

Stress, coping, and family services of families who have children with disabilities

by

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LITERATURE REVIEW

Introduction

Recognition of the importance of family support is revealed in current changes in policy and practice (Beckman, 1991). The passage of P. L. 99-457 has required early intervention programs to provide family centered services rather than child centered services. For children birth to three with disabilities, it is mandated that parents be provided the opportunity to receive early intervention services, and not only the educational goals of children, but also concerns and needs of families be emphasized in the Individualized Family Service Plan (IFSP) (Bailey, 1991; Beckman, 1991; Gallagher, 1990; Turnbull & Turnbull, 1990). Therefore, early intervention programs have a responsibility to help families cope with stressors that they experience due to raising children with disabilities (Turnbull & Turnbull, 1990).

Research on families' involvement, where families have taken on teaching and training roles with their children, has been extensive. However, research on families being the primary focus of early intervention programs has been limited for several reasons (Simeonsson & Bailey, 1990). Emphasis on families has only recently been adopted in early intervention programs, therefore professionals may lack expertise and resources to address families' needs and concerns. Boundaries of families' involvement are not well defined resulting in ambiguity in the nature and extent of support services professionals provide families.

This study will focus on family services that professionals provide families as part of their children's early intervention programs; there has been limited research due to relatively recent policy changes and lack of time and resources to produce adequate changes in practice

or empirical studies. Dunst, Trivette, Starnes, Hamby, and Gordon (1993) state that supporting and strengthening families ought to be a major outcome of early intervention programs. The main purpose of this research is to examine the relationship between families' perceived parenting stress, coping strategies utilized, and type of and satisfaction with family services provided by professionals to families who have young children with disabilities and are currently involved with early intervention programs.

In this review of literature, I will first discuss the Double ABCX model which describes the interaction between stress and coping. The Double ABCX model of family adaptation, designed by McCubbin and Patterson (1983), has been the predominate model used to describe family stress and coping for families of children with disabilities (Deardorff, 1992; Orr, Cameron, & Day, 1991; Shapiro, 1989).

Second, I will discuss the stress some families experience due to having children with disabilities. Children with disabilities often have a profound impact on the social climate of families, as well as affect the psychological states of individual family members (Flynt, Wood, & Scott, 1992). Evidently, some families who have children with disabilities experience higher levels of stress compared to families who have children without disabilities (Beckman, 1991). Although some families of children with disabilities report more stress, there is considerable variance in the degree and type of stress experienced depending on child, family, and parent variables.

Third, I will discuss the coping strategies families utilize in order to cope with raising children with disabilities. Over the years, it has been apparent that not all families who have children with disabilities experience higher levels of stress compared to families of children

without disabilities. Different families are better able to cope and overcome stress and hardship due to internal perceptions they have toward their children's disabilities, and different amounts of utilized informal coping strategies such as friends and family (Olson, McCubbin, Barns, Larsen, Muxen, & Wilson, 1983).

Last, I will discuss the roles professionals play in supporting families. Using professional services is considered an external, formal coping strategy that has been recommended to provide support to families that have children with disabilities. Many types of family services could potentially be provided by professionals such as systems engagement, child information, family instructional activities, personal/family assistance, and resource assistance in order to support families who have children with disabilities.

Double ABCX Model

The Double ABCX model is a revision of Reuben Hill's ABCX classical model of families' response to crises (Shapiro, 1989). In Hill's model, (a) represents a stressful event the family encounters, (b) represents resources and support available to the family during a stressful event, (c) represents perceptions and meaning the family assigns to a stressful event, and (x) represents the crisis or the degree of stress felt by the family due to a stressful event (Deardorff, 1992; Orr et al., 1991; Shapiro 1989).

The Double ABCX model focuses on the family's response to stress rather than the individual's response (Deardorff, 1992). The model is dynamic rather than static which recognizes that each component of the model experiences frequent change due to the ongoing process of family adaptation. Deardorff (1992) applies this model directly to families who have children with disabilities, but it could be applied to any stressful event.

The Double ABCX model, as explained by Deardorff (1992), concentrates on family adaptation while receiving early intervention services; which has a pre-crisis, crisis, and post-crisis phase (see Figure 1). Deardorff (1992) suggests that the Double ABCX Model is a framework that early intervention personnel can use to reduce the possibility of intrusiveness during the identification of family's strengths and needs. The model can also be used in assisting the family and the early intervention personnel to recognize and maximize the family's informal and formal resources. The early interventionist's primary role is to help the family adapt to existing challenges.

In the pre-crisis stage, the birth of a child into the family is considered a normative stressor (a). The resources the family has at the time of birth, such as family strengths and support from extended family and friends are considered existing resources (b). The perception or meaning the family ascribes to the stressful event (positive, neutral, negative) is represented by (c).

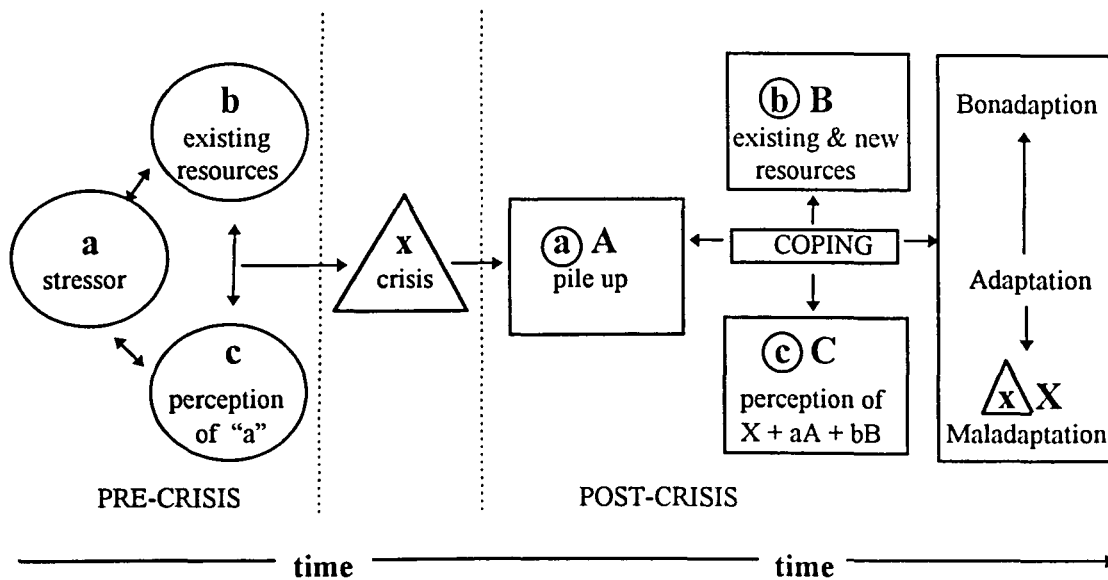


Figure 1. The Double ABCX Model of Family Adaptation. Presented by Deardorff, 1992

During the crisis stage, all three components interact with each other in order to produce the degree of stress (x) felt by the family when the child is referred for early intervention services due to concerns regarding the child's development (Deardorff, 1992). The degree of stress is determined by the imbalance between (a), (b), and (c). The stressful experience causes the other components to change.

The post-crisis phase occurs after the child has been referred and the family has become involved with an early intervention program (Deardorff, 1992). At this time, early intervention personnel would be intensely involved with the family. This phase focuses on events that occur over time (Orr et al., 1991). Thus, the family experiences a pile-up of stress and strains (aA) which can include financial burden, caregiving burden, marital discord, and work strains. Early intervention personnel would identify family needs and concerns from this component of the model. The second component (bB) includes existing resources present before the crisis, as well as new resources that emerge due to being involved with an early intervention program. Family resources would include the strengths of the family, support from extended family and friends, and early intervention services. The perception (cC) of the event is a combination of the family's perception of the event, as well as the pile-up of stressors, and the outcome or effect that the situation has on the family. The family copes with the stress in order to restore balance between (aA), (bB), and (cC). Each family has its own coping strategies, patterns, and behaviors they use to restore and maintain balance within their family. The outcome of family efforts is the family's level of adaptation (xX) ranging from bonadaptation (good) to maladaptation (poor).

Perceived Parenting Stress Experienced by Families

A number of child, family, and parent variables have potential impact on the level of perceived parenting stress families feel due to having children with disabilities. Child variables include whether children do or do not have disabilities, as well as specific characteristics of children with disabilities such as type of disability, severity of disability, caregiving needs, gender, and age. Family and parent variables include number of siblings in the home, family demographic information, and gender of the parent.

Child Variables

Children with Disabilities versus Children without Disabilities

Having children with disabilities can potentially influence parenting stress. There are conflicting research findings regarding whether families who have children with disabilities experience greater parenting stress than families who have children without disabilities. Beckman (1991) found that families of children with disabilities reported more parenting stress on the Parent Domain and the Child Domain of the Parenting Stress Index (PSI) compared to families of children without disabilities. On the Child Domain, both mothers and fathers of children with disabilities reported more parenting stress due to their children's adaptability, demandingness, mood, and distractibility-activity level. The two groups of families did not differ on how reinforcing their children were to them, or how acceptable their children were to them. On the Parent Domain, families of children with disabilities reported more depression, more restrictions in parental role, more problems in marital relationships, more health problems, more social isolation, and less sense of competence. These two groups of families did not differ on their attachment relationships with their children.

In contrast to the above findings, Salisbury (1987) found that both married and single parents of children with disabilities did not experience more parenting stress than married or single parents of children without disabilities. The children with disabilities in this study were moderately delayed and had few medical complications. Thus, parents, whether married or single, viewed these two groups of children, at the same age, as having more commonalities with each other than differences.

Children with Disabilities

Type of Disability. Different types of disabilities that children have can be associated with different amounts and types of parenting stress. The majority of the studies measured parenting stress across all types of disabilities without distinguishing differences, if any, between different types of disabilities (Noh, Dumas, Wolf, & Fisman, 1989).

Type of disability was not a predictor of parenting stress (Friedrich, 1979), or other parental outcomes such as parents' response to their children, quality of general families' interactions, and parents' psychological functioning (Frey, Greenberg, & Fewell, 1989) suggesting that parenting stress is experienced across all types of disabilities. The type of disability, whether Down Syndrome, motor impairment, or developmental disability with unknown etiology, did not differentiate scores on parenting stress due to child characteristics (Child Domain on the PSI) or parenting stress due to parental functioning (Parent Domain on the PSI) between mothers and fathers (Krauss, 1993).

Goldberg, Marcovitch, MacGregor, and Lojkasek (1986) found that families of children with Down Syndrome, neurological problems, and developmental disabilities with unknown etiology had similar amounts of physical and psychological distress such as

headaches and irritability. However, families of children with Down Syndrome had less parenting stress and daily stress compared to other families. Mothers of children with Down Syndrome reported the most positive experiences with their children and reported they managed well (Goldberg et al., 1986). A possible explanation is that children with Down Syndrome are typically diagnosed at birth requiring families to deal with the disabilities immediately; thus giving families a longer time to adjust compared to families who learn about a diagnosis later on in their children's lives. Also, Down Syndrome is more widely recognized, and more resources are available, (Goldberg et al., 1986) thus making contacts and services easier to find and obtain.

Severity of Disability. The severity of children's disabilities, or the level of functioning, can influence parenting stress. Friedrich, Wilturner, and Cohen (1985) found that families of children with severe disabilities experienced greater parental and family problems compared to families of children with less severe disabilities. When children with disabilities had low developmental quotients it was associated with lower psychological well-being for mothers (Dunst, Leet, & Trivette, 1988).

Low communication skills of children with disabilities were associated with greater parenting stress (Frey, Greenberg, & Fewell, 1989), less family adjustment, less adjustment to the child, and less personal adjustment (Frey, Fewell, & Vadasy, 1989) for mothers and fathers, as well as greater psychological distress for fathers (Frey, Greenberg, & Fewell, 1989).

Caregiving Requirements. Caregiving requirements of children with disabilities can potentially influence parenting stress. Beckman (1991) found that families who had children

with disabilities between the ages of 18 and 72 months, reported additional and unusual caregiving requirements in areas of feeding, handling, and medical care, compared to families of children without disabilities at those same ages. In particular, fathers of younger children with disabilities reported more caregiving requirements than fathers of older children with disabilities. At the same time, fathers who reported more caregiving requirements did not report greater levels of parenting stress. However, mothers who reported more caregiving requirements reported greater levels of parenting stress.

Similarly, Friedrich et al. (1985) found that when children had more medical and behavior problems, their mothers reported more parental and family problems. When children had medical and behavior problems it was assumed there were additional caregiving requirements placed on their families.

Gender. Another possible influence on parenting stress is child's gender, which has shown inconsistent results in the literature. Some studies have found that gender has no significant relationship with mothers' coping effectiveness, level of parenting stress, or degree of parental and family problems (Friedrich et al., 1985; Salisbury, 1987).

In contrast, Frey, Fewell, and Vadasy (1989) found gender was a good predictor of parental adjustment, particularly for mothers. Female children were associated with greater parental adjustment compared to male children for mothers and fathers, and greater family adjustment for mothers. Similarly, Frey, Greenberg, and Fewell (1989) found that parents of female children experienced less parenting stress, particularly fathers. Gender was not associated with psychological distress or family adjustment for mothers or fathers. Even though both mothers and fathers had significant values for parenting stress due to gender,

fathers appeared to be affected more by having sons with disabilities. Fathers could have more difficulty adjusting to sons because they identify with the same gender.

Age. Child's age can potentially influence parenting stress. Examination of the relationship between child's age and reported levels of parenting stress has shown inconsistent results. Dunst, Leet, and Trivette (1988) found that mothers of younger children with disabilities reported lower psychological well-being than mothers of older children with disabilities. In contrast, Friedrich et al. (1985) found that as children with disabilities got older, mothers had higher levels of depression and reported more family and parental problems.

In contrast to the above findings, Beckman (1991) did not find age related to mothers' levels of parenting stress. However, fathers of younger children with disabilities reported greater parenting stress than fathers of older children with disabilities. Vadasy, Fewell, Greenberg, Dermond, and Meyer (1986) also found that fathers' satisfaction levels with their children were greater with younger children with disabilities than older children.

