THE INFLUENCE OF STRESS AND CHILD FACTORS ON FAMILIES WITH EDUCABLE MENTALLY RETARDED CHILDREN: THE MOTHER'S VIEWPOINT

by

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TABLE OF CONTENTS

MODIFICATION OF THE QUESTIONNAIRE ON RESOURCES AND STRESS SHORT-FORM FOR EMR CHILDREN

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Running Head: Modification of QRS Short-Form

Key Terms: Stress Measurement, Families, EMR Children

Abstract

Mothers of 43 EMR chidren aged 5 to 21 completed Holroyd's Questionnaire on Resources and Stress Short-Form. The 11 factors in the measure were analyzed utilizing an internal consistency method. Reliability estimates and intercorrelations among the factors supported the elimination of 4 factors. Among the remaining 7 factors, item-total scale correlations supported an elimination of 4 items. It was concluded that the remaining 38-item scale was an appropriate total measure of stress for families having an EMR child. A discussion of the use of the 7 factors and the total scale followed.

Modification of the Questionnaire on Resources and Stress Short-Form for EMR Children

The objective measurement of stress in families having a mentally retarded member has been attempted for at least the last ten years (Friedrich, Greenburg, & Crnic, 1983; Holroyd, 1974). The Questionnaire on Resources and Stress (QRS) was developed to provide a multi-dimensional, objective, self-administered test to measure the psychological costs to persons living with and caring for a handicapped or chronically ill relative (Holroyd, 1982).

The QRS is a 285-item true-false questionnaire with 15 face-valid scales which are grouped into three broad categories: personal problems of the respondents as related to the handicapped person; family problems as related to the handicapped person; and limitations or problems of the handicapped or chronically ill family member (Holroyd, 1982).

The QRS has been used in numerous studies as a measurement of stress and coping in families having a handicapped member. The measure has discriminated various levels of stress in families having: retarded versus emotionally disturbed children (Holroyd, 1974); retarded versus nonretarded children (Catechis, 1978); autistic versus outpatient psychiatric children (Holroyd & McArthur, 1976); and institutionalized versus noninstitutionalized autistic children (Holroyd, Brown, Wikler, & Simmons, 1975). The QRS has also been used to: described characteristic stress patterns of parents who have children with neuromuscular diseases (Holroyd & Guthrie, 1979); predict coping behaviors

of mothers of handicapped children (Friedrich, 1979); and compare psychosocial assets of parents of handicapped versus non-handicapped children (Friedrich & Friedrich, 1981). The results above would lead one to conclude that the dimensions included in the 285 items have adequate content validity with a variety of handicapped populations. However, the questionnaire remains quite lengthy, taking approximately 40 minutes to complete.

In an attempt to reduce the length and to add empirical strength to the QRS, Holroyd (1982) factor analyzed the 285 items using a population of 526 cases. The cases included parents of children of all ages, diagnosed with autism, cerebral palsy, cystic fibrosis, Down syndrome, hematological disorders, neuromuscular disease, psychiatric disorders, renal disease, and mixed developmental and/or mental retardation disorders (p. 8). A 66-item 11 factor short-form of the QRS was developed. Six items were included in each of the following 11 factors: dependency and management, cognitive impairment, limits on family opportunity, life span care, family disharmony, lack of personal reward, terminal illness stress, physical limitations, financial stress, preference for institutional care, and personal burden for respondent. Further research on Holroyd's factor scale QRS has not been reported in the literature.

The purpose of the present investigation was to provide further analysis of the total QRS 11-factor scale with families having an educable mentally retarded (EMR) child. The inclusion of a factor-scale in the total measure was established by meeting specific criteria for Kuder-Richardson-20 reliability coefficients, a test of significance for each of the reliability coefficients, and intercorrelations among the scales. Then, items in the remaining factors having an unacceptable item-total scale correlation were removed in an effort to compose a psychometrically stronger and shorter total measure for an EMR population.

Method

Subjects

The sample consisted of 43 mothers (mean age = 40.0; SD = 8.0) having a child who was EMR. Approximately 75% of the mothers were Protestant. The children attended city and county school systems serving a geographic area of 250,000 people in southwest Virginia. Mothers were included in the study if the following criteria were met: 1) the EMR child (a) was between 5 and 21, (b) had an IQ between 55 and 70 on a standardized intelligence test, (c) was living with two married parents (not necessarily the natural parents); and 2) the family was not on welfare. If families had more than one EMR child, the mother was sampled only once.

The sample consisted of 43 EMR children (60.5% male; 39.5% female) between the ages of 5 years 6 months and 20 years 3 months (mean = 13.0; SD = 4.2). The sample was composed of mostly white (86.0%) and black (11.6%) children. The disabled child was the youngest offspring living in the home in most of the families. Fewer than 10% of the families had others living in the home and 7% of those included grandmothers. Although not on welfare, 16.3% of the families received some type of public assistance such as free or partial lunch programs.

Procedure

The investigator introduced the study to special education teachers of EMR students (primary and secondary) in both city and county school systems. Teachers were told the research project was investigating stress in the families of EMR children. The teachers were asked to identify children in the classroom who met the subject criteria.

Mothers were sent an informed consent letter and self-addressed stamped envelope by the teacher of eligible EMR students in the classroom. If informed consent letters were not returned, the teacher sent up to two reminder post cards at a rate of one per week. There was a 56.5% rate of return for the informed consent letter.

Once informed consent letters were received, the name, address, and telephone number of the potential respondents were telephoned to the investigator by the child's teacher. The respondents were then called by the investigator to answer any questions and to thank the respondents for their participation in the research (one mother could not be contacted by telephone). Of all the potential respondents contacted, only one family decided not to participate in the research after the telephone call. The respondents were then sent a booklet containing the QRS short-form, (also three other self-report measures for further research), a modified Holroyd (1982) demographic information questionnaire, and self-addressed stamped envelope. One hundred percent of the respondents returned the booklet.

Results

Reliability

Each of the 11 scales was item analyzed utilizing the internal consistency method (Carmines & Zeller, 1979). Kuder-Richardson-20 (KR-20) reliability coefficients were calculated for each of the 11 factors as well as the modified scales. KR-20 reliability coefficients for each of the 11 scales (six items each) as well as the means, standard deviations (SDs), and ranges of all the scales, are reported in Table 1. The Spearman-Brown prophecy formula (Carmines & Zeller, 1979) was applied to each of the reliability coefficients to correct for the number of items in the shortened scales.

Insert Table 1 about here

One criterion for inclusion of a factor in a shorter total QRS measure that factors should have a KR-20 reliability coefficient equal to or more than .60. Based on this criterion, the factors labeled Terminal Illness Stress, Physical Limitations, Financial Stress, and Preferences for Institutional Care were eliminated. The reduction of the scale by four factors made the scale shorter and improved the reliability.

Because of the possibility that the KR-20s of the individual factors may have occurred by chance with such a small sample size, a statistical analysis recounted in Feldt (1965) was applied to test whether the lowest KR-20 in the modified scale was significantly different from zero. The lowest KR-20 included in the shortened 7-factor scale was yielded by Personal Burden for Respondent (KR = .60). It was found that Personal Burden for Respondent was significantly different from zero at the .01 level of significance ($F = 2.47$; $df = 42, 210$); therefore, the .60 value would not have occurred by chance.

Correlations

Intercorrelations. Another consideration in composing a stronger instrument for use with families having EMR children was the intercorrelations among the summated factor-scales. If the total QRS was drawing on a common content domain, the dimensions (factors) should have intercorrelated positively. Table 2 indicated thaa the factor-scales which were eliminated because of low reliabilities also had negative correlations with the remaining

factor-scales.

Insert Table 2 about here

The seven scales included in the 42-item scale all had positive correlations with one another. The correlations ranged from .12 to .57. These findings supported the elimination of Terminal Illness Stress, Physical Limitations, Financial Stress, and Preference for Institutional Care from the total instrument.

Item-Total Scale. An acceptable item-total scale correlation was another consideration for inclusion of an item in a total scale form of the QRS. Items which had correlations less than or equal to .10 were removed from the 42-item measure. The result of removing the items was higher KR-20 coefficients and Spearman-Brown estimates for the total measure (See Table 1).

Four items were deleted from the 42-item scale to arrive at a shortened 38-item total measure which had factors meeting the .60 reliability criterion and item-total score correlations above .10. The factors affected and the items removed were: Cognitive Impairment - " _____ is aware of who he/she is (for example, male 14 years old)."; Limits on Family Opportunities- "One of us has had to pass up a chance for a job because _____ could not be left without someone to watch him/her."; Lack of Personal Reward - "People who don't have the problems we have don't have the rewards we have either.", and "I am pleased when others see my care of _____ is important."

It was concluded that the 38-item scale was the shortest appropriate total QRS measure of stress for two-parent families of EMR children. The conclusion was based on the reliability of the statistically significant

factors, the reliability of the total scale, the intercorrelations among the factors, and item-total scale correlations. This shorter version of the QRS would take less than ten minutes to complete. However, it should be noted that the elimination of the four items from the 42-item measure would invalidate the use of the factors labeled Cognitive Impairment, Limits on Family Opportunities, and Lack of Personal Reward as independent measures of their respective concepts within the 38-item measure.

Discussion

Both the 42-item and the 38-item revisions of the short-form of the QRS could provide researchers and clinicians with a reliable and relatively short instrument for measuring stress and coping in families having an EMR child. The 42-item seven-factor scale is recommended as a good measure of each of the seven factors. The 38-item measure has a slightly higher reliability and it is recommended as a total measure of stress and/or coping. The reduction of the short-form of the QRS as illustrated has both a statistical and a rational basis.

The elimination of the four factors from the short-form of the QRS was statistically based, however, quite reasonable. One might expect that families having an EMR child would not be particularly concerned with terminal illness, physical limitations, and preference for institutional care. Financial stress was apparently not affecting families in this sample much either.

Friedrich et al. (1983) found no items from the financial dimension of the 285-item QRS to be included in their factor analyzed QRS-F; their sample included a much higher SES group than the present sample (Hollingshead Index: Class I = 24%; Class V = 19%). Although the respondents in the present study were not on welfare, Hollingshead Index data indicated 4.6% were

in Class I (highest SES category); and 39.6% in Class V - a much lower SES grouping when compared with Friedrich et al. (1983). The present data, therefore, supported the conclusion that financial stress was not a significant stress measure in the families of handicapped children included in both research projects.

The remaining seven stress and/or coping factors may be expected to be useful with families having an EMR child. The demands on both the caregiver and the family as well as cognitive impairment as perceived by the respondent are reflected in the seven factors. However, there were individual items within these seven factors which did not contribute to a shorter total measure. The four items deleted from the 42-item measure did not contribute much to a total measure of stress and/or coping. Although the decision to eliminate the four items was statistically-based, the items seemed to be inappropriate for the family having an EMR child or perhaps not clearly understood by respondents.

The seven factor scale would seem to be quite useful for clinicians working with families with EMR children to provide for assessment of stress and/or coping. The factors could provide a self-report measure of parents' perception of their family situation. A subjective measure of stress may be quite important as it has been suggested that there is no relationship between severity of the handicapping condition and stress (Friedrich, 1979).

Educators would also seem to benefit from knowledge of stress within the family. Research has found numerous aspects within the home and family environment to be associated with both adaptive and maladaptive school behavior in mentally retarded children (Nihira, Mink, & Meyers, 1981). The

abbreviated QRS scales resulting from the present research might be used by school psychologists and/or teachers who serve EMR children with behavioral problems. The responses to the QRS may provide the educator with some information as to how the family is perceiving the care of this child. However, more research is required before any specific conclusions can be made about direct or indirect influences of the family's perception of stress on the amount of inappropriate behavior exhibited by the child.

Although the original QRS (Holroyd, 1974) was found to be a valid measure, the short-form, as well as the present abbreviated short-form, requires additional validation. It is not known whether the factors are indeed measuring the constructs identified. Friedrich et al. (1983) attempted to shorten the original QRS utilizing a sample of 289 respondents. Their efforts at concurrent validation of the resulting QRS-F are admirable and this type of research should also be conducted on Holroyd's short-form. Research utilizing the QRS short-form with large samples is also needed. The present investigation was a pilot effort at modifying the short-form of the QRS with a specific population. However, the size and parameters of the sample limit its generalizability. This research, therefore, requires replication and perhaps expansion to other families of MR children, both EMR and lower functioning children.

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Table 1

Reliability Coefficients, Means, Standard Deviations, and Ranges for the QRS

Scale	Mean	SD	Range	KR-20	Spearman-Brown
I. Factor Scale					
1. Dependency and Management	2.07	1.80	0 - 6	.76	.97
2. Cognitive Impairment	.74	1.06	0 - 5	.62	.95
3. Limits on Family Opportunity	.65	1.10	0 - 4	.65	.95
4. Life Span Care	3.88	1.82	0 - 6	.74	.97
5. Family Disharmony	.54	1.13	0 - 4	.75	.97
6. Lack of Personal Reward	.95	1.20	0 - 4	.60	.94
7. Terminal Illness Stress	.77	.94	0 - 5	.40	.88
8. Physical Limitations	.14	.46	0 - 2	.57	.94
9. Financial Stress	1.63	1.29	0 - 5	.52	.92
10. Preference for Institutional Care	.84	.91	0 - 3	.32	.83
11. Personal Burden for Respondent	3.51	1.50	1 - 6	.60	.94
II. Total Scale					
1. 66-item	15.72	7.36	5 - 37	.863	.863
2. 42-item	12.35	6.58	2 - 28	.885	.924
3. 38-item	12.98	6.55	3 - 28	.892	.935

Table 2

Intercorrelations Among Summated Scale Scores for the QRS

Scale		DP	CI	LF	LC	FD	LR	TI	PL	FS	PI	PB
Dependency and Management	(DP)											
Cognitive Impairment	(CI)	.23										
Limits on Family Opportunities	(LF)	.57	.12									
Life Span Care	(LC)	.49	.25	.41								
Family Disharmony	(FD)	.52	.29	.43	.17							
Lack of Personal Reward	(LR)	.42	.14	.18	.19	.48						
Terminal Illness Stress	(TI)	.40	.22	.31	.28	.36	.18					
Physical Limitations	(PL)	-.07	.03	.14	-.09	.12	-.03	-.09				
Financial Stress	(FS)	.18	-.12	.17	-.16	.39	.42	-.15	.24			
Preference for Institutional Care	(PI)	-.08	-.04	-.17	-.43	.04	.27	.04	.22	.36		
Personal Burden for Respondent	(PB)	.50	.39	.53	.56	.42	.22	.30	-.07	.11	-.26	

STRESS AND COPING IN TWO-PARENT FAMILIES OF EMR CHILDREN: THE MOTHER'S VIEWPOINT

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Running Head: Stress, Coping, and the Family

Key Terms: Stress, Coping, Families, EMR Children

Abstract

Mothers of 43 EMR children aged 5 to 21 were assessed to determine the influence of stress on the family environment. Ten stress predictors were regressed on each of 10 family psychosocial dimensions utilizing a stepwise regression procedure. Sixty-nine percent of the variance in cohesion was accounted for in a model presented. One other significant model and significant predictors were found. Associations between a measure of social desirability and both predictor and criterion variables was determined. The theoretical importance of the results in reference to stress and coping in families having an EMR child was discussed.

