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MEDIATIONAL EFFECTS OF PERCEIVED CHILD CONTROL AND PARENTAL COPING  
ASSISTANCE ON PEER PROBLEM OUTCOMES IN FAMILIES OF CHILDREN WITH  
DEVELOPMENTAL DISABILITIES

by

KARA E. SNEAD

Under the Direction of Frank J. Floyd

ABSTRACT

Literature to date suggests that child coping is often a direct result of coping assistance provided by parents. Findings have not considered aspects of the stressor that may impact what the parent suggests; specifically, the child's role, and the controllability of the stressor particularly for children with intellectual disabilities. The current study examines how the child's disability status and parental perceptions of the child's control over a peer problem influence the type of coping suggestions parents offer and how specific types of coping assistance affect the outcome of the coping situation. Results indicated that mothers of children with mental retardation provided more passive coping assistance and perceived their children as having less control over peer problems. Coping assistance was not directly linked to problem outcomes which suggests future studies should incorporate measures of factors such as direct parent and teacher assistance and child's willingness or ability to implement coping suggestions.

INDEX WORDS: Coping assistance, Parenting, Coping, Intellectual disabilities

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of  
Master of Arts  
in the College of Arts and Sciences  
Georgia State University

2007

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Children with developmental disabilities have more difficulty with peer problem resolution and social relationships than typically developing children (Foxx et al., 1989; Healey & Masterpasqua, 1992). Accordingly, their parents face the task of managing the child's social stressors and assisting the child to cope with social problems. It is likely that the coping assistance that parents provide to their children ultimately shapes their children's interpersonal relationships and peer problem-solving capabilities. Although coping assistance probably involves different procedures than coping with one's own stressors, the coping model developed for understanding self coping is applicable to the situation of providing coping assistance. Thus, the present study will use this model to examine important mechanisms involved in parental coping assistance to children with disabilities.

Coping is defined as the "cognitive and behavioral efforts to master, reduce, or tolerate the internal and external demands that are created by a stressful transaction" (Folkman, 1984). The coping process is initiated in response to an individual's appraisal of some harm, loss, or threat and is initiated in an emotional environment where the first task is often to regulate negative emotions (Folkman & Moskowitz, 2004). Coping efforts usually vary across time and context depending on the nature of the stressor (Compas, 1987). The ability to modify coping according to situational demands is termed coping flexibility, which involves the systematic use of a variety of strategies across different situations rather than the rigid application of a few strategies under all circumstances (Lester et al., 1994; Folkman & Moskowitz, 2003).

Coping strategies have been classified according to a variety of categories. The most widely studied dimensions are two-factor models, which include classifications of coping strategies as problem- versus emotion-focused coping, primary versus secondary control coping,

engagement (approach) versus disengagement (avoidance) coping, and active versus passive coping. There is considerable overlap among the various strategies classified across different two-factor models. Specifically, the strategies classified as problem-focused, primary control, approach, and active coping broadly involve taking actions to alter the stressor. In contrast, strategies classified as emotion-focused, secondary control, avoidance, and passive coping involve behaviors that aim to regulate the emotions and distress associated with the stressor. Despite efforts to categorize dimensions of coping, there has been little consensus concerning the dimensions that best discriminate among different coping strategies (Compas, 2001).

Notably, a number of different models have recently been proposed using exploratory factor analytic techniques (e.g. Glyshaw, Cohen & Towbes, 1989; Causey & Dubow, 1992) and confirmatory factor analytic approaches (Ayers, 1996). Most relevant to the present study, Miller and colleagues (1994) examined the coping assistance that divorced mothers provided to their children and the subsequent coping strategies employed by their children. Additionally, the study sought to test measurement models of coping socialization. Specifically, the study analyzed three different models of coping: a single-factor model, Lazarus and Folkman's (1984) two factor model, a five-factor model, and a six-factor model. Findings demonstrated that the six-factor model of mother's coping socialization fit the data well. The six factor model consisted of problem-focused, positive cognitive restructuring, avoidance, distraction, seeking support, and negative action coping suggestions. Additionally, results indicated that mother's encouragement of distraction, support seeking, positive cognitive restructuring, and negative actions were positively related to reports of their children's use of the same strategies across time and context. Miller notably asserted that a confirmatory factor analysis has not yet been used to compare alternative theoretical models of adult coping (e.g. between two-dimensional models vs. more

complex models of adult coping). In spite of criticisms that the two-factor model is overly broad, it is the most widely utilized. Additionally, the six factors can be parceled into two factors. Specifically, problem-focused, positive cognitive restructuring, and negative action coping suggestions can be conceptualized as “active” coping assistance; whereas avoidance, distraction, and seeking emotional support can be conceptualized as “passive” coping assistance. The measure used in the present study was developed around a two-factor model of coping.

Classification into problem-focused and emotion-focused strategies has frequently been used in research on coping in childhood and adolescence (Compas et al., 1996; Hart, 1991; Compas, 2001). The ability associated with problem-focused coping involves efforts to alter aspects of the situation in order to reduce stress and generally emerges at age 4-5 years (Band & Weisz, 1988; Thurber & Weisz, 1997). Examples of problem-focused coping are formulating a plan of action or concentrating on subsequent steps in a plan, and enacting the plan. In contrast, the ability associated with emotion-focused coping, involves changing oneself emotionally to fit the situation by ameliorating negative sentiments associated with the problem and generally emerges between ages 6-8 years (Band & Weisz, 1988; Thurber & Weisz, 1997). Some examples of emotion-focused coping are avoidance (e.g. engaging in cognitive or behavioral efforts to avoid dealing with or thinking about the problem), distraction (avoiding thinking about the problem by using distracting stimuli), and seeking emotional support. The use of coping strategies among children is related to the age of the child and the development of metacognition, which are important factors to consider when examining the type of coping that individuals with developmental disabilities may be implementing. Furthermore, an individual’s developmental level both contributes to the resources that are available for coping and limits the types of coping responses the individual can enact (Compas, 2001).

Some research indicates that problem-focused coping efforts tend to be associated with more adaptive functioning, whereas emotion-focused coping strategies tend to be associated with behavioral, affective and social dysfunction (Holahan et al., 1987; Windle et al., 1996). For example, in a sample of young adolescents, Compas et al. (1988) found that for both boys and girls, emotion-focused coping was positively correlated with Youth Self Report (YSR; Achenbach, 1991) scale scores, which indicate relatively higher levels of emotional/behavioral problems. Overall, the young adolescents who chose to use emotion-focused coping strategies in response to social and academic stressors experienced more adjustment problems in comparison to their peers who utilized problem-focused strategies. Specifically, emotion-focused coping was positively correlated with the elevations in the aggression subscale for boys and girls, and the depression and delinquency subscales for girls.

The coping literature indicates that both the type of coping strategy used and the effectiveness of a coping strategy are influenced by contextual factors, specifically the perceived controllability or uncontrollability of the stressful event. (Folkman & Lazarus, 1980; Compas, 1987; Carver et al., 1989; Valentiner et al., 1994). That is, when an individual appraises a stressor as controllable, he/she tends to use problem-focused coping to manage the stressor, whereas when an individual appraises that he/she lacks control over the stressor, that individual tends to use emotion-focused strategies to manage the internal response to the stressor (Folkman & Moskowitz, 2004). For example, in a study of the coping strategies of HIV positive men and caregiving partners of men with AIDS, participants were asked to describe the most stressful event of the past week related to caregiving or HIV/AIDS, and subsequently rate their appraisal of controllability of the event. Findings indicated that problem-focused coping was effective in

diminishing depressed mood in situations appraised as controllable. Emotion-focused coping was useful in situations that were appraised as less controllable (Park et al., 2001).