Family Life Cycle. Age by itself may not be the predictor variable of parenting stress but rather the process of children transitioning through the stages of the family life cycle (family's development over time). The beginning of the cycle involves families having young children (Turnbull & Turnbull, 1990). As children grow older and enter school, the needs of families change, as well as the parental roles and functions parents perform. When children and families transition into a later stage of the family life cycle they face new challenges which potentially could cause stress. For families of children with disabilities, transition through the

family life cycle could be additionally stressful due to delayed entry into the next developmental stage.

Flynt et al. (1992) examined families in three different family life cycle stages (preschool, school-age, and adolescent). Results did not show any significant differences in levels of parenting stress between mothers of preschool, school age, and adolescent children. Mothers' levels of parenting stress did not vary as a function of their stage in the family life cycle.

Family and Parent Variables

Siblings in the Home

The impact of the number of siblings in the home on parental stress and family functioning has been contradicting. The number of siblings in the home was not found to be related to mothers' level of parenting stress (Friedrich, 1979), parents' responses to children with disabilities, quality of families' interactions, or parents' psychological functioning (Frey, Greenberg, & Fewell, 1989).

In contrast to the above findings, Beckman (1991) found that families with more siblings experienced lower levels of total parenting stress for both mothers and fathers. A possible explanation is that larger families have additional members to help with additional responsibilities. Additional children can create a greater sense of normalcy, and take on expectations for achievement that would typically fall on the child with a disability if she/he was an only child (Turnbull & Turnbull, 1990).

Demographic Information on the Family

Another variable that could impact level of parenting stress is marital status. When the marital status of parents were compared, single parents of children with disabilities did not report more parenting stress than married parents of children with disabilities (Salisbury, 1987).

Other family demographic variables for families of children with disabilities were not associated with increased levels of parenting stress: mother's age (Dunst, Leet, & Trivette, 1988), mother's education (Friedrich, 1979; Friedrich et al., 1985), mother's occupation (Friedrich, 1979), family socioeconomic status (Dunst, Leet, & Trivette, 1988), family income (Dunst, Leet, & Trivette, 1988), and religious domination (Friedrich, 1979). The majority of studies reviewed either controlled family demographic variables such as mother's and father's age, education, occupation, income, and family's socioeconomic status, or did not use the family demographic variables as independent variables. Therefore, it is not appropriate to make conclusions on how these variables affect level of parenting stress for families of children with disabilities.

Gender of the Parent

There are similarities and differences in levels of parenting stress between family members, particularly mothers and fathers. Research on parent's gender has failed to produce conclusive results as to whether parent's gender is associated with of parenting stress due to having children with disabilities. Mothers and fathers of children with disabilities and children without disabilities differ in the levels of parenting stress, as well as type of parenting stress experienced (Beckman, 1991; Goldberg et al., 1986; Krauss, 1993; McLinden, 1990). The

type of parenting stress can be divided into two categories: parenting stress due to different dimensions of parental functioning (Parent Domain measured by the PSI), and parenting stress due to different qualities of the child (Child Domain measured by the PSI). Both types of stress can make it potentially difficult for individuals to perform their parenting roles.

Parenting stress due to parental functioning. Mothers of children with disabilities reported more depression, less sense of competence (Beckman, 1991), more restrictions in parental role, more problems in their marital relationship, and more health problems compared to fathers (Beckman, 1991; Krauss, 1993). Fathers of children with disabilities reported more problems in attachment relationships to their children with disabilities compared to mothers (Beckman, 1991; Krauss, 1993). There were no differences between mothers' and fathers' reports of social isolation (Beckman, 1991; Krauss, 1993).

Parenting stress due to qualities of the child. Beckman (1991) did not find any differences between mothers' and fathers' reports of parenting stress due to qualities of the children, whereas Krauss (1991) found that fathers of children with disabilities reported greater parenting stress due to their children's adaptability, mood, and reinforcement to the parent compared to mothers.

In general, mothers of children with disabilities reported more parenting stress related to personal impacts of parenting (Parent Domain) and fathers reported more parenting stress related to children's temperament (Child Domain) (Goldberg et al., 1986). Mothers generally are the primary caregivers of children with disabilities which could affect mothers' sense of well-being and personal impacts of parenting instead of fathers' sense of well-being.

Even though Krauss (1993) found differences in the types of parenting stress experienced by mothers and fathers, she did not find differences in overall amount of parenting stress experienced by mothers and fathers as reported on the PSI. Similarly, Salisbury (1987) found that mothers and fathers did not differ on the amount of stress experienced according to the Questionnaire on Resources and Stress (Salisbury, 1986).

McLinden (1990) described the impact young children with disabilities have on parents' daily lives. Differences were found for mothers and fathers on three subscales of the Comprehensive Evaluation of Family Functioning (CEFF) (McLinden, 1988). Mothers had higher scores on the Time Demand Subscale (mothers $X=18.1$; fathers $X=15.9$) and the Well-Being Subscale (mothers $X=16.2$; fathers $X=14.2$) which indicated that the presence of children with disabilities affected daily activities, routines, and physical health for mothers. Fathers had higher scores on the Coping Subscale (fathers $X=17.9$; mothers $X=16.1$) which indicated that fathers had lower frequencies of utilizing positive coping strategies due to having children with disabilities.

Even though parents differed on the Time Demand, Well-Being, and Coping Subscales, they did not differ on whether or not they viewed the situation as problematic. In other words, no matter what the frequency, parents did not perceive the situation as problematic, which suggested that the frequency of occurrence did not determine whether the situation was viewed as problematic.

Coping Strategies and Resources Utilized by Families

Not all families of children with disabilities experience greater levels of parenting stress; families utilize mediating variables, such as coping strategies, to buffer the effects of

stress. McCubbin et al. (1980) suggest that coping strategies decrease vulnerability to stress, reduce the impact of stress, strengthen and maintain useful resources, and influence the environment by changing the social circumstances in order for the family to adjust.

Families do not have to utilize all available coping strategies in order to reduce stress (Olson et al., 1983). Over time, families adopt a repertoire of strategies and utilize different coping strategies depending on their current and past life events (Dunst, Trivette, & Deal, 1988). Strategies that are successful at one time and with one situation may not be successful at a different time or during a different situation. Strategies for coping are not created during single incidents but evolve and are modified over time. Olson et al. (1983) divide coping strategies and resources into internal and external categories. Families' utilization of social support depends on the informal and formal resources available to them.

Internal Coping Strategies and Resources

Internal coping strategies and resources pertain to the psychological thoughts used to avoid thinking about a situation or change ones' perception about a situation. Internal coping strategies include passive appraisal and reframing.

Passive Appraisal

Passive appraisal involves families ignoring that their children have disabilities hoping the problem will go away permanently, or temporarily (Olson et al., 1983; Turnbull & Turnbull, 1990). A permanent internal solution involves denial, whereas a temporary internal solution involves relaxation.

Denial. Denial involves families denying their children have disabilities and usually occurs when families first learn about the disabilities (Olson et al., 1983; Turnbull & Turnbull,

1990). This type of coping can be harmful if it lasts too long. Frey, Greenberg, and Fewell (1989) found that avoidance of coping with the situation of raising children with disabilities was associated with increased psychological distress for both mothers and fathers and decreased family adjustment for fathers.

Relaxation. Relaxation is a form of passive appraisal in which families set aside their problems for a limited amount of time and distance their minds and bodies from their problems (Olson et al., 1983; Turnbull & Turnbull, 1990). Some examples include sleeping, exercising, watching TV, and shopping. Respite care is a service that provides temporary care for children with disabilities in families' homes or in a center in order to provide relief for families (Edgar, Reid, & Pious, 1988; Turnbull & Turnbull, 1990).

Reframing

Reframing involves changing the families' perceptions about a stressful situation in order to manage better (Olson et al., 1983; Turnbull & Turnbull, 1990). Perceptions are the interpretations that families prescribe to their children's disabilities. Different families can perceive having children with disabilities in different ways. Families who view raising children with disabilities as negative consider them threatening to their well-being, therefore stressful. In contrast, families who view raising children with disabilities as positive consider them enhancing to their well-being and satisfying to their needs. When using reframing, one revises the perceptions about a situation originally viewed as negative in order to be viewed as positive or at least neutral.

Shapiro (1989) found that mothers who assigned negative meaning to raising children with disabilities denied any sense of meaning or comprehension associated with the disabilities

and thought such things as, "Why me?" Mothers who assigned positive meaning to raising children with disabilities saw the disabilities as positive and accepted their children along with their disabilities. This author also found that mothers who assigned positive meaning to raising children with disabilities had less depression, less stress in daily care, greater sense of well-being, and greater problem-focused and emotional-focused coping (strategies of acceptance and understanding).

There are a number of approaches that families can use to reframe their perceptions in order to make them more manageable: problem solving, positive comparisons, and selective attending and ignoring.

Problem-Solving. The problem-solving process includes defining the problem, brainstorming alternatives, and selecting and acting upon a solution (Turnbull & Turnbull, 1990). Problem-solving coping strategies were associated with reduced parenting stress and psychological distress for both mothers and fathers (Frey, Greenberg, & Fewell, 1989), increased family adjustment for fathers (Frey, Greenberg, & Fewell, 1989; Frey, Fewell, & Vadasy, 1989), and increased adjustment to their children for fathers (Frey, Fewell, & Vadasy, 1989). These results suggest that problem-solving skills were used by both mothers and fathers, but appear to be more important to the adjustment for fathers. Better problem-solvers may receive positive feedback that affirms their parental role, thus increasing adjustment.

Positive Comparisons. Positive comparisons consist of families comparing themselves and their children to others resulting in positive feelings about their own situations. Frey, Greenberg, and Fewell (1989) found positive comparisons related to greater family adjustment, less parenting stress, and less psychological distress for both mothers and fathers.

Selective Attending and Selective Ignoring. Selective attending and selective ignoring involve paying particular attention to the positive aspects of having children with disabilities and paying less attention to the negative aspects of having children with disabilities.

External Coping Strategies and Resources

External coping strategies and resources can be defined as social support provided by others in times of stress (Dunst, Trivette, & Deal, 1988; Turnbull & Turnbull, 1990). Social support and resources are a major source of aid and assistance that are necessary for meeting parents' and families' needs (Dunst, Trivette, & Deal, 1988). The availability of social supports has been shown to play a major role in helping families adapt to problems when raising children with disabilities (Affleck, Tennen, Rowe, Roscher, & Walker, 1989). Social support can be differentiated into two groups: informal and formal support networks (Dunst, Trivette, & Deal, 1988; Olson et al., 1983; Turnbull & Turnbull, 1990).

Informal Support Networks

Informal support networks have been found to produce greater beneficial effects for families than formal support networks (Dunst, Trivette, & Deal, 1988; Olson et al., 1983). Informal networks include individuals accessible to families as part of their daily living such as spouse, immediate and extended family, friends, neighbors, other parents who have children with disabilities, and people in the community. Informal supports are generally more spontaneous due to close, trusting relationships. Generally, informal supports are reciprocal producing a mutual commitment for those involved (Olson et al., 1983). It is easier for families to ask for help when they can return the favor at a later date.

Spouse. Mothers feeling secure in marital relationships and having happier marriages were the two most significant contributors to their ability to cope with their children having disabilities (Friedrich, 1979; Friedrich et al., 1985). Marital satisfaction and good emotional climate within the home and family were associated with less depression, and less family and parental problems (Friedrich et al., 1985). Also, mothers reported lower levels of parenting stress when they perceived their spouse as helpful within the family (Friedrich et al., 1985).

Flynt et al. (1992) found that mothers of preschool children with disabilities relied more on intimate support from the children's fathers than on friends or others in the neighborhood and community. However, mothers of older children with disabilities did not rely on intimate support more than on others. This decrease in intimate support in later childhood years was not related to higher levels of parenting stress for mothers of older children with disabilities.

Family and Friends. Family and friends are able to meet many needs that families have due to raising children with disabilities (Affleck et al., 1989). When mothers received social support from family and friends they had greater psychological well-being and greater commitment to implement child-related interventions (Dunst, Leet, & Trivette, 1988).

Social networks were associated with greater family adjustment for both mothers and fathers (Frey, Greenberg, & Fewell, 1989). However, social networks were related to lower levels of parenting stress and psychological distress for fathers, but not for mothers. The important element of social networks, whether it be social support or criticism, varied for mothers and fathers. For mothers, higher amounts of social support from others was the important aspect of social networks that was associated with greater family adjustment.

Whereas for fathers, lower amounts of criticism was the important aspect of social networks that was associated with greater family adjustment, less parenting stress, and less psychological distress.

In contrast, Frey, Fewell, and Vadasy (1989) found that the overall amount of support did not contribute to greater adjustment for mothers or fathers, but rather their reported satisfaction with support was the contributing factor. When mothers and fathers were satisfied with support they had greater personal adjustment, and fathers had greater family adjustment compared to others who were not satisfied.

Beckman (1991) found that higher amounts of informal social support from spouse, friends, and neighbors were related to lower levels of parenting stress on the Parent Domain and total parenting stress on the PSI for both mothers and fathers of children with disabilities, and related to lower levels of parenting stress on the Child Domain for mothers.

There were no differences in amounts of social support or types of social support received by mothers and fathers when comparing parents of children with disabilities to children without disabilities (Beckman, 1991). In addition, Krauss (1993) did not find any differences between mothers and fathers of children with disabilities in either perceived helpfulness of their social support networks or size of their networks.

Support Group. Support groups are one form of intervention for families of children with disabilities frequently recommended by physicians, nurses, and other developmental specialists. Support groups can be considered both an informal and external coping strategy. Early intervention programs often provide support groups where professionals are the

facilitators of the groups. However, the purpose of support groups is to support one another and increase support networks.

Shapiro (1989) examined whether participation in support groups had positive outcomes for mothers of children with disabilities. Results showed mothers who participated in support groups were less depressed, perceived themselves as less burdened from their children in terms of daily care, and engaged in more problem-solving coping strategies. Mothers' perceived level of family disharmony did not decrease due to participating in support groups compared to mothers who did not participate in support groups. These results suggest that participation in support groups is beneficial for mothers personally, but may not be associated with family functioning.

Vadasy et al. (1986) examined the effects of fathers participating in a fathers' support group, as well as the second order effects on mothers. Over time, fathers' parenting stress, depression, and grief due to having children with disabilities were reduced due to participating in the fathers' support group; however pessimism about the future increased during participation and satisfaction with intimate support remained the same. Fathers who had higher levels of support group attendance had fewer informational needs about their children.

