill was scored on a Likert-type scale with five possible responses: (1) never, (2) once in a while, (3) sometimes, (4) often, (5) most of the time. The two variables that represented the ventilation subscale came from A-COPE (i.e., "I get angry and yell," and "Blaming others for what's going wrong;" McCubbin et al., 1979). The spiritual coping subscale was developed by taking one item from A-COPE (i.e., "prayer;" McCubbin & Patterson, 1982) and a second variable was taken from the Family Coherence and Coping Scale (i.e. "having faith in God;" FCC; McCubbin et al., 1982).

Adolescent Life Events Checklist (ALEC). The Adolescent Life Events Checklist (Fournier, 1984; see Table 3) was used to measure perceived adolescent recent (last 12 months) life events that may have been defined as stressful. This scale contained 37 items and had an internal consistency reliability of .88. This scale was scored like the original Parents Life Events Checklist scoring (Fournier, 1984), but was also changed to that of the SOCC-C. Due to the low number of respondents for this scale, the ALEC could not be tested for internal consistency reliability and construct validity. Therefore, the ALEC was dropped from further analyses.

Data Analysis

SPSS (1988) "compute" and "if" statements were used to establish family mean scores for each of the variables in the scales and the overall scale means for use in the analyses (see Table 3). The step

by step process for establishing these scores are found in the article methods section of this dissertation.

To ensure internal consistency reliability, Cronbach's coefficient alpha (Cronbach, 1951) was established on each of the above designated scales using all family member combined scores in the analysis (see Table 3). Bivariate correlations of the SOCC-C instrument with the PLEC was used to test for concurrent validity (Kidder & Judd, 1986).

The SPSS principal components factoring followed by varimax rotation program (SPSS, 1988) was used to test for construct validity in the various scales using all individual family member scores in the analysis. This factoring procedure was chosen because the study was exploratory and an attempt was made to reduce improper solutions resulting from maximum likelihood estimation factoring (Jackson & Chan, 1980; Kim & Mueller, 1978). Internal consistency reliability was again checked using individual family member scores after items were dropped from the various scales as a result of the previous reliability tests and the factor analyses.

To determine the distribution of the regenerative family types (i.e., vulnerable, durable, stable, and regenerative; McCubbin et al., 1988), discriminant function analysis was applied to the combined (see Table 3) participant responses on the Family Hardiness Scale (McCubbin & Patterson, 1986), and the Family Coherence Scale (McCubbin et al., 1982). The exogenous variables from the path analysis (i.e., parent individual stress level, ministerial work and family-community fit stress level, number of children, number of participants from the family in the study, income, number of times moved, and oldest participating child's age) were used as independent variables in the discriminant

analysis. Discriminant function analysis was chosen to develop these typologies because of its value in predicting groups on the basis of the independent continuous predictor variables (Tabachnick & Fidell, 1983). The regenerative groups were determined by finding the family mean scores on the Family Coherence and Family Hardiness Scales. Any family below the mean on coherence was labeled low coherent, and any family below the mean on hardiness was labeled low hardiness. Any family scoring on or above the mean on family coherence was labeled high coherence, and any family scoring on or above the mean on family hardiness was labeled high hardiness. The four regenerative family types, then, were the following groups: low coherence and low hardiness = vulnerable family, low coherence and high hardiness = secure family, high coherence and low hardiness = durable family, high coherence and high hardiness = regenerative family. These groups acted as the dependent variable in the discriminant analysis.

Results of the discriminant analysis appear in Table 18. Accurate prediction of groups was very low, resulting in the decision to treat family hardiness and family coherence as separate variables, rather than using the regenerative typologies, in the path analysis for testing the adaptation in ministers' families model.

A regression path analysis procedure was used as a means of testing an overidentified model for predicting levels of adaptation as measured by the mean of the overall family score from the modified version of Antonovsky and Sourani's (1989) Family Adaptation Scale (see Figure 2). An overidentified model specifies at least one independent variable

Insert Figure 2 about here

whose relationship to at least one other variable is not tested (i.e. it is assumed there is no direct relationship between these two variables, or the relationship is zero; Pedhazur, 1982). The degrees of freedom for testing the significance of the model for explaining variance in the overall model is equal to these overidentified restrictions (8 degrees of freedom for the adaptation in ministers' families model; Pedhazur, 1982). The overall testing of significance for the path model for explaining adaptation in ministers' families utilized a chi-square statistic (χ^2) that tested the overidentified model for goodness of fit to the recursive model, the model which showed all possible variance. Calculations for this test appear in Table 19.

Age of oldest participating child in the study, number of times moved, income, number of family members participating in the study, and number of children in the family were tested as exogenous variables in the path analysis, however, the family level of minister's work and family-community stress (SOCC-C; see Table 2), as well as parents' individual stressors (PLEC; see Table 2) were the exogenous variables of interest in the path analysis.

Each of the exogenous variables were regressed on two endogenous variables: means of the total family coherence (as measured by the FCC) and means of the total family hardiness (as measured by the FHI). The mean of total family coherence was then regressed on the means of the total family hardiness measure. The means of the overall spiritual coping and ventilation coping measures were then entered into the model as endogenous variables (independent as well as dependent variables), with the means of the family coherence and family hardiness measures regressed on the means of the two coping measures. Ventilation coping

was then regressed on spiritual coping. The dependent and totally endogenous variable for the model was the overall family members' perceptions of family adaptation as measured by the family mean score on the Family Adaptation scale. Family spiritual and family ventilation coping means were regressed on the family adaptation mean. The overidentified test for usefulness of the overall model for predicting family adaptation was the final step in the path analysis. Pedhazur's (1982) formula was used for testing the overidentified model by inserting the Betas from the regression analyses above into this formula. The χ^2 (W) for the overall model was 16.215, $p < .01$. The overidentified model described a significant amount of variance in the recursive model, indicating the model is a meaningful explanation of adaptation in ministers' families.

Operationalized Research Hypotheses

Several research hypotheses were tested with the above analyses. These hypotheses follow.

1. The pile-up of stressors related to ministerial work and family-community fit (SOCC-C measure), and parents' individual perceived stressors (PLEC measure) were predicted to be negatively related to family coherence (FCC measure).
2. The pile-up of stressors related to ministerial work and family-community fit issues (SOCC-C measure) and parents' individual perceived stressors (PLEC measure) were predicted to be negatively related to family hardiness (FHI measure).
3. The pile-up of stressors related to ministerial work and family-community fit issues (SOCC-C measure) parents' individual perceived stressors (PLEC measure) were predicted to be negatively related to family adaptation (FA measure).

4. Number of family moves, number of children in the family, the age of the oldest child participating in the study, and number of family members participating in the study were expected to be negatively related to family hardiness (FHI measure).

5. The level of family income was expected to be positively related to family hardiness (FHI measure).

6. Number of family moves, number of children in the family; the age of the oldest child participating in the study, and number of family members participating in the study were expected to be negatively related to family coherence (FCC measure).

7. Level of family income was expected to be positively related to family coherence (FCC measure).

8. Number of family moves, number of children in the family, the age of the oldest child participating in the study, and number of family members participating in the study were expected to be negatively related to family adaptation (FA measure)

9. Level of family income was expected to be positively related to family adaptation (FA measure).

10. Family coherence (FCC measure) was predicted to be a positive predictor of family hardiness (FHI measure).

11. Family coherence (FCC measure) was predicted to be positively related to spiritual and ventilation coping.

12. Family hardiness (FHI) was predicted to be positively related to family perceptions of spiritual and ventilation coping.

13. Family perceptions of ventilation coping were expected to be positive predictors of family perceptions of spiritual coping.

14. Family perceptions of spiritual coping and of ventilation coping were expected to be positive predictors of family adaptation (FA measure).

15. Individually perceived pile-up of stressors (i.e., work and family-community fit stressors, or SOCC-C measure, and parents' perceived individual stressors, or PLEC measure), were positive predictors of family adaptation (FA measure).

16. The research model (see Figure 2) based on the pile-up of

Insert Figure 2 about here

stressors related to ministerial work and family-community fit issues (SOCC-C measure), and parents' life event stressors (PLEC measure), family coherence (FCC measure), family hardiness (FHI measure), family perceptions of spiritual coping and family perceptions of ventilation coping is a useful model for predicting overall family adaptation (FA measure).

17. The Stressors of Clergy Children and Couples (SOCC-C) scale was predicted to be positively correlated with the Parent Life Event Checklist (PLEC).

18. The Cronbach's coefficient alphas were expected to meet the minimum acceptable standard for research (.55) for the following scales: Stressors of Clergy Children and Couples Scale (SOCC-C), Parents' Life Events Checklist (PLEC), Family Coherence (FCC), Family Hardiness (FHI), spiritual coping, ventilation coping, and family adaptation (FA).

19. The Stressors of Clergy Children and Couples (SOCC-C), the spiritual coping subscale, the ventilation coping subscale, and the

Family Adaptation (FA) scales were predicted to demonstrate construct validity.

20. The age of oldest child in study, number of family moves, income level, number of participants in the family, number of children in the family, level of family perceived stress related to ministerial work and family-community fit (SOCC-C measure), and parents' perceptions of individual stress (PLEC measure) were expected to be predictors of family regenerativity as shown by discriminant analysis.

Limitations

Limitations to a survey design using a convenience sample such as the one used in this study include several threats to internal validity due to the inability to guarantee who will volunteer to fill out the questionnaires, or which of the volunteers will actually complete forms, or if they will ask someone else to complete their forms (selection threat). Differing historical or geographical events in various parts of the country may also influence responses (history threat). The occurrence of the Operation Desert Storm Mideast War at the time the data was collected for this study may also be a historical threat to internal validity. Families who have members who fail to return their portion of the survey may also create a mortality threat to internal validity.

In addition estimates were used to arrive at family scores, which may limit the interpretation of this study. In other words, family means do not reflect the differences between family members' perceptions of stress and adaptation in ministers' families. The findings of this study, therefore, can only be interpreted as the families' average perceptions of the stress and adaptation process and cannot be applied

to specific family members (i.e., ministers' perceptions may vary significantly from the average family means of perceptions).

External validity may be limited by use of only five denominations in the Protestant movement, although use of denominations to represent the three branches of Protestantism (Latourette, 1965) may reduce this threat. Further, the final sample was not as representative of Western states which may limit generalizability to churches in this part of the United States.

APPENDIX C

RESULTS AND DISCUSSION

Sociodemographics. Detailed demographic statistics for this sample of ministers' families are found in Table 7 (see Table 7). This sample consisted of 135 ministers' families (42 Episcopal who represented the mainline sector of Protestantism; 44 Church of Christ who represented the fundamental sector of Protestantism; 21 Free Methodist, 9 Wesleyan and 16 Christian Missionary Alliance, who represented the evangelical sector of Protestantism (Latourette, 1965). Families had from 0 to 6 children (mean = 2.6), parents ranging from 24 to 74 years of age, (mean = 44). About one half of the nonministerial spouses were employed. The families were equally rural or urban with the Northeast (n = 33), South (n = 35) and Midwest (n = 35) equally represented, with the Western states yielding 17 families. Thus, generalizability of this study to ministers' families in Western states may be limited. Fifteen families, however, failed to note their area of residence. The average age of a child who filled out the survey was 12.53 years old.