### *Parental Influences on Child Coping*

There has been a body of research examining the complex relationship between parenting and child coping outcomes (Valentiner et al., 1994; Eisenberg et al., 1996; Kliewer et. al, 1996; Meesters and Muris, 2004). Parents influence children's coping through several possible mechanisms, which may include parental rearing practices (McIntyre et al., 1995), appraising/modeling the situation (Power 2004), and providing a supportive and flexible family environment (Hardy et al., 1993). Dusek and Danko (1994) examined the relationship between parental child rearing practices and adolescent coping. Results indicated that adolescents who perceived their parents as warm, supportive, and nurturant engaged in more problem-focused coping than adolescents who perceived their parents as uninvolved and non-demanding. This study demonstrates that parenting practices significantly impact the coping strategies employed by typically developing adolescents. Parents may also impact their child's coping through the coping strategies that they themselves utilize or modeling. Kliewer and colleagues (1995), found that in a sample of children with sickle cell disease, children's use of avoidant coping strategies, a subtype of emotion-focused/passive coping, was associated with greater levels of parental emotion-focused/passive coping (e.g., denial and disengagement) and lower levels of parental problem-focused/active coping. In a study by Hardy and colleagues (1993) a group of school-age children and their mothers described how they responded to stressful episodes the child had recently experienced, and parenting dimensions such as nurturance/supportiveness, structure, and directiveness/control were assessed in relation to the children's coping styles. Results indicated



that children from families with high levels of support, and moderate levels of structure used the greatest variety of coping strategies in response to everyday stressors.

Although the literature documents the parental influences on child coping strategies through parenting styles and modeling, direct coping assistance by parents as a form of socialization of coping has not received much attention particularly for children with developmental disabilities. In addition to describing the types of coping assistance that parents provide, this study examines both determinants and outcomes of those efforts. Ultimately, understanding the factors that motivate parental coping assistance further enables us to help parents make effective coping suggestions. The present study examines the coping strategies that parents suggest to their children to manage peer issues.

### *Coping Assistance*

Coping assistance is conceptualized as actions taken by parents to help their children cope with stressful events. It is similar to the concept of coping in that it represents an attempt to deal with a stressor; however, it differs in that it is coping related to acts that facilitate coping by someone else, in this case the child (Prinstein et al., 1996). For example, a child may use an emotion-focused strategy like avoidance to cope with a stressor (e.g. “I played with my toys instead of thinking about the problem”). In contrast, with coping assistance, a parent becomes actively involved in the coping process (e.g. mother takes the child shopping to help the child feel better). Coping assistance is also related to the construct of social support, in that for both coping assistance and social support, parents are involved in providing help and guidance to eliminate problematic demands on the child (Thoits et al., 1986). In broader terms, coping assistance can be conceptualized as a component of social support. Coping assistance is likely influenced by numerous factors such as parent’s own coping style, quality of the parent-child

relationship, nature of the family environment and family structure, and the child's usual coping behavior (Kliewer, 1996). The types of coping suggestions that parents offer to their children are important to understand because of their potential impact on the coping strategies used by the child, which eventually determine problem outcomes.

Parental coping assistance has not been widely researched thus far, and much remains to be discerned about the nature of this assistance and its effects on child coping outcomes. The research that has been conducted to date suggests that child coping is often a direct result of the parental coping assistance provided. A study of the coping strategies of school-age children and the coping suggestions made by their parents indicated that the girls who reported the use of active coping strategies had mothers who reported making active coping suggestions (Kliewer, 1996), which suggests that girls followed their mothers' advice. Additionally, maternal negative action suggestions (e.g. blame others or act aggressively) were positively associated with girls' use of avoidant coping. Maternal suggestions did not predict boys' coping. In comparison, paternal active suggestions predicted boys' distraction coping. Broadly, study findings suggest that coping suggestions may either be followed directly or used as springboards for the child's own coping decisions. Additionally, the genders of parent and child may be connected to the type of parental coping assistance provided and the subsequent child coping strategies.

In a related study, Shipman and Zeman (2001) investigated maternal socialization of children's coping responses to emotional arousal in a sample of 6-12 year old physically maltreated and nonmaltreated children. Results indicated that maltreated children's reports of effective coping (i.e., seeking social support) were positively associated with their mother's reports of suggesting effective coping strategies. Maltreating mothers demonstrated a decreased ability to generate effective coping strategies for their children. Consequently, when compared to

nonmaltreated peers, children who were maltreated demonstrated difficulty generating effective coping strategies (i.e. reported using passive strategies or no strategies) in response to anger arousing situations.

Similarly, Miller and colleagues (1994) examined the coping assistance that divorced mothers provided to their children and the subsequent coping strategies employed by their children. Findings indicated that mother's encouragement of distraction, support seeking, positive cognitive restructuring, and negative actions were positively related to reports of their children's use of the same strategies. Prinstein and colleagues (1996) conducted a study on the coping assistance parents, teachers, and friends offered to children following Hurricane Andrew. Findings demonstrated that that children's use of distraction was strongly related to coping assistance in the form of distraction (e.g. parent helped child to cope by distracting the child) more than to emotional processing coping assistance.

Although these studies demonstrate that children's coping strategies are affected by the type of coping assistance provided by parents, the findings do not illustrate why parent's make certain suggestions. Specifically, the studies to date have not considered the various aspects of the stressor that may impact what the parent suggests; particularly the child's role (if any), and the controllability of the stressor. To fully understand what leads parents to offer particular suggestions, it is necessary to identify the factors that facilitate useful and effective coping strategies. Additionally, there is little literature that examines parental coping assistance for children with developmental disabilities whose peer experiences and social problem solving skills are divergent from typically developing peers, and who therefore may receive different forms of coping assistance from their parents.

### *Perceived Control*

There is a significant body of literature on the associations between perceived control and coping, particularly in research on chronic illness (Shagena et al., 1988; Wallander et al., 1992; Weisz, McCabe & Denning, 1994; Charron-Prochownik, 2002; Tan et al., 2005). Research suggests that perceived control over illness is related to well-being, type of coping strategies utilized, and quality of life. In a study of the cognitions and coping of chronically ill adults, Jensen and colleagues (2001) demonstrated that belief in control over pain is adaptive and that other cognitions and coping responses (e.g., catastrophizing, guarding, and resting) are not adaptive. Because perceptions of control over a stressor likely influence the type of coping assistance that parents provide, it is an important factor to consider in understanding how parents help children to cope with peer-related stress.

In the coping framework, perceived control is defined as the generalized belief of an individual concerning the extent to which he/she can control outcomes across situations as well as the appraisal of possibilities for influencing outcomes in a particular situation (Folkman, 1984). These two aspects of control, one's ability to influence the stressor (i.e., control over one's response to stressor), and controllability of a particular stressor are separate; however, the distinction becomes less clear when examined within a social context. Frequently during a peer problem, the stressor is the behavior of the perpetrating child involved. For example, a child who is a victim likely has control over his/her response to the peer situation, but may not have control over the stressor- which involves the behavior of the perpetrating child. Alternatively, the perpetrating child, who may have control over his/her own behavior, also has control over the peer situation as his/her behavior is the stressor. In the current study, control over one's ability to influence the stressor and control over the stressor will be considered in tandem.