Mothers experienced second order effects when their children's fathers participated in the fathers' support group (Vadasy et al., 1986). This was speculated since the increased positive functioning in both mothers and fathers were not due to the increase in children's age. Over time, mothers had decreased parenting stress due to their children's disabilities, decreased depression, increased satisfaction with social support (intimate, friend, and

community), and increased cohesion within the family. Thus, the support that fathers received in support groups was mutually experienced by mothers.

Formal Support Networks

Intervention services can be conceptualized as the combination of many different types of assistance provided by informal and formal support networks (Dunst, Trivette, & Deal, 1988). Formal support networks include professionals and agencies from which families seek assistance such as teachers, social workers, doctors, therapists, hospitals, early intervention programs, and health departments. Professionals require a fee from families who want to obtain their services (Turnbull & Turnbull, 1990).

Role of Professionals

One of the most frequently used formal support networks by families who have children with disabilities, and the one of interest here, is early intervention professionals, specifically Early Childhood Special Educators who provide home intervention to families of children with disabilities, birth to three years of age. Professionals within early intervention programs provide families with a variety of family services that enhance the effectiveness of families' caring for their children with disabilities (Mahoney, O'Sullivan, & Dennebaum, 1990a; Mahoney, O'Sullivan, & Dennebaum, 1990b); maintain parental health and well-being (Dunst, Trivette, & Deal, 1988); and increase families' ability to cope with stressful events (Affleck et al., 1989).

Types of Services Provided by Professionals

The specific types of family services typically provided to families as part of their children's intervention services include: systems engagement (Mahoney et al., 1990a, 1990b),

child information (Affleck et al., 1989; Dunst, Trivette, & Deal, 1988; Mahoney et al., 1990a, 1990b; Turnbull & Turnbull, 1990; Whiddon, 1993), family instructional activities (Dunst, Trivette, & Deal, 1988; Mahoney et al., 1990a, 1990b), emotional or personal/family assistance (Affleck et al., 1989; Dunst, Trivette, & Deal, 1988; Mahoney et al., 1990a, 1990b; Turnbull & Turnbull, 1990; Whiddon, 1993), resource assistance (Affleck et al., 1989; Dunst, Trivette, & Deal, 1988; Mahoney et al., 1990a, 1990b; Whiddon, 1993), and material aid (Affleck et al., 1989; Dunst, Trivette, & Deal, 1988; Turnbull & Turnbull, 1990).

Systems Engagement

Systems engagement consists of activities that promote involvement of families in early intervention programs (Mahoney et al., 1990a, 1990b). Activities can include having families choose what they want to do in the program, encouraging families to make major decision, helping families plan for their children's future, helping families deal with "the system", and encouraging families' involvement in parent support groups (Whiddon, 1993).

Child Information

Child information consists of providing families with information relevant to their children's development, disability, health, and intervention programs (Mahoney et al., 1990a, 1990b). Information can be presented in the form of written literature (Whiddon, 1993) or through verbal conversation. Professionals can explain to families the assessments administered to their children and the meaning of results. In addition, professionals provide child information and opinions in response to families' requests.

Family Instructional Activities

Family instructional activities consist of activities that family members can use to interact with their children (Mahoney et al., 1990a, 1990b). Instructional activities can include showing family members how to play with their children, providing weekly instructional plans, providing strategies for families to help with children's development and behavioral concerns, and providing activities to facilitate parent-child interactions. Dunst, Trivette, and Deal (1988) suggest that one role of professionals is being a teacher not only to the children but also to the families in order to teach families how to provide instruction to their children when the professionals are not around. In order for families to do this effectively, professionals often incorporate instructional activities within the families' daily routines and include household items rather than suggesting families set time aside to provide instruction with specialized equipment.

Emotional or Personal/Family Assistance

Personal/family assistance consists of activities or supportive attitudes to enhance family members' personal functioning and psychological well-being (Mahoney et al., 1990a, 1990b). Professionals can help families with personal problems (needs and concerns) by providing a supportive atmosphere for families to talk. Providing support to families can include listening, having an understanding, caring attitude, and offering encouragement and reassurance. Personal/family assistance also includes recognizing families' concerns in areas other than caring for the children with disabilities such as concerns about siblings and marital issues (Whiddon, 1993).

Resource Assistance

Resource assistance consists of activities that provide families with assistance in obtaining and using other services or programs not offered within the children's early intervention programs (Mahoney et al., 1990a, 1990b). Professionals can make referrals to schools, health agencies, recreation programs, doctors, social workers, and therapists. Providing resource assistance can include encouraging families to participate in support groups or informally talking with other families in similar situations (Whiddon, 1993). When providing resource assistance, professionals can assume a number of roles (Dunst, Trivette, & Deal, 1988). Professionals can become a source of information about other services and programs. They can act as an enabler to encourage families to take action and utilize needed resources rather than have professionals do it. As a mobilizer, professionals teach families the necessary skills needed to mobilize support and access resources. Dunst, Trivette, and Deal (1988) suggest that professionals should help strengthen families' informal support networks rather than add formal support. Formal support may weaken families' informal social networks by having a negative impact on social relationships.

Empirical Findings

When given the Family Focused Intervention Scale (FFIS) (Mahoney et al., 1990a), mothers of children with disabilities, ages birth to three, indicated that early intervention professionals were most likely to provide child information and family instructional activities, followed by systems engagement, resource assistance, and personal /family assistance as part of their children's early intervention program. Also, mothers were asked to indicate which types of family services were the most critical for early intervention professionals to provide

as part of their children's early intervention programs. Mothers indicated that child information and systems engagement were the most critical, family instructional activities and resource assistance were moderately critical, and personal/family assistance was the least critical for early intervention professionals to provide.

The family services that mothers indicated were actually being provided by professionals were compared with the family services that mothers indicated were critical for professionals to provide in order to assess how much the programs were currently meeting mothers' needs (Mahoney et al., 1990a). For all five types of services, mothers reported greater need for services than what were actually being provided. Mothers felt the greatest discrepancy between their needs and services provided in resource assistance and systems engagement, followed by child information, family instructional activities, and personal/family assistance.

There was a relationship between the amount of family services provided by professionals and mothers' perceptions of the effectiveness of family services (Mahoney et al., 1990a). When professionals provided high and moderately high amounts of family services, mothers reported the greatest benefits from early intervention programs. When professionals provided low amounts of family services, mothers reported the lowest benefits from early intervention programs.

Shonkoff, Hauser-Cram, Krauss, and Upshur (1992) assessed the relationship between hourly amount of home visits per month and level of parenting stress. The authors found that mothers whose families received more hours of home visits per month had lower levels of

parenting stress on the Parent Domain of the PSI, specially in the areas of parental sense of competence, restriction of parental role, and relationship with partner.

Affleck et al. (1989) found that mothers with high needs for support were more likely to talk about their emotions, seek advice and reassurance, and ask for information and instruction from professionals who provided intervention. They also benefited from intervention programs in their perceptions of personal control, sense of competence, and responsiveness to their infants. But for mothers with low needs for support, intervention programs were related to negative effects on these same outcomes. Mothers who sought formal support found it difficult to obtain the support they needed from family and friends. Some of the needed support was unobtainable from informal sources such as information about specific disabilities and expert advice.

Conclusion

This literature review has indicated that some families of children with disabilities experience higher levels of parenting stress compared to families of children without disabilities, while other families of children with disabilities do not experience higher levels of parenting stress. There are many variables (child, parent, and family) that may affect the level of parenting stress families experience due to raising children with disabilities. The literature has also shown that utilizing internal and external coping strategies can reduce levels of parenting stress due to having children with disabilities. However, this review of the literature found little research on how amount of family services and satisfaction with the amount of family services were related to levels of parenting stress or to coping strategies utilized by the primary caregivers of children with disabilities.

Therefore the present study was undertaken to address the following research questions:

- 1) What is the relationship between coping strategies utilized and level of perceived parenting stress experienced by the primary caregiver?
- 2) What is the relationship between amount of family intervention services provided by professionals and level of perceived parenting stress experienced by the primary caregiver?
- 3) What is the relationship between level of satisfaction with family intervention services provided by professionals and level of perceived parenting stress experienced by the primary caregiver?
- 4) What is the relationship between coping strategies utilized by the primary caregiver and amount of family intervention services provided by professionals?
- 5) What is the relationship between coping strategies utilized by the primary caregiver and level of satisfaction with intervention services provided by professionals?
- 6) What is the relationship between amount of each family intervention service provided by professionals and the level of satisfaction with that service, as well as overall level of satisfaction with intervention services provided by professionals?

METHODS

This study was conducted in conjunction with a larger research project (Project Home Visit) intended to describe the content and process of home intervention services for children with disabilities, birth to three years of age, and their families. For the larger project, subjects provided demographic information, and completed Family Coping Strategies (F-COPES) and Parenting Stress Index (PSI) questionnaires. For the purpose of this research, the Early Intervention Scale (EIS) questionnaire was also completed by the subjects participating in the larger project. Additional subjects recruited for the current study provided these same pieces of information. This study has been approved by the Iowa State University Human Subjects Committee.

Subjects

Subjects included 35 primary caregivers (26 caregivers from the larger project and nine additional caregivers). The primary caregivers of the children with disabilities were the source of information from each family; demographic information is presented in Table 1. All primary caregivers were mothers and 82.9% were married or living with a partner. All but three respondents were the child's biological mother. These three respondents were foster mothers, with one being the child's biological grandmother. All mothers except one were white; that mother was Hispanic. Mothers ranged in age from 18 to 48 years old, and fathers ranged in age from 23 to 47 years old. The majority of both mothers and fathers had above a high school education. A variety of income levels were represented with the majority of families earning between \$21,000 and \$40,000.

Table 1. Demographic Information on Families

Variable	N	%	M	SD	Range
Mother's age	35		29.66	5.97	18-48
Father's age	35		32.00	7.22	23-47
Number of children in family			2.27	1.05	1-9
1	10	29.4			
2	10	29.4			
3	9	26.5			
4 or more	5	14.7			
Marital status					
Single	1	2.9			
Divorced or separated	5	14.3			
Married or living with partner	29	82.9			
Mother's level of education					
Partial high school	1	2.9			
High school diploma or GED	12	34.3			
Post secondary training	15	42.9			
College degree	7	20.0			
Graduate professional training	0	0			
Father's level of education					
Partial high school	5	14.3			
High school diploma or GED	11	31.4			
Post secondary training	11	31.4			
College degree	6	17.1			
Graduate professional training	2	5.7			
Income					
5,000-10,000	6	18.2			
11,000-15,000	3	9.1			
16,000-20,000	3	9.1			
21,000-30,000	6	18.2			
31,000-40,000	7	21.2			
41,000-50,000	4	12.1			
51,000-74,000	3	9.1			
Above 75,000	1	3.0			
Ethnicity					
Hispanic	1	2.9			
White	34	97.1			

Mothers had children with disabilities ranging in age from 5 to 43 months with a mean age of 23 months; Table 2 presents demographic information on children. More than 64% of the children with disabilities were male. Mothers most frequently classified their children with disabilities as requiring somewhat more caregiving compared to other children the same age (47.1%). Children had received 1 to 36 months of home intervention services, with a mean length of 9 months. The majority of children had a specific medical diagnosis for their disabilities. Additional services were being offered to some of the children.

Home interventionists provided services to all participating families; Table 3 presents demographic information on home interventionists. All home interventionists are certified Early Childhood Special Educators. There were 15 home interventionists from seven Area Education Agencies (AEAs) throughout the state of Iowa. Each has worked in an early intervention program for 2 to 18 years. All were white females ranging in age from 25 to 54 years old. Their educational background ranged from having a B.A. degree to having a M.S. degree plus additional graduate training in special education.

For the larger project, families were selected through purposive sampling. Home interventionists were asked to select families with whom they worked that had children with disabilities under three years of age. The researchers and the home interventionists worked together to select families that had a range of resources (limited to adequate) and children requiring a range of caregiving demands (average to more than typical). Additional subjects were recruited by asking the home interventionist to select two additional families with children under the age of three from their caseload. All home interventionists and families volunteered to participate.

Table 2. Demographic Information on Children

Variable	N	%	M	SD	Range
Child's age (months)	34		23.32	9.30	5-43
Length in AEA programs (months)	33		8.94	7.78	1-36
Child's gender					
Female	12	35.3			
Male	22	64.7			
Level of care child required					
Great deal more care					
Somewhat more care	5	14.7			
Same amount of care	16	47.1			
	13	38.2			
Medical diagnosis					
Yes	20	58.8			
No	14	41.2			
Services received:					
Home Teacher					
Yes	34	100.0			
No	0	0			
Speech/Language					
Yes	8	23.5			
No	26	76.5			
Occupational Therapy					
Yes	16	47.1			
No	18	52.9			
Physical Therapy					
Yes	20	58.8			
No	14	41.2			
Nutrition Services					
Yes	4	11.8			
No	30	88.2			
Nursing					
Yes	2	5.9			
No	32	94.1			

Table 3. Demographic Information on Home Interventionists

Variable	N	%	M	SD	Range
Sex					
Female	15	100.0			
Ethnicity					
White	15	100.0			
Age	15		40.53	7.61	25-54
Years serving 0-3 population	15		7.87	5.00	2-18
Years in AEA	15		11.00	5.13	2-11
Education level					
B.A. in special education	2	13.3			
B.A. in other area	1	6.7			
B.A. plus graduate hours in SE	7	46.7			
M.S. in other area	1	6.7			
M.S. plus graduate hours in SE	4	26.7			

Variables and Measures

Perceived Parenting Stress

The Parenting Stress Index (PSI) (Abidin, 1991) was used to assess the level of perceived parenting stress related to the role of being a parent. The PSI identifies parent and child variables that affect individuals' levels of perceived parenting stress. It is a 101-item, self-administered questionnaire, with each item ranked on a five-point Likert scale ranging from (1) strongly agree to (5) strongly disagree. Items are contained within 13 subscales and clustered into two domains (parent and child). The Parent Domain has seven subscales that indicate different dimensions of parental functioning that could potentially make it difficult for

individuals to perform their parenting roles: (1) depression, (2) attachment, (3) restriction of role, (4) sense of competence, (5) social isolation, (6) relationship with spouse, and (7) parent health. The Child Domain has six subscales that indicate different qualities of the child that could potentially make it difficult for individuals to perform their parenting roles: (1) adaptability, (2) acceptability, (3) demandingness, (4) mood, (5) distractibility/hyperactivity, and (6) reinforcement to parent. Each subscale is scored by summing all items in the subscale; the Child Domain and the Parent Domain are scored by summing the subscales within each domain; and the PSI Total Score is scored by summing the two domains. High scores on the subscales and domains indicate high levels of stress. Norm scores are available for subscales, domains, and total score. The PSI Total Score is considered high if greater than 260 (80th percentile). The Child Domain and Parent Domain scores are considered high if greater than 122, and 153 (80th percentile), respectively. High scores for each subscale have also been computed and documented from the norm group (Abidin, 1991). Internal reliability has been demonstrated for the Child Domain, Parent Domain, and PSI Total Score with alpha coefficients of .90, .93, and .95, respectively. The subscales of the Child Domain have alpha coefficients ranging in magnitude from .73 to .83 and the subscales of the Parent Domain have alpha coefficients ranging in magnitude from .70 to .84. Test-retest (Pearson product-moment) correlation coefficients for Child Domain, Parent Domain, and PSI Total Score are .63, .91, and .96, respectively; indicating good stability of scores across time intervals. Abidin (1991) reports numerous studies that indicate that the PSI has content, concurrent, construct, discriminate, predictive, and factorial validity.