Stress and Coping in Two-Parent Families of EMR Children: The Mother's Viewpoint

The stress and coping of parents to the presence of a mentally retarded child in the family has gained a considerable amount of recent attention. Marital satisfaction (Friedrich, 1979), social/economic circumstances of the family (Bradshaw & Lawton, 1978), parent and family problems (Beckman-Bell, 1981; Catechis, 1978), and specific child characteristics (Beckman, 1983; Farber, 1959) have been associated with patterns of stress in families having a disabled child. Through a better understanding of the sources of stress in families have a handicapped or chronically ill child (Beckman-Bell, 1981; Gallagher, Beckman, & Cross, 1983), models of coping with the child are beginning to emerge (Crnic, Friedrich, & Greenberg, 1983; Patterson & McCubbin, 1983). It seems that families having a mentally retarded child are experiencing specific stress patterns related to problems involving demands on the caretaker and certain characteristics of the child.

It has been suggested that 66% of the variance in parent and family problems could be accounted for by the stress resulting from unusual caregiving demands created by the disabled child but not by normative individual life changes (Beckman-Bell, 1981). Holroyd and McArthur (1976) reported that when mothers of Down syndrome children were compared with mothers of children from an outpatient psychiatric clinic, the mothers of the Down children scored higher on the scales measuring high personal child-care responsibilities such as lack of social support and overcommitment/martyrdom. From a family systems per-

spective, what happens to one family member will effect other members of the family to some extent. Therefore, the relationship between normative changes experienced by any member of the family (i.e. family stress) and stress related to the EMR child will be considered in the present research. However, in order to thoroughly consider stress related to the EMR child, certain child characteristics will be explored.

Catechis (1978) found that when mothers of mentally retarded children were compared with mothers of non-retarded children, mothers of retarded children showed significantly higher scores on scales measuring problems related to difficult personality characteristics of the child. Holroyd and McArthur (1976) reported that when mothers of Down syndrome children were compared with mothers of children from an outpatient psychiatric clinic, the mothers of the Down children scored higher on the stress scales reflecting the child's developmental disability such as physical incapacitation and social obtrusiveness. Beckman (1983) also found that mothers of handicapped infants reported child characteristics such as social responsiveness, temperament, and repetitive behavior as being related to parent and family problems. In addition, both older and male mentally retarded children have been associated with increased family stress (Farber, 1959). However, the precise relationship between both the age and the sex of the EMR child as sources of stress in the family has not been determined.

An objective of the present research was to assess the relative contribution of normative family stress and non-normative stress related to the EMR child (including both age and sex of the child) within the family psychosocial environment. The psychosocial environment within the family has been found to be important in the development of adaptive and maladaptive behavior in

both TMR and EMR children (Meyers, 1982; Nihira, Meyers, & Mink, 1980; Nihira, Mink, & Meyers, 1981). In addition, coping among family members (i.e. lack of stress) has also been associated with the family psychosocial environment (Nihira et al., 1980; Patterson & McCubbin, 1983).

Nihira et al. (1980) found some interesting relationships between psychosocial dimensions in the family and family adjustment; family adjustment was defined as both observed coping level and feelings of impact of the child in the home. Among other aspects of significance, cohesion and organization were the most important psychosocial variables in family adjustment. In families having an EMR child, cohesion within the family was related to observed coping level of the family and organization was related to parents' feelings of the impact of the child in the home.

Adjustment and coping through increased cohesion within the family has been suggested previously (Beal, 1979). Lazarus (1981) has proposed that denial-like coping may have positive consequences when direct action toward a problem situation may have little effect. "The most important functions of coping: (1) that of changing a damaging or threatening relationship between person and environment (problem-focused) and (2) that of regulating emotional distress produced by that relationship (emotion-focused). . ." (Lazarus, 1981 , p. 63). Many questions arise concerning the relationships between adjustment and the family environment, as well as adjustment and stress.

Therefore, three questions can be posed from an examination of the literature. What is the relative importance of predictors of selected measures of stress (including child characteristics) on psychosocial dimensions within the family? What predictors of stress are significant across psychosocial

dimensions with the family? What is the association between a measure of coping and both stress and family psychosocial dimensions?

The present study has addressed the aforementioned questions in families having an EMR child. Ten sources of stress (including two child characteristics) were regressed through a stepwise procedure on each of the ten measured psychosocial dimensions within the family. Significant predictors across psychosocial dimensions within the family were also determined. A measure of social desirability was used as a measure of coping (Friedrich, Greenberg, & Crnic, 1983); the coping measure was correlated with all of the ten predictor variables and all of the ten criterion variables used in the regression.

Method

Subjects

The sample consisted of 43 mothers (mean age = 40.0; SD = 8.0) having a child who was EMR. Approximately 75% of the mothers were Protestant. The children attended city and county school systems serving a geographic area of 250,000 people in southwest Virginia. Mothers were included in the study if the following criteria were met: 1) the EMR child (a) was between 5 and 21, (b) had an IQ between 55 and 70 on a standardized intelligence test, (c) was living with two married parents (not necessarily the natural parents); and (2) the family was not on welfare. If families had more than one EMR child, the mother was sampled only once.

The sample consisted of 43 EMR children (60.5% male; 39.5% female) between the ages of 5 years 6 months and 20 years 3 months (mean = 13.0; SD = 4.2). The sample was comprised of mostly white (86.0%) and black (11.6%) children. The disabled child was the youngest offspring living in the home

in most of the families. Fewer than 10% of the families had others living in the home and 7% of those included grandmothers. Although not on welfare, 16.3% of the families received some type of public assistance such as free or partial lunch program.

Measurement

The 90-item Family Environment Scale by Moos (1974) was used as a measure of the family psychosocial environment (the criterion variable). The Family Environment Scale (FES) incorporates ten subscales under three major dimensions as follows: (1) relationship dimensions--cohesion, expressiveness and conflict, (2) personal-growth dimensions--independence, achievement orientation, intellectual-cultural orientation, active-recreational and moral-religious emphases, (3) system-maintenance dimensions--organization and control. A modified version of the short-form of the Questionnaire on Resources and Stress (Holroyd, 1982) was used as a measure of specific stress factors. A 42-item, 7-factor measure was used in the analysis as item analysis has revealed low reliabilities for terminal illness stress, physical limitations, financial stress, and preference for institutional care with this population (Dougherty, 1984). The Questionnaire on Resources and Stress (QRS) scales used in the analysis were: dependency and management, cognitive impairment, limits on family opportunities, life span care, family disharmony, lack of person reward, and personal burden for respondent. The Family Inventory of Life Events and Changes (FILE) was utilized as an overall index of family stress. The 72-item questionnaire was designed to measures normative and non-normative life events and changes experienced by a family within the past year (McCubbin, Patterson, & Wilson, 1982).

Sex was included as a predictor because differentials in parental acceptance and stress according to the sex of the mentally retarded child have been noted (Farber, 1959; Grossman, 1972; Price-Bonham & Addison, 1978). Age was also included as a predictor because with age: (a) discrepancies in development of MR and non-MR children emerge (Wikler, 1981), (b) parenting patterns of mothers of MR children and non-MR children become increasingly divergent (Birenbaum, 1971), and (c) associations with family stress have been noted (Farber, 1959).

Fifteen items from Olson, Bell and Portner's (1978) Family Adaptability and Cohesion Evaluation Sclae (FACES) were included in the study as a measurement of the respondents' tendency to answer questions about the family in a socially desirable direction. The items were presented in a true-false format. The 15 items were adapted by Olson et al. (1978) for a family measure from the Edmond's Social Desirability Scale (Edmonds, 1967). Socially desirable responses have been suggested as an index of coping and denial-like processes (Friedrich et al., 1983).

Procedure

The investigator introduced the study to special education teachers of EMR students (primary and secondary) in both city and county school systems. Teachers were told the research project was investigating stress in the families of EMR children. The teachers were asked to identify children in the classroom who met the subject criteria.

Mothers were sent an informed consent letter and self-addressed stamped envelope by the teacher of eligible EMR students in the classroom. If informed consent letters were not returned, the teacher sent up to two reminder

post cards at a rate of one per week. There was a 56.5% rate of return for the informed consent letter.

Once informed consent letters were received, the name, address and telephone number of the potential respondents were telephoned to the investigator by the child's teacher. The respondents were then called by the investigator to answer any questions and to thank the respondents for their participation in the research (one mother could not be contacted by telephone). Of all the potential respondents contacted, only one family decided not to participate in the research after the telephone call. The respondents were then sent a booklet containing the QRS short-form, the FES, the FILE, Olson et al.'s adaptation of Edmond's Social Desirability Scale (ESDS), a modified demographic information questionnaire (Holroyd, 1982), and a self-addressed stamped envelope.

Results

Regression Analysis

Ten predictor variables of stress were linearly regressed on each of the ten psychosocial dimensions of the FES utilizing a stepwise multiple regression procedure. The predictor variables were entered in the following order in each one of the ten analyses: personal burden for respondent, child's sex, lack of personal reward, child's age, limits on family opportunities, life span care, family disharmony, cognitive impairment, family life events and changes, and dependency and management. The order in which the variables were entered was determined by the stepwise regression procedure included in the Statistical Package for the Social Sciences (Hull & Nie, 1981) in order to establish the best model for each of the psychosocial dimensions.

Significant Models. As indicated in Table 1, all of the regression

equations except for those yielded from the control and the achievement orientation dimensions were significant ($p. < .025$). However, some predictor variables within each of the equations exceeded the .025 level of significance; this may have been a result of the small sample size. The two best models yielded by the stepwise procedure will now be highlighted.

Insert Table 1 about here

Cohesion has been defined as the commitment, help and support family members provide for one another (Moos, 1981, p.1). The three independent variables predicting cohesion presented one of the best models of regression. All three variables were significant at least at the .01 level. Moreover, approximately 70% of the variance was accounted for in the model. Low family disharmony (beta = -.598) was the most important relative predictor of the high cohesion reflected through the FES. Low dependency and management (beta = -.411) and limits on family opportunity (beta = .267) were also important in predicting family cohesion.

Organization has been defined as the degree of importance of clear organization and structure in planning family activities and responsibilities (Moos, 1981, p.2). Low family disharmony (beta = -.430) and the presence of a female child (beta = .387) were significant predictors of organization ($p. < .01$). In order for families to maintain a clear organization and structure in planning family activities and responsibilities, apparently it was important for low amounts of family disharmony to exist. However, a mentally retarded female child influenced family organization almost as much as low family disharmony. The two predictors accounted for 32% variance in organization.

Significant Predictors. Family disharmony was significant in three of the regressions. It was noteworthy that family disharmony was contained in the two significant regression models as well as being the most significant predictor variable in any of the regressions. In addition, family disharmony had the highest relative weight in all equations in which it was significant. The results support the notion that the family members' ability to work together was important in two-parent families of EMR children. However, dependency and management was also significant in three equations.

Low dependency and management was consistently significant across each of the psychosocial dimensions of cohesion, expressiveness, and intellectual-cultural orientation ($p. < 01.$). The relationship with cohesion was very interesting in light of the notion that the presence of a mentally retarded child can bring the family together. In the case of an EMR child, the child's lack of dependency on family members was important in maintaining cohesion. The relationship of low dependency and management with expressiveness supported the notion that the large number of instrumental tasks required of family members may restrict expressiveness in families with a mentally retarded child. The relationship of low dependency and management with intellectual-cultural orientation was rather novel; however, it was quite reasonable. Perhaps the lack of dependency on the child's part was able to free family members to think about political, social, intellectual, and cultural activities rather than daily instrumental caretaking tasks.

Low lack of reward was important in the extent of participation in social and recreational activities, and the degree of emphasis on ethical and religious values. The results supported the notion that as the care of the EMR child becomes more rewarding to family members, the family is more likely to be involved socially, recreationally, and religiously.

The limits on family opportunities dimension was significantly related to intellectual-cultural orientation. Therefore, the limitations imposed on the family were related to extra-familial interests such as political, social intellectual, and cultural activities.

The life span care dimension was significantly related to cohesion. It seemed that as families perceived their responsibility as life long, their commitment, help, and support for one another increased. However, family harmony and independence were of greater importance in predicting cohesion when compared with life span care. Finally, the effects of a female mentally retarded child on family organization has already been noted in the significant model section of these results.

Correlational Analysis

A true-false (Olson et al., 1978) adaptation of the ESDS was correlated with both the criterion and predictor variables (see Table 2).

Insert Table 2 about here

Considering all associations with both criterion and predictor variables, the results pointed to the importance of providing socially desirable responses to stresses in the family (i.e. family disharmony and FILE), responsibilities of both the family (i.e. dependency and management and limits on family opportunities) and the mother (i.e. personal burden of respondent), and specific child characteristics (i.e. cognitive impairment and age). It is suggested that providing socially desirable responses to interpersonal dimensions (i.e. cohesion and conflict) were indications of emotion-focused coping patterns (Beal, 1979; Lazarus, 1981).

The results also provided further support to the association between family adjustment and both cohesion and organization as noted by Nihira et al. (1980).

Discussion

The results of the present research provided a clearer explanation of the stress and coping patterns that seem to be affecting families of EMR children. It was not surprising that family disharmony affected both cohesion and conflict quite strongly. The significant relationships between the dependency and management variable and both cohesion and conflict presented an interesting picture.

O'Connor and Stachowiak (1971) indicated that certain overt and covert "auxiliary control mechanisms", such as the stabilization of conflict and increasing the overt power of the parents, were utilized by families having a mentally retarded child when under stress in order to maintain family integration and cohesion. It seemed the stresses resulting from the care of the child were best met by the family working together and perhaps sharing responsibilities for care. The communication resulting from working together tended to create a sense of cohesiveness as well as avert conflict. Being able to communicate and work together as a family may have provided families with an ability to stay organized and controlled, thereby averting conflict, and allowing for independence and self-sufficiency on the part of family members.

The above model of the family functioning is consistent with healthy family functioning (Minuchin, 1974, 1981; Minuchin, Montalvo, Guerney, Rosman, & Schumer, 1967). One aspect of healthy family functioning is the ability of family members to be close with one another at some times (cohesion) and to

be able to go apart from the family at other times (independence). Theoretically, this type of arrangement is best facilitated by a good marital relationship. Friedrich (1979) has suggested that parents' marital satisfaction was quite important in the social environment of the family with a handicapped child. Although the present investigation did not assess the parents' marital relationship, these families were all non-clinic families and could be assumed to be functional families.

Beal (1979) has also suggested that stress influences characteristics of family relationships. The more stress, the more intense the relationship. The more intense the relationship, the more cohesion exists over independence and, therefore, the greater the "emotional influencing." Beal (1979) described four compensatory mechanisms utilized to balance emotional forces in family relationships: (a) physical and emotional distance between individuals, (b) emotional conflict between individuals, (c) emotional, social, or physical dysfunction within an individual, and (d) child focus through greater parental emotional investment in the child whether the child's circumstances realistically dictate it or not. It appeared that the families in this study compensated to the demands of an EMR child mostly by becoming closer (i.e., family harmoney and high cohesion) and becoming organized. Perhaps family counseling to facilitate cohesion and organization is the treatment of choice when working with EMR clients who are living with their parents.

The present investigation also identified dependency and management as being a very important factor in families having an EMR child. The immediate demands created by the child influenced families more than the potential demands that the child may create in the future (e.g., life span care). Programs designed to reduce current dependency demands of the child on the family

may be quite helpful. For example, respite care programs may provide a much needed rest for parents so they can spend time as a couple and perhaps nurture growth in their relationship with one another. The fortification resulting from time away from the family may provide the couple with an enhanced sense of commitment and challenge in parenting the EMR child.

Social desirability was another important aspect of this investigation. It could be argued that the number of significant correlations with both the predictor and criterion variables reduces the importance of the research. However, the theoretical importance of social desirability in coping with a handicapped child has not been clear.