Empirical studies and the coping model indicate that active/problem-focused coping processes should be most effective in situations that are appraised as changeable and controllable (Moos and Schaefer, 1993; Valentiner et al., 1994) and that passive/emotion-focused coping may be most effective in situations appraised as uncontrollable (Suls & Fletcher, 1985). Further, in order to produce the best event outcome, appraised controllability of the stressor must be consistent with the actual controllability of the stressor. This is because coping strategies are selected to match the perceived controllability of the event, so that misperceptions about controllability lead to the selection of inappropriate coping strategies. For example, when an individual inaccurately perceives an uncontrollable event as being controllable, he/she likely engages in repeated, problem-focused efforts that are unsuccessful. His/her outcome, in terms of both problem resolution and sense of well being would be worse than those who engage in emotion-focused coping in this type of situation. Similarly, when an individual inaccurately perceives a controllable event to be uncontrollable, he/she is unlikely to engage in problem-focused coping, and is instead more likely to engage in emotion-focused efforts. Therefore, the resolution of the problem is apt to be poorer than if problem-focused efforts had been implemented (Folkman, 1984).

The fit between appraisal of the stressor's controllability and the coping strategy used is often referred to as "goodness of fit" (Vitaliano et al., 1990; Folkman and Moskowitz, 2004). Notably, most stress-inducing situations have controllable and uncontrollable aspects to them (Folkman & Moskowitz, 2000). Well-adjusted individuals are able to shift between the use of problem-focused and emotion-focused strategies to "fit" the scenario. A study of college undergraduates showed that using different balances of problem-focused and emotion-focused coping for controllable and uncontrollable events is associated with relatively low levels of

distress (Forsythe and Compas, 1987). Although the notion of fit is compelling, one criticism of the model is that it does not differentiate between adaptive and nonadaptive forms of either active/problem-focused strategies or passive/emotion-focused strategies. Power (2004) provides the example of a child using aggression, an active strategy, to terminate taunting by a peer, which is perceived to be a controllable situation. Though the fit is good and the coping approach may assuage immediate distress, the approach is unlikely to be effective in the long term for reducing stress.

These considerations suggest that, in order to understand the reasons why parents offer particular coping suggestions, it is necessary to comprehend the parent's perception of their child's control, which is the belief that the child does/does not have control over the stressor, in this case, a peer problem. In a peer problem, control over behavior is necessary to consider because often the aggressive behavior of the perpetrating child is the stressor. Weiner (1980) proposed a model for understanding causal explanations of behavior that is applicable to the current study. The model suggests that causal explanations are formed based on three aspects of behavior: locus (internal and external), controllability (controllable and uncontrollable), and stability (transient or stable). Weiner demonstrated that whether an individual views the behavior of others as internal and controllable (e.g., behavior attributed to drunkenness) as opposed to internal and uncontrollable (e.g., behavior caused by a disability or illness) is related to the type of help they offer. Specific findings indicated that bystanders at a subway station were more likely to go to the aid of an individual who had fallen if the individual in need of help appeared to be ill/disabled. However, bystanders tended to avoid the fallen individual if he/she appeared to be intoxicated. In a related study, Johnston et al. (1992) examined the causal explanations for behaviors of children who were hyperactive in comparison to children who were aggressive.

Results demonstrated that adults perceive hyperactive and aggressive behaviors as equally likely to be internal (originate within the children) and equally likely to be stable over time; however, aggressive behaviors were seen as more within the child's control than the hyperactive behaviors.

Prior research also suggests that in samples of typically developing children, problematic behaviors such as aggression are associated with a tendency for parents to perceive children as having control over peer situations; that is, the parents see the children as responsible for their own behavior. Bondy and colleagues (1999) utilized hypothetical vignettes of child misbehavior and demonstrated that mothers of typically developing children tended to view oppositional behavior as controllable and intentional in comparison to hyperactive or inattentive behaviors. Additionally, in a study of typically developing socially aggressive and socially withdrawn seventh graders, the more aggressive students perceived *themselves* as having more control over daily peer hassles than their socially withdrawn peers (Bowker et al., 2000). Overall, these findings suggest that aggressive behavior tends to be viewed as controllable.

Very few studies have examined the perception of control and aggressive behavior in children with developmental disabilities. Therefore, it is unknown whether parents of children with developmental disabilities react in ways that are similar to the reactions by parents of children without developmental disabilities. Chavira et al. (2000) demonstrated that, overall, mothers of children with developmental disabilities tended to view their children as having little responsibility over their problematic behavior. Nevertheless, results also indicated that of the few mothers who did hold their children responsible, did so when their child's behavior was characterized as behavioral excess (e.g. tantrums and fighting) rather than as a behavioral deficit (e.g. lack of speech, toileting, or walking).

In addition to examining the effect of child aggression on parental perceptions of child control, it is also important to understand parental perceptions when children are victims. Typically victims are individuals who have been harmed or taken advantage of due to their lack of power in a particular circumstance (Hepburn, 1997; Hunter et al., 2002). It is important to recognize that children who are victims may be classified as such not only because they are victimized but also because of a limited capacity to generate effective solutions to problems (i.e., they are vulnerable). Essentially, victimization is a function of both the actions of the perpetrator and the vulnerability of the host (receiver). Parent's perception of their child's control over the continuation of a problem may be affected by whether the child is seen as a victim in the peer situation. It seems likely that a parent, whose child is a victim, would perceive the child as having little control over the stressor, in this case, a peer situation. Children with disabilities may be more vulnerable because of their inability to elude victimization. Although studies have shown that individuals with intellectual disabilities are more prone to victimization than individuals without disabilities (Doren et al., 1996; Halpern et al., 1986), the studies fail to consider how parental perceived control is involved. The current study was designed to understand the process of parental coping assistance when a child has mental retardation (MR), and to focus on the role of perceived control as a mediator of parental responses.

### *Purpose*

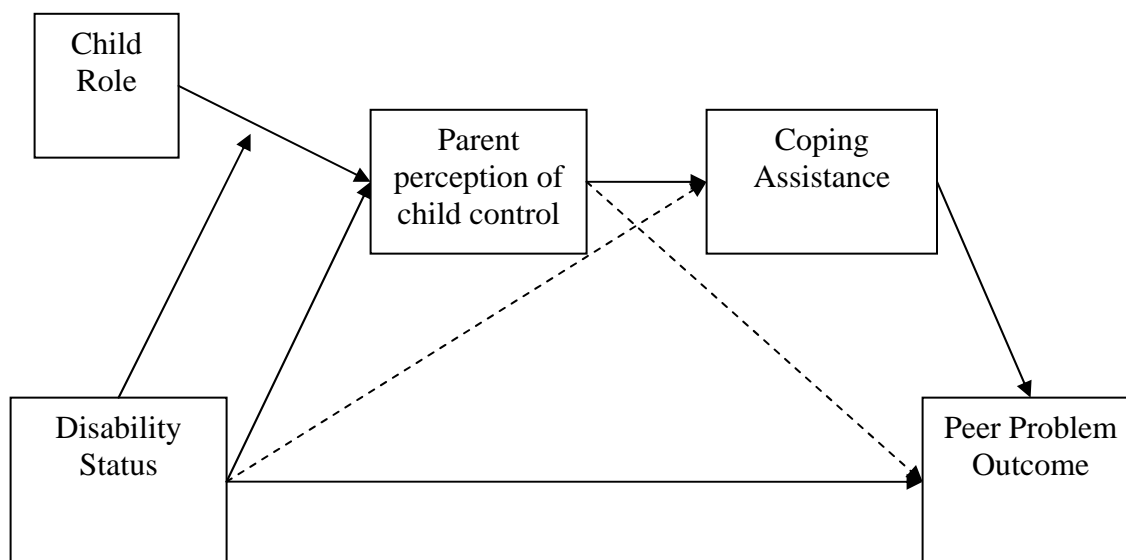
The purpose of this study is to understand the nature of the coping assistance that parents provide to their children with intellectual disabilities. Moreover, the study explores how the child's disability status and parental perceptions of the child's control over problem continuation influence the type of coping suggestions parents offer and how specific types of coping assistance affect the outcome of the coping situation. Additionally, the study examines the



hypothesis that the perception of child control over the stressor will be a function of disability status, such that if a child has MR, his/her parents will tend to view him/her as lacking control over social stressors. To discern the various types of coping assistance parents offer their children who have intellectual disabilities, three groups of children are included in the study: children with Down syndrome who have mild or moderate levels of mental retardation (MR) or Down syndrome, children with learning disabilities, and children who are typically developing. Lastly, the study aims to assess the impact of the child's role as a victim or an aggressor in relation to the parent's perception of the extent to which the child had control over problem continuation.