The demographic statistics showed that a wide range of families from five denominations participated in this study, allowing at least some generalizability to the given denominations. Similar results may also be found in other denominations that are close in belief and structure to the denominations used in this study.

Scoring for the Analyses. Family mean scores were used in the regression path analysis that were composite scores. These were

developed through the SPSS (SPSS, 1989) "compute" and "if" statements which allowed the individual members' averages to be used while controlling for missing data and number of family members who filled out the scale (see Table 3). In other words, each family was represented by one family mean score in the path analysis, making the $n = 135$ families. Individual family member scores were used for internal consistency reliability and construct validity testing to test the reliability and validity of the items in each scale across all members of the family (i.e., children aged 8 to 18 years, nonministerial spouses, and ministers). In other words, each family member was treated as a separate subject for the reliability and construct validity analyses.

Cronbach (1951) alpha was used to test for internal consistency reliability with each of the scales used in the path model in this study. Principal components factoring followed by varimax rotation (SPSS, 1989) was used to test each of the scales for construct validity. The two item measures (spiritual coping and ventilation coping) were tested for relatedness of variables using bivariate correlations, since two items were insufficient for the factor analysis procedure.

The Path Analysis. Results and discussion for the path model are found in the article at the beginning of this dissertation. Computations for arriving at the χ^2 are found in Table 19. As discussed in the methods section, the χ^2 statistics (W) tested for the significance of the overidentified model for explaining variance in the overall model for explaining adaptation in ministers' families. The significant χ^2 indicates the model was a meaningful explanation of adaptation in ministers' families (Pedhazur, 1982). Since this path analysis is discussed in depth in the article part of the dissertation,

and the results are shown in Tables 4, 5, and 7, no further explanation will be included here.

Coping. The spiritual coping measure was filled out by 8 to 18 year old children, the nonministerial spouses, and the ministers in the study. The Cronbach's (1951) alpha test for internal consistency reliability for the spiritual coping scale showed this scale to have only moderate reliability ($\alpha = .55$; see Table 2). The limited number of items on this scale ("prayer," and "having faith in God") may have lowered the level of reliability of this scale. Therefore, the hypothesis that this would be a reliable measure of spiritual coping could only be moderately upheld. This scale, then, needs to be modified and retested with other samples of ministers' families before a true understanding of the role of spiritual coping in ministers' families can be understood.

The ventilation scale was completed by the children aged 8 to 18 years, nonministerial spouses and the ministers in the participating families. The internal consistency reliability of this two item scale was low ($\alpha = .53$, see Table 2), which may have been due to the small number of items ("I get angry and yell," and "blaming others for what's going wrong"). Due to the low alpha, the hypothesis that the ventilation scale was a reliable measure of ventilation coping could not be examined. This scale needs to have an increase of items and retesting before understanding of the role of ventilation coping is understood in ministers' families. The ventilation scale was negatively related to the spiritual coping measure ($r = .39$, $p < .001$).

The Stressors of Clergy Children and Couples Scale. The Stressors of Clergy Children and Couples (SOCC-C) is a 19 item scale (see Table 8)

that was completed by the 8 to 18 year old children, the nonministerial spouses and the ministers. The Cronbach (1951) alpha test of the Stressors of Children and Couples (SOCC-C) scale showed this scale was a reliable measure of church and family-community fit stress (see Table 8), which supported the hypothesis that the SOCC-C was a reliable measure of stress for ministers' families.

Construct validity was shown for the SOCC-C scale (see Table 8). Three factors were found in this scale: (1) The family's public life, (2) expectations, and (3) family member isolation (see Table 8).

The Family Coherence Scale. The previously established scales varied in their level of internal consistency reliability. First, the Family Coherence Scale (McCubbin et al., 1982) was a four item scale that the ministers and nonministerial spouses and children from 13 to 18 years of age answered. Initial internal consistency reliability of this scale was .57. Item four, "having faith in God," was deleted from the scale, increasing the alpha to .59 (see Table 9). These findings show that a three item scale is not really broad enough to determine sound reliability in family research. Hence, the family coherence scale needs to be further developed and tested before improved internal consistency reliability can be determined.

Based upon the literature indicating the having faith in God may be more of a coping mechanism for ministers' families, and since it was coded in the same way as the coping variables, this item was added to the prayer variable in the spiritual coping scale discussed above. The two items were significantly correlated ($r = .37$; $p < .01$). Hence, these items were used as the spiritual coping scale in the path analysis.

Construct validity for the four item Family Coherence Scale was questionable since the four items loaded on two separate factors. When "having faith in God" was deleted the three remaining items loaded highly on the same factor (see Table 9). There is a suggestion, then, that "having faith in God" might be measuring a construct other than coherence. Hence, there was further evidence for deleting this item from the Family Coherence subscale.

The Family Hardiness Index. The Family Hardiness Index (FHI) is a 20 item scale that the ministers' nonministerial spouses and children aged 13 to 18 responded to. The FHI had about the same reliability with this sample as McCubbin and Patterson (1986) found ($\alpha = .81$; see Table 10). Due to inaccurate directions on how to code the various items, the initial alpha was very low (.26). Upon inspecting the actual items, it was found the directions called for recoding inappropriate items in reverse order (i.e., 0 = true, 1 = mostly true, 2 = mostly false, 3 = false, NA = does not apply). Conceptual consideration of each item, however, resulted in the following items being reverse coded: (1) "Trouble results from mistakes we make," (2) "It is not wise to plan ahead and hope because things do not turn out anyway," (3) "Our work and efforts are not appreciated no matter how hard we try and work," (8) "We do not feel we can survive if another problem hits us," (10) "Life seems dull and meaningless," (14) "We tend to do the same things over and over and it's boring," (16) "It is better to stay at home than go out and do things with others," (19) "Most of the unhappy things that happen are due to bad luck," (20) "We realize our lives are controlled by accidents and luck." After recoding these items and setting all other items to the raw data score the internal consistency reliability increased from .26 to .78.

Item five of the Family Hardiness Index (i.e., "We have a sense of being strong even when we face big problems") lowered internal consistency reliability whether it was raw-data coded or reverse-coded. This variable also loaded negatively on all the hardiness factors when reverse coded and only had a .01 factor loading when raw-score coded. This variable, therefore, was deleted from the Family Hardiness Index increasing the internal consistency reliability from .78 to .81 (see Table 10). Upon inspecting this variable more closely, it became apparent that perceiving the family as "being strong even when facing big problems" may have been a coping skill families had learned rather than a type of family hardiness. A bivariate correlation of this variable with the variables in the spiritual and ventilation coping measures showed a significant negative relationship with the "having faith in God" spiritual coping item ($r = -.14, p < .05$), and a significant positive relationship with the "I get angry and yell" ventilation coping item ($r = .13, p < .01$). These correlations would support the hypothesis that this variable was probably coping mechanism rather than a family strength. Further testing, however, is needed to verify this hypothesis.

Construct validity was established for the Family Hardiness Index through use of the Principal Components followed by Varimax Rotation (SPSS, 1989) procedure (see Table 10). Three factors emerged: (1) family meaning of life, (2) family involvement, and (3) family internal control (see Table 10).

The Family Adaptation Scale. The modified Family Adaptation scale, (Antonovsky & Sourani, 1989), which was completed by children aged 8 to 18 years, the ministers, and the minister's spouses, had high internal

consistency reliability (see Table 11). Changing the scoring of this scale from a 7 point to a 5 point Likert scale and the wording of the questions into two syllable children's words, therefore, yielded a higher reliability for the modified scale than for Antonovsky and Sourani's (1989) original 11 point scale (see Table 2). Further, adding several more items related to the family-community fit dimension of the Family Adaptation scale may have aided in increasing its reliability (see Table 11). These findings support the hypothesis that the Family Adaptation scale was a reliable measure with ministers' families.

Since these modifications in the Family Adaptation scale were designed to suit a specific population (ministers' families), however, further testing needs to be done to ensure that this altered scale is a reliable measure of family adaptation. Slight alterations in the current wording could also be done to use the revision with families from other professional and job backgrounds.

Construct validity was found for the Family Adaptation scale (see Table 11) through use of the Principal Components Factoring followed by varimax rotation SPSS (1989) procedure. Two factors emerged in this analysis: adaptation within the family, and family-community fit, supporting Antonovsky and Sourani's (1989) previous findings. This scale, therefore, is a valid measurement of adaptation in ministers' families.

The Parent Life Events Checklist (PLEC). The Parent Life Events Checklist (PLEC; Fournier, 1984) had a strong internal consistency reliability with this sample of ministers' families ($\alpha = .87$ as compared to previous established alpha of $.92$; see Table 12). The

ministers and their spouses were asked to respond to this scale, showing that it was a reliable measure for these family members.

The PLEC as a total scale measured two things: whether or not a stressor had occurred, and how much stress this event resulted in. Because of the nature of the scale adequate testing for construct validity was not possible. In addition the sample size (267) may have been insufficient for testing this 49 item instrument, with only five subjects available per item on the scale. The correlation matrix upon which the principal components factoring analysis was based for determining construct validity was unstable, hence, the results of the factoring could not be safely interpreted.

Inspection of the means of the individual variables showed none of the ministers' families reported experiencing item 8, "abortion for your wife or child." The zero variance interfered with the factoring process, however, so this item was deleted from the scale. Low means (less than 0) for other items also indicated many of the items had not been experienced by the ministers and their spouses, since a score of zero was used to indicate "life event had not occurred."

Since the overall PLEC construct validity was high (see Table 12), but the correlation matrix upon which the principal components factoring was performed had low stability, the factors that were found with this procedure were subject to questioning. Each of these factors were, therefore, treated as subscales and subjected to principal components factoring: Work-Family Threatening Events (see Table 13), Marital Security Threats (see Table 14), Health Issues (see Table 15), Parenting Issues (see Table 16), and Personal Security Issues (see Table 17). Residuals were too high for proper interpretation on the work-

family threatening events subscale (54%; see Table 13), the marital security threats (69%; see Table 14), and the health issues subscale (69%; see Table 15). The parenting (see Table 16) and personal security (see Table 17) subscales were found to have construct validity.

Interpretation of the construct validity analysis with the PLEC is difficult due to the nature of the scale. It appears the items in the parenting and personal security (see Tables 14 and 15, respectively) are global stressors that the ministers and their spouses had experienced and so could score them. The other items in the work-family threatening events (see Table 11), marital security threats (see Table 12), and health issues (see Table 13) may not have been issues experienced sufficiently to allow enough variability to test for construct validity.

The high reliability ($\alpha = .87$) of the overall PLEC scale warrants continued use of this scale with ministers' families, however, and continued observance of frequency in which stressors were more apt to occur in ministers' families. Future testing with other specific groups may also aid in determining which stressor events on this checklist are more common among other populations.