Folkman (1979) found that when illness was present, coping with illness was associated with a regulation of emotional distress. Respondents in the present study seemed to have been attempting to minimize the effects of emotional distress within the family; particularly with respect to relationships among family members (e.g. conflict, limits on family opportunities, family disharmony, family life changes and events) and the relationship of the MR child with the mother (e.g., dependency and management, personal burden for the respondent). Respondents apparently did not want to admit to having experienced much stress. In addition, low scores on the QRS have been reported as indications of coping (Friedrich, 1979). Significant low scores were found with the following stress variables: lack of personal reward, family disharmony, and dependency and management. Kobasa (1979) has suggested that hardiness toward stress consisted of a sense of control, commitment, and challenge toward the stressor. Perhaps the minimization of stress through socially desirable responses was one way that the mothers gained a sense of control, commitment and challenge toward the demands created by the EMR child.

Future research on stress and coping within the family having an EMR child might investigate other variables which may be influencing the psychosocial climate within the family. However, one's choice of measurement may be quite important in obtaining relevant results. In the present research, the total score on the FILE and the total score on the QRS short-form (including all 11 factors) highly correlated ($r = .64$) resulting in problems of multicollinearity in regression analyses. However, Beckman (1983) found that the parent and family problems measure of the 285-item QRS and the Schedule of Recent Experience (Holmes & Rahe, 1967) were not significantly correlated. Moreover, the latter measure did not significantly correlate with child characteristics of handicapped infants whereas the former measure revealed some significant relationships. The point is that non-normative measures designed to assess stress within families having a handicapped member were more appropriate than normative measures. Future research might also investigate differences among populations using the QRS and FILE.

The present research could be expanded by including mothers having a child who is below the EMR level of intelligence. Differences in families having an EMR and a trainable mentally retarded (TMR) child are already beginning to emerge (Meyers, 1982; Mink, Nihira, & Meyers, 1983; Nihira et al., 1981). It would be informative to investigate how the relationships among the predictors would change in affecting the TMR child's family psychosocial climate; the disability is typically more evident and unambiguous.

In sum, research on stress and coping of families with mentally retarded children has just begun. The present investigation has presented two significant models related to cohesion and organization. In addition, significant predictors across family dimensions have been identified. The relationship between social desirability and predictor/criterion variables was also identi-

fied. It is hoped that the present research will inform clinicians and provide a basis for future investigations for persons interested in families having a mentally retarded child.

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Table 1

Significant Stepwise Regression Results

Dependent Variable	T Values for Predictors in Order Entered [a]									F[b] BEST SUBSET	R^2
	PB	SEX	LR	AGE	LF	LC	FD	CI	FILE	DP		
Cohesion						2.66**	-5.76***			-3.55**	29.66***	.69
Expressiveness				-1.83						-3.43*	6.91**	.26
Conflict				-1.93			2.40*			1.78	7.78***	.37
Independence						-2.24	-1.78	-2.06			6.72***	.34
Intellectual-Cultural Orientation		1.91		1.70	2.48*					-2.75**	3.61*	.27
Active-Recreational Orientation			-3.32**	2.30							7.77**	.28
Moral-Religious Emphasis			-2.51*		1.76				-2.30		5.79**	.31
Organization		2.97**					-3.30**				9.48***	.32

*p < .025

**p < .01

***p < .001

[a]PB-Personal Burden for Respondent; LR-Lack of Personal Reward; LF-Limits on Family Opportunities; LC-Life Span Care; FD-Family Disharmony; CI-Cognitive Impairment; FILE-Family Inventory of Life Events and Changes; DP-Dependency and Management

[b]F values use predictors in Table

Table 2

Pearson Correlation of the Social Desirability Scale With the Predictor and Criterion Variables

Variables	r
Criterion Variables	
Cohesion	.377*
Expressiveness	.192
Conflict	-.361*
Independence	.208
Achievement Orientation	.287
Intellectual-Cultural Orientation	.312
Active-Recreational Orientation	.288
Moral-Religious Emphasis	.247
Organization	.355*
Control	.246
Predictor Variables	
Dependency and Management	-.433*
Cognitive Impairment	-.380*
Limits on Family Opportunities	-.387*
Life Span Care	-.290
Family Disharmony	-.387*
Lack of Personal Reward	-.212
Personal Burden of Respondent	-.603**
FILE	-.659**
Sex	.027
Age	.371*

*$p < .01$

**$p < .001$

APPENDIX A

Review of the Literature

Review of the Literature

The review of the literature which follows was organized according to four major headings as follows:

1. The Questionnaire on Resources and Stress
2. Families of mentally retarded children
3. Family psychosocial dimensions
4. Stress and coping

It was felt that the above sections could best organize the literature which was relevant to the two articles addressed in this dissertation. The section on the Questionnaire on Resources and Stress will focus on the development of the instrument and review the research on stress and coping which has used the QRS. In addition, recent literature on the refinement of the QRS will be discussed in this section. A specific section on families of mentally retarded children was included because of the contemporary importance of a group of articles which have been published out of the Mental Retardation Research Center, UCLA. The section on family psychosocial dimensions will review selected literature which is relevant to each of the ten dimensions as it applies to families having a mentally retarded child. Finally, the last section will review more general stress and coping literature on handicapped and mentally retarded persons which did not use the QRS; a discussion of the potential importance of denial-like processes in coping with chronic illness will conclude the section and the review.

The Questionnaire on Resources and Stress

There have been many reports on the stress that family members experience from having to care for a mentally retarded child (Jacobsen & Humphry, 1979; Wikler, 1981). Much of the literature has described the emotional reactions parents commonly have to the knowledge that their son or daughter has been diagnosed with some disability. The process has been described either as stages or as distinct emotions which the parents experience (Kubler-Ross, 1969; Price-Bonham & Addison, 1978; Wentworth, 1974) and the reports were usually anecdotal.

The self-reported measurement of the psychological well-being of parents of a chronically ill child has been accomplished by various instruments (Cairns & Lansky, 1980; Miller & Keirn, 1978). However, the Questionnaire on Resources and Stress (QRS) developed by Jean Holroyd (1974) has been gaining recent widespread use as a measure of stress and coping associated with the burden of having a chronically ill family member (Friedrich, 1979; Beckman, 1983). The QRS was developed to be a "multidimensional, objective, self-administered test to measure not only the burden imposed on the family but the family's emotional response to that burden" (Holroyd, 1974, p. 92).

The QRS is a 285-item questionnaire with three rationally based clusters of 15 face-valid scales. The three broad categories and the associated scales are: (1) Personal problems of the respondent as related to the index case (a) Poor health/mood (b) Excess time demands (c) Negative attitude toward index case (d) Overprotection/dependency (e) Lack of social support (f) Overcommitment/martyrdom (g) Pessimism; (2) Family problems as related to the index case (a) Lack of family integration (b) Limits on

family opportunity (c) Financial problems; (3) Limitations or problems of the handicapped or chronically ill family member (a) Physical incapacitation (b) Lack of activities for index case (c) Occupational limitations for index case (d) Social obtrusiveness (e) Difficult personality characteristics. The author of the QRS went through a series of steps to arrive at the above-mentioned scales. An understanding of the development of the QRS is important to proper use and interpretation of the instrument.

Questionnaire Development

The description which follows has been extracted from Holroyd's draft manual completed in May, 1982. For information on the need for the instrument and a more thorough description of the development of the questionnaire, see the manual and the report by Holroyd (1974).

A 556-item pool was generated by a psychologist, psychiatrist, social worker, two teachers, and a parent who had varying experiences with handicapped populations. The number of items was reduced by 12 experienced raters who considered statement appropriateness, content, clarity, and redundancy. Then, twenty-nine items were added because of either their theoretical or empirical importance. Finally, another 15 items were added with the intention of the items becoming a short validity scale which could reflect a tendency to claim extreme stress in order to gain public support; but no empirical support for the validity scale has been offered and the items have been included in other dimensions.

All 285 items comprising the full measure were rewritten to suit any age or either gender. Response bias was addressed by wording the items in a way that 50 percent would be answered "true" and 50 percent "false" if all items were answered in the supposedly healthy, adjusted, coping direction.

Readability was estimated at the sixth-grade level. Six parents were then interviewed by a social worker to determine whether any items need to be changed; four items were clarified by minor changes in wording.

An item factor analysis of the 285 items was undertaken using a population of 526 subjects in an effort to construct a short factor-scale QRS. The sample included parents of children of all ages, diagnosed with autism, cerebral palsy, cystic fibrosis, Down syndrome, hematological disorders, neuromuscular disease, psychiatric disorders, renal disease, and mixed developmental and/or mental retardation disorders. Various factor scales emerged from the analysis.

The six items which correlated most highly with the factor scale scores were selected for a 66-item 11-factor shorter questionnaire. The factor scales were used to compare a number of clinical populations to a control group. The factor scales appeared to reflect characteristic stress patterns in the various clinical populations (Holroyd & Guthrie, 1982). Test-retest reliabilities have not been undertaken; however, split-half reliabilities for both the original scale and the factor scale questionnaire were being investigated (Holroyd, 1982).

Stress Research Using the QRS

The 285-item QRS has been used in numerous studies as a measure of stress. The questionnaire has been useful in discriminating populations which differ in the total amount of stress and the characteristic types of stress experienced (Holroyd, 1982).

Three pilot studies utilizing the QRS compared: (a) mothers to fathers, (b) mothers of mentally retarded children to mothers of emotionally

disturbed children, and (c) mothers living with a husband to mothers living along (Holroyd, 1974). The 15 scales yielded different results based on the population studied. Mothers described themselves as less able to experience personal development, more limited in how they use their time, poorer in health and mood, sensitive to how the child fits into the community, and more aware than fathers of disharmony within the family. Single mothers experienced more of some of these same problems plus financial problems. In addition, mothers of retarded children were concerned more about overprotection or dependency problems and limited school or occupational opportunities when compared to mothers of emotionally disturbed children. It was concluded that the scales were able to differentiate various stresses and discriminate amount of stress between populations.

Holroyd and McArthur (1976) employed canonical correlation associations among the 15 QRS scales within three groups of mothers of autistic, Down syndrome and outpatient psychiatric clinic children. The results supported a general retardation/social dependency factor as discriminating the autistic and Down syndrome groups from the clinic sample. However, mothers of Down syndrome children did not report more personal and family problems than mothers of outpatient clinic children. Mothers of Down syndrome children scored higher on scales reflecting the child's developmental disability, negative attitudes toward the child, and feeling that most of child-care problems fell on their own shoulders. The QRS was reported to differentiate the three populations in 60 out of 76 cases ($p < .001$). Further research using the QRS was conducted with autistic children (Holroyd, Brown, Wikler, & Simmons, 1975).

The QRS was able to discriminate parents of institutionalized and noninstitutionalized autistic children (Holroyd, et al., 1975). The questionnaire was also able to separate high stress mothers from low stress mothers which was confirmed by parent interviews.

Other types of research employing the QRS as a measure of stress have been conducted. Statistically significant differences were found in six of the scales when comparing groups of mothers of retarded and nonretarded children (Catechis, 1978). Three of the scales, i.e. lack of family integration, difficult personality characteristics, and pessimism, could correctly classify 93% of the cases in comparing parents of children having neuromuscular disease with parents of children having a psychiatric diagnosis (Holroyd & Guthrie, 1979).

The above research indicates that the QRS is a useful instrument in measuring some of the various stresses experienced by parents of children within various clinical populations. The questionnaire can be used as a measure of total stress as well as various specific stresses reported by parents. For example, Beckman (1983) used the QRS as well as the Holmes and Rahe (1967) Schedule of Recent Experience (SRE) to investigate the influence of selected child characteristics of handicapped infants on stress within families. The QRS and the SRE correlated only slightly ($r = .27$). Four of five child characteristics were significantly related to the amount of stress reported by mothers on the QRS but not significantly related to the amount of stress reported on the SRE. The author suspected the two measures tap different family experiences. Beckman's research seemed to add further credence to the QRS as a measure of stress specific to "the burden imposed on the family" and the family's emotional response to that burden within a handicapped population.

Coping Research Using the QRS

Two articles have utilized the QRS as a measure of coping. Friedrich (1979) regressed 19 independent variables on the total QRS scores (higher scores indicating less coping) of 98 mothers of children with a variety of handicapping conditions. Utilizing a stepwise multiple regression procedure, the author found marital satisfaction, child's residence (home, school, or institution), and child's sex as significant predictors of coping behavior. Marital satisfaction alone was responsible for 79% of the predictive ability. The three independent variables accounted for 46% of the total variance.

The QRS has also been used in research comparing the psychosocial assets of parents of handicapped with parents of nonhandicapped children (Friedrich & Friedrich, 1981). The parents of the handicapped children differed significantly from the control group on 12 of the 15 subscales of the QRS. The significant scales included negative attitudes, overprotection/dependency, physical incapacitation, occupational limitations, social obtrusiveness, and difficult personality characteristics.

Friedrich's articles (Friedrich, 1979; Friedrich & Friedrich, 1981; Friedrich, Greenberg, & Crnic, 1983) and the Beckman (1983) article were examples of the increased use of the QRS in research. As researchers and practitioners are becoming more aware of the instrument, the measure will be recognized as a measure for all handicapped populations. It has gained more acceptance in the field of mental retardation and it has been recommended as a useful instrument in parent and family therapy (Tymchuk, 1979). However, the length and some psychometric weaknesses of the 285-item questionnaire have made it difficult to use the full QRS in a number of

settings. Therefore, Holroyd's (1982) 66-item short factor-scale was quite welcomed. However, there has been no known published use of this instrument. Other than the Holroyd and Guthrie's (1982) proposed research indicated in the manual, the present investigation was the only known research which used the 66-item scale. Ironically, another short-form of the QRS has been developed (Friedrich et al., 1983).

Further Refinement of the QRS

Friedrich et al. (1983) analyzed the 285 items of the QRS using subjects in their continuing research on stress and coping. The children of 289 parents had the following conditions: 12% had no handicapping condition, 10% had motoric disabilities (but no associated mental retardation, i.e. IQ $\geq$ 80), 28% were deaf or blind (but were neither motorically disabled or mentally retarded), and 50% were mentally retarded (IQ $\leq$ 70). Fifty-two items emerged as the most reliable (r = .951). These items were then factor analyzed utilizing the varimax method and four factors were found: parent and family problems, pessimism, child characteristics, and physical incapacitation. The scale has been entitled the QRS-F.

The QRS-F was correlated with three established measures in an attempt to investigate concurrent validity. Forty mothers of children who had an IQ of 70 or below were subjects. Parent and family problems correlated significantly with the Beck Depression Inventory and the Marlowe-Crowne Social Desirability Scale; pessimism correlated significantly with the Beck Depression Inventory; both child characteristics and physical incapacitation were significantly correlated with the problem checklist. The authors reported that the pattern of correlations between four QRS-F factors and the independent measures was indicative of the concurrent validity of the QRS-F.

It was interesting to note that Friedrich et al. (1983) found that there were three original QRS subscales that had no item representation in the QRS-F: social support, financial problems, and social obtrusiveness. However, the authors recognized that independent measures of these variables should be the subject of future research.