A potential benefit to examining these variables in this population of individuals is that results and implications of the study will fill gaps in the present literature on parental coping assistance as it relates to children with developmental disabilities. Specifically, the current literature on parental coping assistance is sparse and generally includes samples of children without disabilities. In addition, study findings will provide a more complete understanding of the impact of disability on parent's perceptions of their child's control within a social context. Finally, by analyzing these variables, we can better comprehend the factors that influence parental coping assistance, and thereby better understand how to help parents make effective coping suggestions to their children.

Figure 1

*Mediational Framework*

*Note.* Model proposes that parent perception of child control over problem continuation and parental coping assistance partially mediate the association between disability status and peer problem outcome. Disability status also moderates the relationship between child's role as a victim or an aggressor and parent perception of child control over problem continuation.

*Hypotheses*

*Direct effects model.* The present study was designed to examine three predictors of the parents' appraisal of the outcome of a coping situation in which a child is confronted with social stressors: perceived child control over problem continuation, coping assistance by the parent, and disability status of the child. Additionally, a fourth variable, child role as a victim/perpetrator is included in order to assess its effect on perceived child control. Parent's perception of their child's control is a measure of the child's control over the peer problem. It is expected that high

levels of child control over the problem should be associated with effective problem resolution. It is also hypothesized that the child's role as a victim/aggressor influences perceived child control, in that a child who is seen as a victim by the parent is subsequently perceived by the parent as having relatively little control in the peer situation. In contrast, if the child is seen as an aggressor by the parents, it is expected that he/she is also perceived as having control over his/her perpetrating actions, and thus more control over the situation than a child who is a victim.

The study also examines the hypothesis that the parent's coping assistance directly affects outcomes for the child. Specifically, the better the fit between coping assistance offered and controllability of the stressor, the more likely the outcome improves for the child, in terms of problem resolution. For example, if a problem is under the child's control and the parent offers a coping suggestion that facilitates problem solving on the part of the child, then the problem will likely be solved more effectively than if the child is encouraged to engage in passive behaviors or if the parent does not offer any suggestions. However, if the parent perceives the child to have little to no control over the problem, he/she may aim to assuage the child's emotional distress with passive coping suggestions. Subsequently, the problem may not be resolved, but the child's emotional well-being is maintained. In addition to fit, the adaptiveness of the suggestion is also relevant to coping outcomes, such that positive and adaptive active coping suggestions (e.g. telling the teacher) will lead to relatively effective problem resolution; whereas active coping suggestions that are negative in nature (e.g. aggression towards the other child) will likely lead to ineffective problem resolution.

The third variable, disability status, has bearing on the outcome in that, because of their intellectual impairment, children with MR and Down syndrome are expected to have more difficulty solving problems than children with learning disabilities (LD). Furthermore, because

children with learning disabilities tend to have poorer social problem resolution capabilities than typically developing children (Pearl et al., 1983), the outcomes for the children with an LD are expected to be less successful than the typically developing comparison group.

*Mediational moderational Model.* The mediational model is a way of conceptualizing the associations among the three variables identified as affecting problem outcome. The present study will test the hypothesis that the type of disability the child has directly influences a parent's perception of the child's control in a stressful social encounter. More specifically, a child with MR or Down syndrome will be perceived as having less control over his/her own actions than a child with a Learning disability or a typically developing child. In addition to this main effect on perceived control, it is also expected that disability moderates the relationship between child role and perceived child control such that children with MR will be perceived as having limited control in the peer situation, regardless of their role as a victim/aggressor. However, for children without MR, parents will be likely to perceive their child as having more control over the continuation of the problem if the child is seen as an aggressor as opposed to a victim. Essentially, the current study posits that the child having MR impacts the parent's perception of the child's control to the extent that it eliminates the effect of the child's role as victim/aggressor (i.e., victim/aggressor status is only relevant for children without MR).

The level of perceived child control is expected to influence the type of coping assistance from parents. It is hypothesized that, if a parent perceives his/her child to have little control over the situation, then he/she will make passive, emotion-focused coping suggestions. If a parent perceives his/her child to have high levels of control over the situation, he/she will make active, problem-focused coping suggestions. Essentially, the hypothesis proposes that parents of children with disabilities, particularly MR, will tend to presume that their children have limited

control over peer situations, and therefore the parents will make few active problem-focused suggestions and relatively more passive, emotion-focused coping suggestions or will not provide any suggestions. It is expected that passive, emotion-focused coping suggestions or making no suggestions will ultimately lead to worse problem resolution. However, active, problem-focused coping suggestions should lead to problem resolution. Thus, the mediational model indicates that the effects of developmental disability on peer problem outcomes are mediated, in part, through parent perceptions of child control over problem continuation, and the parent's subsequent coping assistance.

## Method

### *Participants*

The participants are 136 families with children age 8-10 years old who were involved in a longitudinal study of families with children who have mental retardation, Down syndrome, or learning disabilities. These families also provided data for a larger longitudinal study examining the family and peer relationships in families with children who have developmental disabilities. In the sample, 49% of the participants were Caucasian, 42% were African American, and 9% were of "mixed" racial background or "other". There are 49 females and 87 males included in the study.

Recruitment of families of children with disabilities occurred in public school systems in Chapel Hill, North Carolina and Atlanta, Georgia. Letters were mailed to parents by the participating schools explaining the project's intent for understanding family and peer relationships of children with developmental disabilities. The letters were sent to those families who had children with mild or moderate mental retardation enrolled in special education classes

or who had been identified as having a learning disability. Interested parents of these children were then able to contact the project coordinator.

Of the 136 families, 44 had a child with mental retardation or Down syndrome. Children with mental retardation (IQ < 70 and significant impairments in adaptive functioning) and Down syndrome were identified by assessments at school and enrollment in special education classes. The third group included in the study was composed of 60 families with children with learning disabilities. This particular cohort was included in the study for comparison because it is a group that also experiences peer-related problems, but does not have the cognitive deficits that children in the MR group have. In order to meet the criteria for a learning disability, the child had to exhibit a significant discrepancy between his/her IQ scores and achievement test scores, with no generalized cognitive delay (i.e., full scale IQ > 70). Children were identified as having a diagnosis of a learning disability through examination of school records, specifically individualized educational plans (IEP). A control group of 32 families with typically developing children with no identified disabilities was also included. These families were recruited through advertisements and contacts with community organizations in the same neighborhoods as participating schools. The children were screened by asking parents and by obtaining confirmation from schools that the children had no known disabilities, had not been or were not currently enrolled in special education classes, and did not have physical, cognitive, or emotional disorders.

