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Coping Resources: A Comparative Study of Parents of Children with Down Syndrome and Parents of Children Without Down Syndrome

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COPING RESOURCES: A COMPARATIVE STUDY OF PARENTS OF CHILDREN WITH DOWN SYNDROME AND PARENTS OF CHILDREN WITHOUT DOWN SYNDROME

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An Abstract Presented to the Faculty of the
Graduate School of Lindenwood College in Partial
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ABSTRACT

A comparative study was conducted on differences in coping resources in parents of a child with Down syndrome and parents of children without Down syndrome. Participants included twenty-three parents of a child with Down syndrome and twenty-nine parents of children without Down syndrome. All parents were from the St. Louis metropolitan area. The participants completed a personal data questionnaire and the Coping Resources Inventory (CRI). The personal data questionnaire contained demographic questions, and the CRI measured coping resources in five domains: cognitive, social, emotional, spiritual/philosophical, and physical. Data was statistically analyzed to determine differences in each of the five domains and in the total scores for coping resources. There were no significant differences found in the individual domains or total scores between parents of a child with Down syndrome and parents of children without Down syndrome.

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DEDICATION

To my parents, Jean Marie and Joseph James Feco, for their continuous support and patience which made this thesis a reality.

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To my brother, J. Douglas Feco, who was confident that I could complete my thesis in-between his many visits to St. Louis.

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CHAPTER I

Introduction

When parents give birth to a baby with Down syndrome, they must mourn the loss of the child they expected. Most parents usually anticipate the birth of a child with joy and excitement. They begin to wonder what the baby will be like; who the baby will look like; and how the baby will change their lives. Because of today's regular use of fetal monitoring, many parents can follow the progress of their baby's development throughout the pregnancy. Fetal monitoring has enabled both parents to more fully share the experience of pregnancy and has promoted earlier attachment and protective feelings in the father-child relationship (Gath, 1993).

The feelings of joy about expected parenthood start to change, however, when doctors first suspect that there might be something wrong. Anxiety begins to replace the initial excitement, and it increases through each day of the pregnancy (Gath, 1993). This is only the beginning of the wide range of emotions that parents experience when a baby is born with a congenital disability. The entire family functioning will undergo changes. Not only will the family experience the "normal" stress of child-rearing (Gallagher, Beckmam, & Cross, 1983), but the family of a child with a disability will often experience stress when facing issues such as the uncertainty of caregiving, medical problems, and concerns about the future. Financial obligations, locating appropriate services, and even the daily management of the child are additional stressors that can interfere with family adjustment and emotional functioning (Kazak & Marvin, 1984). Caring for a child with a disability can also be "detrimental to familial psychosocial functioning" (Crnic, Friedrich, & Greenberg, 1983, p. 129) since parents will often spend twice as much time providing care and emotional support for a child with a disability than parents of children without disabilities (Brust, Leonard, & Sielaff, 1992). The time spent in caregiving can limit the leisure time that parents have for outside social interests and relationships (Harris & McHale, 1989; Smith, 1986).

Down syndrome is a condition that is usually recognized and diagnosed shortly after birth because of distinctive physical characteristics (Brill, 1993; Cheng & Tang, 1995). The diagnosis is confirmed with a blood sample and chromosomal analysis (Brill, 1993; Lauras, Gautheron, Minaire, & DeFreminville, 1995). In each human cell there are 46 chromosomes arranged in 23 pairs. In 95% of cases of Down syndrome the 21st chromosomal pair has an extra chromosome resulting in a total of 47 chromosomes and referred to as trisomy 21

(Brill, 1993). The prevalence of Down syndrome is approximately 1 in every 800 births and increases to 1 in every 400 births for mothers over the age of 35 (Brill, 1993).

When a baby is born with Down syndrome, the entire family is affected. The addition of any newborn into the family system requires adjustments in family functioning as new roles and patterns evolve (Kazak & Marvin, 1984). When a baby with Down syndrome enters a family, however, the family is faced with additional adjustments and problems (Gallagher et al., 1983). Not only must the parents cope with their own initial emotional distress, but they must also endure the increased anxiety and uncertainty that emerges when faced with the reactions of others (Brill, 1993). In many cases, negative reactions and attitudes of others will have a detrimental effect on parents. These reactions can interfere with parental coping resources such as problem solving and social support (Crnic, et al., 1983). Thus, there is often a negative impact on emotional responses and emotional coping.

Parents of a child with disabilities, as opposed to parents of children without disabilities, are at risk for a multitude of difficulties, both individually and as a family (Crnic et al., 1993). A child with a chronic disability effects not only the parents, but the entire family system which includes siblings, extended family, and friends (Crnic et al., 1983; Kazak & Marvin, 1984). The greater the degree of disability, the greater the stress of the caregiver (Minnes, 1988; Quine & Pahl, 1985).

New parents of a child with Down syndrome are faced with additional problems and demands that require the interaction of various professionals in the ongoing care of their baby (Brill, 1993; Cheng & Tang, 1995; Kazak & Marvin, 1984). Most parents are also forced to acknowledge that they will have to undergo essential changes in their social lives, time demands, and financial situations (Crnic et al., 1993; Sloper, Knussen, Turner, & Cunningham, 1991). All of these factors elicit increased emotional distress which usually begins at the time parents are told that their child has Down syndrome (Carr, 1988). Most parents never forget their initial reactions and the emotional impact during the first few moments when they are told about their baby's condition (Brill, 1993; Gath, 1993). These parents will have to explore available resources in order to cope with the emotional, physical, and financial strains that will be present throughout their lives (Cheng & Tang, 1995).

Statement of Purpose

The purpose of this study is to identify the differences in coping resources between parents with a child with Down syndrome and parents with children without Down syndrome. Zeitlin, Rosenblatt, & Williamson (1986) noted that interventions are usually aimed at reducing stress rather than helping individuals identify and utilize various coping resources. Identifying resources enables individuals to assume more control over their lives. Instead of viewing certain events as threats, coping resources permit individuals to make choices that can facilitate growth and change.

Cognitive, social, and emotional resources can be extremely helpful in managing the stress and anxiety that often emerges when parents care for a child with a disability. Cognitive resources include perceptions of self-worth (Hammer, 1988). Increasing self-worth can lead to a more positive outlook, thereby, providing parents with more strength and stamina with which to handle everyday events. Social resources refer to the availability of help and support from outside relationships. Outside relationships can include extended family, friends, support groups, or professionals. Emotional resources are the extent to which individuals can accept and express their feelings. As events unfold, emotions often change. Being able to identify contradictory emotions aids parents or individuals in their adaptive capacities to manage stress (Folkman & Lazarus, 1985).

Research Questions. The following research questions were addressed in this study:

1. Do parents of a child with Down syndrome exhibit a greater sense of self-worth as identified by cognitive resources, than parents who have children without Down syndrome?
2. Do parents of a child with Down syndrome employ greater social resources than parents of children who do not have Down syndrome?
3. Do parents of a child with Down syndrome utilize higher levels of coping resources in the emotional domain than parents of children without Down syndrome?

Hypotheses. The null hypothesis is that there are no significant differences in the coping resources between parents of a child with Down syndrome and parents of children without Down syndrome. The alternate hypothesis, if accepted, is that there are significant differences in coping resources between parents of a child with Down syndrome and parents of children without Down syndrome.