Families of Mentally Retarded Children

Important and extensive research has been published by a small group of authors in the last few years which has had a very significant impact in the field of mental retardation. Research for approximately the past twenty years has focused upon how the mentally retarded child influenced the parents (Cummings, 1976; Cummings, Bayley, & Rie, 1966; Price-Bonham & Addison, 1978), the siblings (Grossman, 1972), and the extended family (Davis, 1967). However, current research at the Mental Retardation Center (UCLA) has investigated the reciprocal effects of the family and the mentally retarded child in reference to: (a) the child's development in both home and school environments and (b) family adjustment. In addition, a "family taxonomy" including child development and family dynamic characteristics has been developed for both TMR and EMR children.

The review which will follow presented the research as it applied to family psychosocial variables relevant to the present research. The review addressed families with TMR children and EMR children separately.

Families With TMR Children

Nihira et al. (1980) have noted a number of relationships between the home environment and child development in families having a TMR child. The author found high canonical relationships between: the social adjustment of the TMR child and harmony and quality of parenting ($R = .83$); the latter

dimension included: (a) adjustment and harmony in home (.60), (b) marital harmony (.47), (c) intellectual-cultural orientation (.38), (d) active recreational orientation (.38), (e) expressiveness (.36), and (f) moral-religious emphasis (.34), (numbers indicate canonical loadings). Nihira et al. (1983) also found the following relationships between other child development variables and environmental variables ($p \leq .05$; numbers indicate significant Family Environment Scale variables which were partialed out from both the Home Observation for Measurement of the Environment and the Home Quality Rating Scale measures); (1) personal self-sufficiency and moral-religious emphasis (.24); (2) social maladaptation and male vs. female (-.24); (3) personal maladaptation and (a) cohesion vs. conflict (-.24), (b) expressiveness (-.20) and (c) male vs. female (-.24); (3) psychological adjustment and cohesion vs. conflict (.27); (4) social adjustment and moral-religious emphasis (-.24). Other variables were also significant; however, they will not be reported as they were not related to the present research. Other important research has investigated the relationship between home environment and school adjustment of TMR children (Nihira et al., 1981).

Nihira et al. (1981) found many aspects within the home environment of TMR children were canonically correlated with various variables of school adjustment ($R = .82$). The home environment dimension included in the research was composed of (a) harmony and quality of parenting (.67), (b) cohesion vs. conflict (.38), (c) expressiveness (.33), (d) intellectual-cultural and recreational orientation (.28), and (e) lack of control (.34).

The above research illustrated the importance of the family in the development of the TMR child. A number of psychosocial aspects within the family emerged as having significant relationships with aspects of child

development-personally, socially and in school. Obviously, there are a number of other significant influences on the developing TMR child. However, the "climate" within the family was an important consideration in the TMR child's behavior. In response to further organizing the data, family typologies were developed to more closely represent families with TMR children (Mink et al., 1983).

Mink et al. (1983) found five clusters of family "types" in families having a TMR child. The five types of families were: cohesive, harmonious (30%); control-oriented, somewhat unharmonious (30%); low disclosure, unharmonious (6%); child-oriented, expressive (24%); and disadvantaged, low morale (10%). Cluster analysis and ethnographic observations revealed significant differences in family characteristics and child adjustment at home and at school.

The results of the present research, as measured by the Family Environment Scale, seemed to be best represented by the cohesive, harmonious family type or the child-oriented, expressive family type. Although the present sample consisted of mothers of EMR children rather than TMR children, a brief description of the two family typologies will be offered.

Cluster analysis revealed the cohesive, harmonious family as follows: "These families had the lowest percentage of mothers who worked, an absence of negative child influence on the marriage, and the lowest occurrence of stressful life events among all groups. At home, the children had significantly high scores on Personal-Social Responsibility. At school, teachers rated them significantly high on self-esteem, and children reported themselves significantly high on physical size and peer acceptance, both self-concept dimensions" (Mink et al., 1983, p. 489-490).

The child-oriented, expressive family type was described as follows: "These families had the lowest percentage of father figures. When they were present, most assisted with child care. Very few of these children had a negative influence on the family. At home, they had significantly high scores on Personal Self Sufficiency. At school, they were average in most measures except for maladaptation, where they were below average. The children rated themselves significantly low on physical size and peer acceptance" (measures of self-esteem) (Mink et al., 1983, p.491). The other three family typologies did not reflect the results of the present research and, therefore, will not be discussed.

Families With EMR Children

Nihira and his colleagues have also focused on families having EMR children in some of the aforementioned research projects. The results will be reported in a format similar to the above research on families with TMR children. The discussion of families with EMR children will be followed by a comparison of families of TMR and EMR children in reference to the children's adjustment, the family's adjustment, and family typologies.

Nihira et al. (1980) found a number of relationships between the home environment and (a) child development and (b) family adjustment in families having an EMR child. The authors found high canonical relationships between adaptive competence of the child and, harmony and educational guidance ($R = .79$). The harmony and educational guidance dimension included the following variables and associated canonical loadings: organization (.50), cohesion (.50), adjustment and harmony in the home (.49), marital harmony (.46), active-recreational orientation (.41) and moral-religious emphasis (.38).

In addition, Nihira et al. (1980) found the child's social adjustment was canonically related to family harmony (R = .67). Family harmony included the following variables and their associated canonical loadings: marital harmony (.39), independence (.34) and lack of conflict (.42). Observed family coping and, harmony and quality of parenting were also significantly canonically related (R = .82). Harmony and quality of parenting, and associated loadings included: adjustment and harmony in home (.81), marital harmony (.59), cohesion (.52), independence (.42), moral-religious emphasis (.33), and a lack of conflict (.42). Finally, feelings concerning the impact of the child in the home and, organization and harmony were related (R = .62). Organization and harmony, and associated loadings included: organization (.38) and expressiveness (.36).

The importance of adjustment and harmony in the home (and the marriage) was illustrated in both child development and family coping variables. Organization, cohesion, lack of conflict, independence, active-recreational orientation and moral-religious emphasis seemed to play an important part in families of EMR children.

The remainder of the published research concerning home and school adjustment in families with a mentally retarded child has been done with TMR children; that research was reviewed above. However, Meyers (1982), in his prepared presidential address to the Mental Retardation Division of the American Psychological Association, focused on family variables in the adjustment of retarded children and youth. Pertinent points from his paper concerning families of EMR children will be mentioned.

There was an absence of a father figure in about 50% of the homes of EMR children (Meyers, 1982). "The absence of a father figure in so many homes seemed significant in that such a large number may indicate a large amount of marital and/or family stress. The EMR child is typically much

more independent; however that independence may create additional concerns for the parent. EMR/EH [Educationally handicapped] students are permitted more freedom as they get older [when compared to TMR students], and further, given the low SES and often fatherless families, there is more variety to their lives, more critical stress events in the families, more problems of adolescent adjustment" (Meyers, 1982, p.7).

Much like Mink et al. (1983), Meyers (1982) reported typologies of families having an EMR child. Seven clusters emerged through cluster analysis and ethnographic interview. The most common to least common family types were: learning-oriented, somewhat discordant (27%); achievement-oriented, but non-learning supportive (18%); outer-directed, with little achievement orientation (16%); expression-oriented, with few sociocultural interests (12%); child-oriented, concordant (10%); low disclosure, un-harmonious (9%); disadvantaged, with little concern for the child (8%). From the FES profiles illustrated and the descriptions of the clusters in the Meyers report, it appeared that the present sample was most like the child-oriented, concordant family.

"Within the child-oriented, concordant family, two features stand out, support at home of school achievement, with harmony and concordance in the family. Yet achievement expectancy is not strong, indicating that the child's handicap is accepted. The impact of the child is regarded as minimal on family life. The children have the lowest average IQ among the 7 groups, suggesting that there is no ambiguity in the families understanding that handicap is present. Good adjustment of the children is indicated both at home and school, though school achievement is not high" (Meyers, 1982, p. 12).

Further results of the above longitudinal study on families of EMR children are not known. Meyers (1982) indicated that the data already obtained will be further analyzed to relate family adjustment and critical life events to changes in family typology. However, at present, no articles on the topic have been published.

Comparison of Families of TMR and EMR Children

Children's Adjustment. The results of the longitudinal study at the Mental Retardation Center (UCLA) presented some similarities and differences in families having a mentally retarded child. In the EMR population studied, the harmony and educational guidance dimension was important in the adaptive competence of the child. Organization, cohesion, active-recreational orientation, and moral-religious emphasis were some of the factors making up the harmony and educational guidance dimension. In the TMR population studied, growth promotion in child rearing was important in the adaptive competence of the child. However, none of the family psychosocial dimensions on the Family Environment Scale was important with TMR children. Moreover, factors such as independence from parental control, stimulation of mature behavior, and quality of the residential environment were important. The difference in the importance of family climate variables when comparing the two populations is noteworthy. For the EMR child, organization and cohesion are the two most important family climate dimensions. The social adjustment of the EMR child also was greatly influenced by the "family climate".

The social adjustment of the EMR child was highly associated with family harmony. Lack of conflict, independence and cohesion were some of the factors making up family harmony. In the TMR population studied, harmony and quality

of parenting were important in the social adjustment of the child. Intellectual-cultural orientation, active-recreational orientation, expressiveness and moral-religious emphasis were the factors making up the parenting dimension. However, it is noteworthy that the authors felt that factors associated with the parents best explained the dimension related to the social adjustment of the TMR child; whereas, the authors felt that factors associated with family harmony best explained social adjustment in the EMR child. The importance of family climate variables in the adjustment of a family to the child was also indicated.

Family Adjustment. In both EMR and TMR populations, the harmony and quality of parenting dimension was related to observed coping level; and, the organization and harmony dimension was related to the feeling of impact of the child in the home. However, cohesion, independence, active-recreational orientation, organization, moral-religious emphasis, and lack of conflict made up the harmony and quality dimension in the EMR population; the only two family psychosocial dimensions to make up the harmony and quality dimension in the TMR population were expressiveness and active-recreational orientation. Moreover, organization, expressiveness and independence made up the organization and harmony dimension in the EMR population; lack of conflict was the only family psychosocial dimension to make up the organization and harmony dimension in the TMR population. It seemed that family psychosocial dimensions, as measured by the Family Environment Scale, were more important in the family adjustment of EMR children than the family adjustment of TMR children. Factors such as openness of respondent, stimulation through equipment, and mother figure's education were more important in the family adjustment of TMR children.

Family Typologies. The clusters of "family types" in both EMR and TMR populations suggested the importance of the psychosocial dimensions of cohesion, control, expressiveness, and achievement orientation in families. The most common family type in the EMR population was learning-oriented, somewhat discordant and the most common family type in the TMR population was cohesive, harmonious. However, an unharmonious family type was the second most common TMR family type. Therefore, generalizations about harmony or disharmony associated with either a TMR or a EMR population do not seem appropriate.

A very critical aspect of typifying differences in families of EMR and TMR children is the presence of the biological father. A biological father was present in 82% of the natural (versus foster) homes of TMR children (Meyers, 1982). A biological father was present in only 56% of the homes of EMR children (Meyers, 1982). It has been suggested that stress is high for the single-parent mother (Holroyd, 1974). However, it is not known whether the amount of stress which existed after the father left the home was significantly different from the stress which existed when the father was in the home.

Another difference which was implicit in the aforementioned research was the percentage of Down syndrome within the TMR and EMR populations. Approximately 45% of the TMR children had Down syndrome and none of the EMR children had the condition (Meyers, 1982). The clarity and observability of the condition may be associated with some of the differences noted in the typologies. The larger number of EMR typologies (when compared to TMR typologies) supported the increased variability and, perhaps, ambiguity which may exist in families of EMR children.

Other research has investigated the family psychosocial variables of

the present research using different subjects, instruments, and methods. The ten variables will be presented individually, with selected literature supporting each of the dimensions.

Family Psychosocial Dimensions

Cohesion

Cohesion has been defined as the commitment, help, and support family members provide for one another (Moos, 1981, p. 1). Concerns about the effects of a mentally retarded child on family cohesion have their roots in beginning empirical research (Farber, 1959; 1960). Investigators were interested in how the married couple, the siblings, and the total family were influenced by the presence of a mentally retarded child in the home or in the institution.

Family cohesiveness has been shown to be a very important factor in the integration of a mentally retarded child into the family (Farber, 1959; 1960; Friedrich & Friedrich, 1981; Holroyd et al., 1975; Mink et al., 1983; Nihira et al., 1980; Nihira et al., 1981; Nihira et al., 1983; O'Connor & Stachowiack, 1971). Generally, it has been reported that families having a mentally retarded child report a high level of cohesiveness and integration (Robinson & Robinson, 1976). High cohesiveness in many families has been demonstrated through multi-measure self-report (Mink et al., 1983; Nihira et al., 1981) and observational (O'Connor & Stachowiack, 1971) methods. However, the amount of cohesivensss varies in research utilizing either self-report and observational methods.

Holroyd et al. (1975) found that when high stress families were compared with low stress families, mothers of high stress families reported

family integration to be significantly lower than low stress families. When relationships between stress and family dynamics were investigated through observational methods, healthy families under stress exhibited "auxiliary" control mechanisms in order to maintain family integration (O'Connor & Stachowiack, 1971). The control mechanisms had the effects of stabilizing conflict and increasing cohesiveness. An explanation of the above differences may be that Holroyd utilized a sample of mothers returning to the hospital for outpatient treatment of their child; whereas, O'Connor and Stachowiack observed children from a general school population. However, the ability of family members to "come together" to cope with the increased burdens of the child may be an important differentiating factor in healthy versus dysfunctional families. Scoresby and Christensen (1976) suggested that non-clinic families reported significantly higher cohesion and less conflict when compared with clinic families.

Cohesiveness has also been associated with family harmony in both TMR (Mink et al., 1983) and EMR (Nihira et al.,1980) children. Perhaps, high cohesion in families of mentally retarded children is not an indication of dysfunction (Minuchin & Fishman, 1981; Olson, Sprenkle, & Russell, 1979). overprotection/dependency (Holroyd, 1975), or problems of the mother (Cummings, Bayley, & Rie, 1966) or father (Cummings, 1976), but a dynamic adjustment necessary for coping (Beal, 1979). The continual demands of the child may be too burdensome for one parent; therefore, the spouse and, in some cases, the children need to share in the caretaking aspect of family responsibilities. The importance of family cohesion in the psychological adjustment, adaptive competence, and social adjustment of the mentally retarded child as well as family adjustment has already been noted (See section entitled Families of Mentally Retarded Children).

Expressiveness

Expressiveness has been defined as the extent to which family members are encouraged to act openly and to express the feelings directly (Moos, 1981, p. 1). Berger (1975), and Tyler and Kogan (1977) reported that families having young mentally retarded children showed little expressiveness. The families avoided conflict and high affect situations (Berger, 1975). However, results on families of very young children are in contradiction to the results of families with older children and adolescents.

The amount of expressiveness exhibited by families of mentally retarded children, aged 11½ years, was between the high expressiveness of a family with a "high adjusted" child and the restricted expressiveness of a family with a "low adjusted" child prior to clinic contact (O'Connor & Stachowiak, 1971). When mothers of retarded children were asked about expressiveness, they considered their own expressiveness as important to the child (Birenbaum, 1971). The large number of instrumental tasks required of family members may indeed restrict expressiveness at specific ages which require increased parental care-taking. However, mothers seemed to know that expressiveness was an important aspect of the child's life. Research in late childhood to early adolescence has supported the mother's contentions.

Nihira et al. (1983) found a negative relationship between expressiveness and personal maladaptation. In addition, measures of a child's feeling of high self-esteem in school were related to higher amounts of expressiveness within the family (Nihira et al, 1981). Expressiveness within the family was also an important component in the family's adjustment to an EMR child (Nihira et al., 1980). The ability of the family members to express themselves is also important for healthy family functioning

(Scoresby & Christensen, 1976). For more thorough illustrations of how expressiveness interacts with other family psychosocial variables, the child's development, and family adjustment see the Families of Mentally Retarded Children section of this review.