### *Measures*

*Background information.* A structured 30-minute interview was administered to the parents in each family to obtain information on the age, education, relevant vocational history, and ethnicity of each family member. Information regarding family constellation, such as the

marital status of the parents, and the biological, adoptive, or step-relationships among all family members was also gathered.

*Perceived control, role of child, coping assistance, and outcome.* The measure used in this study is the Parental Socialization of Coping interview (Kupersmidt, Clarke, & Morey, 1997). This interview was designed to examine social information processing and coping assistance processes and was adapted from a coping interview for children developed by Band and Weisz (1988) that examined similar constructs. The interview provides a set of standardized stimuli for gathering information about how a parent assisted the child to handle a peer-related problem, the parent's rationale for the actions taken, and the parent's impressions of the outcome of the problem.

The interview was structured such that questions were given in a standard order, and an interviewer recorded the parent's responses. Mothers and fathers were interviewed separately. The interview was audio taped to use for later verification of the parents' responses and coding of open-ended responses. Extensive training on constructs in the open-ended questionnaire was provided to coders who reviewed the interviews and determined categorical codes for the open-ended responses. The coders were trained until agreement reached 80-90% and interrater reliability was checked 20% of the time. Cohen's kappa was calculated to assess interrater agreement, and consistently exceeded .77.

In this interview, the parent described a recent peer problem experienced by the child, and answered a series of questions about perceived control (i.e. parent's perception of the child's and his/her own control over the stressor occurring in the first place, control over the stressor continuing once it began, and control over the outcome), the child's role in the experience, efforts to help the child cope with the problem, whether or not the suggestion was followed, if it

was effective, positive effects on child, the parent's goals for the chosen strategies, and other coping activities that involved direct activity by the parent toward solving the problem (e.g. speaking to the teacher about the problem). The variables included in the present study are perception of child's control over problem continuation, the role of child as a victim or perpetrator in the situation, coping assistance provided by parent, and perceived outcome of the situation.

Perceived child control was measured by responses to the question "Was there anything your child could have done to have changed the problem or to have prevented it from continuing once it occurred?" Parents indicated the perceived degree of controllability his/her child had over the continuation of a peer problem on a Likert-type scale with responses ranging from 1=no control to 5=total control. The measure also assessed parent's perception of the child's control over problem occurrence and problem outcome. However, parent perception of child control over problem continuation will be the only type of control examined in this study because it more likely relates to the selection of coping strategies.

The role of the child as a victim or a perpetrator was determined by the coder who reviewed parent descriptions of the event. To be considered a victim, a child had to experience overt (e.g., direct threat, teasing) or covert (e.g. verbal gossip, stealing, passive exclusion) aggression; whereas, to be considered a perpetrator, a child had to be an aggressor and demonstrate verbal aggression (e.g. telling a secret), physical aggression (e.g. hitting), or actively exclude other children from activities. The scores for these data will be based on whether the child is a victim (yes/no) or a perpetrator (yes/no). Additionally, there were situations in which a child could not be cleanly classified as either a victim or a perpetrator, such as when the child had a conflict or disagreement with a friend. For those types of situations, the scores will indicate



“neither” (i.e., victim=no, perpetrator=no). Initially, child role included a fourth level: child as victim and perpetrator. However, on examination of the data, the cases were reassigned to either victim or perpetrator categories due to the content of the parent interview. Specifically, three of the cases were reassigned to the victim category, as the perpetration was a subsequent response to being victimized. One case was reassigned perpetrator as the subsequent victimization was due to the child initiating perpetration. Essentially, there are three possible groups in which a child could be considered: victim, perpetrator, or neither victim nor perpetrator.

Coping assistance was measured by responses to a series of questions in which the parent describes what he/she first did when learning of the problem, along with subsequent probes to find out all of the parent’s responses. The parent’s responses to when they first learned of the problem were first coded into one of eight possible actions, and then further categorized as being active coping assistance, passive coping assistance, or no coping assistance. Similarly, the suggestions that parents made were first coded into one of thirteen categories, which were then classified as either active/problem-focused coping (e.g., logical analysis, positive problem solving) or passive/emotion-focused coping (e.g., emotional support, avoidance). The final scoring will indicate whether the parent provided active coping assistance (yes/no), or passive coping assistance (yes/no) across all items. If parents performed activities on their own to influence the situation (e.g. spoke to teacher, other adults), or performed other actions in response to the child’s problem (e.g. punishment, asking what happened), these actions will not be considered part of the coping assistance model as the actions cannot be classified as direct coping assistance. For parents who performed these activities in isolation and did not provide direct coping assistance to their children, their responses will be coded as “no direct coping assistance”.

The outcome of the situation was measured by two questions that probably tap separate constructs. The first question is “Has the problem been worked out?” and responses are 1=no, not at all, 2= somewhat, and 3=yes, very well. The second question is “Did anything good come out of your child coping with the problem?” and responses range from 1=no, 2=yes, a little, and 3=yes, a lot. Whereas the first question most directly addresses problem resolution, this second question addresses the child’s emotional well-being. Correlations between these questions determined the relationship between them. Since they were not highly related they were run as two separate dependent variables.

### *Procedure*

The data used in the present study were collected during the first wave of a larger longitudinal study of children with developmental disabilities and their families. At wave 1, each family participated in two, 2-hour sessions that were approximately 1 week apart. For each session, two or three interviewers conducted the assessments in the family’s home while all family members were present. In the first session, families were informed that investigators were interested in the family and peer relationships of school age children. Family members were also advised that information obtained from each participating family member was strictly confidential. Following this explanation, parental consent and child assent were obtained. During this first session, parents were administered questionnaires regarding family demographic information, child behavior problems, and other measures of family stress and relationships. In the second family session, family members were given the Parental Socialization of Coping interview. Upon completion of the study, each family received a monetary compensation of \$75 for their participation.

## Results

Descriptive statistics are presented in Tables 1 and 2. Orthogonal contrast codes were used to examine differences among the three disability groups, MR, LD and typically developing. Thus, the independent variable, disability status, was assessed with two vectors in all analyses, one contrasting the MR with the LD group and one contrasting the MR with the typically developing group. For the continuous measures, examination of the skewness statistic and histograms revealed that the distributions for all variables were relatively normal, though the data for problem resolution was somewhat negatively skewed. As a result, the problem resolution variable was log transformed. Although the transformation improved the skewness, it did not alter the results. Therefore, the non-transformed results are reported. Each variable was assessed for outliers, which were defined as scores 1.5 times greater or less than the interquartile range. There were no outliers in the data. All variables met the assumptions of normality according to the guidelines provided by Tabachnick and Fidell (2001).

Table 1

*Correlations Among Variables and Descriptive Statistics for Mothers*

|                      | 1       | 2       | 3       | 4     | 5     | 6     |
|----------------------|---------|---------|---------|-------|-------|-------|
| 1 Child Role- Victim | 1.00    | -0.60** | -0.23** | -0.07 | 0.01  | 0.01  |
| 2 Child Role- Perp   | -0.60** | 1.00    | 0.22*   | 0.13  | -0.03 | 0.11  |
| 3 Perceived Control  | -0.23** | 0.22*   | 1.00    | 0.03  | 0.16  | -0.02 |
| 4 Active Coping      | -0.07   | 0.13    | 0.03    | 1.00  | 0.06  | 0.14  |
| 5 Passive Coping     | 0.01    | -0.03   | 0.16    | 0.06  | 1.00  | -0.02 |
| 6 Problem Resolution | 0.01    | 0.11    | -0.02   | 0.14  | -0.02 | 1.00  |
| Mean                 | 0.53    | 0.26    | 2.51    | 0.68  | 0.27  | 2.54  |
| SD                   | 0.50    | 0.44    | 1.32    | 0.47  | 0.45  | 0.66  |
| Std. Skew            | -0.57   | 5.18    | 1.92    | -3.80 | 4.94  | -5.31 |
| Std. Kurtosis        | -4.88   | -2.12   | -2.41   | -3.42 | -2.31 | 0.19  |

Note. n = 136. \* = significant at  $p < .05$ .