Family Coping Strategies

The Family Coping Strategies (F-COPES) (McCubbin, Larsen, & Olson, 1982) was used to assess coping strategies utilized by families. It is a 30-item, self-administered questionnaire, with each item ranked on a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. The F-COPES is intended to identify coping strategies that families utilize in response to difficult situations. These coping strategies are a combination of internal strategies (from within the family) and external strategies (outside the family) represented in five subscales: (1) acquiring social support from family, friends, neighbors, and community, (2) reframing events in order to make them more manageable, (3) seeking spiritual support, (4) mobilizing the family to acquire and accept help, and (5) passive appraisal. Subscale scores, obtained by summing items in each subscale, represent the amount the family utilizes each particular coping strategy. F-COPES Total Score is obtained by summing all items representing the overall amount of strategies families utilize to cope with stressful situations. Norm scores are available for subscale scores and total score (McCubbin et al., 1992). The F-COPES Total Score has an alpha coefficient of .86 and the subscales have alpha coefficients ranging from .63 to .83. The F-COPES Total Score has test-retest reliability of .81 and the subscales have test-retest reliability ranging from .61 to .95.

Amount of and Satisfaction with Family Services Provided

The Early Intervention Scale (EIS) (Formerly called the Family Focused Intervention Scale) (Mahoney et al., 1990a, 1990b) was used to assess families' perceptions of the amounts of various types of family services provided by professionals and their level of satisfaction with the amount of family services. It is a 39-item, self-administered questionnaire identifying

family services often recommended and potentially used in early intervention programs. The EIS is intended to identify families' perceptions of the amount of family services provided by professionals as part of their children's early intervention programs. The specific types of family services are categorized into five subscales: (1) systems engagement, (2) child information, (3) family instructional activities, (4) personal/family assistance, and (5) resource assistance. Professionals may provide a variety of other child related services not included in the EIS. Therefore, the amount of family services provided by professionals would potentially be less than the overall amount of services provided in early intervention programs.

Factor analysis determined that the five categories of family services were evident from mothers' ratings (Mahoney et al., 1990b). The resulting five-factor solution had a Kaiser Statistic of .94 and accounted for 53% of the item variance. The EIS Total Amount Score has an overall alpha coefficient of .84 with subscales ranging from .79 to .89.

In the current study, primary caregivers were asked to make two responses for each family service identified on the EIS. For the first response, subjects indicated how often a specific type of family service was provided as part of their children's early intervention program on a Likert scale ranging from (1) never to (6) always. Each subscale (amount) is scored by summing items in the subscale, with high scores indicating high perceived amounts of family services provided by professionals within a particular category of family service. The EIS Total Amount Score is scored by summing the subscales, with high scores indicating greater overall tendency of early intervention programs to provide a variety of family services.

For the second response, subjects indicated how often they would like a specific type of family service provided as part of their children's early intervention program on a Likert

scale from (1) less often to (6) more often. Thus, scores reflect satisfaction levels for each particular category of family service. The rating for each item was recoded in order to determine the level of satisfaction. Most satisfied was assigned the number (3), which included the original numbers 3 and 4. Less satisfied was assigned the number (2), which included the original numbers 2 and 5. Least satisfied was assigned the number (1), which included the numbers 1 and 6. Each subscale (satisfaction) is scored by summing items in the subscale, with high scores indicating high satisfaction levels with the amount of family services provided by professionals within a particular category of family service. The EIS Total Satisfaction Score is scored by summing the subscales, with high scores indicating greater satisfaction with the amount of family services provided by professionals.

Data Collection Procedures

Data collection coincided with data collection for the larger project. For subjects participating in the larger project, the research assistant who accompanied the home interventionist to the families' homes distributed the questionnaire packet directly to the primary caregivers. Research assistants collected observational data in families' homes six times, approximately once a month. During the fifth visit to families' homes the research assistant distributed the questionnaire packets directly to the primary caregivers. Each packet contained a cover letter explaining this project, a PSI, a F-COPES, and an EIS. If during the subsequent visit, the packet had not been returned, the primary caregiver was reminded to complete the questionnaires and was given a self-addressed stamped envelope to mail the questionnaires to ISU. Primary caregivers were given new packets if necessary. If the

questionnaires were not received at ISU within a month, primary caregivers were called and sent an additional packet.

For additional subjects, home interventionists distributed questionnaire packets to the primary caregivers. Each home interventionist was given two questionnaire packets to distribute to two primary caregivers on their caseload. Each packet contained a cover letter explaining this project, a demographic questionnaire, a PSI, a F-COPES, an EIS, and a self-addressed stamped envelope to mail the questionnaires to ISU when completed. In order to increase response rates, home interventionists were called and asked to remind families to consider participating in the study by mailing the questionnaires to ISU. This was done since the researcher did not have names of the additional families.

RESULTS

Preliminary Analysis

In the preliminary analysis, scores from each measure were compared with norm scores to determine if the sample was similar or different than the general population. In addition, the internal consistency reliability of each measure was examined.

Sample Information

All PSI scores fell within the normal range of parenting stress; presented in Table 4. On the PSI, normal range of stress includes means between the 15th and 80th percentile. In the current study, the mean PSI Total Score fell between the 60th and 65th percentile. The mean score on the Child Domain fell between the 70th and 75th percentile, with subscale scores ranging from the 55th to the 80th percentile. The mean score on the Parent Domain fell at the 50th percentile, with the subscale scores ranging from the 40th to the 70th percentile. Percentile ranks on all subscales of the Child Domain were above the 50th percentile and the adaptability and acceptability subscales in the Child Domain were at the 80th percentile, which was on the verge of being considered high levels of parenting stress.

The F-COPES Total Score and four of the five subscale scores had higher mean scores than those from the norm group: acquiring social support, reframing, mobilizing family to acquire and accept help, and passive appraisal; presented in Table 5. This indicates that mothers in this sample reported their families utilizing higher levels of coping strategies than mothers in the norm group. One coping strategy, seeking spiritual support, was utilized to a lesser extent by this sample than by the norm group.

Table 4. Means, Percentiles, and Standard Deviations for PSI (N=35)

PSI	Mean	Percentile	SD
PSI Total	230.60	60-65	42.13
Child Domain (child related stress)	109.86	70-75	24.35
Acceptability	15.51	80	4.79
Adaptability	28.34	80	6.47
Demandingness	20.89	75	4.98
Distractibility	25.89	65	5.55
Mood	10.00	60	3.77
Reinforces parent	9.23	55	4.17
Parent Domain (parent related stress)	120.74	50	26.95
Attachment	11.97	50	3.50
Sense of competence	27.34	40	6.20
Depression	19.17	45	4.79
Parent health	12.11	65	3.20
Social isolation	13.89	70	4.63
Restriction of role	17.77	45	5.08
Relations with spouse	18.49	65	7.02

All scales are with in normal range of stress.

Table 5. Means and Standard Deviations for F-COPES (N=35)

F-COPES	Mean	SD
F-COPES Total	98.54 *	11.36
Acquiring social support	30.14 *	6.47
Reframing	31.09 *	6.30
Seeking spiritual support	13.83 +	3.31
Mobilizing family to acquire and accept help	14.49 *	2.76
Passive appraisal	9.00 *	3.46

+ = lower than norm mean

* = higher than norm mean

Preliminary analysis of the EIS questionnaire included calculating the percentages of items in each subscale that received: (a) ratings of 1 or 2, (b) ratings of 3 or 4, and (c) ratings of 5 or 6; presented in Table 6. For the first response, percentages represent mothers' reported perceived amounts of family services that were never, sometimes, or always provided as part of their early intervention programs. For the second response, percentages represent how often mothers wanted family services provided as part of their early intervention programs, whether it be less often, the same, or more often. Mothers who answered "same" were considered satisfied with the amount of family services professionals were providing, while those who answered "less often" or "more often" were considered not satisfied.

The EIS Total Amount Percentages indicated that 46.1% of mothers reported that family services were always provided as part of families' early intervention program; 30.5% reported that family services were sometimes provided; and 23.4% reported that family services were never provided as part of early intervention programs. Services included on the EIS are only a sample of the wide range of family services that potentially could be provided.

Mothers indicated different amounts of family services depending on the nature of the services. Results indicated that 66.4% of mothers reported that child information was always provided by professionals as part of their early intervention program, 61.6% reported that family instructional activities were always provided, 48.2% reported that systems engagement was always provided, 28.8% reported that resource assistance was always provided, and 25.7% reported that personal/family assistance was always provided by professionals as part of their early intervention programs.

Table 6. Percentages of answers for EIS (N=35)

	How often does your program provide each of the following:				How often would you like your program to provide the following			
	Never	Sometimes	Always		Less often	Same	More often	
Early Intervention Scale (EIS)								
EIS Total	23.4	30.5	46.1		7.5	67.5	25.0	
Systems Engagement Total	20.1	31.7	48.2		6.7	65.2	28.1	
Help to prepare you for your child's future	12.5	37.5	50.0		3.1	71.9	25.0	
Help you to be an informed advocate for your child	9.4	37.5	53.1		3.1	68.8	28.1	
Want you to choose what you do in the program	9.4	43.8	46.9		0.0	65.6	34.4	
Help you prepare for your child's next educational setting	18.8	28.1	53.1		0.0	65.6	34.4	
Provide opportunities for you to participate in parent groups	40.6	25.0	34.4		21.9	53.1	25.0	
Encourage you to make major decisions about care & educ. of your child	15.6	15.6	68.8		9.4	68.8	21.9	
Help you learn how to deal with the system	34.4	34.4	31.3		9.4	62.5	28.1	
Child Information Total	7.4	26.2	66.4		3.5	70.7	25.8	
Discuss the philosophy of the program	3.1	56.3	40.6		6.3	75.0	18.8	
Ask what you need for your child	6.3	25.5	68.8		0.0	62.5	37.5	
Talk to you about your child's health	3.1	28.1	68.8		3.1	81.3	15.6	
Talk to you about your child's developmental growth	3.1	12.5	84.4		3.1	65.6	31.3	
Explain the results of tests	6.3	12.5	81.3		0.0	68.8	31.3	
Explain why tests are used	9.4	28.1	62.5		6.3	68.8	25.0	
Ask how you are coping with your child	12.5	25.0	62.5		3.1	75.0	21.9	
Provide opportunities for you to share your feelings with the program staff	15.6	21.9	62.5		6.3	68.8	25.0	

Table 6 (continued)

	How often does your program provide each of the following:				How often would you like your program to provide the following			
	Never	Sometimes	Always		Less often	Same	More often	
Early Intervention Scale (EIS)								
Family Instructional Activities Total	10.3	28.1	61.6		2.2	67.0	30.8	
Want you to be there while your child is being tested	6.3	21.9	71.9		3.1	68.8	28.1	
Show you how to help your child develop	3.1	21.9	75.0		0.0	65.6	34.4	
Show you how to play with your child	6.3	25.0	68.8		3.1	71.9	25.0	
Provide you with toys for your child	12.5	28.1	59.4		0.0	68.8	31.3	
Give you a plan to carry out during the month	18.8	40.6	40.6		0.0	59.4	40.6	
Provide books and pamphlets for you to use	12.5	37.5	50.0		3.1	50.0	46.9	
Assess how you play or interact with your child	12.5	21.9	65.6		6.3	84.4	9.4	
Personal/Family Assistance Total	37.9	36.4	25.7		12.1	68.4	19.5	
Ask what you want for your family	6.3	43.8	50.0		3.1	68.8	28.1	
Show interest in hearing about your family	3.1	21.9	75.0		6.3	87.5	6.3	
Provide opportunities for you to share your feeling with other parents	40.6	46.9	12.5		9.4	59.4	31.3	
Provide family counseling	56.3	34.4	9.4		12.5	65.6	21.9	
Provide information on stress management strategies	56.3	28.1	15.6		12.5	62.5	25.0	
Help you to take time for yourself	43.8	43.8	12.5		15.6	65.6	18.8	
Assist you in getting your spouse or other relatives to help with your child	53.1	31.3	15.3		15.6	62.5	21.9	
Help you with personal problems	43.8	40.6	15.6		21.9	75.0	3.1	

Table 6 (continued)

Early Intervention Scale (EIS)	How often does your program provide each of the following:				How often would you like your program to provide the following			
	Never	Sometimes	Always		Less often	Same	More often	
Resource Assistance Total	41.3	29.9	28.8		12.8	66.0	21.2	
Assist you getting help from friends and neighbors	56.3	40.6	3.1		12.5	78.1	9.4	
Help you get medical care for your child	37.5	37.5	25.0		12.5	75.0	12.5	
Make referrals to professionals such as social workers or family counselors	40.6	21.9	37.5		15.6	65.6	18.8	
Make referrals to other Early Intervention Programs	28.1	21.9	50.0		6.3	68.8	25.0	
Help you fill out forms	28.1	31.3	40.6		12.5	68.8	18.8	
Help you obtain services for your child from other agencies	31.3	25.0	43.8		12.5	59.4	28.1	
Help you obtain funding that you are qualified to receive	40.6	31.3	28.1		12.5	56.3	31.3	
Help you find transportation for services or meeting if needed	50.0	28.1	21.9		12.5	65.6	21.9	
Help you find babysitting or childcare	59.4	31.3	9.4		18.8	56.3	25.0	

Results indicated that 67.5% of mothers reported satisfaction with overall amount of family services provided by professionals as part of their early intervention programs. More specifically, 70.7% reported satisfaction with the amount of child information provided by professionals, 68.4% reported satisfaction with the amount of personal/family assistance, 67% reported satisfaction with the amount of family instructional activities, 66% reported satisfaction with the amount of resource assistance, and 65.2% reported satisfaction with the amount of systems engagement provided by professionals.