Discriminant Analysis of Regenerativity. Family scores were determined for both family coherence and family hardiness, as directed by McCubbin et al. (1988). The mean for each of these two variables was found. Regenerative groups were then developed as follows: low through the mean of family coherence was labeled low coherence, the mean plus .0001 through the high score on family coherence was labeled high coherence. The low through the mean of family hardiness was labeled low hardiness, and the mean plus .0001 through the high score

on family hardiness was labeled high hardiness. Regenerative groups were then formed: low coherence and low hardiness = vulnerable families, or group 1; low coherence and high hardiness = secure families, or group 2; high coherence and low hardiness = durable families, or group 3; high coherence and high hardiness = regenerative families, or group 4.

The discriminant analysis showed that ministerial families' church and family-community fit stress, parent life event stress, family level of participation in the participation in this research project, number of children in the ministers' family, number of times the family had moved, the age of the children in the study, and the family income level were not adequate for predicting the level of regenerativity in the ministers' family as based on McCubbin et al.'s (1988) measures of family coherence and family hardiness (see Table 18). Therefore, the hypothesis that these variables were predictors of family regenerativity were not supported.

Results of the discriminant analysis indicated that knowing the stress level in a ministers' family did not necessarily predict whether the family was vulnerable, secure, durable, or regenerative. Thus, although stress in a family may be high, their levels of coherence and hardiness may be high also. In contrast, having a low stress level would not mean family coherence and hardiness is high either. These findings would support Moy and Malony's (1987) findings that although ministers' families were highly stressed their high flexibility kept them healthy and their family relationships strong. This author agrees with Moy and Malony (1987), however, in their concern that such flexibility may be an asset in the short run for maintaining family integrity

under high levels of stress, but high stress levels over a long period of time would probably be detrimental to a family's level of regenerativity (level of coherence and hardiness). Longitudinal studies with ministers' families need to be conducted to test for changes in family regenerativity as a result of long periods of stress, and how flexibility may interact with regenerativity.

Future Studies

The sparsity of literature would indicate that many future studies with ministers' families are needed. Potential research projects growing out of this study of adaptation in ministers' families follow:

1. A coping scale with high reliability needs to be developed that can test coping in ministers' families. To obtain reliability and validity the scale would need to add ten or more items (Kim & Mueller, 1978).
2. The role of coping and specific coping processes in the stress and adaptation process needs to be investigated.
3. The model in this study needs to be tested for variation among other ministerial family samples.
4. A comparison of ministerial family perceptions of stress sources and lay persons' perceptions of stress sources is needed if researchers are to understand the relationship between the ministerial family and the church system more accurately.
5. Studies comparing ministers, ministers' spouses, and children's perceptions of the stress and adaptation process would aid in determining variation in perceptions among family members.
6. A comparison of ministers' families with other professional families with similar work-family boundary ambiguity are needed. Such

studies would help in determining whether the stressors in the ministerial lifestyle are unique to the ministry or enmeshed lifestyles.

7. Studies are needed that would show which resources ministerial families have access to and which resources are needed.

8. Studies are needed that would investigate the bonding and flexibility, family time and routines, and family traditions and celebrations in ministers' families.

9. The Stressors of Clergy Children and Couples scale needs to be used with other samples of ministerial families to check for variations in reliability and validity across samples.

10. The Family Adaptation scale with the alterations used for this study with ministers' families needs additional testing with other ministerial families.

11. Longitudinal studies with ministers' families need to be conducted to test for changes in family regenerativity as a result of long periods of stress, and how flexibility may interact with generativity.

12. This study showed that further testing of the Family Hardiness Index is needed.

13. A better measure of family coherence also needs to be developed which has 10 or more items to ensure internal consistency reliability and construct validity.

14. Coping measures appear to be lacking in the general literature, too, which would indicate the need to develop a coping measure that could measure coping across populations. This scale would need to have 10 or more items to assure internal consistency reliability and construct validity.

15. In conclusion, the Family Adaptation scale needs to be altered to fit other specific populations (i.e., military families) and tested for reliability and validity.

APPENDIX D

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APPENDIX E
SUPPLEMENTAL TABLES

Table 7

Demographic Variables in Predictors of Adaptation in Ministers'Families

Variable	n	Mean	Median	Mode	SD
Family Life Cycle Stage					
Childless couple	2				
Couple with grown child	34				
Couple with young child	27				
Couple with 8-12 year old child	25				
Couple with adolescent	29				
Couple with 8-12 and adolescent children	18				
Total:	135				
Family Members Taking Part in Study					
Minister only	16	6.23	3.00	3.00	5.21
Nonministerial spouse only	4				
Minister and spouse	53				
Minister and child	0				
Spouse and child	4				
Minister, spouse and child	21				
Minister and adolescent	0				
Spouse and adolescent	1				
Minister, spouse and adolescent	20				
Minister, spouse, child and adolescent	11				
Child only	0				
Adolescent only	1				
Spouse, adolescent and child	1				
Minister, adolescent and child	1				
Missing	2				
Total:	135				
Denomination					
Episcopal	42	2.37	2.00	2.00	1.36
Church of Christ	44				
Free Methodist	21				
Wesleyan	9				
Christian Missionary Alliance	16				
Missing	3				
Total:	135				
Protestant Affiliation					
Mainline	42				
Fundamental	44				
Evangelical	46				
Missing	3				
Total:	135				
Marital Status					
Married	131	1.01	1.00	1.00	.09
Divorced	1				
Never married	0				
Missing	3				
Total:	135				
Number of Children (Range = 0 to 6)					
0 children	1	2.61	2.50	2.00	1.12
1 child	18				
2 children	47				
3 children	41				
4 children	16				
5 children	8				
6 children	1				
Missing	3				
Total:	135				
Ministerial Position					
Sole minister	98	1.32	1.00	1.00	.22
Senior minister	29				
Associate minister	2				
Bivocational	4				
Missing	3				
Total	135				

Table 7 (Continued)

Variable	n	Mean	Median	Mode	SD
Employment Status of Minister		1.00	1.00	1.00	.22
Full time	114				
Not full time	6				
Missing	15				
Total:	135				
Employment Status of Spouse		2.13	2.00	2.00	.97
Full time	33				
Part time	42				
Not employed	42				
Missing	18				
Total:	135				
Location of Church		1.49	1.00	1.00	.50
Urban	61				
Rural	58				
Missing	16				
Total:	135				
Geographical Area		2.30	2.00	2.00	1.03
Northeast	33				
South	35				
Midwest	35				
West	17				
Missing	15				
Total:	135				
Minister's Gender		1.90	2.00	2.00	.28
Female	10				
Male	110				
Missing	15				
Total:	135				
Spouse's Gender		1.17	1.00	1.00	.68
Female	112				
Male	7				
Missing	16				
Total:	135				
Minister's Age (Range = from 24 to 74)		44.19	43	35	10.73
24 years	1				
27 years	1				
28 years	1				
29 years	1				
30 years	3				
31 years	2				
32 years	2				
33 years	10				
34 years	1				
35 years	11				
36 years	2				
37 years	5				
38 years	5				
39 years	5				
40 years	3				
41 years	3				
42 years	3				
43 years	2				
44 years	7				
45 years	4				
46 years	7				
47 years	1				
48 years	3				
49 years	3				
50 years	2				
51 years	3				
52 years	1				
53 years	2				
54 years	2				
55 years	2				
56 years	2				
57 years	2				
58 years	1				
59 years	4				

Table 7 (Continued)

Variable	n	Mean	Median	Mode	SD
Minister's Age (continued)					
60 years	2				
61 years	2				
62 years	1				
63 years	1				
64 years	4				
68 years	1				
71 years	1				
74 years	1				
Missing	15				
Total:	135				
Spouse's Age (Range = 24 to 70)					
		42.87	40.50	36	10.49
24 years	1				
27 years	1				
28 years	3				
29 years	3				
30 years	5				
32 years	6				
33 years	2				
34 years	7				
35 years	5				
36 years	8				
37 years	3				
38 years	4				
39 years	6				
40 years	5				
41 years	4				
42 years	1				
43 years	2				
44 years	8				
45 years	3				
46 years	1				
47 years	1				
48 years	5				
49 years	4				
50 years	4				
51 years	1				
52 years	3				
53 years	1				
54 years	3				
55 years	1				
56 years	2				
57 years	1				
58 years	2				
59 years	3				
63 years	2				
64 years	1				
66 years	1				
67 years	1				
69 years	1				
70 years	1				
Missing	17				
Total:	133				
Gender of Child in Study					
Male	42				
Female	33				
Missing	4				
Total:	69				
Age of Child in Study (Range = 8 to 18)					
		12.53	13	9	3.16
8 years	6				
9 years	10				
10 years	9				
11 years	5				
12 years	7				
13 years	7				
14 years	8				
15 years	6				
16 years	3				
17 years	3				
18 years	3				
Missing	2				
Total:	69				

Table 7 (Continued)

Variable	n	Mean	Median	Mode	SD
Number of Times Couple Moved Since Entering Ministry (Range = 0 to 19 moves)		3.60	3.62	3.00	2.00
0 moves	9				
1 move	13				
2 moves	22				
3 moves	18				
4 moves	16				
5 moves	15				
6 moves	7				
8 moves	3				
10 moves	2				
11 moves	2				
17 moves	1				
19 moves	1				
Missing	26				
Total:	135				
Number of Times Moved Since Adolescent Started School (Range = 1 to 15 moves)		2.93	2.50	3.00	3.01
0 times	3				
1 time	7				
2 times	4				
3 times	8				
4 times	2				
5 times	1				
6 times	1				
9 times	1				
15 times	1				
Missing	7				
Total:	35				
Number of Times Moved Since 8-12 Year Old Started School (Range = 1 to 9 moves)		1.63	1.00	0.00	2.21
0 times	11				
1 time	11				
2 times	8				
3 times	2				
6 times	1				
9 times	2				
Missing	3				
Total:	35				
Minister's First Description of Church Served		3.27	3.00	2.00	1.45
Charismatic	4				
Evangelical	47				
Fundamental	18				
Conservative	25				
Mainline	10				
Liberal	14				
Missing	17				
Total:	135				
Minister's Second Description of Church Served		4.23	4.00	4.00	.99
Charismatic	4				
Evangelical	1				
Fundamental	5				
Conservative	42				
Mainline	33				
Liberal	3				
Missing	47				
Total:	135				
Spouse's First Description of Church Served		2.96	2.00	2.00	1.28
Charismatic	5				
Evangelical	53				
Fundamental	13				
Conservative	22				
Mainline	8				
Liberal	5				
Missing	29				
Total:	135				

Table 7 (Continued)