\*\* = significant at  $p < .01$ . Child Role Perp = perpetrator

Table 2

*Correlations among variables and Descriptive Statistics for Fathers*

|                      | 1       | 2       | 3       | 4     | 5      | 6     |
|----------------------|---------|---------|---------|-------|--------|-------|
| 1 Child role- Victim | 1.00    | -0.62** | -0.38** | 0.00  | 0.34** | -0.06 |
| 2 Child Role- Perp   | -0.62** | 1.00    | 0.52**  | 0.07  | -0.17  | 0.12  |
| 3 Perceived Control  | -0.38** | 0.52**  | 1.00    | 0.18  | -0.07  | 0.22  |
| 4 Active Coping      | 0.00    | 0.07    | 0.18    | 1.00  | -0.17  | 0.04  |
| 5 Passive Coping     | 0.34**  | -0.17   | -0.07   | -0.17 | 1.00   | -0.09 |
| 6 Problem Resolution | -0.06   | 0.12    | 0.22    | 0.04  | -0.09  | 1.00  |
| Mean                 | 0.53    | 0.25    | 2.59    | 0.79  | 0.27   | 2.58  |
| SD                   | 0.50    | 0.44    | 1.35    | 0.52  | 0.45   | 0.06  |
| Std. Skew            | -0.44   | 3.82    | 0.91    | 1.63  | 3.54   | -4.11 |
| Std. Kurtosis        | -3.41   | -1.00   | -1.72   | 7.22  | -1.44  | 0.96  |

Note. n = 56. \* = significant at  $p < .05$ .

\*\* = significant at  $p < .01$ . Child Role Perp= perpetrator

A power analysis was conducted to assess how powerful the tests were given the available sample size. Using a formula from Bakeman (1999), power and alpha were set at .80 and .05 respectively and a moderate effect size of .5 was used. For this study, the required sample size is 85 participants, which indicates that the study has adequate power for analysis of data on the mothers (n=136), but is underpowered to detect effects of this size for the fathers (n=65).

*Disability Status as a Predictor of Coping Assistance as Mediated by Parent Perception of Child Control*

*Active Coping Assistance.* The first set of analyses tested the hypotheses that children with MR would be perceived as having less control over their actions than either children with learning disabilities or children that are typically developing, and that parents would subsequently provide less active coping assistance and more passive coping assistance to children with MR than to children in the other two groups. The first part of the analysis involved a logistic regression and evaluated the relationship between disability status and active coping assistance and whether this association was mediated by parents' perceptions of child control (see Table 3). The outcome variable active coping assistance was coded "yes/no" for whether or not the parent provided an active strategy. In the analysis, the dummy coded vectors contrasting the MR group and LD group, and the MR group and comparison group were entered in the first block. Findings indicated that disability status was not a significant predictor of active coping assistance provided by mothers,  $X^2(2, N= 124) = 0.77$ , ns, Nagelkerke  $R^2 = 0.01$ . Considering this finding, there was no support for the mediation model. Nevertheless, other components of the model were examined in order to better understand the nature of associations among the predictor and outcome variables.

Table 3

*Logistic Regression Predicting Active Coping Assistance from Disability Status as Mediated by Mothers' and Fathers' Perceptions of Child Control*

|        |           | Mother   |             |                      |          | Father   |             |                      |          |
|--------|-----------|----------|-------------|----------------------|----------|----------|-------------|----------------------|----------|
|        |           | <i>B</i> | <i>SE B</i> | <i>e<sup>b</sup></i> | <i>p</i> | <i>B</i> | <i>SE B</i> | <i>e<sup>b</sup></i> | <i>p</i> |
| Step 1 | MR vs. LD | -0.39    | 0.45        | 0.68                 | 0.39     | 0.38     | 0.73        | 1.46                 | 0.60     |
|        | MR vs. TD | -0.19    | 0.55        | 0.83                 | 0.73     | 0.34     | 0.84        | 1.41                 | 0.68     |
|        | Constant  | 1.00     | 0.35        | 2.73                 | 0.00     | 0.96     | 0.53        | 2.60                 | 0.07     |
| Step 2 | MR vs. LD | -0.43    | 0.46        | 0.65                 | 0.35     | 0.45     | 0.74        | 1.57                 | 0.54     |
|        | MR vs. TD | -0.26    | 0.57        | 0.77                 | 0.65     | 0.22     | 0.86        | 1.25                 | 0.79     |
|        | Control   | 0.08     | 0.15        | 1.08                 | 0.60     | 0.35     | 0.26        | 1.42                 | 0.18     |
|        | Constant  | 0.84     | 0.47        | 2.31                 | 0.07     | 0.10     | 0.81        | 1.10                 | 0.90     |

*Note.* Control = parent perception of child control. MR vs. LD= MR compared to LD. MR vs. TD= MR compared to typically developing. \*  $p < .05$ . \*\*  $p < .01$ . a= approaching significance.

To examine the relationship between the independent variable, disability status, and the mediator, perception of control, a linear regression was conducted in which the mediator was regressed onto the two vectors representing disability status. Findings indicated that the disability status predicted the mothers' perception of control,  $F(2, 121) = 3.69$ ,  $p < .05$ ,  $R^2 = 0.06$ . B weights for the individual vectors demonstrated that the mothers perceived the children with MR to have significantly less control than the children in the comparison group (see Table 4), and there was a nonsignificant trend indicating that the mothers also tended to perceive the children with MR to have less control than the children in the LD group. Next, to examine the relationship between the mediator, perception of control, and active coping assistance, the

outcome variable, active coping assistance was regressed onto parent perception of child control. Findings indicated that mothers' perceived control was not a significant predictor of mothers' active coping assistance,  $X^2(1, N= 124) = 0.14$ , ns, Nagelkerke  $R^2 = 0.00$ . To examine the fit of all the predictors in the model, the mediator, parent perception of child control was entered in the second block of the logistic regression after the vectors for disability status had been entered (see Table 3). These variables did not significantly improve model fit for the mothers,  $X^2(1, N= 124) = 0.27$ , ns, Nagelkerke  $R^2 = 0.01$ , indicating that they were not significantly associated with the likelihood of mothers providing active coping assistance. Thus, although there was support for the hypothesis that, relative to children with LD and the typically developing children, children with MR would be seen by their mother as having less control over their actions, the hypothesis that parents would subsequently be less likely to offer the children active coping assistance was not supported.