While the majority of mothers reported satisfaction with the amount of services provided by professionals, there was great variability with some categories of family services. While the majority of mothers reported always receiving at least some child information services, some mothers reported wanting child information services provided even more often. For example, several mothers wanted more of the following child information services provided by professionals: ask what they need for their children (37.5%), talk to them about their children's development (31.3%), and explain the results of tests (31.3%). Again, while the majority of mothers reported always receiving family instructional activities, some mothers reported wanting services in this category provided even more often. For example, several mothers wanted more of the following family instructional activities: provide books and pamphlets (46.9%), give them a plan to carry out during the month (40.6%), show them how to help their children develop (34.4%), provide them with toys for their children (31.3%), and want families to be there while their children are being tested (28.1%). Very low percentages of mothers wanted child information and family instructional activities provided less often.

While just under the majority of mothers reported professionals always provided systems engagement services, some mothers reported wanting more help from professionals preparing for their children's next educational setting (34.4%), having them choose what they want to do in the program (34.4%), helping them be an informed advocate for their children (28.1%), and helping them learn how to deal with the system (28.1%). However, in this category 21.9% of mothers reported wanting professionals to provide fewer opportunities for them to participate in parent groups.

The majority of mothers reported satisfaction with the amount of services in the personal/family assistance and resource assistance categories, even though mothers reported always receiving these services only 26% and 29% of the time, respectively. This suggests that even though professionals provided these services less often, mothers were satisfied with the lesser amount. When the mothers were not satisfied with the amount in these two categories, there was great variability to whether they wanted more or less services provided when compared to the other categories of services.

Measure Information

Internal reliability coefficients (Cronbach's Alpha) were calculated for each subscale score, domain score, and PSI Total Score; presented in Table 7. The coefficients ranged from .64 to .89 for subscales in the Child Domain, and from .67 to .88 for subscales in the Parent Domain. Coefficients for the Child Domain, Parent Domain, and PSI Total Score were .93, .94, and .95, respectively.

Table 7. Internal reliability coefficients (Cronbach's Alpha) for PSI (N=35)

PSI	Alpha	# of Items
PSI Total	.95	101
Child Domain (child related stress)	.93	47
Acceptability	.69	7
Adaptability	.77	11
Demandingness	.64	9
Distractibility	.72	9
Mood	.83	5
Reinforces parent	.89	6
Parent Domain (parent related stress)	.94	54
Attachment	.69	7
Sense of competence	.78	13
Depression	.72	9
Parent health	.67	5
Social isolation	.85	6
Restriction of role	.77	7
Relations with spouse	.88	7

Internal reliability coefficients (Cronbach's Alpha) were calculated for each subscale score and F-COPES Total Score; presented in Table 8. The coefficients for the subscales ranged from .61 to .88, and the coefficient for the total scale was .75.

Internal reliability coefficients (Cronbach's Alpha) were calculated for each subscale score and EIS Total Score; presented in Table 9. The coefficients for the subscales in the first part of the questionnaire (amount of services) ranged from .80 to .89 and EIS Total Amount Score was .95. The coefficients for subscales in the second part of the questionnaire (satisfaction with services) ranged from .80 to .88 and EIS Total Satisfaction Score was .96.

Table 8. Internal reliability coefficients (Cronbach's Alpha) for F-COPES (N=35)

F-COPES	Alpha	# of Items
F-COPES Total	.75	29
Acquiring social support	.82	9
Reframing	.88	8
Seeking spiritual support	.80	4
Mobilizing family to acquire and accept help	.61	4
Passive appraisal	.63	4

Table 9. Internal reliability coefficients (Cronbach's Alpha) for EIS amount and satisfaction (N=32)

EIS	Alpha (Amount)	Alpha (Satisfaction)	# of Items
EIS Total	.95	.96	39
Systems engagement	.80	.87	7
Child information	.88	.84	8
Family instruction activities	.85	.80	7
Personal/family assistance	.82	.88	8
Resource assistance	.89	.87	9

Analysis of Research Questions

Relationship between Coping and Stress

The relationship between coping strategies utilized and level of perceived parenting stress was examined using Pearson product-moment correlation. The five subscale scores and total score from the Family Coping Strategies (F-COPES) were correlated with Child Domain, Parent Domain, and total score, all from the Parenting Stress Index (PSI). Results of the correlational analyses are presented in Table 10.

Results revealed significant correlations between passive appraisal and both parenting stress on the Parent Domain and total parenting stress. Closer examination of the subscales in the Parent Domain revealed that higher levels of passive appraisal were significantly correlated with greater depression, lack of competence, social isolation, lack of a positive relationship with partner, and health problems.

Relationship between Amount of Services and Stress

The relationship between amount of family intervention services provided by professionals and level of perceived parenting stress was examined using Pearson product-moment correlation. The five subscale scores and total score from the Early Intervention Scale (EIS) were correlated with Child Domain, Parent Domain, and total score from the PSI; Table 11 presents the correlational analysis.

Results revealed a significant negative correlation between family instructional activities and total parenting stress. In addition, the negative correlations between family instructional activities and parenting stress on the Parent Domains, and between child information and parenting stress on the Parent Domain were approaching significance.

Table 10. Correlations between coping strategies utilized (F-COPES) and level of perceived parenting stress (PSI)

	F-COPES						F-COPES Total Score
	Acquiring Social Support	Reframing	Seeking Spiritual Support	Mobilizing Family to Acquire and Accept Help	Passive Appraisal		
PSI	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)
Child Domain	.1198 (.493)	-.1029 (.556)	-.0040 (.982)	.0006 (.997)	.0471 (.788)		.0245 (.889)
Parent Domain	.0338 (.847)	-.2182 (.208)	-.2226 (.199)	-.0802 (.647)	.4830 (.003)**		-.0388 (.825)
PSI Total Score	.0909 (.604)	-.1990 (.252)	-.1447 (.407)	-.0509 (.771)	.3361 (.048)*		-.0107 (.952)

* Statistical significance at p<.05 level, two-tailed-test.

** Statistical significance at p<.01 level, two-tailed-test.

Table 11. Correlations between amount of family services provided (EIS) and level of perceived parenting stress (PSI)

PSI	EIS Amount of Services						EIS Total Amount Score r (p)
	Systems Engagement r (p)	Child Information r (p)	Family Instructional Activities r (p)	Personal / Family Assistance r (p)	Resource Assistance r (p)		
Child Domain	-.1618 (.376)	-.1731 (.344)	-.2835 (.116)	-.0026 (.989)	.0494 (.788)	-.1170 (.524)	
Parent Domain	-.2547 (.159)	-.3013 (.094)	-.3129 (.081)	-.0663 (.719)	-.0299 (.871)	-.2101 (.248)	
PSI Total Score	-.2550 (.159)	-.2911 (.106)	-.3618 (.042)*	-.0438 (.812)	.0092 (.960)	-.2009 (.270)	

* Statistical significance at $p < .05$ level, two-tailed-test.

** Statistical significance at $p < .01$ level, two-tailed-test.

Relationship between Satisfaction with Services and Stress

The relationship between level of satisfaction with family intervention services provided by professionals and level of perceived parenting stress was examined using Pearson product-moment correlation. The five subscale scores and total score from the EIS were correlated with Child Domain, Parent Domain, and total score from the PSI; Table 12 presents the correlational analyses.

Results revealed several significant negative correlations between satisfaction with family services and parenting stress: (1) between family instructional activities and total parenting stress; (2) between systems engagement and parenting stress on the Parent Domain; (3) between child information and parenting stress on the Parent Domain; (4) between family instructional activities and parenting stress on the Parent Domain; (5) and between total satisfaction level and parenting stress on the Parent Domain. Also, the negative correlations between satisfaction with child information and total level of parenting stress, and between satisfaction with systems engagement and parenting stress on the Parent Domain were approaching significance.

Closer examination of the subscales in Parent Domain of the PSI revealed several significant correlations: (1) higher levels of satisfaction with systems engagement were associated with greater sense of competence; (2) higher levels of satisfaction with child information were associated with less depression, and greater sense of competence and positive relationships with partner; (3) higher levels of satisfaction with family instructional activities were associated with less depression and social isolation, as well as greater sense of

Table 12. Correlations between satisfaction of family services provided (EIS) and level of perceived parenting stress (PSI)

PSI	EIS Satisfaction with Services						EIS Total Satisfaction Score r (p)
	Systems Engagement r (p)	Child Information r (p)	Family Instructional Activities r (p)	Personal / Family Assistance r (p)	Resource Assistance r (p)		
Child Domain	-.0966 (.599)	-.0937 (.610)	-.1333 (.467)	.0172 (.925)	.0020 (.991)	-.0595 (.746)	
Parent Domain	-.3786 (.033)*	-.4173 (.017)*	-.4928 (.004)**	-.1835 (.315)	-.2266 (.212)	-.3708 (.037)*	
PSI Total Score	-.2966 (.099)	-.3196 (.075)	-.3904 (.027)*	-.1071 (.560)	-.1433 (.434)	-.2704 (.134)	

* Statistical significance at $p < .05$ level, two-tailed-test.

** Statistical significance at $p < .01$ level, two-tailed-test.

competence and positive relationships with partner; and (4) higher levels of total satisfaction were associated with less social isolation.

Relationship between Coping and Amount of Services

The relationship between coping strategies utilized and amount of family intervention services provided by professionals was examined using Pearson product-moment correlation. The five subscale scores and total score from the F-COPES were correlated with the five subscale scores and total score from the EIS; presented in Table 13.

Results revealed that mobilizing the family to acquire and accept help was significantly correlated with child information services. Also, there were several correlations approaching significance: reframing and amount of systems engagement; total coping strategies utilized and systems engagement; and mobilizing the family to acquire and accept help and systems engagement, personal-family assistance, and total services provided.

Relationship between Coping and Satisfaction with Services

The relationship between coping strategies utilized and satisfaction with family intervention services was examined using Pearson product-moment correlation. The five subscale scores and total score from the F-COPES were correlated with the five subscale scores and total score from the EIS. Results of the correlational analyses are presented in Table 14.

Results revealed several significant negative correlations between utilizing passive appraisal and satisfaction with systems engagement, child information, and family instructional activities, as well as with total level of satisfaction. In addition, the negative correlations

Table 13. Correlations between coping strategies utilized (F-COPES) and amount of family services provided (EIS)

EIS Amount of Services	F-COPES						F-COPES Total Score
	Acquiring Social Support	Reframing	Seeking Spiritual Support	Mobilizing Family to Acquire and Accept Help	Passive Appraisal		
	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)
Systems Engagement	.2312 (.203)	.3339 (.062)	-.0374 (.839)	.3013 (.094)	-.2017 (.268)		.3127 (.081)
Child Information	.0703 (.702)	.0665 (.718)	.1943 (.287)	.3566 (.045)*	-.1984 (.276)		.1604 (.381)
Family Instructional Activities	.1861 (.308)	-.0239 (.897)	.2225 (.221)	.2057 (.259)	-.2802 (.120)		.1210 (.510)
Personal /Family Assistance	.2620 (.147)	.2397 (.186)	-.2092 (.250)	.3276 (.067)	-.1737 (.342)		.2422 (.182)
Resource Assistance	.1877 (.304)	.1944 (.286)	-.0958 (.602)	.2010 (.270)	-.1067 (.561)		.1990 (.275)
EIS Total Amount Score	.2198 (.227)	.1960 (.282)	.0041 (.982)	.3210 (.073)	-.2164 (.234)		.2435 (.179)

* Statistical significance at p<.05 level, two-tailed-test.

** Statistical significance at p<.01 level, two-tailed-test.

Table 14. Correlations between coping strategies utilized (F-COPES) and satisfaction with family services provided (EIS)

	F-COPES					F-COPES Total Score
	Acquiring Social Support	Reframing	Seeking Spiritual Support	Mobilizing Family to Acquire and Accept Help	Passive Appraisal	
EIS Satisfaction with Services	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)
Systems Engagement	.1197 (.514)	.2566 (.156)	-.0843 (.646)	.0381 (.836)	-.3695 (.037)*	.0795 (.665)
Child Information	.1218 (.507)	.1091 (.552)	.0948 (.606)	.1307 (.476)	-.3860 (.029)*	.0705 (.702)
Family Instructional Activities	.2174 (.232)	.0567 (.758)	.0703 (.702)	.0135 (.941)	-.3979 (.024)*	.0546 (.767)
Personal /Family Assistance	.0081 (.965)	.0154 (.933)	-.3224 (.072)	-.1571 (.391)	-.1721 (.346)	-.1729 (.344)
Resource Assistance	.2614 (.148)	.1063 (.563)	-.3234 (.071)	-.0610 (.740)	-.2832 (.116)	.0062 (.973)
EIS Total Satisfaction Score	.1773 (.332)	.1217 (.507)	-.1604 (.381)	-.0173 (.925)	-.3602 (.043)*	.0039 (.983)

* Statistical significance at $p < .05$ level, two-tailed-test.** Statistical significance at $p < .01$ level, two-tailed-test.

between seeking spiritual support and satisfaction with personal-family assistance, and between seeking spiritual support and resource assistance were approaching significance.

Relationship between Amount of Services and Satisfaction with Services

The relationship between amount of each category of family intervention service provided by professionals and the level of satisfaction with that particular service, as well as overall level of satisfaction were examined using Pearson product-moment correlation. The five subscale amount scores and total amount score from the EIS were correlated with the five subscale satisfaction scores and total satisfaction score from the EIS. Table 15 presents these correlational analyses.

For each of the following subscales, systems engagement, child information, family instructional activities, and resource assistance, the amount of each particular subscale was significantly correlated with the corresponding satisfaction subscale, as well as significantly correlated with total satisfaction. The amount of personal/family assistance was not significantly correlated with satisfaction with personal/family, but it was significantly correlated with total satisfaction. Also, total amount of services provided by professionals was significantly correlated with total satisfaction level.