Some researchers have concentrated strictly on the levels of stress and the influence of stress on family functioning when there is a child with a disability in the family (Dyson, 1993). The result is an automatic assumption of a pathological outcome in families with a child with a disability (Crnic et al., 1983). Just because a family is "different," however, does not mean that the family is dysfunctional or experiencing duress. Recognizing strengths or weaknesses in coping resources will facilitate a more appropriate and integrated approach to interventions in ameliorating stress.

CHAPTER II

Review of the Literature

Nearly everyone experiences some type of stress at some point in his or her life. Just managing time can be stressful for some people in today's busy society. Folkman and Lazarus (1985) claimed that stress is a relationship between an individual and the environment. Each person handles stress in a distinct way, and the effectiveness of an individual's stress management is crucial to his or her daily functioning.

The potential for stress exists when individuals or families experience heightened emotions in conflicts, hassles of daily living, and critical life events (Zeitlin et al., 1986). An individual's emotions change as his or her assessment of a specific situation changes (Folkman & Lazarus, 1985). Thus, emotions are a major indication of how an individual is managing a particularly stressful situation.

As an individual experiences intense emotions, his or her physical and/or mental well-being is threatened with the realization that attempts to cope are no longer ameliorating the stress. Family stability is threatened when the family is unable to apply effective problem-solving techniques. The family then becomes at risk for crisis through unmet needs and goals, and confused roles (Minnes, 1988).

Stress and Anxiety

The birth of a child is a critical life event which precipitates change in the family system. Change, however, is not always the responsible element for creating undue stress. Rather, the way in which the family perceives and reacts to the change is often the determining factor in a family's adaptation to undue stress and anxiety (Byrne & Cunningham, 1985; Flynt & Wood, 1989). Many families possess innate qualities that enable them to function and effectively manage stress from daily life events and even unexpected crises (Donovan, 1988). Thus, what might result in maladaptation in one family may not necessarily effect another family.

The birth of a child with a disability creates heightened emotions and a variety of changes that effect each person in the family, but the birth, itself, does not always necessitate stress (Byrne & Cunningham, 1985; Donovan, 1988). Stress and anxiety are often the products of the changes that the birth inevitably creates, such as in family activities and the family's financial condition (Crnic et al., 1983). A child with a disability will also have different needs from other children or siblings without disabilities (Gath, 1993). Some families adapt reasonably well even though there are undoubtedly a multitude of unique stressors (Kazak &

Marvin, 1984).

Most families that experience undue stress and anxiety usually have co-existing issues and conflicts (Byrne & Cunningham, 1985; Kazak & Marvin, 1984). The characteristics of the child along with the stage of family functioning often act as predictors of stress (Crnic et al, 1983; Minnes, 1988). These factors often interact to produce a circular effect with the family responding to the child, and the child responding to the family (Crnic et al., 1983; McKinney & Peterson, 1987; Saxby & Morgan, 1993).

Child Characteristics. Characteristics of a child with Down syndrome which may affect family functioning include developmental rate, required home and medical care, and behavior problems. Because Down syndrome is a life-long condition often requiring continuous caretaking demands, parents will experience different stressors than parents of children who do not have disabilities (Cheng & Tang, 1995). Dykens, Hodapp, and Evans (1994) found that children with Down syndrome, although strong in their receptive abilities, are usually weak in communication and socialization skills.

Another characteristic that effects parental stress is the age of the child (Gallagher et al., 1983). Minnes (1988) found that the age of the child with Down syndrome has a significant affect on parental stress.

Parents with younger children experience greater stress, but as the child grows older, stress seems to decrease. Minnes suggested that this may be the result of parental acceptance over time. Byrne and Cunningham (1985) noted, however, that the age of a child with a disability was not a determinant of family stress. Salisbury (1987) also found that there were no differences in age-related stress between parents of a child with a disability and parents of children who are not disabled. Salisbury expounded by claiming that there is probably more age-related stress common among the two groups than has been previously acknowledged.

Friedrich, Wilturner, and Cohen (1985) conducted a study of 104 parents with children in special education classes. They found a direct relationship between the behavior problems of the child and the degree of stress experienced by the parent and family. The researchers also noted that as the behavior problems affected the parents, the problems of the parents also affected the child. If stress and behavior are often maintained through these circular patterns (Crnic et al., 1983; McKinney & Peterson, 1987), then the ability to cope will also affect both the parents and the child with a disability.

Quine and Pahl (1985) found that there was a significant association between the severity of behavior disorders in a child and the level of stress in the caregiver. Effective coping of the family is an important factor in improving the coping behavior of the child (Zeitlin et al., 1986). Professionals should help parents understand that exacerbated stress over a child's behavior is not always a result of inadequacy on the part of the parents (Dumas, Wolf, Fisman, & Culligan, 1991). In addition, Saxby and Morgan (1993) also warned that not all behaviors should be treated as a problem. Some families may not perceive certain behaviors as a problem, whereas the same behaviors may be extremely stressful for other families.

Family Characteristics. The characteristics of the family which influence family functioning include marital status, social support, and financial situation (Sloper et al., 1991). The presence of a child with a disability in the family would also seem to have a deleterious affect on the family and on marital satisfaction. Several studies found that the marital relationship was not affected by the presence of a child with a disability (Carr, 1988; Donovan, 1988; Kazak & Marvin, 1984; Salisbury, 1987). In fact, Kazak & Marvin (1984) and Minnes (1988) found that having a child with a disability may even contribute to higher levels of marital satisfaction which would mediate the child associated stress. Crnic et al., (1983) found, however, that marital satisfaction may actually decrease with the presence of a child with a disability. This may be the result of several factors such as the degree of the disability and marital satisfaction before the birth of the child.

Carr (1988) conducted a longitudinal study of parents and their children with Down syndrome. Almost half of the mothers reported no harmful effects on their marital relationships with the arrival of their baby. In contrast, over a quarter of the mothers felt that their marriage had been affected, and that they did not receive the support from their husbands that they needed. Donovan (1988) also found that there were no significant differences in marital satisfaction between parents of a child with a disability and parents of children without disabilities. Kazak and Marvin (1984) suggested that marital stress is often related directly to parenting issues and not entirely dependent upon whether a child is disabled.

Parental expectations can also be a major contributor to stress when a child is born with Down syndrome (Springer & Steele, 1980). Gath (1993) explained that when a child is born with Down syndrome, self-esteem is often deflated in many parents whose expectations were of a child who would carry on the family "culture and traditions, and in turn become a parent as well" (p. 167). In addition, emotional turmoil results when a parent attaches self-blame to the cause of the disorder and then questions his or her parental capacities (Gallagher et al., 1983). Education about the genetic factors related to Down syndrome's long history and high prevalence rate can help ease the burden of guilt often felt by parents (Brill, 1993; Dykens et al., 1994).

Concern about the child's ability to function is another major concern. Children with Down syndrome usually experience a variety of medical and educational difficulties, as well as developmental problems (Brill, 1993; Dumas et al., 1991; Lauras et al., 1995). The response of parents to these problems is often influenced by how they were told about their child's condition. Cottrell and Summers (1990) suggested that parents of a child with Down syndrome should be told as soon as possible after diagnosis. Communication to parents should be honest and not raise false hopes. Likewise, the potential for children with Down syndrome should be emphasized, because parents may not encourage progress in their child if they are led to believe that progress is not possible (Springer & Steele, 1980).