Variable	n	Mean	Median	Mode	SD
Spouse's Second Description of Church Served		4.37	4.0	4.0	1.4
Charismatic	2				
Evangelical	1				
Fundamental	12				
Conservative	36				
Mainline	24				
Liberal	3				
Missing	57				
Total:	135				
Family Income (Range = \$2,000 to \$98,000 per Year)		\$27,787	\$24,500	\$20,000	\$16,105
\$ 2,000	2				
2,400	1				
2,600	1				
5,550	1				
6,000	1				
8,000	1				
8,480	1				
9,000	2				
9,880	1				
10,000	1				
10,400	1				
11,000	1				
12,000	1				
13,000	2				
13,800	1				
14,000	2				
15,000	4				
16,000	2				
16,750	1				
17,000	1				
18,000	2				
18,500	1				
18,700	1				
18,900	1				
19,000	1				
19,490	1				
19,800	1				
19,850	1				
20,000	8				
20,400	1				
21,000	4				
22,000	1				
22,100	1				
23,000	2				
24,000	3				
25,000	2				
26,000	3				
27,000	1				
27,500	1				
29,000	1				
30,000	7				
31,000	1				
32,000	3				
32,500	1				
33,460	1				
34,000	3				
35,000	5				
37,000	1				
38,760	1				
39,000	1				
40,000	5				
40,140	1				
42,000	2				
42,500	1				
44,800	1				
45,000	2				
49,180	1				
50,000	5				
55,000	1				
56,800	1				
60,000	4				
70,000	1				
98,000	1				
Missing	19				
Total:	135				

Table 7 (Continued)

Variable	n	Mean	Median	Mode	SD
Kind of Housing Family Lives In		1.92	1.00	1.00	1.23
Church owned parsonage	71				
Rent with allowance	5				
Buy with allowance	32				
Rent, no allowance	1				
Buy, no allowance	9				
Missing	17				
Total:	135				
Monthly Housing Allowance (Range = \$0 to \$1,869 per month)		\$633	\$500	\$500	\$369
\$ 0	1				
100	1				
125	1				
152	1				
200	3				
250	2				
300	7				
350	6				
400	9				
450	6				
475	1				
481	1				
500	15				
540	1				
575	1				
600	3				
625	1				
634	1				
650	3				
700	7				
750	4				
800	2				
850	1				
900	1				
1,000	8				
1,200	3				
1,250	3				
1,300	1				
1,400	1				
1,500	1				
1,600	1				
1,800	1				
1,869	1				
Missing	36				
Total:	135				
Amount of Adolescent's Allowance (Range = \$0 to \$22.00/week)		\$3.74	\$5.00	\$0.00	\$1.55
\$.00	7				
1.00	1				
2.00	1				
5.00	7				
6.00	1				
7.50	1				
8.00	1				
10.00	2				
15.00	1				
22.00	1				
Missing	15				
Total:	38				
Amount of Adolescent's Earnings (Range = \$0 to \$150.00/week)		\$16.46	\$4.50	\$0.00	\$32.35
\$.00	10				
3.00	1				
4.00	1				
5.00	2				
10.00	3				
15.00	1				
20.00	1				
26.00	1				
40.00	1				
42.00	1				
55.00	1				
150.00	1				
Missing	14				
Total:	38				

Table 7 (Continued)

Variable	n	Mean	Median	Mode	SD
Amount of Child's Allowance (Range = \$0 to \$12.00/week)		\$2.28	\$1.00	\$0.00	\$3.07
\$.00	12				
1.00	8				
1.10	1				
1.25	1				
1.50	1				
2.00	1				
3.50	1				
5.00	6				
8.00	1				
10.00	1				
12.00	1				
Missing	9				
Total:	43				
Amount of Child's Earnings (Range = \$0 to \$20.00/week)		\$2.55	\$1.00	\$0.00	\$4.33
\$.00	14				
1.00	5				
1.10	1				
2.00	3				
3.00	3				
5.00	1				
7.50	1				
8.00	1				
10.00	2				
20.00	1				
Missing	11				
Total:	43				

Table 8

Principal Components Factoring Followed by Varimax Rotation for
SOCC-C Scale

Item	1	2	3
<u>The Family's Public Life:</u>			
The death of a close relative	.62	.05	.07
The time our family spends praying/reading the Bible together	.61	-.01	.03
The parents in our family fight	.60	.27	-.21
The minister in our family is gone a lot on weekends and in evenings when the children and other parent are home	.58	.39	.17
Lack of privacy for our family	.55	.28	.08
Now our neighborhood/town think ministers' families should behave	.55	.07	.28
Whether or not the minister in the family practices what they preach ministers' families should behave	.50	-.10	.27
Another family member's emotional or mental health	.48	.37	.05
Moving	.47	-.23	.35
Being criticized	.46	.30	.01
<u>Expectations:</u>			
Both parents work because we need the money	.10	.68	.06
Both parents work	.11	.56	.24
Whether or not I can ask for help if I feel sick	-.03	.50	-.19
The way I am allowed or not allowed to be angry or show my other negative emotions (sadness, mad, hate or such)	.24	.42	.10
Being told how to act by church people	.36	.38	.28
<u>Family Isolation:</u>			
Feeling all alone or different from other people my age	.09	.11	.69
The parent(s) in our family are divorced or talk about getting a divorce	-.21	.26	.60
Not having a really good/close friend	.28	.09	.58
Whether or not the church or the family is more important to the minister in our family	.11	.03	.55
Eigenvalue	4.39	1.53	1.38
% of variance	23.1%	8.1%	7.3%
Cronbach alpha for scale = .80			

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .79 Bartlett Test of Sphericity = 916.76, $p < .001$, Off-diagonal Elements of AIC Matrix $\geq 0.09 = 78$ (22.8%) Residuals above Diagonal $> 0.05 = 74$ (43.0%).

Table 9

Principal Components Factoring Followed by Varimax Rotation for Family
Coherence Scale

Item	Factor Loading
We cope with family problems by:	
Accepting that difficulties occur unexpectedly	.78
Accepting stressful events as a fact of life	.75
Defining the family problem in a more positive way so we don't get discouraged	.65
Eigenvalue	1.78
% of variance	44.6%
Cronbach alpha = .59	

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .57. Bartlett Test of Sphericity = 134.06, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 6$ (50.0%), Residuals above Diagonal $> 0.05 = 5$ (83.0%).

Table 10

Principal Components Factoring Followed by Varimax Rotation for the
Family Hardiness Index

Item	1	2	3
<u>Family Meaning of Life</u>			
While we don't always agree, we can count on each other to stand by us in times of need	.69	.07	.25
We strive together and help each other no matter what	.68	.12	.15
We work together to solve problems	.66	.34	-.09
We believe that things work out for the better if we work together as a family	.65	-.04	.20
Many times I feel I can trust that even in difficult times that things will work out	.56	.19	.09
We listen to each other's problems, hurts and fears	.52	.43	.17
We have a sense of being strong even when we face big problems	-.45	-.31	-.03
Life seems dull and meaningless*	.43	.30	.33
In the long run, the bad things that happen to us are balanced by the good things that happen to us	.38	.09	-.20
<u>Family Involvement</u>			
When our family plans activities we try new and exciting things	.16	.80	.11
We seem to encourage each other to try new things and experiences	.31	.77	-.08
We tend to do the same things over and over and it's boring*	.12	.72	.26
Being active and learning new things are encouraged	.27	.64	.02
Trouble results from mistakes we make*	-.22	.30	.24
<u>Family Internal Control</u>			
We realize our lives are controlled by accidents and luck*	.06	-.11	.68
Most of the unhappy things that happen are due to bad luck*	.01	-.03	.66
It is not wise to plan ahead and hope because things do not turn out anyway*	-.03	.19	.51
Our work and efforts are not appreciated no matter how hard we work*	.20	.23	.43
We do not feel we can survive if another problem hits us*	.34	.10	.42
It is better to stay at home than go out and do things with others*	.13	.09	.38
Eigenvalue	5.15	1.77	1.51
% of variance	25.8%	8.8%	7.5%
Cronbach alpha = .81			

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .83 Bartlett Test of Sphericity = 1241.59, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 48$ (12.6%), Residuals above Diagonal $> 0.05 = 88$ (46.0%).

*This item was reverse coded.

Table 11

Principal Components Factoring Followed by Varimax Rotation for
the Family Adaptation Scale

Item	1	2
<u>Adaptation within the Family</u>		
Are you happy with:		
The way your family members talk to each other?	.79	.16
With how close you and the other people in your family feel toward each other?	.78	.18
The way the family members respect and treat each other?	.74	.14
Now think of what you believe would be a great family to live in. How does your family compare to this great family? Circle the answer below that describes how you feel they compare.	.71	.23
1) My family is not like the great family at all.		
2) There are very few things in my family that make it like the great family I thought of.		
3) There are some things in my family that make it like the great family I thought of.		
4) There are quite a few things in my family that make it like the great family I thought of.		
5) My family is much like the great family I thought of.		
The chances you get to express what you feel in your family?	.71	.19
Being a member of your family?	.68	.23
Are you happy with:		
How your family spends time when the children are not in school and parents are not at work?	.60	.26
About how the children in your family are being raised? (like where they go to school, how they are treated for their good and bad behaviors, things the children are allowed/not allowed to do)	.60	.29
<u>Family-Community Fit Adaptation</u>		
Are you happy with:		
How your family acts toward church people and how they act toward you and your family?	.17	.82
How the church people treat your family?	.05	.76
How your family fits in with people and activities at church?	.23	.72
How your family fits into your neighborhood or town?	.25	.65
The amount of time your family spends in church activities?	.24	.59
Living in a minister's family?	.44	.55
How close your family is to people not in the church? (such as aunts, cousins, uncles, grandparents, friends or neighbors)	.22	.54
Eigenvalue	6.16	1.74
% of variance	41.1%	11.6%
Cronbach alpha = .89		

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .91, Bartlett Test of Sphericity = 1749.67, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 34$ (16.2%), Residuals above Diagonal $> 0.05 = 42$ (40%).