Table 15. Correlations between amount of family intervention services provided (EIS) and satisfaction with services (EIS)

EIS Satisfaction with Services	EIS Amount of Services					EIS Total Amount Score
	Systems Engagement	Child Information	Family Instructional Activities	Personal / Family Assistance	Resource Assistance	
	r (p)	r (p)	r (p)	r (p)	r (p)	r(p)
Systems Engagement	.6594 (.000)***	.5819 (.000)***	.5051 (.003)**	.5677 (.001)***	.4651 (.007)**	.6445 (.000)***
Child Information	.6014 (.000)***	.5633 (.001)***	.4963 (.004)**	.4448 (.011)**	.3375 (.059)*	.5596 (.001)***
Family Instructional Activities	.5149 (.003)**	.5742 (.001)***	.5795 (.001)***	.3783 (.033)*	.3075 (.087)	.5359 (.002)**
Personal /Family Assistance	.4557 (.009)**	.2522 (.164)	.2847 (.114)	.3380 (.058)	.2291 (.207)	.3590 (.044)*
Resource Assistance	.6509 (.000)***	.4149 (.018)*	.4668 (.007)**	.5885 (.000)***	.4482 (.010)**	.5975 (.000)***
EIS Total Satisfaction Score	.6678 (.000)***	.5334 (.002)**	.5295 (.002)**	.5439 (.001)***	.4176 (.017)*	.6208 (.000)***

* Statistical significance at p<.05 level, two-tailed-test.

** Statistical significance at p<.01 level, two-tailed-test.

*** Statistical significance at p<.001 level, two-tailed-test.

DISCUSSION

The main purpose of this study was to examine the relationship between several variables related to families who have young children with disabilities and are currently involved in an early intervention programs: (a) perceived parenting stress, (b) coping strategies utilized, and (c) type of and satisfaction with family services provided by professionals.

Perceived Parenting Stress

All subscales, domains, and PSI Total Score were within normal levels of perceived parenting stress, suggesting that participating mothers of young children with disabilities reported experiencing levels of parenting stress similar to those experienced by the general population. Closer examination revealed that even though mothers of children with disabilities experienced normal levels of parenting stress when compared to the PSI norm group, they were at the high end of the normal range on parenting stress due to child characteristics. Mothers who had children with disabilities were more likely to report more parenting stress due to their children's inability to adjust to changes in their physical and social environment, as well as their children having physical, intellectual and emotional characteristics that did not match what they had hoped for and expected.

Even though high amounts of a variety of family services were provided by professionals, providing high amounts of family instructional activities was the only family service associated with low levels of total parenting stress. When mothers have lower levels of parenting stress they may have additional time and energy to learn and carry out activities with their children. Or, when professionals show mothers how to play with their children and

help their children develop, as well as provide activities for mothers to carry out with their children during the month, it may relieve some of the burden mothers feel when thinking of appropriate developmental activities to do with their children. This matches the findings of Shonkoff et al. (1992) who revealed that higher amounts of home visiting hours per month were associated with lower levels of parenting stress on the Parent Domain of the PSI. However, in Shonkoff's study, home visits may have included a combination of child services and family services. Therefore the amount of services in the previous study is potentially higher than our study since the current study measured only family services.

Satisfaction with family services, to a greater extent than reported amounts of family services, was significantly correlated with lower levels of parenting stress. Mothers have different needs and thus may want different amounts of family services; therefore, satisfaction with family services appears to be a more meaningful measure than amount of family services. Higher satisfaction levels with systems engagement, child information, and family instructional activities, as well as overall satisfaction level were associated with lower levels of parenting stress due to parent characteristics. Also, higher satisfaction levels with family instructional activities was associated with lower levels of total parenting stress. This follows the philosophy of family centered services, in that services directed at the family unit as a whole enhance family functioning, therefore, benefiting children. Unfortunately, satisfaction with family services was not related to lower levels of parenting stress due to child characteristics.

Coping Strategies Utilized

Since participating mothers experienced somewhat more parenting stress than the norm group due to child characteristics, it follows that they may utilize more coping

strategies. Mothers reported their families utilizing higher levels of acquiring social support, reframing, mobilizing the family to acquire and accept help, passive appraisal, and overall coping strategies compared to the F-COPES norm group. Mothers reported that their families attended and participated in church services and activities at a lower level than the F-COPES norm group. One explanation is that there could be a religious bias in the norm group since subjects were primarily Lutherans having life insurance with a religious affiliated company.

Four of the five coping strategies utilized were not significantly related to levels of parenting stress such as acquiring social support, reframing, mobilizing family to acquire and accept help, and passive appraisal. However, the F-COPES questionnaire includes only a small sample of possible coping strategies and may not include coping strategies that families of children with disabilities utilize. Utilizing higher amounts of passive appraisal was associated with higher levels of parenting stress due to parent characteristics and total parenting stress. More specifically, mothers who reported higher utilization of passive appraisal were more likely to report higher levels of depression, lack of competence, social isolation, lack of a positive relationship with partner, and health problems. This is similar to results Frey, Greenberg, and Fewell (1989) reported in their study. Avoidance of coping with the situation of raising children with disabilities was associated with psychological distress for mothers and fathers, and poor family adjustment for fathers. Passive appraisal can include denying their children have disabilities, or not dealing with it, either temporarily or permanently (Turnbull & Turnbull, 1990). This form of coping can be beneficial if utilized for short periods of time, but if utilized for extended periods of time, or permanently it can lose its

effectiveness and become detrimental (Frey, Greenberg, & Fewell, 1989); as seen in it's association with higher levels of parenting stress.

Higher utilization of mobilizing the family to acquire and accept help was associated with higher amounts of child information provided by professionals. When professional provided families more information regarding their children's development and health, families appeared to be better able or perhaps more ready and willing to seek help from others.

Higher utilization of passive appraisal was also associated with lower satisfaction levels with a variety of family services including systems engagement, child information, family instructional activities, and total satisfaction which implies that mothers who reported their families utilizing passive appraisal to cope with their current situations were less likely to be satisfied with any amount of services that professionals provided. In addition, mothers who reported their families utilizing high levels of passive appraisal were more likely to receive low amounts of overall family services, although this relationship was not significant it has implications for understanding the previous relationship. Even though mothers received lower amounts of family intervention services, they were not satisfied with that amount. This may indicate that these mothers tend to deny their children have disabilities, therefore any amount of services that professionals provide their children are perceived as too much since they see nothing wrong with their children. In addition, mothers who reported their families utilizing high amounts of passive appraisal were the only mothers who experienced higher levels of parenting stress compared to mothers who reported their families utilizing other types of coping strategies.

Family Intervention Services - Amount and Satisfaction

P.L. 99-457, enacted in 1987, encourages family centered services be provided when delivering early intervention services. Results indicated that only 46% of mothers reported that family services were always provided by professionals as part of families' early intervention programs. Therefore, less than half the families received family services on a regular or consistent bases. Mahoney et al. (1990a) found similar results. In both studies the rank ordering of types of services provided were identical. Child information was provided most often, followed by family instructional activities, systems engagement, and to a lesser extent, resource assistance, and personal/family assistance. These similarities indicate that professionals throughout Iowa are providing types and amounts of family intervention services similar to those provided by professionals in Mahoney's national sample.

However, when comparing the actual percentages of family services that were always provided across studies, Mahoney's sample had higher percentages in four of five types of services. This could be interpreted one of two ways. First, professionals from the national sample may have provided family services more often than those in Iowa. Or, Mahoney's study overestimated the magnitude of intervention services provided by professionals due to administrators recruiting mothers who were more active participants in their programs (Mahoney et al., 1990a).

The majority of mothers in the current study indicated satisfaction with the amount of family services provided by professionals as part of their early intervention program; sixty eight percent of mothers reported satisfaction with the overall amount of services provided. While the majority of mothers reported satisfaction with the amount of services provided by

professionals, there was great variability with some categories of family services to whether mothers wanted services provided less often or more often. Overall, when mothers were not satisfied with the amount of services provided were more likely to want greater amounts of services rather than fewer services.

When examining the relationship between amount of family service and satisfaction with that particular service, four of the five relationships were significant. Higher amounts of services were associated with higher levels of satisfaction with that service for the following categories: systems engagement, child information, family instructional activities, and resource assistance. In addition, higher amounts of each type of family service were associated with higher total levels of satisfaction. Higher amounts of personal/family assistance were not associated with higher levels of satisfaction with that service, but were associated with total levels of satisfaction. This suggests that mothers would rather not receive or do not expect high amounts of personal/family assistance. Other studies have found that informal support networks produce greater beneficial effects for families than formal support networks (Dunst, Trivette, & Deal, 1988; Olson et al., 1983). Therefore, personal/family assistance may be a service that families typically do not expect or seek out from professionals due to receiving social support from family and friends (Mahoney et al., 1990).

CONCLUSIONS AND RECOMMENDATIONS

When providing services to families, professionals should not assume that they must provide high amounts of all types of family services to all families. In this study, results from the EIS indicate that different mothers want different amounts of particular types of services. Specifically, while 25% of mothers reported wanting some family services provided more often, 8% of mothers reported wanting some family services provided less often when compared to their current amount of services received from professionals.

In general, higher levels of satisfaction with services were associated with higher amounts of services, but this varied from family to family, as well as from one service to another. Satisfaction with family services, to a greater extent than amount of family services, was associated with lower levels of parenting stress and higher utilization of particular coping strategies. Therefore, satisfaction with the amount of services appears to be a more meaningful measure than amount of services when examining its relationship with stress and coping. This is similar to what Frey, Fewell, and Vadasy (1989) found where satisfaction with support, rather than amount of support, was associated with greater adjustment.

Previous research has shown that services provided to families are most effective when they correspond with families' needs and concerns and do not go against their preferences (Affleck et al., 1989; Turnbull & Turnbull, 1990). Dunst, Trivette, and Deal (1988) state they have repeatedly found that families' indicating a need for support was necessary in order for support to benefit family functioning. The lack of fit between families' needs, values, and expectations of services and those services provided by professionals can result in neutral or

even harmful effects rather than enhancing coping (Affleck et al., 1989; Dunst, Trivette, & Deal, 1988; Turnbull & Turnbull, 1990).

Different families of children with disabilities have different needs and wants, at least in part due to experiencing different stressors in their lives. Families perform a variety of functions for their children such as providing affection, daily care, recreation, etc. These functions can be affected due to having children with disabilities causing the family to experience parenting stress. In this study, even though as a group mothers reported experiencing normal levels of parenting stress, they were at the high end of normal range in terms of parenting stress due to their children's adaptability and acceptability.

Families utilizing a variety of coping strategies is associated with their ability to deal with the fact that their children have disabilities, as well as associated with lower levels of parenting stress (Turnbull & Turnbull, 1990). Like previously theorized (Turnbull & Turnbull, 1990), this study suggests that some coping strategies may be less effective than others for reducing levels of parenting stress. Mothers who reported their families utilizing higher levels of passive appraisal also reported higher levels of parenting stress, as well as lower levels of satisfaction with the amount of services provided by professionals.

This study provides further evidence that early intervention services must be individualized to be beneficial to families. It is clear that satisfaction with services is the best indicator of usefulness of services. To increase families' satisfaction with external supports, their needs and wants should be assessed, as well as what types and amounts of services they would like professionals to provide. When professionals first start working with families they need to assess the types of stressors families experience in order to provide specific services to

those families to help reduce stress. This may be a difficult task for professionals since when asked directly, families may not know what types of services will benefit their family. Also, there is no specific assessment instrument available for professionals to use to assess the individual needs of families to determine which services to provide. Therefore, it may be helpful for professionals to informally talk with families about their lives and through that conversation professionals may be able to identify services that might benefit specific families.

Early intervention services have evolved from a variety of service delivery systems. Traditionally, services were directed at the children; but with the passage of P.L. 99-457, entire families are to be seen as potential recipients of services. In order to produce change in delivery of early intervention services, there also needs to be change in the training of early intervention personnel. Therefore, training must change to meet the existing type of system delivery of the profession. Professionals must be trained to be aware of and respond to the larger picture, such as families' needs rather than just the children's needs. In order for professionals to understand the importance of providing services to families in an effort to reduce parenting stress, an understanding of child development within the context of families must be portrayed. Through this theoretical perspective, professionals may come to understand that children do not develop in an isolated environment but rather families are the center of children's environment. Helping families adjust to raising children with disabilities will promote a healthy environment for children to develop and all family members to live.

With the added responsibilities of providing services to entire families, professionals must learn additional skills to work with families. These skills might include portraying a non-judgmental attitude, as well as empathetic listening skills. It is also important to realize that

educators can not provide all types of service to meet families' needs; therefore they must refer families to other professionals trained to meet desired needs. This emphasizes the significance of teaming with other professionals. When more than one professional works with a family it is beneficial for those professionals involved, as well as the family if team members share the information they have regarding the family.

Due to a small, homogeneous sample (N=35), conclusions from this study must be drawn cautiously. The majority of the primary caregivers were white, married mothers, therefore the generalizability to all families of children with disabilities is limited. Also, sampling bias occurs when volunteers are used. Families that volunteer for research studies may be different in regard to motivation and participation in their intervention program than families who do not volunteer. Despite these cautions, a number of correlations were significant or approaching significance. These recommendations for delivery of early intervention services and training of early intervention personnel suggest the need for further examination of these variables with a larger population.

REFERENCES

- Abidin, R. R. (1991). Parenting Stress Index Manual. Charlottesville, VA: Pediatric Psychology Press.
- Affleck, G., Tennen, H., Rowe, J., Roscher, B., & Walker, L. (1989). Effects of formal support on mothers' adaptation to the hospital-to-home transition of high-risk infants: The benefits and costs of helping. Child development, *60*, 488-501.
- Bailey, D. B. (1991). Issues and perspectives on family assessment. Infants and young children, *4*(1), 26-34.
- Beckman, P. J. (1991). Comparison of mothers' and fathers' perceptions of the effect of young children with and without disabilities. American journal on mental retardation, *95*(5), 585-595.
- Deardorff, C. A. (1992). Use of the double ABCX model of family adaptation in the early intervention process. Infants and young children, *4*(3), 75-83.
- Dunst, C. J., Leet, H. E., & Trivette, C. M. (1988). Family resources, personal well-being, and early intervention. The journal of special education, *22*, 108-116.
- Dunst, C. J., Trivette, C. M., & Deal, A. (1988). Enabling and empowering families: Principles and guidelines for practice. Cambridge, MA: Brookline Books.
- Dunst, C. J., Trivette, C. M., Starnes, A. L., Hamby, D. W., & Gordon, N. J. (1993). Building and evaluating family support initiatives. Baltimore, MA: Paul H. Brookes Publishing Co.
- Edgar, E. B., Reid, P. C., & Pious, C. C. (1988). Special sitters: Youth as respite care providers. Mental Retardation, *26*(1), 33-37.