Early counseling and education by physicians can encourage parents to acknowledge the developmental potential in their child with Down syndrome (Springer &

Steele, 1980). Parents who are not educated about their child's potential may avoid their problems and adopt a fatalistic attitude. The feeling of hopelessness about their situation can lead to even more distress (Cheng & Tang, 1985).

As the child grows older, parents also begin to dwell on problems surrounding the care of the child and the child's future (Dyson, 1993). Parents must make decisions on institutional care or home care. If parents choose institutional care, stress is often increased because of financial responsibilities and contending with negative societal reactions (Minnes, 1988). Many parents often expect and/or sense negative reactions from others, and the extent to which they internalize these reactions can increase stress and induce feelings of isolation (Byrne & Cunningham, 1985; Gallagher et al., 1983; Kazak & Marvin, 1984).

The trend today is toward home care and mainstreaming (Brill, 1993; Donovan, 1988; Gallagher et al., 1983). The decision is not always an easy one for some parents, and it is usually based upon a combination of individual and cultural beliefs as well as the influence and pressure of others (Crnic et al., 1983). Having made the decision to keep the child at home, however, does not necessarily eliminate stress. If the child with Down syndrome requires constant supervision and care, the parent's leisure activity and mobility is limited, plus dependence of the child on the parents often occurs (Smith, 1986). As children age, parents usually look forward to more freedom and eventual retirement. Many parents of a child with Down syndrome, however, are faced with the additional stress of continuous care and responsibility of their child throughout their lives (Carr, 1988).

Child-care arrangements and expenses can be difficult even in families of children who do not have disabilities (Gallagher et al., 1983). For parents of a child with a disability, the costs added to the extra medical expenses, as well as the time and effort involved in care, can be extremely distressful (Quine & Pahl, 1985). Considering many of these factors, parents with a child with Down syndrome would most likely endure higher levels of stress than parents of children without disabilities. In fact, Minnes (1988) found that parents of children with Down syndrome experienced more financial stress than parents of children with mental retardation due to unknown etiology. Perhaps this is because of various birth irregularities and health problems commonly associated with Down syndrome (Brill, 1993).

There are numerous studies that have concentrated on the stress of the mother since it is usually the mother who takes on the role of the main caregiver (Carr, 1988; Cheng & Tang, 1995; Cottrell & Summers, 1990; Crnic et al., 1983; Gallagher et al., 1983; Harris & McHale, 1989; Sloper et al., 1991; Smith, 1986). Sloper et al. (1991) warned, however, that it should not be assumed that results from mothers would automatically reflect similar results for fathers or families. Every member of a family has distinct roles and issues.

Salisbury (1987) claimed that both parents experienced equal amounts of stress in caring for a child with a disability, but Smith (1986) acknowledged that even though both parents undoubtedly experience stress, it is usually the mother that experiences higher levels of stress. A contributing factor to the stress in both mothers and fathers is time restraints (Barnett & Boyce, 1995; Smith, 1986). Smith found that both mothers and fathers of children with disabilities spent a considerably greater amount of time for caregiving activities than parents in the nationwide sample. In addition, he suggested that fathers of children with disabilities usually take on expanded roles in caregiving as opposed to fathers of children who are not disabled. In a study of fathers with a child with Down syndrome, Barnett & Boyce (1995) also found that fathers spent more time in caregiving, although fathers typically felt less demands than mothers.

Caregiving roles, however, do not always refer to the parent-child relationship. Cottrell & Summers (1990) explained:

> In many families, a delicate balance seemed to have built up where mother cared for the child and father cared for the mother. Fathers were not allowed to reveal too much distress to mothers as this would upset mothers, rather than care for them. Mothers, however, would not reveal too much distress to their husbands as they too did not want to upset their partner. (p. 216)

Regardless of the role that parents adopt, both mothers and fathers of children with disabilities experience less time for themselves in social activities and leisure time pursuits (Barnett & Boyce, 1995; Brust et al., 1992; Smith, 1986).

A study by Kazak and Marvin (1984) examined parental stress in 53 families with a child with a disability and 53 families with children without disabilities. They found that the parents of children with disabilities experience higher levels of personal stress. They also found, however, that although there was greater stress in families of children with disabilities, the families were able to maintain adequate family functioning by adapting and altering family routines and patterns.

The family must also be flexible in its adaptive capabilities since many of the strengths and weaknesses in children with Down syndrome appear to change as the children develop (Dykens et al., 1994). For example, Minnes (1988) found that stress in families often increases with age because of changes in the child's size and strength. As the child grows, behavior problems also often emerge leading to disruption in family functioning.

In contrast, Dyson (1993) conducted a longitudinal study on parental stress and family functioning between families of children who had disabilities and families of children without disabilities. Although the researcher found greater levels of stress in families of a child with a disability, the results also indicated that there were no significant differences in family functioning over time. The characteristics of the child were the main factor in the amount of stress. The greater the degree of disability, the greater the stress, but the level of stress did not change over time.

If it is acknowledged that families with children with Down syndrome experience greater stress, yet their family functioning does not differ from families of children without Down syndrome, then the mitigating factor must lie in the inherent coping capacity and the resources available for these parents. Donovan (1988) suggested that, depending upon the family's ability to cope, stress can also facilitate higher levels of family functioning, rather than family distress.

To assume that families with a disabled child would automatically experience more stress than families with children without disabilities would be to assume a pathological orientation (Donovan, 1988). Families must be considered individually because dysfunction in one family is not dysfunction in another family (Byrne & Cunningham, 1985). Thus, the crucial factor would be to identify individual and family coping resources that would facilitate effective stress management and increase family functioning.

The Coping Process

Coping refers to the process by which an individual manages a particularly stressful situation or event. Effective coping reduces stress, thereby increasing the individual's feeling of well-being (Zeitlin et al., 1986). As individuals or families manage or adapt to the stressful situation, they will experience "fewer or less intense symptoms" (Cochran, 1995, p. 242). Coping responses emerge from mental, physical, or emotional efforts that enable an individual to reduce or tolerate stress (Byrne & Cunningham, 1985; Folkman & Lazarus, 1985; Zeitlin et al., 1986). Many coping resources are derived from inherent qualities that enable individuals to manage various stressors and to experience less intense symptoms (Hammer, 1988).

Individuals and families utilize a variety of coping resources depending upon their specific situations and the resources available to them as well as cultural differences (Byrne & Cunningham, 1985). Engaging in a coping effort, however, does not always mean a successful outcome; nor does the coping effort always change the specific situation. Coping is the effort, regardless of the outcome, that will produce change and moderate stress (Cheng & Tang, 1995; Folkman, 1984; Folkman & Lazarus, 1985; Zeitlin et al., 1986).

Individuals and families engage in a variety of coping strategies. They may draw upon experiences that have been effective in the past, or they may develop new strategies to manage their distress (Zeitlin et al., 1986). Strategies are often identified as a particular behavior that occurs after a stressor appears (Hammer, 1988). Hammer claimed that when a strategy is successfully repeated, the strategy often becomes a resource.

Coping Resources. Resources can emerge from physical qualities such as health, energy, and stamina; economic resources such as employment, housing, and finances; psychological resources such as beliefs, values, and problem solving skills; and social resources such as support groups and family networks (Sloper et al., 1991). Resources that moderate stress in families also entail a combination of individual characteristics, the relationships within the family, and the material and social resources available to the family (Byrne & Cunningham, 1985; Crnic et al., 1983).