Conflict

Conflict has been defined as the amount of openly expressed anger and aggression among family members (Moos, 1981, p. 1). Many researchers consider conflict to be opposite of cohesion within the family (Mink et al., 1983; Nihira et al., 1983). Therefore, this section of the review should be considered in conjunction with the cohesion section.

Berger (1975) and O'Connor and Stachowiak (1971) found families with a mentally retarded child tended to avoid and stabilize conflict. The lack of conflict and the presence of a father figure within the home were the two most important aspects of family harmony with EMR children (Nihira et al., 1980). As mentioned in the Families of Mentally Retarded Children section of this paper, the lack of conflict was important in both the child's development and the family's adjustment.

High conflict may lead to a high desertion rate of fathers (Reed & Reed, 1965), a high suicide rate of parents (Love, 1973), and, perhaps, signs of emotional disturbances within siblings (Grossman, 1972). The disruption related to conflict as perceived by the family members may influence a decision to institutionalize a mentally retarded child; particularly a male child (Wolf & Whitehead, 1975). High conflict within the family, coupled with the instrumental demands of parenting a mentally retarded child, may create adverse circumstances for all family members.

Independence

Independence has been defined as the extent to which family members are assertive, are self-sufficient, and make their own decisions (Moos, 1981, p. 1). Holroyd (1974) reported that mothers, with increased stress resulting from the care of a chronically ill child, reported less freedom and more overprotection/dependency. A major responsibility in parenting a handicapped child is the increased time required to raise the child (Dunlap & Hollinsworth, 1977; Friedrich & Friedrich, 1981). However, there is no known evidence to suggest that a family member's assertiveness, self-sufficiency, or decision-making would be significantly affected because of a mentally retarded child being within the family.

Achievement Orientation

Achievement orientation has been defined as the extent to which activities (such as school and work) are cast into an achievement-oriented or competitive framework (Moos, 1981, p. 1). Achievement orientation within the family has been found to have a positive relationship with personal self-sufficiency and a negative relationship with social maladaptation of TMR adolescents (Nihira et al., 1983). Achievement-oriented families were also the second most common "type" of families having an EMR child (Meyers, 1982). However, it is difficult for women to work toward a "career".

Watson and Midlarsky (1979) found working mothers of mentally retarded children were twice as likely as mothers with nonretarded children to work part-time rather than full-time (p. 310). In the case of a single-parent mother, who essentially has to work to maintain some measure of self-sufficiency, the woman would probably be more survival oriented rather than achievement oriented. The large number of single-parent mothers

of EMR children (Meyers, 1982) and the part-time nature of many mothers' work may tend to reduce achievement orientation out of necessity. Moreover, if a woman was achievement oriented, it may be difficult to pursue career goals because of inhibiting practical circumstances.

Intellectual-Cultural Orientation

Intellectual-cultural orientation has been defined as the degree of interest in political, social, intellectual, and cultural activities (Moos, 1981, p. 1). Little has been written about this psychosocial dimension within the family. Most of the data available has investigated participation in activities; these data will be presented in the active-recreational orientation section of this review. Other published research has investigated social support networks (Suelzle & Keenan, 1981), intra- and extra-familial interaction patterns (Barsch, 1976; Holt, 1958; McAllister, Butler, & Lei, 1973; Tizard & Grad, 1961), and use of community services (Saenger, 1960; Schonell & Roke, 1960). Some parents of mentally retarded children have strong interests in specific political and social activities (as indicated by the composition of numerous social service agency boards). Such parents are small in number compared to the overall population of families of mentally retarded children. Perhaps, it has been assumed that other factors within the family have a greater impact on the mentally retarded child than the intellectual-cultural orientation as defined by Moos (1981). However, the dimension was found to be significant in the overall home environment which was associated with positive school adjustment (Nihira et al., 1981).

Active-Recreational Orientation

Active-recreational orientation has been defined as the extent of participation in social and recreational activities (Moos, 1981, p. 1).

Families of young and adolescent children who are mentally retarded were regularly engaged in social and recreational activities in the community (Barsch, 1976; McAllister et al., 1973; Saur, 1980). In addition, parents of younger children utilized more community services and social support networks than parents of older children (Suelzle & Keenan, 1981). In 1968, however, Farber concluded that families with severely mentally retarded children tend to disengage themselves from outside activities.

There may be a cohort effect operating within families having a mentally retarded child. Younger parents (within the last nine years) have had a variety of educational, recreational, residential, and therapeutic services offered them. There are some older parents who have not, to date, availed themselves or their adult offspring to any services. However, it was interesting to note that mothers who were actually more restricted appear to suffer no more stress than mothers who were able to get out easily (Bradshaw & Lawton, 1978, p. 186). Perhaps, the knowledge that social support was available moderated the potential stress which could have resulted from the demands of a mentally retarded child (Cobb, 1976).

Moral-Religious Emphasis

Moral-religious emphasis has been defined as the degree of emphasis on ethical and religious issues and values (Moos, 1981, p. 1). Zuk, Miller, Bartram, and Kling (1961) contrasted maternal acceptance of their retarded child in a sample of Catholic, Protestant and Jewish mothers. It was found that: (a) Catholic mothers were more acceptant of their retarded child than Protestants or Jews, and (b) mothers more involved in religious practices were slightly more acceptant of their retarded child. Farber (1964) felt that person having a Catholic theological background, with emphasis on the sufferings of martyrs and saints, would be more amenable

to coping with a mentally retarded child. Darling (1979) reported that Catholicism tended to provide more social support than other religions and an implicit or explicit connection with others may be important aspect of coping with a handicapped child. However, regardless of the specific religion, generally families with handicapped children are significantly higher in religiosity than families with nonhandicapped children (Friedrich & Friedrich, 1981; Saur, 1980).

Moral-religious emphasis has also been associated with various child development and family adjustment variables. Nihira et al. (1983) found the following in families having a TMR adolescent: (a) a significant positive relationship between personal self-sufficiency and moral-religious emphasis, and (b) a significant inverse relationship between social adjustment and moral-religious emphasis. It seemed that moral-religious emphasis helped the child personally but social adjustment, as judged by others, was adversely affected. Family adjustment to the child, however, was facilitated by the family's emphasizing ethical and religious values (Nihira et al., 1980). A further explanation of the relationships among moral-religious emphasis and other psychosocial dimensions with child development and family adjustment may be found in the Families of the Mentally Retarded Child section of this review.

Organization

Organization has been defined as the degree of importance of clear organization and structure in planning family activities and responsibilities (M os, 1981, p. 2). Families of handicapped children were significantly higher in organization when compared to families of nonhandicapped children (Saur, 1980). Organization was also very important in maintaining a

harmonious, cohesive family which provided appropriate intellectual guidance and educational expectations for EMR children, and family adjustment (Nihira et al., 1980). High levels of organization were not surprising as professionals frequently encourage parents to set up clear rules and structure with children who are mentally retarded. For a further explanation of organization within the family, see the Families of Mentally Retarded Children section of this review.

A review of one well-conducted research project on the control dimension as well as brief mention of the relationships between control and child development variables will conclude the next section. The overview of the ten family psychosocial variables will be completed after the discussion on control.

Control

Control has been defined as the extent to which set rules and procedures are used to run family life (Moos, 1981, p. 2). It appeared that "set rules and procedures" was one critical distinction between the control dimension and the organization dimension. Control implied more rigidity in accomplishing family goals.

O'Connor and Stachowiak (1971) studied the family interactions of the following three groups: (a) families with a low adjusted child prior to formal clinic contact, (b) families with a high adjusted child, and (c) families with a child who was mentally retarded. The MR group consisted of 8 families which had a 10- to 12-year-old oldest male in an EMR class and a younger male sibling of school age. All families were roughly equivalent in terms of geographic area, religion, parental occupation, education, socioeconomic status, and size of family. Family members were

asked to reach a consensus concerning statements to which they had previously indicated an opinion.

O'Connor and Stachowiak (1971) described the family having a mentally retarded child as "a relatively healthy family unit with unique stresses". These families utilized "auxiliary control mechanisms" or order to maintain family integrations. These control mechanisms were used "to adapt more readily on a formal level, to stabilize conflict, to increase overt power of the parents, to increase covert power of the oldest child to increase emotional messages received by the older child, and to increase mother's covert power" (p. 240). Many of the aforementioned behaviors were also utilized by families with a low adjustment child. However, the frequency with which a family utilized the auxiliary control mechanisms was important for the child.

A control-oriented family atmosphere tended to have a negative influence on the child's adjustment (Nihira et al., 1983, p. 145). High social maladaptation and misbehavior in school were associated with high control in families (Nihira et al., 1981). In addition, the mentally retarded child within control-oriented, somewhat unharmonious family had significantly low scores on adaptive behavior, general social adjustment, community self-sufficiency and self-esteem (Mink et al., 1983). Emphasis on organization within the family seemed to provide for a growth-producing environment for the child and the family members whereas emphasis on control did not.

Stress and Coping

Stress and coping can be discussed in a number of ways. Stress or coping can exist at a biological, psychological, familial, micro-sociological,

and macro-sociological level. The present review will address the topic with a familial focus. There will be an attempt to limit the discussion to stress and coping as it relates to and is experienced by families of mentally retarded children. Therefore, a discussion of the research concerning changes in life events (Holmes & Rahe, 1967) will not be presented because of the focus of the present research. The reader is referred to Dohrenwend & Dohrenwend (1974), and Sarason & Spielberger (1980) for a discussion of changes in life events, stress, and anxiety.

Stress

The characterisitics which may influence stress experienced by family members included such factors as the nature of the handicap. the parents, family structure, and social factors (Gallagher, Beckman, & Cross, 1983). Information concerning stress within various handicapping conditions was presented in the "Stress Research Using The QRS" section of this review. A review of literature related to family structure was presented previously in "Families of Mentally Retarded Children". The review which follows will address stress as it relates to child characteristics and the parental/marital system. Social factors will be discussed in the "Coping-Adjustment Through Adaptation" section; this section will conclude the literature review.

Child Characteristics as a Potential Stressor. Beckman (1983) found that the handicapped infant's responsivness, temperament, repetitive behavior patterns, and the presence of additional or unusual caregiving demands were significantly related to the amount of parent and family problems reported by mothers. In a similar study, 66% of the variance in parent and family problems could be accounted for by the number of additional or unusual caregiving demands alone (Beckman-Bell, 1981). However, these same child characteristics were not significantly related to stress as measured by recent life changes.

The prolonged burden of care presented by a handicapped infant seemed to be impacting on the mothers in a very stressful manner. Even though others of young handicapped infants generally reported a sense of personal involvement with others (Saur, 1980) and readily utilized existing community service resources (Suelzle & Keenan, 1981), the mothers felt the burden of care to be on themselves at a very young age.

Parents of older mentally retarded children reported more family stress than parents of younger mentally retarded children (Beckman-Bell, 1981; Farber, 1959). In addition, parents of older children reported feeling less supported, more isolated, and more in need of expanded services (Suelzle & Keenan, 1981). However, within a multiple regression model tracing the causes of stress (N = 303), age of the child did not have a significant linear effect on stress reported by mothers of severely disabled children (Bradshaw & Lawton, 1978). It is possible that reported stress found in descriptive research may be a function of non-normative parenting (Birenbaum, 1971), increased social stigma (Wikler, 1981), and other factors which may come from influences outside the family rather than solely the specific care of the child. Rejection from strangers has been frequently reported by parents as the disabled child's level of functioning was notably different from the child's peers (Fotheringham, Skelton, & Hiddinott, 1971). The "difference" in MR children becomes more obvious with age. It seemed that precise relationship between the chronological age of the handicapped child and reported stress has not been firmly established and requires further investigation.

Sex of the mentally retarded child has also been associated with increased family stress, i.e. boys tended to be more stressful than girls (Farber, 1959). Specifically, fathers appeared more accepting of a mentally

retarded daughter than a mentally retarded son (Grossman, 1972). Fathers' reactions seemed to be based at least partially on traditional sex role assignments. The domestic, dependent role semmed to be acceptable for the daughter. However, sons would have difficulty fulfilling achievement roles which would require rather swift progress in school and work (Price-Bonham & Addison, 1978). It is interesting, however, that fathers of EMR children in "special classes" had poorer evaluations of their child's ability and lower occupational expectations than fathers of EMR children in a regular classroom (Meyerowitz, 1967).

Mothers of moderately retarded boys tended to have lower parental adjustment when compared with mothers of moderately retarded girls. Mothers of young girls had the highest scores on parental adaptability, adjustment, and coping when compared with both mothers and fathers of boys of any age. (Burke, 1973)

Child characteristics alone do not solely influence the stress and potential adjustment experienced by the family. "Personality and situational factors of practically infinite number . . . some of the more evident ones include personality type, past coping experience and success, socioeconomic status, marital relationship, number of siblings and place of child among them, age of child when problem is discovered, type and clarity of diagnosis, the way in which parents were informed, availability of counseling, and degree and number of other stress at the time" (Sieffert, 1978, p. 38) can influence both reported stress and family adjustment. All of these factors can not be reviewed in this discussion. However, the primary importance of the parental/marital system within the family (Chinn et al., 1978; Minuchin & Fishman, 1981; Nihira et al., 1980; 1983) warrants discussion.

Parental/Marital Stress. It was no surprise that parents' behavior was modified in some ways by the existence of a disability in their child (Murray & Cornell, 1981). Concern about how the presence of a mentally retarded child affected the parents' marriage has beginning roots in early family mental retardation research (Farber, 1959). Generally, it was concluded that the mentally retarded child created a strain in the marriage (Farber, 1959; 1960; Farber, Jenne, & Toigo, 1960). Wilcox and Smith (1973) observed that a high frequency of mentally retarded children came from "broken homes." Reed and Reed (1965) reported the desertion rate for fathers was high. Farber (1960) found that mothers withdraw from the husband/father and become more involved with the child. However, when a large sample matched for social class compared families with a non-retarded child and families with a retarded child, no differences in divorce rates were found (Davis & McKay, 1973). Barsch (1976) also indicated poorly integrated marriages were a minority in his study.

"The data were inconsistent as to the specific effect of an MR child on the parents' marriage" (Price-Bonham & Addison, 1978, p. 224). Many parents were able to adjust to their mentally retarded child and other parents seemed to have difficulties. A critical factor in any adjustment is the parents' willingness and ability to adapt to their new circumstances.

Coping-Adjustment Through Adaptation

Research concerning mediators of stress which facilitate coping has increased dramatically in recent years (Cobb, 1976; Kobasa, 1979; Pearlin, Lieberman, Menaghan, & Mullan, 1981). Because of the multi-dimensional nature of stress, it was important to limit discussion to a specific type of stressor.

Empirical research concerned with family adjustment to a mentally retarded child and associated family environment dimensions has just recently been undertaken (Nihira et al., 1980; 1983 - see Families of Mentally Retarded Children section of this review for the reports). There have also been some preliminary discussions on specific empirically supported parental coping patterns and associated characteristics of the family environment for both mothers and fathers of chronically ill children (Patterson & McCubbin, 1983).

The review which follows will address the specific coping patterns of mothers and fathers, and associated family environment characteristics. [The discussion is based on reports in a chapter entitled Chronic Illness: Family Stress and Coping by Patterson and McCubbin (1983). The reader is encouraged to refer to the chapter for further information]. There will also be mention of the importance of social support networks which include community services, and their effects on the family. The review will be concluded by a discussion of the theoretical importance of denial as a healthy coping mechanism.