Table 12

Principal Components Factoring Followed by Varimax Rotation for
Parent Life Events Checklist (PLEX)*

Item	1	2	3	4	5
1. <u>Work-Family Threatening Events</u>					
Change jobs or job responsibilities	.80	.07	.01	-.06	-.01
Change in work hours or conditions	.77	.08	.04	.00	-.03
Change in living conditions	.74	.03	-.09	.08	-.08
Change in place of residence	.72	-.04	-.21	-.07	.09
Change to different line of work	.67	-.20	.04	.00	.09
Change in social activities	.66	-.04	.15	.06	.01
Change in financial state	.62	.07	.15	.17	-.05
Change in personal habits	.54	.03	.37	.25	.09
Husband/wife begins or stops work	.53	.08	.18	.15	-.06
Change in recreation activities	.51	.02	.26	.17	.06
Fired at work/strike/loss of job	.44	-.04	-.11	.16	.06
Trouble with boss at work	.43	.06	.12	.15	.28
Change in sleeping habits	.37	.06	.32	.33	.00
Husband/wife begins or stops school	.34	-.02	-.03	.10	.10
2. <u>Marital Security Threats</u>					
Marital separation	.03	.75	.04	.18	-.12
Foreclosure of mortgage or loan	-.01	.71	-.10	.01	-.00
Major personal legal problems	-.02	.64	.15	.13	-.08
Physically abused by others	.00	.58	.02	.00	.24
Trouble with in-laws	.21	.47	.12	.20	-.14
Change in number of arguments with spouse	.22	.43	.28	.35	.34
Increase in unpaid debt	.34	.35	.23	.13	.09
Long vacation (over 2 weeks at one time)	.04	-.16	.08	.06	.04
Divorce or remarriage of parents	-.06	.11	.08	-.07	-.10
3. <u>Health Issues</u>					
Major illness/accident of any relative or friend	.07	.05	.73	-.04	.07
Major illness of close relative or friend	.09	-.02	.67	.01	.07
Death of relative or close friend	-.03	-.10	.62	-.05	.03
Spouse injury or illness	.05	.04	.54	.12	.11
Personal injury or illness	.09	.32	.45	.18	.14
Major legal problems for a close relative	.00	.03	.43	-.07	-.03
Change in eating habits	.28	.03	.31	.21	.12
Death of a child or grandchild	.01	.05	.27	.09	-.06
Mortgage over \$30,000	.04	-.00	.17	.16	.09
4. <u>Parenting Issues</u>					
Pregnancy of wife or your child	.12	-.03	-.07	.79	.06
Birth of child or grandchild	.11	.03	-.07	.78	.09
Change of birth control method	.15	.10	-.07	.52	.18
Change in parental responsibilities	.38	.04	.12	.49	-.06
Miscarriage of wife or child	.10	.03	.17	.45	-.02
Change in number of arguments	.18	.10	.27	.40	-.02
Change in behavior of children	.23	.21	.20	.36	-.09
Relative/friend moved in with you	-.10	.02	-.00	.25	-.11

Table 12 (Continued)

Item	1	2	3	4	5
5. Personal Security Issues					
Threats of marital separation	-.04	.55	-.01	-.15	.68
Threats of divorce	-.07	.54	.02	-.14	.62
Marital reconciliation	-.05	.09	.05	-.08	.61
Change in religious beliefs	.14	-.11	-.07	.10	.54
Sex difficulties	.23	-.06	.07	-.02	.46
Your marriage or remarriage	.09	-.03	.11	.32	.42
Change in use of legal/illegal drugs	-.02	-.06	.30	.15	.36
Change in use of alcohol	-.11	-.06	.05	-.01	.32
Eigenvalue	7.41	3.74	2.52	2.32	2.02
% of variance	15.4%	7.8%	5.2%	4.8%	4.2%
Cronbach alpha for overall scales = .87					

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .70 Bartlett Test of Sphericity = 4385.56, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 166$ (7.4%), Residuals above Diagonal $> 0.05 = 234$ (20.0%).

*The Parent Life Events Checklist did not have a stable correlation matrix for performing factor analysis. However, the conceptual importance of the scale and the exploratory nature of the study using the scale warrants maintaining the scale in some form for the study. Therefore, its subscale factor analyses appear in Tables 11, 12, 13, 14, and 15.

Table 13

Principal Components Factoring Followed by Varimax Rotation for Parent Life Events Checklist (PLEC) Work-Family Threatening Events

Item	1	2
Change in personal habits	.79	.12
Change in sleeping habits	.79	-.11
Change in recreation activities	.61	.20
Husband/wife begins or stops work	.50	.30
Trouble with boss at work	.50	.18
Change in social activities	.50	.47
Change in financial state	.49	.43
Husband/wife begins or stops school	.26	.25
Change in place of residence	.08	.85
Change in living conditions	.24	.76
Change jobs or job responsibilities	.43	.66
Fired at work/strike/loss of job	-.02	.65
Change in work hours or conditions	.53	.54
Change to different line of work	.44	.49
Eigenvalue	5.29	1.46
% of variance	37.8%	10.4%
Cronbach alpha for Work-Family subscale = .87		

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .84 Bartlett Test of Sphericity = 1266, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 30$ (16.5%), Residuals above Diagonal $> 0.05 = 50$ (54.0%).*

*Residuals in the Work-Family Threatening Events subscale were high, indicating sufficient amounts of variability may not be present. However, the subscale was retained because of the conceptual importance and exploratory nature of this subscale.

Table 14

Principal Components Factoring Followed by Varimax Rotation for Parent
Life Events Checklist (PLEC) Marital Security Threats Scale*

Item	Factor Loading
Marital separation	.74
Foreclosure of mortgage or loan	.69
Major personal legal problems	.68
Change in number of arguments with spouse	.62
Physically abused by others	.58
Trouble with in-laws	.57
Increase in unpaid debt	.46
Long vacation (over 2 weeks at one time)	-.11
Divorce or remarriage of parents	.08
Eigenvalue	2.77
% of variance	30.8%
Cronbach alpha for Marital Security Threats subscale = .57**	

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .74 Bartlett Test of Sphericity = 330.36, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 18$ (25.0%), Residuals above Diagonal $> 0.05 = 25$ (69%).

*Residuals in the Marital Threats subscale were high, indicating sufficient amounts of variability may not be present. However, the subscale was retained because of the conceptual importance and exploratory nature of the subscale.

**When "Long vacation (over 2 weeks at one time)" was deleted, alpha = .62.

Table 15

Principal Components Factoring Followed by Varimax Rotation for Parent
Life Events Checklist (PLEC) Health Issues

Item	Factor Loading
Major illness/accident of any relative or friend	.80
Major illness of close relative or friend	.74
Death of relative or close friend	.64
Spouse injury or illness	.59
Personal injury or illness	.58
Major legal problems for a close relative	.38
Death of a child or grandchild	.33
Change in eating habits	.29
Mortgage over \$30,000	.20
Eigenvalue	2.62
% of variance	29.1%
Cronbach alpha for Health Issues Subscale = .68	

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .70 Bartlett Test of Sphericity = 338.53, $p < .001$, Off-diagonal Elements of AIC Matrix > 0.09 = 20 (27.0%), Residuals above Diagonal > 0.05 = 25 (69.0%).

Table 16

Principal Components Factoring Followed by Varimax Rotation for Parent
Life Events Checklist (PLEC) Parenting Issues

Item	Factor Loading
Birth of child or grandchild	.74
Pregnancy of wife or your child	.74
Change in parental responsibilities	.66
Change in number of arguments with child	.59
Change in behavior of children	.58
Change of birth control method	.55
Miscarriage of wife or child	.47
Relative/friend moved in with you	.19
Eigenvalue	2.77
% of variance	34.6%
Cronbach alpha for Parenting subscale = .72.	

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .65, Bartlett Test of Sphericity = 545.18, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 12$ (21.4%), Residuals above Diagonal $> 0.05 = 13$ (46.0%).

Table 17

Principal Components Factoring Followed by Varimax Rotation for Parent
Life Events Checklist (PLEC) Personal Security Issues

Item	Factor Loading
Threats of marital separation	.85
Threats of divorce	.79
Marital reconciliation	.69
Change in religious beliefs	.42
Sex difficulties	.41
Your marriage or remarriage	.38
Change in use of legal/illegal drugs	.35
Change in use of alcohol	.30
Eigenvalue	2.53
% of variance	31.6%
Cronbach alpha for Personal Security Issues = .62.	

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .50 Bartlett Test of Sphericity = 493.75, $p < .001$, Off-diagonal Elements of AIC Matrix $> 0.09 = 24$ (42.9%), Residuals above Diagonal $> 0.05 = 11$ (39.0%).

Table 18

Discriminant Analysis of Regenerativity

Actual Membership Group*	n of Cases	Predicted Group			
		1	2	3	4
Group 1	19	9 47.4%**	3 15.8%	3 15.8%	4 21.1%
Group 2	45	10 22.2%	10 22.2%	13 28.9%	12 26.7%
Group 3	14	2 14.3%	3 21.4%	4 28.6%	5 35.7%
Group 4	52	8 15.4%	5 9.6%	25 48.1%	14 26.9%
Ungrouped Cases	2	1 50.0%	0 0.0%	0 0.0%	1 50.0%

*Grouping (Independent) variables were: level of church and community-family fit stress, level of parents' life event stress, number of members in family who participated in the study, number of children in the family, number of moves family experienced, the age of child participating in study, level of family's income.

**Percent of "grouped" cases correctly classified: 28.6%.

Table 19

Computations for the Goodness of Fit Test for the Adaptation in
Ministers' Families Path Model

1. $R_m^2 = 1 - (1 - R_1^2) (1 - R_j^2)$ where each multiplication represented all relationships in the recursive path model of the Path Analysis for Adaptation in Ministers' Families (see Figure 2).
2. $M = 1 - (1 - R_1^2) (1 - R_j^2)$ where each multiplication represented all relationships in the overidentified (final) model (see Figure 3).
3. $e = R^2$ (see Tables 3 and 4 and Figures 2 and 3).
4. For the recursive model, compute:

$$1 - R^2 =$$

$$e^1 = 1 - .16 = .84$$

$$e^2 = 1 - .03 = .97$$

$$e^3 = 1 - .05 = .95$$

$$e^4 = 1 - .0008 = .99$$

$$e^5 = 1 - .05 = .95$$

$$e^6 = 1 - .0007 = .999$$

$$e^7 = 1 - .002 = .998$$

$$e^8 = 1 - .10 = .90$$

$$e^9 = 1 - .06 = .94$$

$$e^{10} = 1 - .15 = .85$$

$$e^{11} = 1 - .01 = .99$$

$$e^{12} = 1 - .01 = .99$$

$$e^{13} = 1 - .42 = .57$$

$$R_m^2 = 1 -$$

$$R_m^2 = 1 - .2915$$

$$R_m^2 = .7085$$

Table 19 (Continued)

5. For the overidentified model compute:

$$\begin{aligned} M &= 1 - (1 - R^2_1) (1 - R^2_3) (1 - R^2_8) (1 - R^2_9) (1 - R^2_{13}) \\ &= 1 - (.84) (.95) (.90) (.94) (.57) \\ &= 1 - .3842 \\ M &= .615 \end{aligned}$$

6. To test for goodness of fit between the recursive model and the overidentified model:

Compute Q:

$$Q = \frac{1 - R^2_m}{1 - M} = 1 - \frac{1 - .7085}{1 - .6150} = \frac{.2915}{.3850} = .7571$$

7. To test the significance of the goodness of fit measure (Q):

Compute W (a χ^2 statistic)

$$W = - (N - df) \log_e Q^*$$

*Where df = number of unused paths in the overidentified path model (e.g., number of paths in recursive model - number of paths in the overidentified model)

$$W = - (135 - 8) (-.1209) = - (127) (-.1209)$$

$$W = 15.3543$$

8. To see if W is significant, find the critical value on a χ^2 table for 8 degrees of freedom = 14.067

$$15.3543 > 14.067.$$

Therefore the W is significant.

9. This test shows that the goodness of fit between the overidentified model and the recursive model was significant. Therefore, the overidentified model explained a significant amount of the variance in the predicted model for explaining adaptation in ministers' families.

Note. From Multiple Regression in Behavioral Research: Explanation and Prediction (pp. 616-619) by E. J. Pedhazur, 1982, Fort Worth, TX: Holt, Rinehart, and Winston.

APPENDIX F

INSTRUMENTS USED IN STUDY

Sociodemographic Sheet

Please fill in the following information as an aide in helping us understand ministers' families better. Thank you.