Coping efforts that have worked well in the past often reinforce the individual's confidence in coping with future stressful situations. When the coping effort fails, however, the result may be additional stress (Zeitlin et al., 1986). A resource that works well for one family is not necessarily an effective resource for another family.

The two major goals in the coping process are to regulate an individual's emotions and to manage the specific situation causing the stress (Folkman, 1984). Folkman classified these two categories as emotion-focused coping and problem-focused coping. Folkman and Lazarus (1985) found that individuals tended to use problem-focused coping in situations that were viewed as changeable and emotion-focused coping in situations that were viewed as unchangeable. Problem-focused coping, which includes decision-making and direct action, usually leads to increased family functioning and lower levels of distress (Cheng & Tang, 1995). Emotion-focused coping is often effective by altering negative emotions and/or the meaning of the outcome (Folkman & Lazarus, 1985).

Individuals and families experience a variety of emotions according to their unique assessment of a situation. Emotion is usually a product of the way the individual assesses a particular outcome. The assessment will normally indicate whether the experience will entail a challenge or a threat (Folkman & Lazarus, 1995). Folkman and Lazarus explained that if the outcome or future is uncertain, individuals often experience both challenge and threat emotions. These emotions often vacillate as individuals continually appraise their situations and their emotional responses. The ability to cope or regulate emotions is a crucial factor in a family's emotional functioning (Crnic et al., 1983).

<u>Coping with Down Syndrome.</u> When a family has the ability to view a situation as a challenge, positive emotions, which encourage hope, will usually emerge, but if the situation is viewed as a threat, negative emotions will usually dominate (Folkman & Lazarus, 1985). As families begin to adapt to the presence of a child with a disability, they will undoubtedly alter their family patterns and routines

(Kazak & Marvin, 1984). Altering patterns and routines becomes a coping resource by reinforcing family adaptation and reducing stress (Crnic et al., 1983). The family that can view their child with a disability as a challenge will experience positive emotions and outcomes which can facilitate family growth (Folkman, 1984).

When a family engages in negative emotions such as avoidance, denial, wishful thinking, and self-blame, problem-focused coping is often blocked. When problem-focused coping is impeded the family will usually experience extreme distress (Folkman & Lazarus, 1985). Cheng & Tang (1995) found that avoidance coping is particularly harmful for parents with a child with Down syndrome. Avoidance coping may "shift parents' focus and efforts away from their problems, limit their response choices, reduce their chance of being desensitized to unfriendly stares, and deny their children necessary training" (p. 17). Thus, negative emotions often result in helplessness or passive responses creating poor problem resolution (Cheng & Tang, 1995).

Appraisal and reappraisal is an ongoing process in coping. The individual or family is continually assessing the degree of stress in a situation and determining how it will affect their well-being (Folkman

& Lazarus, 1985). The result is a cognitive coping process, similar to problem-focused coping, which can foster feelings of hope and thus, reduce feelings of hopelessness (Folkman, 1994; Folkman & Lazarus, 1985; Knussen, Sloper, Cunningham, & Turner, 1992). Folkman and Lazarus (1985) found a strong correlation between problem-focused coping and emphasizing the positive.

As emotions change throughout the coping process, so too will the assessment change. A family's initial reaction to a child with Down syndrome might be extreme distress. If the family begins to see the disorder as a challenge, more positive emotions may emerge. As the family begins to assess the amount of ongoing care that is required and the time involved with that care as a threat, their reappraisal may again result in negative emotions. For example, Knussen et al. (1992) explained that parents could effectively cope with a specific "child-related problem, but could not change the fact of Down's syndrome itself" (p. 783). The resulting emotions from the appraisal process are dependent upon the effectiveness and the availability of the family's resources as parents confront each new situation or problem (Sloper et al., 1991).

Another factor in the appraisal process is assessing the amount of control over a particular situation. An effective moderator of stress is the family's positive belief about the amount of control they have over a situation (McKinney & Peterson, 1987). Folkman (1984) claimed that an individual's actual convictions about control can actually alter their experience from a threat to a challenge. If the family believes they have control over a threat, the experience will not arouse the "apprehensive cognitions" that eventually lead to stressful emotions (Cheng & Tang, 1995, p. 13). Thus, when a family possesses a sense of control they can alter their goals and commitments to establish a new definition of the outcome (Folkman, 1984). Families can often manage stress by utilizing their available resources as they abandon old goals and establish new goals to satisfy the needs of the family (Byrne & Cunningham, 1985; Folkman, 1984).

A child with a disability will necessitate an ongoing coping response by the family (Friedrich et al., 1985), but the ability to adapt and cope with these changes will vary according to the unique characteristics of each family member and individual differences in emotion (Folkman & Lazarus, 1995; Gallagher et al., 1983). McKinney and Peterson (1987) explained that past research has concentrated on the stress associated with the characteristics of the child or the child's condition, but Crnic et al. (1983) reported that family response to stress is not solely dependent upon the child variables.

Although a family is in distress, the child's condition might only be the trigger. The future well-being of the child may very well depend upon the behaviors of the parents and their available coping resources. Sloper et al. (1991) found that the child with a disability alone was not the contributing factor to family stress. Family stress and satisfaction were the result of the interaction of child, parental factors, and social factors.

Social Support. Several researchers have identified social support as an important and crucial coping resource for families of children with disabilities (Cheng & Tang, 1995; Friedrich et al., 1985; Gallagher et al., 1983; Zeitlin et al., 1986). The concept of coping and social support as a coping resource is an interactive relationship. Higher levels of coping are associated with more social support, and more social support facilitates coping (Friedrich et al., 1985; Sloper et al., 1991).

How and when families and individuals use social support is largely dependent upon the type of stressful situation they encounter and the changes and demands that are often necessary (Folkman & Lazarus, 1985). Utilization of both personal and professional support can vary over the life-cycle of the family (Byrne &

Cunningham, 1985), and families can choose to maintain or disregard support systems as they deem necessary (Folkman & Lazarus, 1985).

Social support can involve a variety of relationships which include extended family and friends, as well as support groups and services. The benefits of social support can include information gathering, access to community contacts, needed assistance, and empathy and understanding (Byrne & Cunningham, 1985). Cheng and Tang (1995) equated social support, which enhances decision-making, to problem focused coping.

Informal social networks, such as support groups, seem to be more valuable than formal social groups, such as health care systems, in mediating stress and limiting feelings of isolation (Kazak & Marvin, 1984). Sometimes the formal support networks actually induce more stress since many parents are besieged with an insurmountable amount of information and services (Brill, 1993).

Although family support appears to remain stable in parents of a child with a disability, Carr (1988) found that many mothers had less support from friends as the child grew older. The demands of childcare for the mother and father often leave little time for parents to develop and maintain friendships. Introducing the parents to other parents of children with similar disabilities gives parents an invaluable source for assimilating and organizing information (Springer, & Steele, 1980). McKinney and Peterson (1987) found that interaction of parents, especially mothers, was an excellent method for early intervention. Parents also have the opportunity to develop new friendships based upon shared interests and common problems. In addition, this is an excellent method to expand available resources (Kazak & Marvin, 1984).

Social support provides parents with the opportunity to express and share their feelings and emotions. Additionally, parents can share information and solutions to common problems (Kazak & Marvin, 1984). Knussen et al. (1992) found that mothers were more likely to engage in and benefit from social support as a coping resource than fathers. One reason that was suggested for this difference was in cultural and social differences between genders (Cheng & Tang, 1995).