Parental Coping and the Family Environment. Three parental coping patterns have been identified utilizing the Coping Health Inventory for Parents (CHIP) (McCubbin, McCubbin, Nevin, & Cauble, 1979). Although all three of the coping patterns have been associated with specific interpersonal and/or system maintenance elements within the family environment, one of the patterns seemed particularly focused on intra-familial interpersonal relationships, i.e. maintaining family integration, cooperation, and an optimistic definition of the situation (See Table I, Coping Pattern I). Parents who used this coping pattern emphasized: (a) doing things together as a family unit; (b) strengthening family relationships; and (c) developing

Table I

Parental Coping Patterns and Characteristics of Family Environment

	Characteristics of Family Environment	
	Interpersonal Relationship Dimensions	System Maintenance Dimensions
Parental Coping Patterns		
Mother's Coping I: Integration, Cooperation & Optimism	+[a] Cohesiveness	
Mother's Coping II: Support, Esteem & Stability	+ Expressiveness	
Mother's Coping III: Medical Communication and Consultation	+ Cohesiveness	
Father's Coping I: Integration, Cooperation & Optimism	+ Cohesiveness	
Father's Coping II: Support, Esteem & Stability	+ Lack of conflict	+ Organization
Father's Coping III: Medical Communication & Consultation		+ Control

[a] + = positive association with

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and maintaining a positive outlook on life in general and specifically when a member has a chronic illness (Patterson & McCubbin, 1983, p.32).

Coping Pattern I has been positively associated with cohesiveness within the family as reported by both mothers and fathers; and, may account for reports of a higher level of family integration and family cohesion in families of disabled children (Robinson & Robinson, 1976). It appeared that these families actively coped with the increased demands of a chronically ill child by cooperating with each other in order to maintain family activities and goals.

The other two parental coping patterns identified by Patterson and McCubbin showed differences between mothers and fathers. Mothers emphasized interpersonal relationship dimensions within the family. Fathers emphasized more system maintenance dimensions within the family. Parents who use . . . [maintaining social support, self-esteem, and psychological stability]. . . try to: (a) maintain a sense of their own personal well-being through social relationships; (b) be involved in activities which have the potential of enhancing self esteem; and (c) manage psychological tensions and strains (Patterson & McCubbin, 1983, p. 32) (See Table I, Coping Pattern II). "Parents who use . . . [understanding the medical situation through communication with other parents and consultation with the medical staff] . . . develop relationships both with other parents who have a child with a similar illness and with the medical staff. They try to understand and master the medical information to care for their chronically ill child and use the medical equipment in the home" (Patterson & McCubbin, 1983, p.32-33) (See Table I, Coping Pattern III).

Coping Pattern II emphasized expressiveness among mothers and lack of

conflict as well as organization among fathers; parents utilizing the pattern maintained social support networks of a personal nature in coping with the increased demands of a chronically ill child. Coping Pattern III emphasized cohesiveness among mothers and control among fathers; parents utilizing this pattern emphasized both personal and professional social support networks. It appeared that when families utilized extra-familial social support networks, fathers tended to emphasize system maintenance functions in order for social networks to occur.

Research on adult-populations confirms the importance of social support in relationship to personal psychological adjustment (Holahan & Moos, 1981; Lin, Ensel, Simeone, & Kuo, 1979). The supportive nature of social services in reducing family demands has also been suggested in the literature concerned with handicapped persons (Joyce, Singer, & Isralowitz, 1983; Liberman, Barnes, Ho, Cuellar, & Little, 1979; Schonell & Rorke, 1960). It is unfortunate, however, that older parents do not take advantage of services as much as younger parents (Suelzle & Keenan, 1981).

In all the parental coping patterns noted above there was a sense of an active "mastery" of the circumstances presented by the chronically ill child. Parents actively maintained or sought situations which would enhance their knowledge or feelings about their circumstances. Lazarus (1981) has suggested that coping with a chronically ill child required some sort of healthy denial of the facts or implications of the illness. The coping patterns identified thus far in the research suggested that hope and active employment of strategies in order to master, or at least improve, circumstances were important. A brief presentation of Lazarus' ideas on the importance of denial-like processess in coping will be presented because of its potential theoretical importance.

Denial--A Process of Adaptation. Lazarus (1981) proposed that denial-like coping processes can have either positive or negative consequences depending upon present circumstances. "If direct action to change the damaging or threatening person-environment transaction is adaptationally essential or useful, the family processes called denial . . . will be destructive. On the other hand, when direct action is irrelevant to the adaptational outcome, denial-like processes are not necessarily damaging and may even by of value by reducing distress and allowing the person to get on with other matters . . . They represent two of the most important functions of coping: (1) that of changing a damaging or threatening relationship between person and environment (problem-focused) and (2) that of regulating emotional distress produced by that relationship (emotion-focused). . . Furthermore, logically it would be far more dangerous to deny what is clear and unambiguous than to deny what cannot be known for certain . . . If one denies what cannot be known for certain . . . If one denies what is ambiguous, the denial is more easily sustained and is apt to be less pernicious adaptationally" (Lazarus, 1981, p. 62-64).

The theoretical relevance of denial-like processes may be important in considering families of mentally retarded children. Direct action as advised by various programs and services is important for maximum development of the retarded child. However, the family of a mentally retarded child is neither problem-focused nor emotion-focused but a combination of both. The clarity versus ambiguity of the situation may be different for various levels of functioning.

Down syndrome children are, and probably will be, for life, retarded. It is very clear to parents early in the child's life what condition the

child has. Initial denial of the child's condition is a normal part of the coping process (Emde & Brown, 1978; Wentworth, 1974). The unambiguous nature of the condition may eventually tend to lead parents of Downs syndrome children to more problem-focused coping, although some measure of emotion-focused coping would be necessary. Mink et al. (1983) found the cohesive, harmonious family type had a significantly higher number of Down syndrome children within the classification category when compared with the control-oriented, somewhat unharmonious family type. Increased harmony within the family may lead toward greater problem-focus processes; disharmony may lead toward greater emotion-focused processes.

Children who are EMR may or may not be considered retarded at different points within their life. The child's maximum potential typically can not be exactly determined or definitively communicated to parents. The ambiguity of the situation is further complicated by the child's frequently having a common appearance, yet the child can not keep pace with agemates. The ambiguity of the condition may lead parents of EMR children to more emotion-focused coping, although some measure of problem-focused coping would be necessary.

The above considerations of potential denial-like processes used by families of children with various conditions of mental retardation may help explain some of the differences in family adjustment with EMR and TMR children noted by Nihira et al. (1980). Furthermore, the lack of a biological father in 44% of families of EMR children and only 28% of families of TMR children (Meyers, 1982) may be associated with ambiguity present in parenting the EMR child.

On the one hand, the parent should guide, nurture, and protect the EMR child; on the other hand, the parent does not want to limit the child or be

overprotective. Whatever circumstances parents of mentally retarded children are confronted with--whether clear and straight-forward or muddled and ambiguous--hope and optimism comprise the elements of successful coping (Kubler-Ross, 1969). Positive views of the future may seem like denial to the observer. However, it would be difficult to predict the effects of hope and optimism of family members on the mentally retarded child. The very strong influence of environmental variables, particularly family climate influences, were shown to be quite significant in the present review.

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APPENDIX B

Supplementary Procedure Information

A. Instructions to Teachers (p. 86-88).

B. Letter and Consent Form Sent to Eligible Families (p. 89-90).

C. Reminder Postcard Sent by Investigator (p. 91).

Dear Colleagues:

The attached outline will hopefully help you in understanding what we would like you to do. We have provided you with very specific details of the sample criteria and the procedures to follow. The procedures may appear elaborate at first, but you will find they are not difficult to follow. Essentially, we are asking you to:

(1) locate the subject pool in your classroom;
(2) encourage potential subjects to be respondents;
(3) provide John with the name, address and telephone number of the respondents who agree to participate in the study.

The success and completion of this research is dependent upon your cooperation. This research is John's dissertation and the final step in his Ph.D. program in Marriage and Family Therapy. This project may also provide the basis for obtaining grant money to study this area further.

Your assistance is very important! John will be having a meeting with you next school year to discuss the results. If you have any questions or concerns, call John in Roanoke at or Joe in Blacksburg at . Thank you very much.

Sincerely yours,

John M. Dougherty, M.A.
Family Counselor

Joseph W. Maxwell, Ph.D.
Professor, Family Studies

JMD/pkz

MENTAL HEALTH SERVICES OF THE ROANOKE VALLEY
Counseling and Life Skills Center - 2724 Liberty Rd., NW, Roanoke, Virginia 24012 - Phone (703) 563-4476

Outline of Sample Characteristics and Procedures

I. Criteria for inclusion in the sample:
   A. Child having an IQ between 55-70.
   B. Child is 6-21 years of age.
   C. Parents are married (does not have to be the biological parents).
   D. Family is not on welfare.

II. Procedures to Follow:
   A. Initial Procedures:
      1. Address one stamped envelope to the mother of the families meeting the above criteria.
      2. Type (preferred) or write the name of the mother on the letter describing the study (buff colored MHS paper).
      3. Send: (a) the letter describing the study (buff colored MHS paper), (b) the letter to be signed indicating participation in the study (white MHS paper), and (c) the stamped, self-addressed envelope (addressed to you) to the mothers.
   B. Follow-up Procedures for the Next Three Weeks:
      1. If you do not receive the letter back in:
         a. One week--call (or send a postcard to) the mother encouraging her to sign and return the consent letter.
         b. Second week--call (or send a postcard to) the mother again, encouraging her to sign and return the consent letter.
      2. Friday of the first, second, and third week after you send out the letter, call and tell the secretary (Ms.) the following information:
         a. Total number of letters sent (tell only after the first week).
         b. Name, address, and telephone number of mothers who signed the letters indicating a willingness to participate. (I will call you on Monday or Tuesday of the week following the Friday if you happen to forget to call.)
   C. Final Procedure
      1. Place the label (provided) of your Director of Special Education Supervisor on the envelope of your packet.
      2. Send by in-house mail ("the pony") the following information to provide for a central pick-up: (a) the signed consent forms, (b) any unused letters, stamped envelopes, postcards, etc.

III. Call John at if you have any questions or concerns during or after the above procedures.

Note: I will be conducting a workshop sometime in the next school year to discuss my results with you. Look for a notice on the workshop in the fall. Please plan to attend. Thanks!

Suggested Instructions for Reminder Postcard
Sent by Teachers

(Date)

Dear (Mother's Name),

You were sent a letter (1 or 2) week(s) ago concerning a study of families having a "special" child. Your participation in this project is very important. Please mail me the letter indicating your willingness to be in the research as soon as possible. Thank you very much!

(Your Signature)

Dear

You are one of a small group of families from whom we hope to learn more about how stress affects your family. You were chosen from the school rolls because you are married and have a six to twenty-one year old child in a special education class living with you.

If you agree to be in the research, John will telephone you and answer any questions or concerns you may have. You will then be mailed a questionnaire to be completed and returned to John in a self-addressed, stamped envelope. It should take you no more than forty-five minutes to answer the questions asked concerning you, your child, and your family.

Your participation in the research is very important. You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we can check your name off the mailing list when your questionnaire is returned. Your name will never be used on the questionnaire.

The overall results of this research, not specifics by individual family, will be made available to parents, teachers, and counselors. You may also receive a summary of the results.

If you decide to withdraw from the research at any time, you may freely do so. However, we would ask that you notify us of your decision.

Please return the enclosed letter to your child's teacher within this week indicating your willingness to participate in the research. John will be calling you shortly after receiving notice of your participation. Thank you in advance for your interest and cooperation. Feel free to call either of us if you have any questions.

Sincerely yours,

John M. Dougherty, M.A.
Family Counselor ( )

Joseph W. Maxwell, Ph.D.
Professor, Family Studies ( )
Virginia Polytechnic Institute
and State University

JMD/pkz

MENTAL HEALTH SERVICES OF THE ROANOKE VALLEY
Counseling and Life Skills Center - 2724 Liberty Rd., NW, Roanoke, Virginia 24012 - Phone (703) 563-4476

MHSrv

Chairman

Vice Chairman

Secretary

Treasurer

Executive Director

Director

Coordinator

Dear Mr. Dougherty:

I agree to participate in the research on stress and the family. I understand that you will be calling me shortly to answer any questions or concerns I may have. Then, you will send me the questionnaire you mentioned in your letter.

_____

Signature

NOTE: Please return this form in the self-addressed, stamped envelope to your child's teacher within one week. Your prompt response will be gratefully appreciated.

MENTAL HEALTH SERVICES OF THE ROANOKE VALLEY
Counseling and Life Skills Center - 2724 Liberty Rd., NW, Roanoke, Virginia 24012 - Phone (703) 563-4476

Reminder Postcard Sent by The Investigator

(Date)

Dear (Mother's Name),

Last week I mailed you "The Family Questionnaire." You are one of a small group of mothers from The Roanoke City and Roanoke County Schools chosen for this study. Your responses are vital in helping us gain a better understanding of families having a special education child.

Please return your completed questionnaire as soon as possible. Thank you so much for your help.

Sincerely,

(John M. Dougherty, M.A.)
Family Counselor

Appendix C

Supplementary Tables

Table 1

Demographic and Background Characteristics

Characteristic	Percentage	N
Age		
5 1/2 - 9 11/12	27.9	12
10 - 14 11/12	39.5	17
15 - 19 11/12	30.3	13
20 and over	2.3	1
Sex		
Male	60.5	26
Female	39.5	17
Child's Relationship To Mother		
Biological Mother	95.3	41
Stepmother	2.3	1
Adoptive Mother	2.3	1
Race		
White	86.0	37
Black	11.6	5
Other	2.3	1
Family Size		
3	18.6	8
4	32.6	14
5	30.2	13
6	18.6	8
Hollingshead Index		
Class I	4.6	2
Class II	16.3	7
Class III	16.3	7
Class IV	23.3	10
Class V	39.6	17

Table 2

ORS: Item-Total Scale Correlations

Item No.	Factor[a]	Scoring Direction	42 Item Scale	66 Item Scale	Item No.	Factor[a]	Scoring Direction	42 Item Scale	66 Item Scale
1	DP	T	.48	.40	29	CI	F	.15	S[c]
2	PB	F	.35	.31	30	CI	F	N[b]	S[c]
3	FD	F	.35	.33	31	PB	T	.19	.27
4	PI	T	-	.45	32	LR	F	.36	.42
5	CI	T	.40	.43	33	DP	T	.63	.58
6	LR	F	N[b]	S[c]	34	FS	T	-	S[c]
7	LF	T	.37	.38	35	PI	F	-	.18
8	DP	T	.46	.46	36	FD	F	.37	.40
9	TI	F	-	.17	37	LC	T	.15	S[c]
10	FD	F	.24	.26	38	FS	F	-	S[c]
11	LF	T	.21	.14	39	LR	F	.55	.59
12	LC	T	.51	.42	40	LF	T	N[b]	S[c]
13	CI	F	.45	.40	41	TI	T	-	.19
14	LC	T	.47	.38	42	LC	T	.47	.39
15	LF	T	.61	.58	43	LC	T	.71	.63
16	PI	F	-	S[c]	44	CI	F	.12	S[c]
17	PI	T	-	.26	45	FD	T	.65	.73
18	PL	F	-	.28	46	FS	F	-	.42
19	TI	T	-	.35	47	FS	F	-	S[c]
20	FS	F	-	.35	48	PI	F	-	S[c]
21	LC	T	.39	.32	49	PI	F	-	S[c]
22	PL	T	-	S[c]	50	CI	F	.36	.42
23	DP	F	.56	.57	51	DP	F	.66	.73
24	PB	T	.17	.11	52	TI	F	-	.61
25	PL	T	-	S[c]	53	PL	T	-	S[c]
26	LF	T	.59	.69	54	LR	F	.37	.46
27	TI	T	-	.45	55	TI	T	-	S[c]
28	LR	F	.42	.43	56	LF	T	.49	.46

Table 2

(Cont.)