1. Is the minister in the family currently employed by a church full time? (1) Yes ___ (2) No ___
How would you describe your church's location? (1) Urban ___ (2) Rural ___
2. Gender of minister (1) Female ___ (2) Male ___
3. Gender of nonministerial spouse (1) Female ___ (2) Male ___
4. Nonministerial spouse's employment status (1) Full time ___ (2) Part time ___ (3) Not employed ___
5. Minister's age ___ 6. Spouse's age ___
7. Age of child participating in study ___
8. Gender of child participating: (1) Male ___ (2) Female ___
9. Age of adolescent participating in study ___
10. Gender of adolescent participating in study: (1) Male ___ (2) Female ___
11. Geographical area family lives in: Northeast ___, South ___, Midwest ___, West ___
12. Number of times moved since birth of adolescent child: ___
13. What 2 terms best describe your church? (1) Evangelical ___ (2) Fundamental ___ (3) Conservative ___
(4) Liberal ___ (5) Mainline ___ (6) Charismatic ___
14. What is your annual income after you subtract any nonreimbursed business expenses? \$ _____
15. What type of housing do you have? (1) Church-owned parsonage (manse) ___ (2) Rental home paid for by housing allowance provided by the church ___ (3) Buying home through a housing allowance provided by church ___ (4) Rental home, receive no housing allowance ___ (5) Buying home, receive no housing allowance ___
16. Monthly rental value of your parsonage, or housing allowance _____
17. Denomination or group your church affiliates with: _____
18. Minister's marital status: Married ___ Single ___ Divorced ___
19. Number of children _____
20. Ages of children _____
21. Ministerial position currently held: (1) Sole minister of a church ___ (2) Senior minister of a church with a staff ___ (3) Associate minister of a church ___ (4) Bivocational ___ (5) Other _____

What types of resources do you use, or would you like to have available to use for coping with the stresses of life in the ministry?

Do you have anything else you would like to share with us?

Thank you again for your help in this survey.

Stressors of Clergy Children and Couples (SOCC-C)

This scale was completed by the minister, spouse, and all children 8 to 18 years old.

DIRECTIONS:

Some the things in the list below have happened to you and some have not. All can be upsetting, and you know the feeling. Please think about each thing, and decide if this really happened to you at some time or not.

If any of the things on the list below did happen to you, please circle how upset you are about this or were when it happened. There should only be one answer circled at the most for each question or statement.

If something on the list did not happen to you please leave that question blank.

Example: Having my bicycle stolen. I think for a moment and remember this has happened to me. It upset me quite a bit, so I circle "quite upset." Remember, there should only be one number circled for each question.

	No	Not Upset	Little what Upset	Some what Upset	Quite Upset	Very Upset
1. The death of a close relative	0	1	2	3	4	5
2. The time our family spends praying/reading the Bible together	0	1	2	3	4	5
3. The parents in our family fight	0	1	2	3	4	5
4. The minister in our family is gone a lot on weekends and on evenings when the children and other parent are home	0	1	2	3	4	5
5. Lack of privacy for our family	0	1	2	3	4	5
6. Now our town/neighborhood think ministers' families should behave	0	1	2	3	4	5
7. Whether or not minister in our family practices what they preach	0	1	2	3	4	5
8. Another family member's emotional or mental health	0	1	2	3	4	5
9. Moving	0	1	2	3	4	5
10. Being criticized	0	1	2	3	4	5
11. Both parents work because we need the money	0	1	2	3	4	5
12. Both parents work	0	1	2	3	4	5
13. Whether or not I can ask for help if I feel sick	0	1	2	3	4	5
14. The way I am allowed/or not allowed to be angry or show any other negative emotions (sadness, mad, hate, or such)	0	1	2	3	4	5
15. Being told how to act by church people	0	1	2	3	4	5
16. Feeling all alone or different from other people my age	0	1	2	3	4	5
17. The parent(s) in our family are divorced or talk about getting a divorce	0	1	2	3	4	5
18. Not having a really good, close friend	0	1	2	3	4	5
19. Whether or not the church or the family is more important to the minister in our family	0	1	2	3	4	5

Family Coherence
McCubbin, Larsen, & Olsen (1982)

The Family Coherence scale was completed by the minister, the nonministerial spouse, and any children 13 to 18 years of age in the home.

DIRECTIONS: This item scale asks you to decide for your family whether you: STRONGLY DISAGREE (SD); DISAGREE (D), are NEUTRAL (N), AGREE (A), or STRONGLY AGREE (SA) with the statements below. After you have decided, circle the number.

We cope with family problems by:

1. Accepting stressful events as a fact of life.	SD	D	N	A	SA
2. Accepting that difficulties occur unexpectedly	SD	D	N	A	SA
3. Defining the family problem in a more positive way so we don't get discouraged	SD	D	N	A	SA
4. Having faith in God	SD	D	N	A	SA

Family Hardiness
McCubbin & Patterson (1986)

The hardiness scale was completed by the minister, nonministerial spouse and any children aged 13 to 18 in the home.

DIRECTIONS: Please read each statement below and decide to what degree each describe your family. Is the statement false (0), mostly false (1), mostly true (2) or totally true (3) about your family? Circle a number 0 to 3 to match your feelings about each statement. Please respond to each and every statement.

	False	Mostly False	Mostly True	Totally True	Does Not Apply
1. Trouble results from mistakes we make	0	1	2	3	NA
2. It is not wise to plan ahead and hope because things do not turn out anyway	0	1	2	3	NA
3. Our work and efforts are not appreciated no matter how hard we try and work	0	1	2	3	NA
4. In the long run, the bad things that happen to us are balanced by the good things that happen to us	0	1	2	3	NA
5. We have a sense of being strong even when we face big problems	0	1	2	3	NA
6. Many times I feel I can trust that even in difficult times that things will work out	0	1	2	3	NA
7. While we don't always agree, we can count on each other to stand by us in times of need	0	1	2	3	NA
8. We do not feel we can survive if another problem hits us	0	1	2	3	NA
9. We believe that things work out for the better if we work together as a family	0	1	2	3	NA
10. Life seems dull and meaningless	0	1	2	3	NA
11. We strive together and help each other no matter what	0	1	2	3	NA
12. When our family plans activities we try new and exciting things	0	1	2	3	NA
13. We listen to each other's problems, hurts and fears	0	1	2	3	NA
14. We tend to do the same things over and over it's boring	0	1	2	3	NA
15. We seem to encourage each other to try new things and experiences	0	1	2	3	NA
16. It is better to stay at home than go out and do things with others	0	1	2	3	NA
17. Being active and learning new things are encouraged	0	1	2	3	NA
18. We work together to solve problems	0	1	2	3	NA
19. Most of the unhappy things that happen are due to bad luck	0	1	2	3	NA
20. We realize our lives are controlled by accidents and luck	0	1	2	3	NA

Family Adaptation
Antonovsky & Sourani (1989)

The Family Adaptation scale was completed by the minister, the nonministerial spouse and any children in the home between the ages of 8 and 18 years.

DIRECTIONS: The next 15 questions on the questionnaire ask you to decide how happy you are about several issues. Please read each question carefully and decide how happy you are with what the question talks about. Circle the answer that best describes your level of happiness.

1. Are you happy being a member of your family?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
2. Are you happy about the way the children in your family are being raised? (like where they go to school; how they are treated for their good and bad behaviors; things the children are allowed to do?)
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
3. Are you happy with how your family fits in with people and activities at church?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
4. Are you happy with living in a minister's family?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
5. Are you happy with how close you, your children, and your spouse feel toward each other?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
6. Are you happy with how your family acts toward church members and how they act toward you?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
7. Are you happy with the chances you get to express what you feel in your family?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
8. Are you happy with how your family spends time when the children are not in school or you and your spouse are not at work?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
9. Are you satisfied with the way your family members talk to each other?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy

10. Are you happy with how your family fits into your neighborhood or town?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
11. Are you happy with the amount of time your family spends on church activities?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
12. Are you happy with how close your family is to people (such as relatives, friends or neighbors) outside your family and church?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
13. Are you happy with the way the family members respect and treat each other?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
14. Are you happy with how the church people treat your family?
 1. No, I am not happy at all
 2. I am a little unhappy
 3. I am not unhappy, but I am not happy either
 4. I am happy
 5. I am very happy
15. And now think of what you believe would be a great family to live in. How does your family compare to this great family? Circle the statement below that describes how you feel they compare.
 1. My family is not like the great family at all.
 2. There are very few things in my family that make it like the great family I thought of.
 3. There are some things in my family that make it like the great family I thought of.
 4. There are quite a few things in my family that make it like the great family I thought of.
 5. My family is just like the great family I thought of.

Parent Life Event Checklist
Fournier (1984)

The minister and nonministerial spouse completed the Parent Life Event Checklist (PLEC).

DIRECTIONS: Many life events occur during a given year that create a certain amount of stress in our lives. Please look at the list below and check those events which have occurred during the PAST YEAR (12 months) and rate the amount of stress experienced with each event, using the following rating scale:

- (0) No, life event did not occur
- (1) Yes, life event occurred but was not stressful
- (2) Yes, life event occurred and was a little stressful
- (3) Yes, life event occurred and was somewhat stressful
- (4) Yes, life event occurred and was quite stressful
- (5) Yes, life event occurred and was very stressful

- | | | | | | | |
|---|---|---|---|---|---|--------------------------------------|
| 0 | 1 | 2 | 3 | 4 | 5 | 1. Your marriage or remarriage |
| 0 | 1 | 2 | 3 | 4 | 5 | 2. Threats of marital separation |
| 0 | 1 | 2 | 3 | 4 | 5 | 3. Marital separation |
| 0 | 1 | 2 | 3 | 4 | 5 | 4. Threats of divorce |
| 0 | 1 | 2 | 3 | 4 | 5 | 5. Marital reconciliation |
| 0 | 1 | 2 | 3 | 4 | 5 | 6. Pregnancy of wife or your child |
| 0 | 1 | 2 | 3 | 4 | 5 | 7. Miscarriage of wife or your child |
| 0 | 1 | 2 | 3 | 4 | 5 | 8. Abortion for your wife or child |