The function of social networks may vary for different family members, and each family member will develop unique relationships depending upon their past experiences and interests. Kazak & Marvin (1984) explained how social support can vary in network density and boundary density. Network density describes a more closely knit group and encompasses a sense of community with common issues among members (Byrne & Cunningham, 1985). A closely knit network can act as a buffer between stress and health (Folkman & Lazarus, 1985), but while the information in a closely knit network may be more reliable, there is less flexibility (Byrne & Cunningham, 1985).

In boundary density there is an overlap of membership. An example of boundary density is two parents who each have a child with Down syndrome and are also divorced. Kazak and Marvin (1984) reported that parents of children with disabilities had more overlapping boundary density and were more closely knit than parents in the comparison group in their study. They also found that the social support networks of parents of children with disabilities were significantly smaller, and that the members were more likely to know and interact with each other. Social support is an excellent coping resource for parents. Parents are able to address areas of concern and gather information on various services available to them.

The process of coping involves an examination of the stressful situation, the way the individual or family reacts to the situation, and the changes that occur throughout the stressful situation (Folkman & Lazarus, 1985). Past investigations have focused on differences in levels of stress among families of children with and without disabilities. They have also examined numerous variables affecting stress. Few studies, however, have concentrated on differences in coping resources between parents of a child with Down syndrome and parents of children without Down syndrome. By examining low coping resources, professionals can help clients find alternative methods for reducing stress. Exploring high coping resources often increases clients' self-confidence and enhances their ability to adapt through change. Identifying and determining differences between high and low resources can facilitate interventions that enable parents of children with Down syndrome to manage stress.

CHAPTER III

Method

Subjects

A total of 52 subjects participated in this study. The subjects were divided into two groups--parents with a child with Down syndrome and parents with children without Down syndrome. There were 80 packets (see Procedure section) distributed to each group. Of the 80 packets, 23 (29%) parents responded in the group with a child with Down syndrome, and 35 (44%) parents out of 80 responded in the group that had children without Down syndrome. Of the 35 who responded in the second group, 6 responses were discarded in order to measure coping resources of parents whose children had no diagnosed medical disorders and/or emotional or physical disabilities. Four of the parents listed a child with Attention-Deficit/ Hyperactivity Disorder. One parent listed a child with depression, and one parent listed a child with cancer. Thus, the total participants in the study included 23 (44%) parents with a child with Down syndrome and 29 (56%) parents of children without Down syndrome.

Table 1 illustrates the demographic data in this study. Each parent in both groups had at least one child under the age of ten. The mean number of children for parents of a child with Down syndrome was 2.39. The ages ranged from 1 to 14. The mean number of children for parents of children without Down syndrome was 1.86 with the ages of their children ranging from 1 to 15.

TABLE 1

Demographics

Variable	Parents of Children with Down Syndrome n=23	Parents of Children without Down Syndrome n=29
Gender		
Males	7	5
Females	16	24
Age		
Range	29-46	18-43
Mean	36.22	32.83
Children		
Mean Number of Children	2.33	1.86
Age Range	1-14	1-15
Employment		
Full-time	15	21
Part-time	5	7
Not Employed	3	1
Marital Status		
Single	0	2
Married	19	19
Divorced	4	7
Widowed	0	1
Education		
Graduate School	4	2
Bachelor Degree	9	10
Some College	6	9
High School Grad	4	5
Some High School	0	3

Ages of the parents of a child with Down syndrome ranged from 29 to 46 with a mean age of 36.22. There were 7 males who responded from this group. This represented 30% of the group and 13% of the total respondents. Ages of the parents of children without Down syndrome ranged from 18 to 43 with a mean age of 32.83. There were 5 males in this group who responded which represented 17% of the group and 10% of the total respondents.

The majority of the parents in both groups were employed full-time and were married. In the group of parents who had a child with Down syndrome, 15 (65%) were employed full-time, 5 (22%) were employed part-time, and 3 (13%) were not employed. This same group included 19 (83%) who were married and 4 (17%) who were divorced. In the second group who had children without Down syndrome, 21 (72%) were employed full-time, 7 (24%) were employed part-time, and 1 (4%) was not employed. There were 2 (7%) single parents in this group, 19 (66%) married parents, 7 (24%) divorced parents, and 1 (3%) parent who was widowed.

The educational status for participants in the group who had a child with Down syndrome included 4 (17.4%) with graduate degrees, 9 (39.1%) with Bachelor degrees, 6 (26.1%) with some college, and 4 (17.4%) who had high school diplomas. Whereas, in the group of parents who did not have children with Down syndrome, 2 (7%) had graduate degrees, 10 (35%) had Bachelor degrees, 9 (31%) had some college, 5 (17%) had high school diplomas, and 3 (10%) had some high school. Participation of all parents was voluntary, and all subjects were from the St. Louis metropolitan area.

Procedure

This study focused on two groups--parents who have a child with Down syndrome and parents who have children who do not have Down syndrome. Participants were contacted through various preschools and support groups for Down syndrome in the St. Louis metropolitan area. Questionnaires were distributed to parents through the assistance of the preschool directors and several members of the support groups for Down syndrome.

The questionnaire packets contained a cover letter explaining the purpose of the study, a personal data questionnaire, and the Coping Resources Inventory. The cover letter (Appendix A) instructed one parent from each household to independently complete the questionnaires. Participation in this study was voluntary, and the cover letter informed parents that all responses would be confidential.

Parents who were contacted in the preschools were instructed to return their completed questionnaires to the preschool director. The preschool director collected these packets and then mailed them to the researcher. The parents from the support groups for Down syndrome were instructed to mail their completed questionnaires directly back to the researcher in the addressed, stamped envelopes which were provided in the packets.

Instruments

Personal Data. Each of the packets distributed to participants contained a personal data questionnaire (Appendix B) compiled by the researcher. The questions included items such as age, marital status, employment status, number and age of children, diagnosed medical conditions or disabilities in children, and involvement in support groups. Answers were used to compile the demographics of this study.

The Coping Resources Inventory - Form D (CRI). The CRI (Hammer & Marting, 1987) is a 60 item measure of coping resources (Appendix C). Subjects were asked to rate each item on a 4-point Likert scale ranging from never or rarely to always or almost always. The CRI was developed to provide a standardized measure of coping resources that would prove beneficial in mediating responses to stress.

The CRI assesses resources in five domains. The manual for the CRI provides a description of each of the domains.

1. **Cognitive (COG)** - The extent to which individuals maintain a positive sense of self-worth, a positive outlook toward others, and

optimism about life in general.

2. **Social (SOC)** - The degree to which individuals are imbedded in social networks that are able to provide support in times of stress.
3. **Emotional (EMO)** - The degree to which individuals are able to accept and express a range of affect, based on the premise that a range of emotional response aids in ameliorating long-term negative consequences of stress.
4. **Spiritual/Philosophical (S/P)** - The degree to which actions of individuals are guided by stable and consistent values derived from religious, familial, or cultural tradition or from personal philosophy.
5. **Physical (PHY)** - The degree to which individuals enact health-promoting behaviors believed to contribute to increased physical well-being.

(Hammer, 1988)

Each of the five domains is scored individually. The higher the score, the higher the resource. Total resources are assessed by summing the scores from each of the five domains.