- Flynt, S. W., Wood, T. A., & Scott, R. L. (1992). Social support of mothers of children with mental retardation. Mental retardation, 30(4), 233-236.
- Friedrich, W. N. (1979). Predictors of the coping behavior of mothers of handicapped children. Journal of consulting and clinical psychology, 47(6), 1140-1141.
- Friedrich, W. N., Wiltuner, L. T., & Cohen, D. S. (1985). Coping resources and parenting mentally retarded children. American journal of mental deficiency, 90(2), 130-139.
- Frey, K. S., Fewell, R. R., & Vadasy, P. F. (1989). Parental adjustment and changes in child outcome among families of young handicapped children. Topics in early childhood special education, 8(4), 38-57.
- Frey, K. S., Greenberg, M. T., & Fewell, R. R. (1989). Stress and coping among parents of handicapped children: A multidimensional approach. American journal on mental retardation, 94(3), 240-249.
- Friedrich, W. N. (1979). Predictors of the coping behavior of mothers of handicapped children. Journal of consulting and clinical psychology, 47(6), 1140-1141.
- Friedrich, W. N., Wiltuner, L. T., & Cohen, D. S. (1985). Coping resources and parenting mentally retarded children. American journal of mental deficiency, 90(2), 130-139.
- Gallagher, J. J. (1990). The family as a focus for intervention. In S. J. Meisels & J. R. Shonkoff (Eds.), Handbook of early childhood intervention (pp. 540-559). Cambridge, MA: Cambridge University Press.
- Goldberg, S., Marcovitch, S., MacGregor, D., & Lojkasek, M. (1986). Family responses to developmentally delayed preschoolers: Etiology and the father's role. American journal on mental deficiency, 90(6), 610-617.

- Krauss, M. W. (1993). Child-related and parenting stress: Similarities and differences between mothers and fathers of children with disabilities. American journal on mental retardation, 97(4), 393-404.
- Mahoney, G., O'Sullivan, P., & Dennebaum, J. (1990a). A national study of mothers' perceptions of family focused early intervention. Journal of early intervention, 14(2), 133-146.
- Mahoney, G., O'Sullivan, P., & Dennebaum, J. (1990b). Maternal perceptions of early intervention services: A scale for assessing family focused intervention. Topics in early childhood special education, 10(1), 1-15.
- McCubbin, H. I., Larsen, A. S., & Olson, D. H. (1982). F-COPES: Family coping strategies. In D. H. Olson, H. I. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds.), Family inventories: Inventories used in a national survey of families across the family life cycle (pp. 101-118). Minneapolis, MN.
- McCubbin, H. I., Joy, C. B., Cauble, A. E., Comeou, J. K., Patterson, J. M., & Needle, R. H. (1980). Family stress and coping: A decade in review. Journal of marriage and family therapy, 42, 855-871.
- McCubbin, H. I., & Patterson, J. M. (1983). Family stress and adaptation to crisis: A double ABCX model of family behavior. In H. McCubbin, M. Sussman, & J. Patterson (Eds.), Social stresses and the family: Advances in family stress theory and research (pp. 7-37). New York, NY: Haworth Press.
- McLinden, S. E. (1988). The comprehensive evaluation of family functioning scale. Logan, UT: Early Intervention Research Institute.

- McLinden, S. E. (1990). Mothers' and fathers' reports of the effects of a young child with special needs on the family. Journal of early intervention, 14(3), 249-259.
- Noh, S., Dumas, J. E. Wolf, L. C., & Fisman, S. N. (1989). Delineating sources of stress in parents of exceptional children. Family relations, 38, 456-461.
- Olson, D. H., McCubbin, H. I., Barns, H., Larsen, A., Muxen, M., & Wilson, M. (1983). Family coping strategies. Families: What makes them work. Beverly Hills, CA: Sage Publications.
- Orr, R. R., Cameron, S. J., & Day, D. M. (1991). Coping with stress in families with children who have mental retardation: An evaluation of the double ABCX model. American journal on mental retardation, 95(4), 444-450.
- Salisbury, C. L. (1986). Adaptation of the Questionnaire on Resources and Stress Short Form. American journal of mental deficiency, 90(4), 456-459.
- Salisbury, C. L. (1987). Stressors of parents with young handicapped and nonhandicapped children. Journal of the division for early childhood, 11(2), 154-160.
- Shapiro, J. (1989). Stress, depression, and support group participation in mothers of developmentally delayed children. Family relations, 38, 169-173.
- Shonkoff, J. P., Hauser-Cram, P., Krauss, M. W., & Upshur, C. C. (1992). Development of infants with disabilities and their families. Monographs of the society for research in child development, 57(6, Serial No. 230).
- Simeonsson, R. J., & Bailey, Jr., D. B. (1990). Family dimensions in early intervention. In S. J. Meisels & J. R. Shonkoff (Eds.), Handbook of early childhood intervention. (pp. 428-444). Cambridge, MA: Cambridge University Press.

- Turnbull, A. P., & Turnbull, H. R. (1990). Families, professionals, and exceptionality: A special partnership. New York, NY: Macmillan Publishing Co.
- Upshur, C. C. (1991). Mothers' and fathers' ratings of the benefits of early intervention. Journal of early intervention, 15(4), 345-357.
- Vadasy, P. F., Fewell, R. R., Greenberg, M. T., Dermond, N. L., & Meyer, D. J. (1986). Follow-up evaluation of the effects of involvement in the fathers program. Topics in early childhood special education, 6(2), 16-31.
- Whiddon, D. A. (1993). A qualitative study of stress and coping in families of children with disabilities involved in early intervention programs in Iowa. Unpublished master's thesis. Iowa State University, Ames.

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APPENDIX: MEASURES

FAMILY DEMOGRAPHIC QUESTIONNAIRE

The following questions will let us describe the participants in this study.

1. Mother's age _____ Father's age _____
2. What is your marital status? Check one:

<input type="checkbox"/> single	<input type="checkbox"/> married or living with partner
<input type="checkbox"/> divorced or separated	<input type="checkbox"/> widowed
3. What is the highest level of school that you have completed? Check one:

Mother	Father
<input type="checkbox"/> partial high school	<input type="checkbox"/> partial high school
<input type="checkbox"/> high school diploma or GED	<input type="checkbox"/> high school diploma or GED
<input type="checkbox"/> some college or specialized training	<input type="checkbox"/> some college or specialized training
<input type="checkbox"/> standard college or university graduation	<input type="checkbox"/> standard college or university graduation
<input type="checkbox"/> graduate professional training (graduate degree)	<input type="checkbox"/> graduate professional training (graduate degree)
4. Mother's Occupation _____ Father's Occupation _____
5. Please give us a general estimate of your family's total income from all sources. Please check one:

<input type="checkbox"/> \$5,000 - 10,000	<input type="checkbox"/> \$31,000 - 40,000
<input type="checkbox"/> \$11,000 - 15,000	<input type="checkbox"/> \$41,000 - 50,000
<input type="checkbox"/> \$16,000 - 20,000	<input type="checkbox"/> \$51,000 - 74,000
<input type="checkbox"/> \$21,000 - 30,000	<input type="checkbox"/> Above \$75,000
6. Would you describe yourself as:

<input type="checkbox"/> Black	<input type="checkbox"/> Native American
<input type="checkbox"/> Hispanic	<input type="checkbox"/> White/Caucasian
<input type="checkbox"/> Asian	<input type="checkbox"/> Other

(OVER)

The following questions pertain to your child receiving services from the AEA.

1. Child's birth date: _____ (month/day/year) Sex: ____ Female ____ Male
2. Number of brothers and sisters ____ brothers ____ sisters
3. Has your child been given a specific diagnosis? ____ yes ____ no
If yes, please specify _____
4. Please indicate the level of care your child requires compared to other children your child's age:
____ my child requires a great deal more caretaking compared to other children his/her age
____ my child requires somewhat more caretaking compared to other children his/her age
____ my child requires about the same amount of caretaking as other children his/her age
5. How long has your child been receiving early intervention services from the AEA?
_____ (months)
6. Please check the services that your child is currently receiving from the AEA:
____ home teacher/educator
____ speech and language
____ occupational therapy
____ physical therapy
____ nutrition services
____ nursing

PARENTING STRESS INDEX (PSI)

Administration Booklet

Richard R. Abidin
Institute of Clinical Psychology
University of Virginia

Directions:

In answering the following questions, please think about the child participating in the AEA program.

The questions on the following pages ask you to mark an answer which best describes your feelings. While you may not find an answer which exactly states your feelings, please mark the answer which comes closest to describing how you feel. **YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER.**

Please mark the degree to which you agree or disagree with the following statements by filling in the number which best matches how you feel. If you are not sure, please fill in #3.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

Example: 1 2 3 4 5 I enjoy going to the movies. (If you sometimes enjoy going to the movies, you would fill in #2.)

- | | 1 | 2 | 3 | 4 | 5 |
|--|-------------------|-------|-------------|----------|----------------------|
| | Strongly
Agree | Agree | Not
Sure | Disagree | Strongly
Disagree |
| 1. When my child wants something, my child usually keeps trying to get it. | 1 | 2 | 3 | 4 | 5 |
| 2. My child is so active that it exhausts me. | 1 | 2 | 3 | 4 | 5 |
| 3. My child appears disorganized and is easily distracted. | 1 | 2 | 3 | 4 | 5 |
| 4. Compared to most, my child has more difficulty concentrating and paying attention. | 1 | 2 | 3 | 4 | 5 |
| 5. My child will often stay occupied with a toy for more than 10 minutes. | 1 | 2 | 3 | 4 | 5 |
| 6. My child wanders away much more than I expected. | 1 | 2 | 3 | 4 | 5 |
| 7. My child is much more active than I expected. | 1 | 2 | 3 | 4 | 5 |
| 8. My child squirms and kicks a great deal when being dressed or bathed. | 1 | 2 | 3 | 4 | 5 |
| 9. My child can be easily distracted from wanting something. | 1 | 2 | 3 | 4 | 5 |
| 10. My child rarely does things for me that make me feel good. | 1 | 2 | 3 | 4 | 5 |
| 11. Most times I feel that my child likes me and wants to be close to me. | 1 | 2 | 3 | 4 | 5 |
| 12. Sometimes I feel my child doesn't like me and doesn't want to be close to me. | 1 | 2 | 3 | 4 | 5 |
| 13. My child smiles at me much less than I expected. | 1 | 2 | 3 | 4 | 5 |
| 14. When I do things for my child I get the feeling that my efforts are not appreciated very much. | 1 | 2 | 3 | 4 | 5 |
| 15. Which statement best describes your child? <i>(Circle number below)</i> | | | | | |
| 1. almost always likes to play with me | | | | | |
| 2. sometimes likes to play with me | | | | | |
| 4. usually doesn't like to play with me | | | | | |
| 5. almost never likes to play with me | | | | | |
| 16. My child cries and fusses: <i>(Circle number below)</i> | | | | | |
| 1. much less than I had expected | | | | | |
| 2. less than I expected | | | | | |
| 3. about as much as I expected | | | | | |
| 4. much more than I expected | | | | | |
| 5. it seems almost constant | | | | | |
| 17. My child seems to cry or fuss more often than most children. | 1 | 2 | 3 | 4 | 5 |
| 18. When playing, my child doesn't often giggle or laugh. | 1 | 2 | 3 | 4 | 5 |
| 19. My child generally wakes up in a bad mood. | 1 | 2 | 3 | 4 | 5 |

	1	2	3	4	5
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
20. I feel that my child is very moody and easily upset.	1	2	3	4	5
21. My child looks a little different than I expected and it bothers me at times.	1	2	3	4	5
22. In some areas my child seems to have forgotten past learnings and has gone back to doing things characteristic of younger children.	1	2	3	4	5
23. My child doesn't seem to learn as quickly as most children.	1	2	3	4	5
24. My child doesn't seem to smile as much as most children	1	2	3	4	5
25. My child does a few things which bother me a great deal.	1	2	3	4	5
26. My child is not able to do as much as I expected.	1	2	3	4	5
27. My child does not like to be cuddled or touched very much.	1	2	3	4	5
28. When my child came home from the hospital, I had doubtful feelings about my ability to handle being a parent.	1	2	3	4	5
29. Being a parent is harder than I thought it would be.	1	2	3	4	5
30. I feel capable and on top of things when I am caring for my child.	1	2	3	4	5
31. Compared to the average child, my child has a great deal of difficulty in getting used to changes in schedules or changes around the house.	1	2	3	4	5
32. My child reacts very strongly when something happens that my child doesn't like.	1	2	3	4	5
33. Leaving my child with a babysitter is usually a problem.	1	2	3	4	5
34. My child gets upset easily over the smallest thing.	1	2	3	4	5
35. My child easily notices and overreacts to loud sounds and bright lights.	1	2	3	4	5
36. My child's sleeping or eating schedule was much harder to establish than I expected.	1	2	3	4	5
37. My child usually avoids a new toy for a while before beginning to play with it.	1	2	3	4	5
38. It takes a long time and it is very hard for my child to get used to new things.	1	2	3	4	5
39. My child doesn't seem comfortable when meeting strangers.	1	2	3	4	5
40. When upset, my child is: <i>(Circle number below)</i>					
1. easy to calm down					
2. harder to calm down than I expected					
4. very difficult to calm down					
5. nothing I do helps to calm my child					

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

41. I have found that getting my child to do something or stop doing something is:

(Circle number below)

1. much harder than I expected
2. somewhat harder than I expected
3. about as hard as I expected
4. somewhat easier than I expected
5. much easier than I expected

42. Thank carefully and count the number of things which your child does that bothers you. For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc. Please fill in the number which includes that number of things you counted.