0	1	2	3	4	5	9. Change of birth control method
0	1	2	3	4	5	10. Sex difficulties
0	1	2	3	4	5	11. Change in living conditions
0	1	2	3	4	5	12. Change in parental responsibilities
0	1	2	3	4	5	13. Change in personal habits
0	1	2	3	4	5	14. Change in sleeping habits
0	1	2	3	4	5	15. Change in eating habits
0	1	2	3	4	5	16. Change in religious beliefs
0	1	2	3	4	5	17. Death of relative or close friend
0	1	2	3	4	5	18. Major illness/accident of any relative or friend
0	1	2	3	4	5	19. Major illness of close relative/friend
0	1	2	3	4	5	20. Trouble with boss -- at work
0	1	2	3	4	5	21. Change jobs or job responsibilities
0	1	2	3	4	5	22. Change in work hours or conditions
0	1	2	3	4	5	23. Fired at work -- loss of job -- strike
0	1	2	3	4	5	24. Change in financial state
0	1	2	3	4	5	25. Change to different line of work
0	1	2	3	4	5	26. Foreclosure of mortgage or loan
0	1	2	3	4	5	27. Change in number of arguments with spouse
0	1	2	3	4	5	28. Change in use of legal/illegal drugs
0	1	2	3	4	5	29. Divorce or remarriage of parents
0	1	2	3	4	5	30. Relative/friend moved in with you
0	1	2	3	4	5	31. Trouble with in-laws
0	1	2	3	4	5	32. Long vacation (over 2 weeks at one time)
0	1	2	3	4	5	33. Change in social activities
0	1	2	3	4	5	34. Change in recreation activities
0	1	2	3	4	5	35. Change in number of arguments with child
0	1	2	3	4	5	36. Change in behavior of children
0	1	2	3	4	5	37. Personal injury or illness
0	1	2	3	4	5	38. Spouse injury or illness
0	1	2	3	4	5	39. Birth of a child or grandchild
0	1	2	3	4	5	40. Death of a child or grandchild
0	1	2	3	4	5	41. Husband/wife begins or stops work
0	1	2	3	4	5	42. Husband/wife begins or stops school
0	1	2	3	4	5	43. Change in place of residence
0	1	2	3	4	5	44. Mortgage over \$30,000
0	1	2	3	4	5	45. Physically abused by others
0	1	2	3	4	5	46. Major personal legal problems
0	1	2	3	4	5	47. Change in use of alcohol

0	1	2	3	4	5	48. Major legal problems for a close relative
0	1	2	3	4	5	49. Increase in unpaid debts
0	1	2	3	4	5	50. Other _____

Profiles
Fournier (1984)

The minister and nonministerial spouse were supposed to complete these five questions, but the printer failed to print all but the first two questions.

DIRECTIONS: Part 1. Please identify how often each of the following events occur by circling either:

3 = often 2 = sometimes 1 = rarely 0 = never

Part 2. When these situations do occur, how much stress or impact does each have on your ability to function at home and at work? Circle the number of the answer that best describes your response:

3 = major effect 2 = some effect 1 = not effect

If an event does not apply to your family, please put a check mark in the column marked "does not apply."

Part 1	Part 2				Does Not Apply			
p ¹ Family does not support or approve of job	3	2	1	0	_____	3	2	1
p ² Family disagreements about things related to work	3	2	1	0	_____	3	2	1
p ³ Disagree on whether should be at work or with the family	3	2	1	0	_____	3	2	1
p ⁴ Disagree with spouse on need for both of us to work	3	2	1	0	_____	3	2	1
p ⁵ Concern about what spouse does while at their job	3	2	1	0	_____	3	2	1

Childrens' Coping Index
McCubbin & Patterson's ACOPE (1982)

The minister, nonministerial spouse and any children aged 8 to 18 in the home were asked to complete the coping index. Due to reliability and construct validity issues resulting from too varied a scale, however, only the starred items were used.

DIRECTIONS: The next 12 statements ask you if you do different activities when you are upset. Read each statement and decide whether you do them or not. If you do not do the activity when you are upset, circle the number 1 under NEVER. If you do the activity when you are upset, then circle the number that says how often you think you do it.

	Never	Once in a While	Some Times	Often	Most of Time
1. I make a joke of something that is bothering me.	1	2	3	4	5
*2. I get angry and yell.	1	2	3	4	5
3. I go to sleep.	1	2	3	4	5
4. Try to figure out the problem by myself.	1	2	3	4	5
5. Try to help other people with their problems.	1	2	3	4	5
6. Talk to a parent about my problem.	1	2	3	4	5
7. Try to stay away from home as much as possible.	1	2	3	4	5
*8. Pray.	1	2	3	4	5
9. Talk to a teacher or counselor at school about what is bothering you	1	2	3	4	5
10. Be close to someone you care about	1	2	3	4	5
*11. Blaming others for what's going wrong	1	2	3	4	5
12. Riding bike, or doing other kinds of exercise	1	2	3	4	5

*These items are reverse coded.

APPENDIX G

LETTERS AND CONSENT FORMS

321 Home Economics
Department of Family Relations and Child Development
Oklahoma State University
January 30, 1991

Dear Minister and Family,

In recent years researchers and church leaders have begun to recognize that ministers and their families have a number of very unique stresses due to the demands of ministering a church. Much work is needed to increase our understanding of ministers' families and to aide in the development of resources for ministers' families. This much needed effort requires that a national group of ministers be contacted to provide insight into their particular issues that are most challenging for their families.

I am a minister's spouse and a doctoral student at Oklahoma State University interested in doing the above mentioned research on the stresses in ministers' families. Your church address was randomly chosen from national church address lists in order to ask you, as a minister's family, to help me with this doctoral research project. If you and your family are willing to help, please fill out the enclosed consent and information forms and return them to me soon. If you are not interested, please fill in your name and church address and check not interested so that you will not be recontacted.

In this research, therefore, you as parents and children (8 to 18 years old) will be asked questions covering possible changes or stresses related to the ministry, parents' work, family life, and other topics of a personal nature. Any questions you do not understand or feel uncomfortable answering may be left blank on the forms. You will also be asked how you cope with any of these stresses. To protect your privacy, the researchers will keep all responses to the survey confidential and only overall group (i.e. ministers' families involved) results will be reported in the study. In addition, to protect your privacy you will be asked to return the forms without putting your names on them.

Anyone may decide to not take part in this study at any time by writing me a brief note (so that I will not contact you again). Group findings from this study are available upon written request to any family who participates. If you have any questions about this study, please contact either me, or Dr. Carolyn Henry (Assistant Professor in Family Relations and Child Development) at (405) 744-5057,

or Terry Maciula, University Research Services, 001 Life Sciences East, Oklahoma State University, Stillwater, OK 74078; telephone: (405) 744-5700.

Thank you for your help. God's blessings be with you.

Sincerely,

Diane L. Ostrander

Enclosures

According to the information that I have read in the accompanying letter:

I understand that I am volunteering to participate in a research study on coping with changes and stressors in ministers' families.

I understand that in order to guarantee confidentiality only group results will be available to participating families, and no one will be asked to put their name on the question forms. Further, in order to protect my own, and my family's privacy, I understand that I am to answer my questions without asking for help and without sharing my answers, or asking others to share theirs with me. I understand we may talk about this research once we have mailed all our forms.

I also realize that I may leave any questions blank which I do not understand or that make me feel uncomfortable. I am free to withdraw from this study at any time. I may contact Diane Ostrander or Carolyn Henry at (405) 744-5057 or Terry Maciula at (405) 744-5700 if I have any questions about this study.

I, as a minister, minister's spouse, the child or adolescent of a minister, have read and fully understand this consent form and sign it freely and voluntarily. Also, I understand that a parent's signature (minister or spouse) on this form indicates voluntary agreement to allow the adolescent and/or child in the family to participate in this study. I also understand a copy of this form will be returned to my family with our question forms we are to answer.

Date _____

Minister's
Signature _____
(name of minister)

Spouse's
Signature _____
(name of spouse)

Signature of
Adolescent _____
(adolescent's name)

Signature of child 8-12 years old _____
(child's name)

Information Form

I need to know the following information before sending you the research questionnaires: (please print)

Family
Name: _____

Family Address:
Street _____

Town _____ State _____ Zipcode _____

Denomination _____

I, or my family is interested in participating in research projects with ministers' families: Yes _____ No _____

321 Home Economics
Oklahoma State University
Stillwater, OK 74078
March 23, 1991

Dear Minister,

Thank you for agreeing to participate in my research study concerning coping with stress and changes in ministers' families.

Please fill out the blue research question form in this envelope and return this as soon as possible. Remember, your answers are confidential and will not be seen by any other member of your family. After you have completed your form, place it in the stamped envelope and put it in the mail yourself. You may discuss this study with your family after everyone has finished and mailed their forms.

The survey takes about 45 minutes to finish. You may opt to not answer any question in the survey.

The numbers at the top of the forms are solely for the purpose of matching family members by computer to ensure proper statistical analysis and will not be used to match your results to your name or postal address. If you, as parent, would like a blank copy of the adolescent or child's questions please feel free to call or write me.

Also, feel free to call me or Dr. Carolyn Henry, Assistant Professor in FRCD, at (405) 744-5057, or Terry Maciula at (405) 744-5700, if you have any further questions. Thank you again and God bless.

Sincerely,
Diane L. Ostrander

321 Home Economics
Oklahoma State University
Stillwater, OK 74078
March 24, 1991

Dear Minister's Spouse:

Thank you for agreeing to participate in my research on coping with stress and changes in ministers' families.

Please fill out the purple question form enclosed in this packet. Remember, your answers are confidential and will not be seen by any other member of your family. After you have completed your form, place it in the stamped envelope and put it in the mail yourself. You may discuss this study with your family after everyone has finished.

Your forms should take about 45 minutes to complete. You may opt to not answer one or more questions in the survey.

The numbers on the forms are simply used by the computer to match family members so that the statistical analysis of the responses is accurate. The numbers will never be used to match your survey answers with your address or name.

If you, as a parent, would like a blank copy of the adolescent or child's questions please feel free to call or write me. Also, feel free to call me or Dr. Carolyn Henry, Assistant Professor in FRCD, at (405) 744-5057, or Terry Maciula at (405) 744-5700, if you have any further questions.

Please return the questionnaire as soon as possible. Thank you again for your help. God bless you in your endeavors.

Sincerely,

Diane L. Ostrander

321 Home Economics
Oklahoma State University
Stillwater, OK 74078
March 24, 1991

Dear Student Aged 13-18,

Thank you for agreeing to help me with this research study on handling stress and change in ministers' families.

Please fill out the green form in this envelope. Remember, your answers are confidential and will not be seen by any other member of your family. After you have completed your form, please place it in the enclosed stamped envelope and put it in the mail yourself. You may discuss this study with your family after everyone has finished.

The questions should take you about 45 minutes to answer. If you do not want to answer, or do not understand a question feel free to leave it blank. If you have any questions please call myself or Carolyn Henry at (405) 744-5057, or Terry Maciula at (405) 744-5700.

Your answers will be analyzed by computer, so there are numbers on the form the computer will use to put your family together with other ministers' families, but these numbers will never be used to try to match your answers to your name or address.

Again, thank you so much for your help in my study. Remember to mail your answers right away. God bless you.

Sincerely,

Diane L. Ostrander

321 Home Economics
Oklahoma State University
Stillwater, OK 74078
March 23, 1991

Dear Student Aged 8 to 12,

Thank you for agreeing to help me in my study of ministers' families.

Please fill out the yellow form stapled to this letter. The form should take you about 45 minutes to finish. Please leave any question blank if you do not understand when you read the question by yourself.

Remember, your answers are confidential and will not be seen by any other member of your family. After you have completed your form, place it in the stamped envelope and put it in the mail yourself. You may discuss this study with your family after everyone has finished mailing their own forms.