QRS: Item-Total Scale Correlations

Item No.	Factor[a]	Scoring Direction	42 Item Scale	66 Item Scale	Item No.	Factor[a]	Scoring Direction	42 Item Scale	66 Item Scale
57	FD	F	.54	.58	62	DP	T	.54	.54
58	LR	F	N[b]	S[c]	63	PB	F	.70	.67
59	FS	T	-	.47	64	PB	F	.66	.64
60	FD	F	.45	.53	65	PL	F	-	S[c]
61	PB	T	.46	.36	66	PL	T	-	S[c]

[a]DP-Dependency and Management; CI-Cognitive Impairment; LF-Limits on Family Opportunities; LC-Life Span Care; FD-Family Disharmony; LR-Lack of Personal Reward; TI-Terminal Illness Stress; PL-Physical Limitations; FS-Financial Stress; PI-Preference for Institutional Care; PB-Personal Burden for Respondent

[b]N-Correlations $\leq$.10 on 42 item scale (6 factor scale)

[c]S-Correlations $\leq$.10 on 66 item scale

Table 3

QRS: Factor-Total Scale Correlations[a]

Factor Scale[b]	66 Item	42 Item
1. Dependency and Management	.80	.82
2. Cognitive Impairment	.43	.48
3. Limits on Family Opportunity	.67	.69
4. Life Span Care	.58	.71
5. Family Disharmony	.72	.66
6. Lack of Personal Reward	.61	.51
7. Terminal Illness Stress	.49	-
8. Physical Limitations	.11	-
9. Financial Stress	.38	-
10. Preference for Institutional Care	.05	-
11. Personal Burden for Respondent	.72	.78

[a] N=43

[b] Contains 6 items in all analysis

Table 4

Stepwise Regression Results[a]

Dependent Variable	Independent Variables	B	Beta	Standard Error B	df	Test of Significance	p	R^2
Cohesion	Life Span Care	2.090	.267	.786		T= 2.660	<.025	
	Family Disharmony	-7.539	-.598	1.309	3,39	T=-5.758	<.001	
	Dependency and Management	-3.265	-.411	.921		T=-3.546	<.01	
	Three Variable Model					F=29.658	<.001	.695
Expressiveness	Age	-.675	-.252	.368		T=-1.833	<.10	
	Dependency and Management	-2.915	-.470	.851	2,40	T=-3.427	<.025	
	Two Variable Model					F= 6.905	<.01	.257
Conflict	Age	-.654	-.247	.338		T=-1.934	<.10	
	Family Disharmony	3.444	.355	1.438	3,39	T= 2.396	<.025	
	Dependency and Management	1.620	.265	.912		T= 1.776	<.10	
	Three Variable Model					F= 7.778	<.001	.374
Independence	Life Span Care	-2.078	-.303	.927		T=-2.242	<.05	
	Family Disharmony	-2.688	-.243	1.513	3,39	T=-1.774	<.10	
	Cognitive Impairment	-3.382	-.287	1.642		T=-2.060	<.05	
	Three Variable Model					F= 6.717	<.001	.341
Achievement Orientation	Lack of Personal Reward	-2.582	-.325	1.175	1,41	T=-2.197	<.05	
	One Variable Model					F= 4.826	<.05	.105

Table 4

(Cont.)

Stepwise Regression Results[a]

Dependent Variable	Independent Variables	B	Beta	Standard Error B	df	Test of Significance	p	R^2
Intellectual-Cultural Orientation	Sex	5.997	.266	3.144		T= 1.908	< .10	
	Age	.632	.237	.371	4,38	T= 1.704	< .10	
	Limits on Family Opportunities	4.188	.417	1.691		T= 2.476	< .025	
	Dependency and Management	-2.848	-.463	1.037		T=-2.746	< .01	
		Four Variable Model				F= 3.606	< .025	.275
Active-Recreational Orientation	Lack of Personal Reward	-3.965	-.446	1.195		T=-3.319	< .01	
	Age	.797	.309	.347	2,40	T= 2.297	< .05	
		Two Variable Model				F= 7.762	< .01	.280
Moral-Religious Emphasis	Lack of Personal Reward	-2.812	-.361	1.119		T=-2.513	< .025	
	Limits on Family Opportunities	2.283	.268	1.300	3,39	T= 1.755	< .10	
	Family Life Changes and Events	-.605	-.372	.263		T=-2.304	< .05	
		Three Variable Model				F= 5.786	< .01	.308
Organization	Sex	5.966	.387	2.011		T= 2.966	< .01	
	Family Disharmony	-2.876	-.430	.872	2,40	T=-3.299	< .01	
		Two Variable Model				F= 9.479	< .001	.322

Table 4

(Cont.)

Stepwise Regression Results[a]

Dependent Variable	Independent Variables	B	Beta	Standard Error B	df	Test of Significance	p	R^2
Control	Family Disharmony	-3.220	-.415	1.336		T=-2.411	< .025	
	Dependency and Management	1.472	.301	.842	2,40	T= 1.749	< .10	
		Two Variable Model				F= 3.08	< .10	.133

[a]N=43

Table 5

T Test of Sample and Standardization Means

	Sample Mean	Standardization Mean	t
FES			
Cohesion	52.44[a]	34.47[ab]	8.18**
Expressiveness	50.19	43.89	3.68**
Conflict	47.23	56.47	-5.47**
Independence	46.91	32.59	7.60**
Achievement Orientation	52.09	44.00	5.49**
Intellectual-Cultural Orientation	46.70	43.47	1.90
Active-Recreational Orientation	47.81	45.42	1.45
Moral-Religious Emphasis	62.28	48.90	9.27**
Organization	54.61	45.00	8.25**
Control	54.70	50.90	2.81*
QRS			
Dependency and Management	2.09	.17[c]	11.77**
Cognitive Impairment	.74	.40	1.84
Limits on Family Opportunities	.65	.25	2.36
Life Span Care	3.88	.58	11.76**
Family Disharmony	.54	.20	1.96
Lack of Personal Reward	.95	.12	4.49**
Personal Burden For Respondent	3.51	.11	14.67**
FILE	8.21	9.21[d]	-1.13
SOCIAL DESIRABILITY SCALE	37.44	34.00[e]	.87

[a]Standard scores from FES conversion table
[b]Normal Family sample (N=1125)
[c]Developmental disability group (N=127)-constitution unknown
[d]National sample; wives mean (N=987)
[e]Edmonds' (1967) data (N=100)
*p < .01
**p < .001

APPENDIX D

The Family Questionnaire

A. The Family Environment Scale (p. 1 - 6).

B. The Questionnaire on Resources and Stress (p. 7 - 10).

C. Adapted Social Desirability Scale (p. 11 - 12).

D. The Family Inventory of Life Events and Changes (p. 13 - 15).

E. Adapted Demographic Questionnaire (p. 16 - 18).

THE FAMILY QUESTIONNAIRE

IF YOUR RETURN ENVELOPE
IS LOST, PLEASE RETURN TO:
John M. Dougherty
Counseling & Life Skills Center

Roanoke, Virginia

MHSrv

April 19, 1983

Dear Participant,

A few days ago John had the opportunity to discuss this study with most of you by phone. You were chosen for this study because you are married and have a 6 to 21 year old child in special education. As more and more children are identified and helped through special education, it is very important to understand how families adjust to living with the demands of a special child.

For those of you who received the letter but for whom John was unable to contact by phone, we have mailed you a copy of our questionnaire. We hope that you will take the time to complete the questionnaire and return it to us. The results of your efforts are important to parents, teachers, counselors, and children educated through special education.

You may receive a copy of the results, which will be reported as a total group. No individual names will ever be used. The number on this questionnaire is simply for our convenience in checking off our mailing list when responses are returned. The number will be removed from the questionnaire as soon as it is received by us.

If you have any questions, please call or write to either of us. We thank you for your cooperation and help.

Sincerely yours,

John M. Dougherty, M.A.
Family Counselor ( )

Joseph W. Maxwell, Ph.D.
Professor, Family Studies ( )
Virginia Polytechnic Institute
and State University

JMD/pkz

MENTAL HEALTH SERVICES OF THE ROANOKE VALLEY
Counseling and Life Skills Center · 2724 Liberty Rd., NW, Roanoke, Virginia 24012 · Phone (703) 563-4476

These are statements about families. You are to decide which of these statements are true of your family and which are false. If you think the statement is *True* or mostly *True* of your family, circle the *True* next to the statement. If you think the statement is *False* or mostly *False* of your family, circle the *False* next to the statement.

You may feel that some of the statements are true for some family members and false for others. Circle *True* if the statement is *true* for most members. Circle *False* if the statement is *false* for most members. If the members are evenly divided, decide what is the stronger overall impression and answer accordingly.

Remember, we would like to know what your family seems like to you. So do not try to figure out how other members see your family, but do give us your general impression of your family for each statement.

Indicate if <u>each</u> statement is True or False by circling your choice.

True	False	1. Family members really help and support one another.
True	False	2. Family members often keep their feelings to themselves.
True	False	3. We fight a lot in our family.
True	False	4. We don't do things on our own very often in our family.
True	False	5. We feel it is important to be the best at whatever you do.
True	False	6. We often talk about political and social problems.
True	False	7. We spend most weekends and evenings at home.
True	False	8. Family members attend church, synagogue, or Sunday School fairly often.
True	False	9. Activities in our family are pretty carefully planned.
True	False	10. Family members are rarely ordered around.
True	False	11. We often seem to be killing time at home.

Indicate if <u>each</u> statement is True or False by circling your choice.

True	False	12. We say anything we want to around home.
True	False	13. Family members rarely become openly angry.
True	False	14. In our family, we are strongly encouraged to be independent.
True	False	15. Getting ahead in life is very important in our family.
True	False	16. We rarely go to lectures, plays or concerts.
True	False	17. Friends often come over for dinner or to visit.
True	False	18. We don't say prayers in our family.
True	False	19. We are generally very neat and orderly.
True	False	20. There are very few rules to follow in our family.
True	False	21. We put a lot of energy into what we do at home.
True	False	22. It's hard to "blow off steam" at home without upsetting somebody.
True	False	23. Family members sometimes get so angry they throw things.
True	False	24. We think things out for ourselves in our family.
True	False	25. How much money a person makes is not very important to us.
True	False	26. Learning about new and different things is very important in our family.
True	False	27. Nobody in our family is active in sports, Little League, bowling, etc.
True	False	28. We often talk about the religious meaning of Christmas, Passover, or other holidays.

Indicate if each statement is True or False by circling your choice.

True	False	29.	It's often hard to find things when you need them in our household.
True	False	30.	There is one family member who makes most of the decisions.
True	False	31.	There is a feeling of togetherness in our family.
True	False	32.	We tell each other about our personal problems.
True	False	33.	Family members hardly ever lose their tempers.
True	False	34.	We come and go as we want to in our family.
True	False	35.	We believe in competition and "may the best man win."
True	False	36.	We are not that interested in cultural activities.
True	False	37.	We often go to movies, sports events, camping, etc.
True	False	38.	We don't believe in heaven or hell.
True	False	39.	Being on time is very important in our family.
True	False	40.	There are set ways of doing things at home.
True	False	41.	We rarely volunteer when something has to be done at home.
True	False	42.	If we feel like doing something on the spur of the moment we often just pick up and go.
True	False	43.	Family members often criticize each other.
True	False	44.	There is very little privacy in our family.

Indicate if each statement is True or False by circling your choice.

True	False	45.	We always strive to do things just a little better the next time.
True	False	46.	We rarely have intellectual discussions.
True	False	47.	Everyone in our family has a hobby or two.
True	False	48.	Family members have strict ideas about what is right and wrong.
True	False	49.	People change their minds often in our family.
True	False	50.	There is a strong emphasis on following rules in our family.
True	False	51.	Family members really back each other up.
True	False	52.	Someone usually gets upset if you complain in our family.
True	False	53.	Family members sometimes hit each other.
True	False	54.	Family members almost always rely on themselves when a problem comes up.
True	False	55.	Family members rarely worry about job promotions, school grades, etc.
True	False	56.	Someone in our family plays a musical instrument.
True	False	57.	Family members are not very involved in recreational activities outside work or school.
True	False	58.	We believe there are some things you just have to take on faith.
True	False	59.	Family members make sure their rooms are neat.
True	False	60.	Everyone has an equal say in family decisions.

Indicate if each statement is True or False by circling your choice.

True	False	61.	There is very little group spirit in our family.
True	False	62.	Money and paying bills is openly talked about in our family.
True	False	63.	If there's a disagreement in our family, we try hard to smooth things over and keep the peace.
True	False	64.	Family members strongly encourage each other to stand up for their rights.
True	False	65.	In our family, we don't try that hard to succeed.
True	False	66.	Family members often go to the library.
True	False	67.	Family members sometimes attend courses or take lessons for some hobby or interest (outside of school).
True	False	68.	In our family each person has different ideas about what is right and wrong.
True	False	69.	Each person's duties are clearly defined in our family.
True	False	70.	We can do whatever we want to in our family.
True	False	71.	We really get along well with each other.
True	False	72.	We are usually careful about what we say to each other.
True	False	73.	Family members often try to one-up or out-do each other.
True	False	74.	It's hard to be by yourself without hurting someone's feelings in our household.
True	False	75.	"Work before play" is the rule in our family.

Indicate if each statement is True or False by circling your choice.

True	False	76.	Watching T.V. is more important than reading in our family.
True	False	77.	Family members go out a lot.
True	False	78.	The Bible is a very important book in our home.
True	False	79.	Money is not handled very carefully in our family.
True	False	80.	Rules are pretty inflexible in our household.
True	False	81.	There is plenty of time and attention for everyone in our family.
True	False	82.	There are a lot of spontaneous discussions in our family.
True	False	83.	In our family, we believe you don't ever get anywhere by raising your voice.
True	False	84.	We are not really encouraged to speak up for ourselves in our family.
True	False	85.	Family members are often compared with others as to how well they are doing at work or school.
True	False	86.	Family members really like music, art and literature.
True	False	87.	Our main form of entertainment is watching T.V. or listening to the radio.
True	False	88.	Family members believe that if you sin you will be punished.
True	False	89.	Dishes are usually done immediately after eating.
True	False	90.	You can't get away with much in our family.

This set of questions deals with your feelings about your mentally retarded child. There are many blanks on the questionnaire. Imagine your child's name filled in on each blank. Give your honest feelings and opinions.

Please answer all of the questions even if they do not seem to apply. If it is difficult to decide True or False, answer in terms of what you or your family feel or do most of the time.

The questions sometimes refer to an older or younger person, or someone who has problems your child does not have. Nevertheless, they can be answered True or False even then.

SIMPLY IMAGINE YOUR CHILD'S NAME IS IN THE BLANKS PROVIDED. CIRCLE EITHER TRUE OR FALSE TO ANSWER EVERY QUESTION.

TRUE FALSE 1. _____ demands that others do things for him/her more than is necessary.

TRUE FALSE 2. _____ is cared for equally by all members of our family.