Reliability of the CRI was examined through item-to-scale correlations, internal consistency, and test-retest. The range and median item-to-scale correlations are provided for each domain. The median correlations ranged from .37 to .46, indicating fairly good homogeneity. Alpha coefficients for internal consistency ranged from .56 to .93 on each scale. The coefficients for the total resource score, however, ranged from .89 to .93 which indicates a high level of consistency. A factor that is evident in examining the various samples is that the alpha coefficients increased with the age of the sample. The test-retest data indicates that CRI scale scores are reasonably stable (Hammer, 1988). The scales ranged from .60 to .78, but the sample was relatively small, consisting of only 115 high school students.

In examining validity of the CRI, interscale correlations indicated that there is some degree of overlap among the resource constructs. For example, the correlations among the Cognitive, Social, and Emotional scales ranged from .60 to .69 which is fairly high. A multitrait-multimethod analysis using the CRI and self ratings was conducted. The traits measured were the five constructs represented in the CRI. The results indicated support for convergent validity with relatively high correlations of .61 to .80 among different measures of the same construct. In contrast, the lower correlations found among other comparisons indicated divergent validity (Cochran, 1995).

The authors have acknowledged an inadequate size and lack of diversity among the normative samples. In view of this they warned that "extreme caution" should be used in making normative interpretations of any scale for an individual. They also suggest that an individual's family, job, and physical and psychological health should be assessed as contributing factors in the analysis of particularly low scores on any scale.

CHAPTER IV

Results

The following data examines t-test results of the Cognitive (COG), Social (SOC), Emotional (EMO), Spiritual (SPI), and Physical (PHY) domains, as well as the total (TOT) scores on the Coping Resources Inventory. These variables at the interval level of measurement were examined with the dichotomous nominal variable of parents with a child with Down syndrome (PWDS) and parents without a child with Down syndrome (PWODS). The results were analyzed using the SPSS/PC+ Studentware Plus (SPSS, 1991). T-tests were conducted to assess the significance of mean differences between the independent variables of PWDS and PWODS and the COG, SOC, EMO, SPI, PHY, and TOT scores which are the dependent variables.

Table 2 illustrates the t-test results for cognitive coping resources for parents with and without a child with Down syndrome. The sample size, which remained the same for all variables, included 23 (n=23) parents of a child with Down syndrome and 29 (n=29) parents of a child without Down syndrome. The mean score on the Cognitive scale for parents of a child with Down syndrome was 29.5217 as opposed to the mean score of 26.7931 for parents of children without Down syndrome. The mean difference was -2.7286.

The Levene's test determines the equality of variances between the two groups of parents. The P value in the Levene's test is .409. Since this value is greater than the .05 alpha level, the assumption is that the two sample groups are homogeneous. Thus, the null hypothesis that the variances for cognitive coping resources for parents of a child with Down syndrome and parents of children without Down syndrome are equal was accepted.

TABLE 2

t-test for independent samples of parents

Variable	Number of Cases	Mean	SD	SE of Mean
COG				
PWDS	23	29.5217	3.895	.812
PWODS	29	26.7931	4.924	.914

Mean Difference = -2.7286
Levene's Test for Equality of Variances: F=.692 P=.409

t-test for Equality of Means

Variances	t-value	df	2-Tail Sig	SE of Diff	95% CI for Diff
Equal	-2.17	50	.035	1.256	-5.253, -.204
Unequal	-2.23	50	.030	1.223	-5.185, -.272

The t-value of -2.17 in Table 2 was calculated using 50 degrees of freedom (29-1, 23-1). The degrees of freedom were the same for each t-test in the study.

Since the t-value falls within the 95% confidence interval for mean difference of -5.253 to -.204, the t-test failed to reject the null hypothesis that there are no significant differences between mean scores in cognitive coping resources for parents of a child with Down syndrome and parents of children without Down syndrome. The significance level of .035 also reinforces accepting the null hypothesis since this value is greater than the alpha level of .025 for a 2-tailed level of significance.

The t-test results for the Social variable are illustrated in Table 3. The mean score for parents of a child with Down syndrome was 41.4348, whereas, the mean score for parents of children without Down syndrome was 40.1034. The mean difference was -1.3313. The two sample groups were tested for equality of variance and found to be homogeneous since the P value of .342 in the Levene's test for equality was greater than the alpha level of .05. The null hypothesis which claimed that the variances for social coping resources for parents of a child with Down syndrome and parents of children without Down syndrome are equal was accepted.

Table 3 also depicts the t-test results. Because the t-value of -.80 falls within the 95% confidence interval for the mean difference of -4.686 to 2.023, the t-test failed to reject the null hypothesis that there are no significant differences between mean scores in social coping resources for parents of children with Down syndrome and mean scores in social coping resources for parents of children without Down syndrome. Further emphasis for accepting the null hypothesis was found in the .429 significance level which was greater than the alpha level of .025 for a 2-tailed significance level.

TABLE 3

t-test for independent samples of parents

Variable	Number of Cases	Mean	SD	SE of Mean
SOC				
PWDS	23	41.1034	5.566	1.161
PWODS	29	40.1034	6.287	1.167

Mean Difference = -1.3313
Levene's Test for Equality of Variances: F=.920 P=.342

t-test for Equality of Means

Variances	t-value	df	2-Tail Sig	SE of Diff	95% CI for Diff
Equal	-.80	50	.429	1.670	-4.686, 2.023
Unequal	-.81	49.35	.423	1.646	-4.640, 1.978

The next set of data is for the Emotional variable as shown in Table 4. The mean score for parents of a child with Down syndrome was 46.9565. The mean score for parents of children without Down syndrome was 46.9565. The mean difference was -.0945.

The null hypothesis for the equality of variances is that the variance for emotional coping resources for parents of a child with Down syndrome and parents of children without Down syndrome are equal. The calculated P value in the Levene test was .709. Like the P values for the Cognitive scale and the Social scale, the P value for the Emotional scale was greater than the alpha level of .05 which indicates accepting the null hypothesis for the equality of variances.

TABLE 4

t-test for independent samples of parents

Variable	Number of Cases	Mean	SD	SE of Mean
EMO				
PWDS	23	46.9565	10.692	2.229
PWODS	29	46.8621	8.488	1.576

Mean Difference = -.0945
Levene's Test for Equality of Variances: F=.141 P=.709

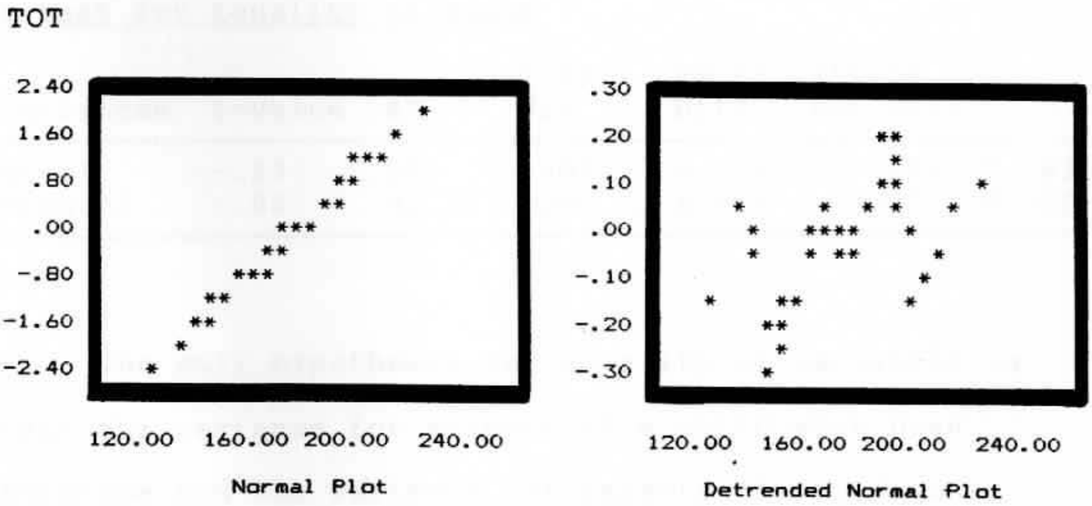
t-test for Equality of Means

Variances	t-value	df	2-Tail Sig	SE of Diff	95% CI for Diff
Equal	-.04	50	.972	2.658	-5.435, 5.246
Unequal	-.03	41.37	.973	2.730	-5.610, 5.421