1. 1-3
2. 4-5
3. 6-7
4. 8-9
5. 10+

43. When my child cries it usually lasts: *(Circle number below)*

1. less than 2 minutes
2. 2-5 minutes
3. 5-10 minutes
4. 10-15 minutes
5. more than 15 minutes

- | | | | | | |
|--|---|---|---|---|---|
| 44. There are some things my child does that really bother me a lot. | 1 | 2 | 3 | 4 | 5 |
| 45. My child has had more health problems than I expected. | 1 | 2 | 3 | 4 | 5 |
| 46. As my child has grown older and become more independent, I find myself more worried that my child will get hurt or into trouble. | 1 | 2 | 3 | 4 | 5 |
| 47. My child turned out to be more of a problem than I had expected. | 1 | 2 | 3 | 4 | 5 |
| 48. My child seems to be much harder to care for than most. | 1 | 2 | 3 | 4 | 5 |
| 49. My child is always hanging on me. | 1 | 2 | 3 | 4 | 5 |
| 50. My child makes more demands on me than most children. | 1 | 2 | 3 | 4 | 5 |
| 51. I can't make decisions without help. | 1 | 2 | 3 | 4 | 5 |

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

52. I have had many more problems raising children than I expected. 1 2 3 4 5
53. I enjoy being a parent. 1 2 3 4 5
54. I feel that I am successful most of the time when I try to get my child to do or not do something. 1 2 3 4 5
55. Since I brought my last child home from the hospital, I find that I am not able to take care of this child as well as I thought I could. I need help. 1 2 3 4 5
56. I often have the feeling that I cannot handle things very well. 1 2 3 4 5
57. When I think about myself as a parent I believe: *(Circle number below)*
1. I can handle anything that happens
 2. I can handle most things pretty well
 3. Sometimes I have doubts, but find that I handle most things without any problems
 4. I have some doubts about being able to handle things
 5. I don't think I handle things very well at all.
58. I feel that I am: *(Circle number below)*
1. a very good parent
 2. a better than average parent
 3. an average parent
 4. a person who has some trouble being a parent
 5. not very good at being a parent
59. What were the highest levels in school or college you and the child's father/mother have completed? *(Circle number below)*
- Mother:
1. 1-8th grade
 2. 9-12th grade
 3. Vocational or some college
 4. College graduate
 5. Graduate or professional school

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

60. Father: *(Circle number below)*

1. 1-8th grade
2. 9-12th grade
3. Vocational or some college
4. College graduate
5. Graduate or professional school

61. How easy is it for you to understand what your child wants or needs?
(Circle number below)

1. very easy
2. easy
3. somewhat difficult
4. it is very hard
5. I usually can't figure out what the problem is

- | | | | | | |
|---|---|---|---|---|---|
| 62. It takes a long time for parents to develop close, warm feelings for their children. | 1 | 2 | 3 | 4 | 5 |
| 63. I expected to have closer and warmer feelings for my child than I do and this bothers me. | 1 | 2 | 3 | 4 | 5 |
| 64. Sometimes my child does things that bother me just to be mean. | 1 | 2 | 3 | 4 | 5 |
| 65. When I was young, I never felt comfortable holding or taking care of children. | 1 | 2 | 3 | 4 | 5 |
| 66. My child knows I am his or her parents and wants me more than other people. | 1 | 2 | 3 | 4 | 5 |
| 67. The number of children that I have now is too many. | 1 | 2 | 3 | 4 | 5 |
| 68. Most of my life is spent doing things for my child. | 1 | 2 | 3 | 4 | 5 |
| 69. I find myself giving up more of my life to meet my children's needs than I ever expected. | 1 | 2 | 3 | 4 | 5 |
| 70. I feel trapped by my responsibilities as a parent. | 1 | 2 | 3 | 4 | 5 |
| 71. I often feel that my child's needs control my life. | 1 | 2 | 3 | 4 | 5 |
| 72. Since having this child I have been unable to do new and different things. | 1 | 2 | 3 | 4 | 5 |
| 73. Since having a child I feel that I am almost never able to do things that I like to do. | 1 | 2 | 3 | 4 | 5 |
| 74. It is hard to find a place in our home where I can go to be by myself. | 1 | 2 | 3 | 4 | 5 |

	1	2	3	4	5
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
75. When I think about the kind of parent I am, I often feel guilty or bad about myself.	1	2	3	4	5
76. I am unhappy with the last purchase of clothing I made for myself.	1	2	3	4	5
77. When my child misbehaves or fusses too much I feel responsible, as if I didn't do something right.	1	2	3	4	5
78. I feel everytime my child does something wrong it is really by fault.	1	2	3	4	5
79. I often feel guilty about the way I feel towards my child.	1	2	3	4	5
80. There are quite a few things that bother me about my life.	1	2	3	4	5
81. I felt sadder and more depressed than I expected after leaving the hospital with my baby.	1	2	3	4	5
82. I wind up feeling guilty when I get angry at my child and this bothers me.	1	2	3	4	5
83. After my child had been home from the hospital for about a month, I noticed that I was feeling more sad and depressed than I had expected.	1	2	3	4	5
84. Since having my child, my spouse (male/female friend) has not given me as much help and support as I expected.	1	2	3	4	5
85. Having a child has caused more problems than I expected in my relationship with my spouse (male/female friend).	1	2	3	4	5
86. Since having a child my spouse (or male/female friend) and I don't do as many things together.	1	2	3	4	5
87. Since having my child, my spouse (or male/female friend) and I don't spend as much time together as a family as I had expected.	1	2	3	4	5
88. Since having my last child, I have had less interest in sex.	1	2	3	4	5
89. Having a child seems to have increased the number of problems we have with in-laws and relatives.	1	2	3	4	5
90. Having children has been much more expensive than I had expected.	1	2	3	4	5
91. I feel alone and without friends.	1	2	3	4	5
92. When I go to a party I usually expect not to enjoy myself.	1	2	3	4	5
93. I am not as interested in people as I used to be.	1	2	3	4	5
94. I often have the feeling that other people my own age don't particularly like my company.	1	2	3	4	5

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

95. When I run into a problem taking care of my children I have a lot of people to whom I can talk to get help or advice. 1 2 3 4 5
96. Since having children I have a lot fewer chances to see my friends and to make new friends. 1 2 3 4 5
97. During the past six months I have been sicker than usual or have had more aches and pains than I normally do. 1 2 3 4 5
98. Physically, I feel good most of the time. 1 2 3 4 5
99. Having a child has caused changes in the way I sleep. 1 2 3 4 5
100. I don't enjoy things as I used to. 1 2 3 4 5
101. Since I've had my child: *(Circle number below)*
1. I have been sick a great deal
 2. I haven't felt as good
 4. I haven't noticed any change in my health.
 5. I have been healthier.

FAMILY QUESTIONNAIRE

The purpose of this questionnaire is to identify the types of problem-solving approaches your family uses in response to problems or difficulties. Please rate the degree to which you agree or disagree with each statement.

1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree

When we face problems or difficulties in our family, we respond by:

- | | | | | | |
|---|---|---|---|---|---|
| 1. Sharing our difficulties with relatives. | 1 | 2 | 3 | 4 | 5 |
| 2. Seeking encouragement and support from friends. | 1 | 2 | 3 | 4 | 5 |
| 3. Knowing we have the power to solve major problems. | 1 | 2 | 3 | 4 | 5 |
| 4. Seeking information and advice from persons in other families who have faced the same or similar problems. | 1 | 2 | 3 | 4 | 5 |
| 5. Seeking advice from relatives (grandparents, etc.) | 1 | 2 | 3 | 4 | 5 |
| 6. Asking neighbors for favors and assistance. | 1 | 2 | 3 | 4 | 5 |
| 7. Seeking assistance from community agencies and programs designed to help families in our situation. | 1 | 2 | 3 | 4 | 5 |
| 8. Accepting that we have the strength within our own family to solve our own problems. | 1 | 2 | 3 | 4 | 5 |
| 9. Accepting gifts and favors from neighbors (ex. food, taking in mail, etc.) | 1 | 2 | 3 | 4 | 5 |
| 10. Seeking information and advice from the family doctor. | 1 | 2 | 3 | 4 | 5 |
| 11. Facing problems "head-on" and trying to get solutions right away. | 1 | 2 | 3 | 4 | 5 |
| 12. Watching television. | 1 | 2 | 3 | 4 | 5 |
| 13. Showing that we are strong. | 1 | 2 | 3 | 4 | 5 |
| 14. Attending church services. | 1 | 2 | 3 | 4 | 5 |
| 15. Accepting stressful events as a fact of life. | 1 | 2 | 3 | 4 | 5 |
| 16. Sharing concerns with close friends. | 1 | 2 | 3 | 4 | 5 |
| 17. Knowing luck plays a big part in how well we are able to solve family problems. | 1 | 2 | 3 | 4 | 5 |
| 18. Accepting that difficulties occur unexpectedly. | 1 | 2 | 3 | 4 | 5 |
| 19. Doing things with relatives (get-togethers, dinners, etc.) | 1 | 2 | 3 | 4 | 5 |
| 20. Seeking professional counseling and help for family difficulties. | 1 | 2 | 3 | 4 | 5 |
| 21. Believing we can handle our own problems. | 1 | 2 | 3 | 4 | 5 |

1 Strongly Disagree	2 Moderately Disagree	3 Neither Agree Nor Disagree	4 Moderately Agree	5 Strongly Agree
---------------------------	-----------------------------	------------------------------------	--------------------------	------------------------

22. Participating in church activities. 1 2 3 4 5
23. Defining the family problem in a more positive way so that we do not become too discouraged. 1 2 3 4 5
24. Asking relatives how they feel about problems we face. 1 2 3 4 5
25. Feeling that no matter what we do to prepare, we will have difficulty handling problems. 1 2 3 4 5
26. Seeking advice from a minister. 1 2 3 4 5
27. Believing if we wait long enough, the problem will go away. 1 2 3 4 5
28. Sharing problems with neighbors. 1 2 3 4 5
29. Having faith in God. 1 2 3 4 5

EARLY INTERVENTION SCALE

Below are a list of services that could be offered to your child and your family in your current program. We are interested in finding out how much you feel that the services listed are actually provided in your current program. Each statement asks for two responses. The first set of responses asks how often does your program provide each of the following; respond by circling a number (1) never to (6) always. Considering your first responses, the second set of responses asks how often would you like your program to provide each of following; respond by circling a number (1) less often to (6) more often. Do not leave any items blank. **Remember to describe your program as you know it.**

	HOW OFTEN DOES YOUR PROGRAM PROVIDE EACH OF THE FOLLOWING:						HOW OFTEN WOULD YOU LIKE YOUR PROGRAM TO PROVIDE EACH OF THE FOLLOWING:						
	NEVER	1	2	3	4	5	6	NEVER	1	2	3	4	5
1. Discuss the philosophy of the program	1	2	3	4	5	6	1	2	3	4	5	6	
2. Ask what you want for your family	1	2	3	4	5	6	1	2	3	4	5	6	
3. Ask what you need for your child	1	2	3	4	5	6	1	2	3	4	5	6	
4. Talk to you about your child's health	1	2	3	4	5	6	1	2	3	4	5	6	
5. Talk to you about your child's developmental growth	1	2	3	4	5	6	1	2	3	4	5	6	
6. Explain why tests are used	1	2	3	4	5	6	1	2	3	4	5	6	
7. Want you to be there while your child is being tested	1	2	3	4	5	6	1	2	3	4	5	6	
8. Explain the results of tests	1	2	3	4	5	6	1	2	3	4	5	6	
9. Help to prepare you for your child's future	1	2	3	4	5	6	1	2	3	4	5	6	
10. Show you how to help your child develop	1	2	3	4	5	6	1	2	3	4	5	6	
11. Show you how to play with your child	1	2	3	4	5	6	1	2	3	4	5	6	
12. Provide you with toys for your child	1	2	3	4	5	6	1	2	3	4	5	6	
13. Give you a plan to carry out during the month	1	2	3	4	5	6	1	2	3	4	5	6	
14. Provide books and pamphlets for you to use	1	2	3	4	5	6	1	2	3	4	5	6	
15. Show interest in hearing about your family	1	2	3	4	5	6	1	2	3	4	5	6	
16. Help you to be an informed advocate for your child	1	2	3	4	5	6	1	2	3	4	5	6	

	SOMETIMES			LESS			MORE					
	NEVER	ALWAYS	OFTEN	SAME	OFTEN	SAME	OFTEN					
17. Want you to choose what you do in the program	1	2	3	4	5	6	1	2	3	4	5	6
18. Help you prepare for your child's next educational setting (day care, pre-school, Head Start, Kindergarten, etc.)	1	2	3	4	5	6	1	2	3	4	5	6
19. Ask how you are coping with your child	1	2	3	4	5	6	1	2	3	4	5	6
20. Provide opportunities for you to share your feelings with the program staff	1	2	3	4	5	6	1	2	3	4	5	6
21. Provide opportunities for you to share your feelings with other parents	1	2	3	4	5	6	1	2	3	4	5	6
22. Assist you in getting help from friends and neighbors	1	2	3	4	5	6	1	2	3	4	5	6
23. Provide family counseling	1	2	3	4	5	6	1	2	3	4	5	6
24. Provide information on stress management strategies	1	2	3	4	5	6	1	2	3	4	5	6
25. Help you to take time for yourself	1	2	3	4	5	6	1	2	3	4	5	6
26. Assist you in getting your spouse or other relatives to help you with your child	1	2	3	4	5	6	1	2	3	4	5	6
27. Help you get medical care for your child	1	2	3	4	5	6	1	2	3	4	5	6
28. Make referrals to professionals such as social workers or family counselors	1	2	3	4	5	6	1	2	3	4	5	6
29. Make referrals to other Early Intervention Programs such as day care, Developmental Disabilities Centers, or schools	1	2	3	4	5	6	1	2	3	4	5	6
30. Provide opportunities for you to participate in parent groups	1	2	3	4	5	6	1	2	3	4	5	6
31. Help you fill out forms	1	2	3	4	5	6	1	2	3	4	5	6
32. Help you obtain services for your child from other agencies	1	2	3	4	5	6	1	2	3	4	5	6
33. Help you obtain funding that you are qualified to receive	1	2	3	4	5	6	1	2	3	4	5	6
34. Help you find transportation for services or meetings if needed	1	2	3	4	5	6	1	2	3	4	5	6
35. Encourage you to be the major decision maker about the care and education of your child	1	2	3	4	5	6	1	2	3	4	5	6
36. Help you find babysitting or childcare	1	2	3	4	5	6	1	2	3	4	5	6
37. Help you with personal problems	1	2	3	4	5	6	1	2	3	4	5	6
38. Help you learn how to deal with the system	1	2	3	4	5	6	1	2	3	4	5	6
39. Assess how you play or interact with your child	1	2	3	4	5	6	1	2	3	4	5	6