The number on your form will be used by a computer to make sure your answers are put with ministers' family members in the computer that will be used to finish the study. The numbers will never be used to put your name or address with your answers.

Remember to fill out and mail your form right away in the stamped envelope that is stapled to your questionnaire. Thank you for your help. God bless you always.

Sincerely,

Diane L. Ostrander

#1

321 Home Economics
OSU
Stillwater, OK 74078

Dear Minister's Family,

Just a reminder that your participation in my research on ministers' families is very important. If you and your family have already sent back all of your forms, thank you for your help!

If you have not returned your forms, please mail them today, as your answers are vital to the completion of my research. I do apologize for the small print on the forms. I did not realize they would be so hard to read until I had paid for the printing. Thank you for your help and patience!

Diane L. Ostrander

#2

321 Home Economics
OSU
Stillwater, OK 74078

Dear Minister's Family,

I wanted to take this moment to thank you for participating in my research. If you have not yet returned your forms to me, please do so today, as what you have to say is important to my study. I am now beginning to analyze the answers from ministers' families across the United States.

If you need to contact me again, please write me at the address on the front of the card, or at (405) 744-5057.

Thank you again, and God bless.

Diane L. Ostrander



SCHOOL OF FAMILY RESOURCES AND CONSUMER SCIENCES
University of Wisconsin-Madison, 1201 Linden Drive, Madison, WI 53706 608-263-4647

OFFICE OF THE DEAN

January 10, 1990

David G. Fournier, Ph.D.
Associate Professor
Oklahoma State University
Dept. of Family Relations and Child Development
College of Home Economics
241 Home Economics West
Stillwater, OK 74078-0337

Dear Dr. Fournier:

I am pleased to give you my permission to use the following instruments:

A-COPE: Adolescent Coping Orientation for Problem Experiences
YA-COPE: Young Adult Coping Orientation for Problem Experiences
CHIP: Coping Health Inventory for Parents
DECS: Dual Employed Coping Scale
FCI: Family Coping Inventory
F-COPES: Family Crisis Oriented Personal Evaluation Scales
FILE: Family Inventory of Life Events and Changes
YA-FILE: Young Adult Family Inventory of Life Events and Changes
FHI: Family Hardiness Index
FTRI: Family Times and Routes Index
FIRM: Family Inventory of Resources for Management
FTS: Family Traditions Scale
FCELEBI: Family Celebrations Index
YA-SSI: Social Support Inventory
FIRA-G: Family Index of Regenerativity and Adaptation-General
FIRA-M: Family Index of Regenerativity and Adaptation-Military

As you are aware, we have a policy to charge \$5.00 (one time charge only) *per instrument* to individuals who seek permission. We apologize for this necessity and thank you for your prepayment. We also ask that you please fill out the enclosed abstract form and return it to this office.

The manual, *Family Assessment Inventories for Research and Practice*, should be cited when using the instruments. The publication was printed at the University of Wisconsin-Madison in 1987 and edited by Hamilton I. McCubbin and Anne I. Thompson.

A sample copy of each of the instruments we have available through our office is enclosed. Additional copies can be obtained at this address for 10 cents each. When large quantities are requested, the cost of postage is also added to the order. However, with permission you also obtain permission to photocopy the scales, if you wish.

If I could be of any further assistance to you, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Hamilton I. McCubbin".

Hamilton I. McCubbin
Dean

HIM/cjd

Enclosures

METHODS:**A. RESEARCH INSTRUMENTS DEVELOPED BY OLSON & COLLEAGUES
(Check One or More)****1. Self-Report Scales**

- FACES III
 - Perceived Only
 - Perceived and Ideal
- FACES II
 - Perceived Only
 - Perceived & Ideal
- FACES I (Original)
- Family Satisfaction
- Marital Satisfaction
- ENRICH - Marital Scales
- PREPARE - Premarital Scales
- PAIR - Marital Intimacy
- Parent-Adolescent Communication

2. Behavioral Assessment

- Clinical Rating Scale on Circumplex Model
- Inventory of Premarital Conflict (IPMC)
- Inventory of Marital Conflict (IMC)
- Inventory of Parent-Child Conflict (IPCC)
- Inventory of Parent-Adolescent Conflict (IPAC)

B. OTHER RESEARCH SCALES

FHI, Family Hardiness Index

FCELEB, Family Celebrations Index

FTRI, Family Time and Routines Index

FFI, Family Flexibility Index (adapted from FACES II)

FBI, Family Bonding Index (adapted from FACES II)

Rosenberg Self-Esteem Scale

Measures of adolescent perceptions of parental support, companionship, positive induction, negative induction, coercion, love withdrawal (as used by Peterson, 1982).

Instruments developed for this project--Adolescent Family Life Satisfaction Index, Adolescent Substance Use Patterns Index

 Do you wish to be kept on our mailing list?
 Yes No

ABSTRACT OF PROPOSED STUDY*
FAMILY STRESS COPING AND HEALTH PROJECT
 Research Instruments Developed by Research Team

NAME: Carolyn S. Negry, Ph.D. PHONE: (405)744-3057
 ADDRESS: FRCD Dept.
Oklahoma State University
 CITY: Stillwater DOCTORAL
 STATE: Oklahoma DISSERTATION PROJECT Yes
 No
 ZIP: 74078 MASTER'S THESIS Yes
 No

TITLE OF YOUR PROJECT:

Perceptions of Family Dynamics as Predictors of Adaptation During Adolescence

BRIEF DESCRIPTION:

This project is designed to examine qualities of family systems, parental qualities, and sociodemographic variables as predictors of adolescent adaptation (i.e., satisfaction with family life, high self-esteem, and lack of substance abuse).

RESEARCH VARIABLES:**SAMPLE:**

Type of Group(s): High school students

Sample Size: 300

DESIGN & METHODS:

Self report questionnaires will be completed in the subjects' high school English classes, using the scales listed on back. Multiple regression analyses will be used to test the hypotheses.

*This Abstract should be completed and returned when requesting permission to use or copy any of the inventories. Thank you for completing this form.

SEND TO:

Dr. Hamilton L. McCubbin, Director
 Anne K. Thompson, Associate Director
 Family Stress, Coping, and Health Project
 800 Linden Drive
 University of Wisconsin-Madison
 Madison, WI 53706

(OVER)

METHODS:**A. RESEARCH INSTRUMENTS DEVELOPED BY FAMILY STRESS, COPING AND HEALTH PROJECT (Check that apply to your project)****1. Stress and Strain Scales**

- A-FILE- Adolescent-Family Inventory of Life Events & Changes
- FILE- Family Inventory of Life Events and Changes
- YA-FILE Young Adult Family Inventory of Life Events

2. Coping Scales

- A-COPE-Adolescent-Coping Orientation for Problem Experiences
- CHP-Coping-Health Inventory for Parents
- DECS-Dual-Employed Coping Scales
- FCI-Family Coping Inventory
- F-COPES-Family Crisis Oriented Personal Scales
- YA COPES Young Adult Coping Orientation for Problem Experiences

3. Family Resources and Social Support Scales

- FIRM-Family Inventory of Resources for Management
- Social Support Index
- Social Support Inventory

4. Appraisal Scales

- FAM-AIDS Family Adaptation Index of Developmental Support
- FIB-Family Index of Balance
- FIC-Family Index of Coherence

B. OTHER RESEARCH SCALES USED IN YOUR STUDY

- FACES I, II, III
- FAD--Family Assessment Device
- FAM--Family Assessment Measure
- FES--Family Environment Scales
- APGAR
- Others--Describe briefly
 - FHI, Family Hardiness Index
 - FCELEB, Family Celebration Index
 - FIRI, Family Time and Routines Index

Parent-Adolescent Communication
(Barnes & Olson)

Family Satisfaction

FFI, Family Flexibility Index

FBI, Family Bonding Index

Rosenberg Self-Esteem Scale

Measures of adolescent perceptions

of parental support, companionship,

positive induction, negative

induction, coercion, love withdraws

parental substance use patterns,

adolescent substance use patterns,

adolescent family life satisfaction

C. ANY PHYSIOLOGICAL MEASURES Yes No

Describe briefly

Do you wish to be kept on our mailing list?

- Yes
- No

MARRIAGE AND FAMILY INVENTORIES PROJECT
Inventories Developed by Olson and Colleagues

ABSTRACT ON PROPOSED STUDY*

NAME:	<u>Carolyn S. Henry, Ph.D.</u>	PHONE:	<u>(405) 744-5057</u>
ADDRESS:	<u>Family Relations & Child Development Oklahoma State University</u>	ABSTRACT DATE:	<u>6/19/90</u>
CITY:	<u>Stillwater</u>	START DATE:	<u>5/90</u>
STATE:	<u>Oklahoma</u>	COMPLETION DATE:	<u>8/92</u>
ZIP:	<u>74078</u>	DISSERTATION PROJECT:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

TITLE OF PROJECT:

Perceptions of Family Dynamics as Predictors of Adaptation During Adolescence

BRIEF DESCRIPTION:

This project is designed to examine adolescents' perceptions of qualities of family systems, parental qualities, and sociodemographic variables as predictors of adolescent adaptation (i.e., satisfaction with family life, high self-esteem, and lack of substance abuse).

THEORETICAL VARIABLES: Family Satisfaction, Parent-Adolescent Communication Patterns, Coherence, Hardiness, Flexibility, Bonding, Celebrations, Time and
SAMPLE: Routines, Self-Esteem, Substance Use Patterns, Parenting Behaviors

Type of Group(s): High School Students

Sample Size: 500

DESIGN: The self-report instruments will be used to measure adolescents' perceptions of family system qualities, parenting behavior/qualities, and sociodemographic information. Multiple regression analyses will be used to test the hypothesized models.

METHODS: (over)

(OVER)

*This Abstract should be completed and returned when requesting permission to use or copy any of the inventories. Thank you for completing this form. Please return to:

David H. Olson, Ph.D.
 Family Social Science
 290 McNeal Hall
 University of Minnesota
 St. Paul, MN 55108

VITA[✓]

Diane Lorraine Ostrander
Candidate for the Degree of
Doctor of Philosophy

Thesis: PREDICTORS OF ADAPTATION IN MINISTERS' FAMILIES

Major Field: Home Economics, specializing in Family Relations

Biographical:

Personal Data: Born in Mason, Michigan, February 28, 1952.

Education: Graduated from Eastern High School, Lansing, Michigan, June, 1970; received Bachelor of Science Degree from Colorado State University, Ft. Collins, Colorado, December, 1975; received the Master of Arts Degree from Central Michigan University, Mt. Pleasant, Michigan, May, 1987; completed requirements for the Doctor of Philosophy Degree, Oklahoma State University, July, 1991.

Professional Experience: Teaching Associate and Research Associate, Department of Family Relations and Child Development, Oklahoma State University, September, 1988 to May, 1991; Teaching Assistant and Research Assistant, Home Economics Department, Central Michigan University, January, 1986 to May, 1987.

Professional Organizations: Phi Kappa Phi, Kappa Omicron Nu, Tau Alpha Delta, AHEA, NCFR, NAEYC, OHEA, OCFR.