The t-test in Table 4 was again calculated with 50 degrees of freedom, and the resulting value was -.04 which falls within the 95% confidence interval for the mean difference of -5.435 to 5.246. Again the results indicated a failure to reject the null hypothesis that there are no significant differences in scores in emotional coping resources for parents with and without children with Down syndrome. Failure to reject the null hypothesis was also supported by the .972 level of significance which was greater than the .025 alpha level for a 2-tailed level of significance.

The normal and detrended normal plot for the total coping resources scores are illustrated in Table 5. The values in the normal plot appear to fall in a relatively straight line, although there is some deviation. The values in the detrended plot appear to be randomly scattered around zero. There may be a pattern, however, which would raise questions about normality.

TABLE 5



The t-test calculating the scores for the Total variable for parents of a child with Down syndrome and parents of children without Down syndrome is displayed in Table 6. The mean score for parents of a child with Down syndrome was 176.8696 and the mean score for parents of children without Down syndrome was 171.7241. The mean difference was -5.1454.

TABLE 6

t-test for independent samples of parents

Variable	Number of Cases	Mean	SD	SE of Mean
TOT				
PWDS	23	176.8696	19.293	4.023
PWODS	29	171.7241	24.108	4.477

Mean Difference = -5.1454
Levene's Test for Equality of Variances: F=.717 P=.401

t-test for Equality of Means

Variances	t-value	df	2-Tail Sig	SE of Diff	95% CI for Diff
Equal	-.83	50	.409	6.176	-17.553, 7.262
Unequal	-.85	49.99	.397	6.019	-17.237, 6.946

The null hypothesis for equality of variances is that the variance for parents of a child with Down syndrome and the variance for parents of children without Down syndrome are equal. The P value in the

Levene test is .401 which was greater than the alpha level of .05. The implication for this value was to accept the null hypothesis that the variances are equal.

The t-test results in Table 6 yielded a t-value of -.83 based on 50 degrees of freedom. Since the t-value falls within the 95% confidence interval for mean difference of -17.553 to 7.262, and the .409 level of significance is greater than the .025 alpha level, the null hypothesis was accepted. The null hypothesis held that there are no significant differences in the mean scores for total coping resources for parents of a child with Down syndrome and parents of children without Down syndrome.

T-tests for the Spiritual and Physical variables yielded similar results indicating no significant differences in mean scores. Thus, no significant differences were found in any of the mean scores for the five domains or in the total mean scores for coping resources between parents of a child with Down syndrome and parents of children without Down syndrome.

CHAPTER V

Discussion

This study investigated differences in coping resources between parents of a child with Down syndrome and parents of children who do not have Down syndrome. Surprisingly, not only did the analysis of mean scores by t-tests fail to find significant differences in the total coping resources scores, but they also failed to find significant differences in the individual domains of cognitive, social, emotional, spiritual, and physical coping resources between the two groups. These results, however, appear to support and be consistent with the findings of previous research (Dyson, 1993; Dumas, 1991).

The first question in this study addressed whether parents of a child with Down syndrome exhibit a greater sense of self-worth than parents of children without Down syndrome as evidenced in the cognitive domain. Cognitive coping refers to a sense of self-worth and how individuals construe what is happening to their well-being. Harris and McHale (1989) found that self-esteem scores did not differ when comparing mothers of a child with mental retardation and mothers of a child without mental retardation. Since t-tests failed to find significant differences in mean scores between the two groups, greater levels of cognitive coping for parents of a child with Down syndrome may have been influenced by social support since 74% of these parents belonged to support groups. It is important to note that the manual for the CRI reports an interrelatedness among the five domains. Being able to openly share experiences with other parents in similar situations often provides a sense of self-efficacy that can contribute to overall strength and stamina. As cognitions change, so will emotions and behaviors, and a more positive outlook generally facilitates enhanced coping measures.

The second research question addressed social coping resources. The findings indicated that there were no significant differences between mean scores for parents of a child with Down syndrome and parents of a child without Down syndrome. Folkman and Lazarus (1985) claimed that social support is interrelated with coping. Social support actually acts as a mediator of stress. Since most of the parents of a child with Down syndrome belong to support groups and most likely interact with a wide range of professionals in the care of their child, the results for this particular domain would be expected to be at greater levels. One explanation, however, is that no matter how large the social network is for these parents, the fact that they have a child with a congenital handicap remains. There is also no way to determine what type of additional stressors may have been present in the group of parents without a child with Down syndrome.

The emotional domain also resulted in no significant differences in mean scores between the two groups. Having a child with Down syndrome would seem to create undue emotional distress since parents must contend with reactions of others, spend more time in the care of their child, and face concerns about their child's future. These are problems that parents of children without Down syndrome would not normally have to face. Being able to accept and express a wide range of emotions, leads to more effective coping efforts. If parents have a substantial social network, they have the opportunity to express their feelings to others. This interactive feedback often provides the empathy and understanding that facilitates emotional coping.

Since the total coping resources mean scores resulted in no significant differences, there are several factors that must be taken into consideration. First, the parents of a child with Down syndrome in this study had children that were relatively young. None of the children were over the age of seven, and the majority of the children were under the age of six. Perhaps the stresses at this point are the results of normative concerns surrounding parenting issues for both groups of parents. Although parents of a child with Down syndrome face unique stressors, they may still be optimistic about their child's future capabilities at this relatively young age.

Second, parents have not yet had to face concerns about educational placement and services or endure the heartache of seeing their children experience negative reactions from their peers. Most children with Down syndrome have delayed social and communication skills (Brill, 1993). Parents sometimes do not recognize the extent of these problems until their children are placed in same age groups of children without disabilities. Several studies (Barnett & Boyce, 1995; Dyson, 1993) found that parental stress remained fairly stable over time. Although stress remained stable, parents of a child with Down syndrome and parents of children without Down syndrome still differed in their daily functioning (Barnett & Boyce, 1995). There appears to be minimal research on coping resources over time. If stress remains stable over time, however, then perhaps coping resources also remain stable throughout the different life stages.

Limitations and Future Considerations

There are several limitations to this study that should be noted. As already discussed, the majority of the parents with a child with Down syndrome belonged to support groups, whereas none of the parents with children without Down syndrome belonged to support groups. Increased social support would invariably have an effect on these parents. Friedrich et al. (1985) stated that "better copers presumably have more social support, and more social support facilitates coping" (p. 137). Interacting with others can contribute to insight, and insight can produce change in emotions, thinking, and behavior. Thus, it is possible that individual scores in the various coping response domains could conceivably be higher for parents with a large social network than for parents who do not have any type of social networks. Future research on coping resources could distinguish between parents of a child with Down syndrome who belong to a support group and parents of a child with Down syndrome who do not belong to a support group.