Table 4

*Multiple Regression Predicting Mothers' and Fathers' Perceptions of Child Control from Disability Status*

| Regressed | IV        | Mothers  |         |           |                   | Fathers  |         |           |          |
|-----------|-----------|----------|---------|-----------|-------------------|----------|---------|-----------|----------|
|           |           | <i>b</i> | $\beta$ | <i>SE</i> | <i>p</i>          | <i>b</i> | $\beta$ | <i>SE</i> | <i>p</i> |
| Control   | MR vs. LD | 0.49     | 0.19    | 0.26      | 0.07 <sup>a</sup> | -0.18    | -0.07   | 0.42      | 0.67     |
|           | MR vs. TD | 0.85     | 0.26    | 0.32      | 0.01*             | 0.44     | 0.14    | 0.48      | 0.36     |

*Note.* Control = parent perception of child control. MR vs. LD= MR compared to LD. MR vs. TD= MR compared to typically developing. \*  $p < .05$ . \*\*  $p < .01$ . a= approaching significance



Similarly for the fathers, the first part of the analysis involved a logistic regression and evaluated the relationship between disability status and active coping assistance and whether this association was mediated by parents' perceptions of child control. The first block in the logistic regression analysis indicated that independent variable disability status was not a significant predictor of the outcome, fathers providing active coping assistance,  $X^2(2, N= 56) = 0.31, ns$ , Nagelkerke  $R^2 = 0.01$ . Considering this finding, there was no support for the mediation model. Nevertheless, other components of the model were examined in order to better understand the nature of associations among the predictor and outcome variables.

In a linear regression to determine the relationship between the mediator and the independent variable, the mediator, perceived control was regressed onto the vectors representing disability status (See Table 4). Results did not indicate a significant relationship between disability status and perceived child control for the fathers,  $F(2, 53) = 0.96, ns, R^2 = 0.04$ . Next, to examine the relationship between the mediator, perception of control, and active coping assistance, the outcome variable, active coping assistance was regressed onto parent perception of child control. Findings indicated that fathers' perceived control did not significantly predict fathers' active coping assistance,  $X^2(1, N= 56) = 1.88, ns$ , Nagelkerke  $R^2 = 0.05$ . Although there was no potential for mediation, the mediator, parent perception of child control was entered in the second block of the logistic regression, after the vectors for disability status had been entered (see Table 3). These variables did not significantly improve model fit, indicating that they were not significantly associated with the likelihood of fathers providing active coping assistance,  $X^2(1, N= 56) = 1.94, ns$ , Nagelkerke  $R^2 = 0.06$ . Thus, the hypothesis that children with MR would be perceived as having less control over their actions and that

parents would subsequently be less likely to offer the children active coping assistance was unsupported for fathers.

*Passive Coping Assistance.* The next set of analyses tested the hypothesis that children with MR would be perceived as having less control over their actions than either children with learning disabilities or children that are typically developing, and that parents would subsequently provide more passive coping assistance to children with MR than to children in the other two groups. The outcome variable passive coping assistance was coded “yes/no” for whether or not the parent provided a passive strategy. A logistic regression was conducted to test the prediction of passive coping by disability status and perceptions of control. In the first block of the logistic regression, findings indicated that disability status predicted mothers’ passive coping assistance  $X^2(2, N=124) = 11.66, p < .05$ , Nagelkerke  $R^2 = 0.13$ . However, as indicated in Table 5, the effects for each vector were opposite expectations, with mothers of children with MR being less likely to suggest passive coping than both the mothers in the LD group and those in the comparison group.

Table 5

*Logistic Regression Predicting Passive Coping Assistance from Disability Status as Mediated by Mothers' and Fathers' Perceptions of Child Control*

|        |           | Mother   |             |                      |                   | Father   |             |                      |          |
|--------|-----------|----------|-------------|----------------------|-------------------|----------|-------------|----------------------|----------|
|        |           | <i>B</i> | <i>SE B</i> | <i>e<sup>b</sup></i> | <i>p</i>          | <i>B</i> | <i>SE B</i> | <i>e<sup>b</sup></i> | <i>p</i> |
| Step 1 | MR vs. LD | 1.12     | 0.56        | 3.06                 | 0.05*             | 0.15     | 0.74        | 1.17                 | 0.83     |
|        | MR vs. TD | 1.97     | 0.62        | 7.20                 | 0.00**            | 0.97     | 0.78        | 2.62                 | 0.22     |
|        | Constant  | -1.97    | 0.48        | 0.14                 | 0.00              | -1.25    | 0.57        | 0.29                 | 0.03     |
| Step 2 |           |          |             |                      |                   |          |             |                      |          |
|        | MR vs. LD | 1.05     | 0.56        | 2.85                 | 0.06 <sup>a</sup> | 0.12     | 0.74        | 1.13                 | 0.87     |
|        | MR vs. TD | 1.85     | 0.63        | 6.38                 | 0.00**            | 1.06     | 0.80        | 2.87                 | 0.19     |
|        | Control   | 0.16     | 0.16        | 1.18                 | 0.32              | -0.18    | 0.23        | 0.83                 | 0.43     |
|        | Constant  | -2.33    | 0.61        | 0.10                 | 0.00              | -0.80    | 0.80        | 0.45                 | 0.31     |

*Note.* Control = parent perception of child control. MR vs. LD= MR compared to LD. MR vs. TD= MR compared to typically developing. \*  $p < .05$ . \*\*  $p < .01$ . a= approaching significance.

The earlier analyses had indicated that disability status was associated with the mothers' perception of control, such that that the mothers perceived the children with MR to have significantly less control than the children in the comparison group (see Table 4). Next, to examine whether perceived control was associated with passive coping assistance, the outcome variable, passive coping assistance was regressed on perceived control. Findings indicated that mothers' perceived control approached significance in predicting mothers' passive coping assistance,  $X^2(1, N= 124) = 2.95, p = .08, Nagelkerke R^2 = 0.03$ . However, the effects were

opposite expectations, such that higher levels of perceived control were associated with mothers' providing passive coping assistance. Next, mothers' perception of child control was entered in the second block after the vectors for disability status had been entered in the first block. These variables did not lead to a significantly better-fitting model for mothers,  $X^2(1, N=124) = 1.0$ , ns, Nagelkerke  $R^2 = 0.14$  and perceived control did not significantly account for variance predicted by disability status in the likelihood of mothers providing passive coping assistance. The vector representing the MR group compared to the typically developing group remained a significant predictor of mothers' passive coping assistance. However, the coefficient for the vector representing the MR group versus LD group fell slightly below the level of significance (see Table 5). A Sobel test was conducted to test for indirect effects of disability status via the mediator, and the result showed that this effect was not significant,  $z = 0.88$ , ns, and  $z = 0.94$ , ns respectively. Thus, there was no support for the hypothesis that the effects of disability status on passive coping would be mediated through perceptions of control.

For the fathers, in the first block of the logistic regression, disability status did not predict fathers' passive coping assistance,  $X^2(2, N=56) = 1.82$ , ns, Nagelkerke  $R^2 = 0.05$ . Because there was not a significant relationship between disability status and passive coping assistance for fathers, there was no possibility that mediation would occur. Nevertheless, further analyses were conducted to evaluate the contributions of disability status and perceived control to passive coping assistance.

The previous analyses had demonstrated that there was no significant relationship between disability status and the mediator, perceived child control for the fathers (Table 4). To examine the relationship between the mediator, perception of control, and passive coping assistance, the outcome variable, passive coping assistance was regressed onto fathers'

perception of child control. Findings indicated that fathers' perceived control was not a significant predictor of fathers' passive coping assistance,  $X^2(1, N= 56) = 0.29$ , ns, Nagelkerke  $R^2 = 0.01$ . As shown in Table 5, at the second step, fathers' perception of child control failed to contribute significantly to the prediction of fathers' passive coping assistance,  $X^2(1, N= 56) = .63$ , ns, Nagelkerke  $R^2 = 0.06$ . The analysis indicated that neither child's disability status nor fathers' perception of child control were significantly associated with fathers' passive coping assistance. Thus, the hypothesis that children with MR would be perceived as having less control over their actions and that parents would subsequently be more likely to offer the children passive coping assistance was unsupported for fathers.