TRUE FALSE 3. Members of our family praise each other's accomplishments.

TRUE FALSE 4. The doctor sees _____ at least once a month.

TRUE FALSE 5. _____ would be in danger if he/she could get out of the house or yard.

TRUE FALSE 6. People who don't have the problems we have don't have the rewards we have either.

TRUE FALSE 7. Other members of the family have to do without things because of _____.

TRUE FALSE 8. If _____ were more pleasant to be with it would be easier to care for him/her.

TRUE FALSE 9. I don't worry too much about _____'s health.

TRUE FALSE 10. Our family agrees on important matters.

TRUE FALSE 11. The constant demands for care for _____ limit growth and development of someone else in our family.

TRUE FALSE 12. I worry about what will happen to _____ when I can no longer take care of him/her.

TRUE FALSE 13. I am able to leave _____ alone in the house for an hour or more.

TRUE FALSE 14. _____ is limited in the kind of work he/she can do to make a living.

TRUE FALSE 15. I have given up things I have really wanted to do in order to care for _____.

TRUE FALSE 16. I would not want the family to go on vacation and leave _____ at home.

TRUE FALSE 17. There is no way we can possibly keep _____ in our house.

TRUE FALSE 18. _____ can feed himself/herself.

TRUE FALSE 19. As the time passes I think it will take more and more to care for _____.

TRUE FALSE 20. We can afford to pay for the care _____ needs.

TRUE FALSE 21. It bothers me that _____ will always be this way.

TRUE FALSE 22. _____ uses special equipment because of his/her handicap.

TRUE FALSE 23. _____ is easy to live with.

TRUE FALSE 24. The doctor sees _____ at least once a year.

TRUE FALSE 25. Wheelchairs or walkers have been used in our house.

TRUE FALSE 26. Caring for _____ has been a financial burden for our family.

TRUE FALSE 27. I worry that _____ may sense that he/she does not have long to live

TRUE FALSE 28. We enjoy _____ more and more as a person.

TRUE FALSE 29. _____ knows his/her own address.

TRUE FALSE 30. _____ is aware of who he/she is (for example, male [4] years old).

TRUE FALSE 31. Sometimes i need to get away from the house.

TRUE FALSE 32. Having to care for _____ has enriched our family life.

TRUE FALSE 33. _____ doesn't do as much as he/she should be able to do.

TRUE FALSE 34. Our family has been on welfare.

TRUE FALSE 35. We take _____ along when we go out.

TRUE FALSE 36. _____ is accepted by other members of the family.

TRUE FALSE 37. _____ spends time at a special day care center or in special classes at school.

TRUE FALSE 38. Our family income is more than average.

TRUE FALSE 39. Caring for _____ gives one a feeling of worth.

TRUE FALSE 40. One of us has had to pass up a chance for a job because _____ could not be left without someone to watch him/her.

TRUE FALSE 41. I worry about how our family will adjust after _____ is no longer with us.

TRUE FALSE 42. The part that worries me most about _____ going on his/her own is his/her ability to make a living.

TRUE FALSE 43. I worry about what will be done with _____ when he/she gets older.

TRUE FALSE 44. _____ can get around the neighborhood quite easily.

TRUE FALSE 45. There is a lot of anger and resentment in our family.

TRUE FALSE 46. Our family has managed to save money or make investments.

TRUE FALSE 47. We own or are buying our own home.

TRUE FALSE 48. I am afraid _____ will not get the individual attention, affection, and care that he/she is used to if he/she goes somewhere else to live.

TRUE FALSE 49. _____ is better off in our home than somewhere else.

TRUE FALSE 50. _____ can describe himself/herself as a person.

TRUE FALSE 51. It is easy to keep _____ entertained.

TRUE FALSE 52. In the future _____ will be more able to help himself/herself.

TRUE FALSE 53. _____ needs a walker or a wheelchair.

TRUE FALSE 54. I have become more understanding in my relationships with people as a result of _____.

TRUE FALSE 55. _____ cannot get any better.

TRUE FALSE 56. Outside activities would be easier without _____.

TRUE FALSE 57. My family understands the problems I have.

TRUE FALSE 58. I am pleased when others see my care of _____ is important.

TRUE FALSE 59. We can hardly make ends meet.

TRUE FALSE 60. Members of my family are able to discuss personal problems.

TRUE FALSE 61. Most of _____'s care falls on me.

TRUE FALSE 62. _____ is very irritable.

TRUE FALSE 63. It is very easy for me to relax.

TRUE FALSE 64. I rarely feel blue.

TRUE FALSE 65. _____ can walk without help.

TRUE FALSE 66. Because _____ uses special equipment and facilities, it is difficult to take him/her out.

The next group of questions is very important in understanding how families work and play together. Please answer each question. When you read the questions, think about "family" as those members currently living with you and any other family members to whom you have a long term commitment. This might include your mother, a sister, or a brother. Before you begin these questions, please list those people you think of as "family". Just list their relationship to you (example: son, brother), not their names.

_____

_____

Indicate if each statement is True or False by circling your choice.

True	False	1.	There are times when other family members do things that make me unhappy.
True	False	2.	I have some needs that are not being met by family members.
True	False	3.	My family completely understands and sympathizes with my every mood.
True	False	4.	Our family is not a perfect success.
True	False	5.	Every new thing I've learned about my family has pleased me.
True	False	6.	I have never regretted being with my family, not even for a moment.
True	False	7.	My family has all the qualities I've always wanted in a family.
True	False	8.	There are times when I do not feel a great deal of love and affection for my family.
True	False	9.	If I could be a part of any family in the world, I could not have a better match.
True	False	10.	If my family has any faults, I am not aware of them.
True	False	11.	I don't think anyone could possibly be happier than my family and I when we are together.
True	False	12.	Family members understand each other completely.

Indicate if each statement is True or False by circling your choice.

True	False	13.	My family could be happier than it is.
True	False	14.	Our family is as well adjusted as any family in this world can be.
True	False	15.	I don't think any family could live together with greater harmony than my family.

This group of questions is very important in understanding how all families experience change as a result of normal growth and development of members and due to external circumstances. The following list of family life changes can happen in a family at any time. Because family members are connected to each other in some way, a life change for any one member affects all the other persons in the family to some degree. Think about "family" in these questions as you did in the previous group of questions.

Please read each family life change and decide whether it happened to any member of your family, including you, during the last 12 months. Please answer each question by circling Yes or No.

Did the change happen to you during the last 12 months?			
YES	NO	1.	Increase of husband/father's time away from family.
YES	NO	2.	Increase of wife/mother's time away from family.
YES	NO	3.	A member appears to depend on alcohol or drugs.
YES	NO	4.	A member appears to have emotional problems.
YES	NO	5.	Increase in conflict between husband and wife.
YES	NO	6.	Increase in arguments between parent(s) and child(ren).
YES	NO	7.	Increase in conflict among children in the family.
YES	NO	8.	Increased difficulty in managing teenage child(ren).
YES	NO	9.	Increased difficulty in managing school age child(ren) (6-12 yrs.).
YES	NO	10.	Increased difficulty in managing preschool age child(ren) (2 1/2-6 yrs.).
YES	NO	11.	Increased difficulty in managing toddler(s) (1-2 1/2 yrs.).
YES	NO	12.	Increased difficulty in managing infant(s) (0-1 yrs.).
YES	NO	13.	Increase in the amount of "outside activities" which the child(ren) are involved in.
YES	NO	14.	Increased disagreement about a member's friends or activities.
YES	NO	15.	Increase in the number of problems or issues which don't get resolved.
YES	NO	16.	Increase in the number of tasks or chores which don't get resolved.
YES	NO	17.	Increased conflict with in-laws or relatives.
YES	NO	18.	Spouse/parent was separated or divorced.
YES	NO	19.	Spouse/parent has an "affair."
YES	NO	20.	Increased difficulty in resolving issues with a "former" or separated spouse.

Did the change happen to you during the last 12 months?			
YES	NO	21.	Increased difficulty with sexual relationship between husband and wife.
YES	NO	22.	Family member experiencing menopause.
YES	NO	23.	Spouse had unwanted or difficult pregnancy.
YES	NO	24.	An unmarried member became pregnant.
YES	NO	25.	A member had an abortion.
YES	NO	26.	A member gave birth to or adopted a child.
YES	NO	27.	Took out a loan or refinanced a loan to cover increased expenses.
YES	NO	28.	Went on welfare.
YES	NO	29.	Change in conditions (economic, political, weather) which hurts family investments and/or income.
YES	NO	30.	Change in Agriculture Market, Stock Market, or Land values which hurts family investments and/or income.
YES	NO	31.	A member started a new business.
YES	NO	32.	Purchased or built a home.
YES	NO	33.	A member purchased a car or other major item.
YES	NO	34.	Increasing financial debts due to over-use of credit cards.
YES	NO	35.	Increased strain on family "money" for medical/dental expenses.
YES	NO	36.	Increased strain on family "money" for food, clothing, energy, home care.
YES	NO	37.	Increased strain on family "money" for child(ren)'s education.
YES	NO	38.	Delay in receiving child support or alimony payments.
YES	NO	39.	A member changed to a new job/career.
YES	NO	40.	A member lost or quit a job.
YES	NO	41.	A member retired from work.
YES	NO	42.	A member started or returned to work.
YES	NO	43.	A member stopped working for extended period (e.g., laid off, leave of absence, strike).
YES	NO	44.	Decrease in satisfaction with job/career.
YES	NO	45.	A member had increased difficulty with people at work.
YES	NO	46.	A member was promoted at work or given more responsibilities.

Did the change happen to you during the last 12 months?

YES	NO	47.	Family moved to a new home/apartment.
YES	NO	48.	A child/adolescent member changed to a new school.
YES	NO	49.	Parent/spouse became seriously ill or injured.
YES	NO	50.	Child became seriously ill or injured.
YES	NO	51.	Close relative or friend of the family became seriously ill.
YES	NO	52.	A member became physically disabled or chronically ill.
YES	NO	53.	Increased difficulty in managing a chronically ill or disabled member.
YES	NO	54.	Member or close relative was committed to an institution or nursing.
YES	NO	55.	Increased responsibility to provide direct care or financial help to husband's and/or wife's parent(s).
YES	NO	56.	Experienced difficulty in arranging for satisfactory child care.
YES	NO	57.	A parent/spouse died.
YES	NO	58.	A child member died.
YES	NO	59.	Death of husband's or wife's parent or close relative.
YES	NO	60.	Close friend of family died.
YES	NO	61.	Married son or daughter was separated or divorced.
YES	NO	62.	A member "broke up" a relationship with a close friend.
YES	NO	63.	A member was married.
YES	NO	64.	Young adult member left home.
YES	NO	65.	A young adult member began college (or post high school training).
YES	NO	66.	A member moved back home or a new person moved into the household.
YES	NO	67.	A parent/spouse started school (or training program) after being away from school for a long time.
YES	NO	68.	A member went to jail or juvenile detention.
YES	NO	69.	A member was picked up by police or arrested.
YES	NO	70.	Physical or sexual abuse or violence in the home.
YES	NO	71.	A member ran away from home.
YES	NO	72.	A member dropped out of school or was suspended from school.

This is the last group of questions. Please fill in the information as requested or place a check on the line next to the appropriate answer. All answers are confidential.

1. Your relationship with the child: (please check one)

   ____ Biological mother
   ____ Stepmother
   ____ Adoptive mother
   ____ Other (please specify) _____

2. The child's age: _____ years _____ months

3. The child's sex: (please check one)

   ____ Male
   ____ Female

4. The child's ethnic origin: (please check one)

   ____ White
   ____ Black
   ____ Other (please specify) _____

5. The ages of brother(s) and sister(s) and relationship with child (e.g., sister, brother, half-sister, half-brother, stepsister, stepbrother, adoptive sister, adoptive brother).

   a.

Age	Relationship to Your "Special" Child
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

   b. _____ No brothers or sisters (please check only if appropriate).

6. Others living in the home (e.g., aunt, uncle, grandmother, grandfather, housekeeper, etc.):

   a. _____

   _____

   _____

   b. _____ No one else living in the home (please check only if appropriate).

7. The level of education you and your husband have attained: (please check one for each parent)

Mother		Father
____	None	____
____	Grades one to five	____
____	Grade six	____
____	Grade seven	____
____	Grade eight	____
____	Grade nine	____
____	Grade ten	____
____	Grade eleven	____
____	Grade twelve	____
____	Technical or trade school	____
____	Part way through college	____
____	Bachelors degree	____
____	Part way through graduate school	____
____	Masters degree	____
____	Doctoral degree	____
____	Unknown	____

8. The best description of the occupations of you and your husband: (please check one for each parent)

Mother		Father
____	Professional or technical	____
____	Managerial or proprietor	____
____	Sales or clerical	____
____	Craftsman/foreman (plumber, mechanic, carpenter, etc.)	____
____	Services (policeman, barber, waiter, etc.)	____
____	Laborer	____
____	Housewife/Househusband	____
____	Student	____
____	Retired	____
____	Unemployed	____
____	None	____
____	Other (please specify)_____	____

_____

9. The religion of you and your husband: (please check one for each parent)

Mother		Father
____	None	____
____	Catholic	____
____	Protestant	____
____	Jewish	____
____	Other (please specify)	____

_____

10. The total gross income last year before income taxes were paid: (please check one)

____ Less than $3,000
____ $3,000-7,999
____ $8,000-12,999
____ $13,000-17,999
____ $18,000-22,999
____ $23,000-27,999
____ $28,000-32,999
____ $33,000 or over

11. Age:

You	Your spouse
_____ years	_____ years

12. Do you get any public assistance such as welfare? (please check one)

____ Yes ____ No

Thank you so much for your time in helping us better understand families having a special education child. If you wish to receive a copy of the results of this study, please print your name and address below. It will be clipped off your questionnaire and saved. The results will be completed by December, 1983.

Name _____

Address _____

Town _____ Zip Code _____

APPENDIX E

Vita

John M. Dougherty

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APPENDIX F

Dissertation Abstract

THE INFLUENCE OF STRESS AND CHILD FACTORS ON FAMILIES WITH EDUCABLE MENTALLY RETARDED CHILDREN: THE MOTHER'S VIEWPOINT

by

John Michael Dougherty

(ABSTRACT)

Mothers in two-parent families of 43 EMR children aged 5 to 21 completed a mailed self-report booklet containing the Family Environment Scale, a family modification of the Edmond's Marital Conventionalization Scale, the Questionnaire on Resources and Stress Short-Form, the Family Inventory of Life Events and Changes, and a demographic questionnaire. The families were not on welfare.

Reliability estimates and intercorrelations among the 11 factors on the QRS supported elimination of Terminal Illness Stress, Financial Stress, Physical Limitations, and Preference for Institutional Care for this sample. The remaining 7 factors of the QRS, the FILE, Sex, and Age (10 predictors) were regressed on each of the 10 family psychosocial variables measured by the FES utilizing a stepwise procedure.

The influence of the aforementioned 10 selected stress and coping variables on 8 family psychosocial dimensions was presented; regressions of both independence and achievement orientation not significant. Two fully significant models of stress and coping were found: 69% of the variance in cohesion was predicted by family disharmony, dependency and management, and life span care; and 32% of the variance in organization was predicted by family disharmony and sex. Associations between specific predictor and criterion variables were reported. The correlation of the modi-

fied version of the EMCS (a measure of social desirability) and both predictor and criterion variables was analyzed.

The results were discussed in reference to the use of the shortened QRS, stress/coping influences on the family environment, and the theoretical importance of denial-like processes in coping. Clinical and research implications were also presented.