This same type of influence is also reflected in the interrelatedness of the domains on the CRI. Indeed, the CRI manual warns about an overlap in the confidence bands and suggests that scores should only be considered different if the confidence bands do not overlap. This study acknowledged that the majority of parents of a child with Down syndrome belonged to some type of support group, and that social support could be a mitigating factor in higher levels of cognitive and emotional coping resources. If there is an overlap in the confidence bands on two domains, then one domain cannot be considered greater than the other domain.

Other factors that were not taken into consideration in this study were the degree of disability in the child with Down syndrome and the socioeconomic status of the parents. The literature supports the fact that the degree of disability reflects upon the amount of stress experienced by the parents (Friedrich et al., 1985; McKinney & Peterson, 1987; Quine & Pahl, 1985). The greater the degree of disability, the greater the stress. Since all children with Down syndrome do not experience the same degree of disability, it is difficult to ascertain the various effects on parents.

Socioeconomic status would also undoubtedly have an effect on the amount of stress experienced by parents. Medical factors alone account for additional financial burdens. Some families experience financial difficulties that are not related to their child's condition. In addition, family income may be reduced since it may be difficult for both parents to work outside the home because of the care involved with many children with Down syndrome. This study addressed the employment status of the parents, but did not consider the annual income for each family.

Another factor that should be considered is the size of the sample in this study and the responses by gender. A more significant comparison for mean differences could be considered with a larger sample. Only one parent from each household was asked to complete the data packets, and the majority of the responses were from mothers. The literature acknowledges that mothers represent the majority of studies (Crnic et al., 1983; Sloper et al., 1991). Perhaps a clearer view into coping resources and family adaptation could be assessed from studies involving both parents and by studies between mothers and fathers.

Considering the complexity of coping resources and the considerable overlapping effects in various domains, more research should be initiated to provide a more thorough understanding of family functioning. Although there were no significant differences in coping resources between both groups of parents in this study, it is important to recognize individual differences within families. Personal characteristics of both the parents and the child can influence coping outcomes. Behaviors, cognitions, and perceptions interact as coping mechanisms, and identifying areas of strength and areas of weakness can facilitate interventions and enhance family functioning.

Appendix A

Dear Participant,

I am a graduate student at Lindenwood College, and I am conducting a comparative research study on coping resources to complete my thesis. The thesis is partial fulfillment for the requirements of a Master of Arts degree in Professional Counseling. Your participation will be greatly appreciated, and by completing the enclosed materials, you will be granting your permission for me to use your responses in this study. All identities will be held in strictest confidence.

Only one parent in the household should independently complete the enclosed questionnaires. Please read the material carefully and complete all questions. After completing the questionnaires, please return them promptly in the enclosed self-addressed, stamped envelope.

I appreciate your support and am thanking you in advance for your participation. If you have any questions, please do not hesitate to contact me.

Sincerely,

Randee J. Feco
1226 Wissmann Dr.
Manchester, MO 63011
314-391-8385

Appendix B

PERSONAL DATA QUESTIONNAIRE

PLEASE CIRCLE THE APPROPRIATE ANSWER OR FILL IN THE BLANK WHERE NECESSARY.

1. Age: _______

2. Sex:
   1-M
   2-F

3. Marital Status:
   1-Single
   2-Married
   3-Divorced
   4-Widowed

4. Education: (indicate highest level achieved)
   1-Graduate or professional school
   2-Bachelor's Degree
   3-Some college
   4-High school graduate/GED
   5-Some high school

5. Spouse's education: (indicate highest level achieved)
   1-Graduate or professional school
   2-Bachelor's Degree
   3-Some college
   4-High school graduate/GED
   5-Some high school

6. Employed:
   1-yes, full-time
   2-yes, part-time
   3-no

7. Spouse Employed:
   1-yes, full-time
   2-yes, part-time
   3-no

8. Number of Children: ________

9. Sex and Age of Children:

Age	Sex M F
1-________	________
2-________	________
3-________	________
4-________	________
5-________	________

10. Have any of your children been diagnosed with medical disorders and/or emotional or physical disabilities?
1-yes
2-no

11. If the answer to question 10 is yes, please list diagnosis and refer to child by corresponding number in question 9.

____

____

____

12. Other than parents and children, who else lives in the household? Provide relationship (For example: aunt, grandmother, roommate, etc.)
1-________________________
2-________________________
3-________________________

13. Are you presently participating in:
Support Groups: 1-yes 2-no
Counseling/Therapy: 1-yes 2-no

Appendix C

Coping Resources Inventory – Form D

Allen L. Hammer, Ph.D. and M. Susan Marting

Directions

For each of the sixty statements that follow, fill in the circle on your answer sheet that best describes you in the last six months. For each statement mark one of the following descriptions:

Never or rarely
Sometimes
Often
Always or almost always

Do not make any marks in this booklet. Mark all of your answers on the separate answer sheet. It is important that you try to answer every question.

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3165

N = Never or rarely
S = Sometimes
O = Often
A = Always or almost always

1. I have plenty of energy.
2. I say what I need or want without making excuses or dropping hints.
3. I like myself.
4. I am comfortable with the number of friends I have.
5. I eat junk food.
6. I feel as worthwhile as anyone else.
7. I am happy.
8. I am comfortable talking to strangers.
9. I am part of a group, other than my family, that cares about me.
10. I accept the mysteries of life and death.
11. I see myself as lovable.
12. I actively look for the positive side of people and situations.
13. I exercise vigorously 3-4 times a week.
14. I accept compliments easily.
15. I show others when I care about them.
16. I believe that people are willing to have me talk about my feelings.
17. I can show it when I am sad.
18. I am aware of my good qualities.
19. I express my feelings to close friends.
20. I can make sense out of my world.
21. My weight is within 5 lbs. of what it should be.
22. I believe in a power greater than myself.
23. I actively pursue happiness.
24. I can tell other people when I am hurt.
25. I encourage others to talk about their feelings.
26. I like my body.
27. I initiate contact with people.
28. I confide in my friends.
29. I can cry when sad.
30. I want to be of service to others.

N = Never or rarely
S = Sometimes
O = Often
A = Always or almost always

31. I can say what I need or want without putting others down.
32. I accept problems that I cannot change.
33. I know what is important in life.
34. I admit when I'm afraid of something.
35. I enjoy being with people.
36. I am tired.
37. I express my feelings clearly and directly.
38. Certain traditions play an important part in my life.
39. I express my feelings of joy.
40. I can identify my emotions.
41. I attend church or religious meetings.
42. I do stretching exercises.
43. I eat well-balanced meals.
44. I pray or meditate.
45. I accept my feelings of anger.
46. I seek to grow spiritually.
47. I can express my feelings of anger.
48. My values and beliefs help me to meet daily challenges.
49. I put myself down.
50. I get along well with others.
51. I snack between meals.
52. I take time to reflect on my life.
53. Other people like me.
54. I laugh wholeheartedly.
55. I am optimistic about my future.
56. I get enough sleep.
57. My emotional life is stable.
58. I feel that no one cares about me.
59. I am shy.
60. I am in good physical shape.

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