*Goodness of Fit.* The next set of analyses addressed the hypothesis that the fit between parent perceptions of control and subsequent parental coping assistance would be influenced by the child's disability status and subsequent parental coping assistance. In consideration of the finding that children with MR were perceived by the mothers as having less control than children in the LD or comparison groups (see Table 4), further analyses were conducted to examine how disability status affected the goodness-of-fit between parent perception of child control and parental coping assistance. An index of fit was calculated to assess the relationship between perceived control and coping assistance. Parent responses were coded as having an "overall fit" if the parent offered the appropriate type of assistance for the particular situation. A parent was coded as having an overall fit if he/she offered a passive coping suggestion when he/she perceived the child to have low control over the peer problem or if the parent offered an active coping suggestion if he/she perceived the child to have high control over the peer problem. In a chi square analysis, the independent variable was disability status and the dependent variable was the overall fit variable. Results indicated that there were significant group differences in the

overall fit between perceived control and coping assistance for the mothers, but not for the fathers. Mothers of typically developing children evidenced more overall fit than mothers of children with MR,  $\chi^2(2, N= 124)= 6.82, p < .05$ .

As a follow up to better understand how mothers of children with MR were not fitting, parent responses were further examined. There were two ways in which a response could be considered a fit: offering an active suggestion in a situation of perceived high control or offering a passive suggestion in a situation of perceived low control. There were also two ways in which a response could not fit: offering an active suggestion in a situation of perceived low control or offering a passive suggestion in a situation of perceived high control. In a chi square analysis, the independent variable was disability status and the dependent variable was fit. Findings indicated that there were differences in fit between the mothers of children with MR and mothers of typically developing children. Specifically, mothers of children with MR made significantly more active suggestions in situations of low control than mothers of children in the comparison group,  $\chi^2(2, N= 124)= 7.26, p < .05$ . Also, mothers of children with MR and mothers of children with LD failed to make passive suggestions in low control situations more often than mothers of typically developing children,  $\chi^2(2, N= 124) = 10.06, p < .05$ . Additionally, results indicated that mothers of typically developing children tended to provide more passive coping suggestions when they perceived their child to have high control over the problem than mothers of children in the MR group,  $\chi^2(2, N= 124)= 12.33, p < .05$ . Although mothers of children with MR perceived their children as having less control over the continuation of a peer problem, the coping assistance the mothers provided did not fit with their perceptions of child control.

*Child Role and Control as Moderated by Disability Status*

The next analyses tested the hypothesis that disability status would moderate the relationship between child's role in the peer problem and parent's perceptions of the child's control over problem continuation, such that the parents would perceive children with MR to have little control over the peer problem regardless of the child's role in the problem, whereas control would be determined by role for the other groups of children (Table 6). A 3 X 3 ANOVA was conducted to test this hypothesis. The independent variable, child role in peer problem, had 3 levels (i.e., victim, perpetrator, neither). The moderator was disability status and had 3 levels (i.e., MR, LD, and typically developing). For the mothers, the results indicated that there were significant main effects for disability status and child role (Table 6). Duncan's post hoc tests revealed that the mothers of children with MR perceived their children to have less control ( $M=2.07$ ) than the mothers of children in the comparison group ( $M=2.92$ ) and that the mothers of children who were victims in the peer situation viewed the children as having less control ( $M=2.19$ ) than perpetrators ( $M=2.94$ ). For fathers, results demonstrated a significant main effect for child role. Similar to the results for the mothers, post hoc tests indicated that the fathers of victims perceived their children to have less control ( $M=2.13$ ) in the peer situation than the fathers of perpetrators ( $M=3.73$ ). Contrary to expectations, findings did not demonstrate a significant interaction between disability status and child role for the mothers or for the fathers (Table 6). In general, these findings do not support the hypothesis that having MR would overshadow the effect of the child's role as a victim or perpetrator in terms of parent perceptions of their child's control in a peer problem.

Table 6

*Analysis of Variance Assessing  
Disability Status Moderating the  
Relation between Child Role and Parent  
Perception of Child Control for Mothers  
and Fathers*

| Source                 | <i>df</i> | <i>F</i> | <i>R</i> <sup>2</sup> |
|------------------------|-----------|----------|-----------------------|
| Mothers                |           |          |                       |
| Disability Status (DS) | 2         | 4.23*    | 0.06                  |
| Child Role (CR)        | 2         | 4.19*    | 0.06                  |
| DS x CR                | 4         | 0.94     | 0.03                  |
| Error                  | 115       | (1.55)   |                       |
| Fathers                |           |          |                       |
| Disability Status (DS) | 2         | 0.71     | 0.02                  |
| Child Role (CR)        | 2         | 10.56**  | 0.29                  |
| DS x CR                | 4         | 0.75     | 0.04                  |
| Error                  | 47        | (1.39)   |                       |

*Note.* Values enclosed in parentheses represent mean square errors.

\* $p < .05$ . \*\* $p < .01$

*Perceived Control Predicting Problem Resolution as Mediated by Coping Assistance*

The next hypothesis was that active and/or passive coping assistance would mediate the relation between parent perception of child control and peer problem resolution. Multiple



regression was used to test this hypothesis. To examine the direct relationship between parent perception of child control and problem outcome, the dependent variable problem resolution was regressed on the independent variable parent perception of child control (see Table 7). This analysis indicated that, contrary to the hypothesis, there was no significant direct relationship between parent perception of child control and peer problem resolution for the mothers,  $F(1, 117) = 0.05$ , ns,  $R^2 = 0.00$  or for the fathers,  $F(1, 49) = 2.56$ , ns,  $R^2 = 0.05$ .

Table 7

*Multiple Regression Predicting Problem Resolution from Mothers' Perceptions of Child Control as Mediated by Active Coping Assistance*

| Test | Criterion/Outcome  | IV            | <i>b</i> | $\beta$ | <i>SE</i> | <i>p</i> |
|------|--------------------|---------------|----------|---------|-----------|----------|
| 1    | Problem Resolution | Control       | -0.01    | -0.02   | 0.05      | 0.82     |
| 2    | Active Coping      | Control       | 0.01     | 0.03    | 0.03      | 0.71     |
| 3    | Problem Resolution | Active Coping | 0.20     | 0.14    | 0.12      | 0.11     |
| 4    | Problem Resolution | Control       | -0.02    | -0.03   | 0.05      | 0.74     |
|      |                    | Active Coping | 0.18     | 0.13    | 0.13      | 0.16     |

Note: Control= parent perception of child control.

In light of these negative findings, the mediation model was not supported. Nevertheless, other components of the model were examined in order to better understand the nature of associations among the predictor and outcome variables (Tables 7-10). To examine the first step in the proposed causal change, coping assistance (the proposed mediator) was regressed on parent perception of child control. The results revealed a nonsignificant trend for mother's

perception of child control,  $F(1, 122) = 3.01, p = .08, R^2 = 0.02$ , but not for fathers,  $F(1, 54) = 1.79, ns, R^2 = 0.03$ . Specifically, the findings demonstrated that for mothers, there was a trend for perception of high child control to be associated with more passive coping assistance, which is in the opposite direction than predicted (see Table 8). Moreover, this trend was opposite of expectation in regards to the goodness-of-fit hypothesis which predicted that situations of high control would lead parents to provide active coping suggestions to their children. Next, to examine the relationship between peer problem outcome (dependent variable) and coping assistance (mediator), peer problem outcome was regressed onto active and passive coping assistance. The results indicated that no significant relationship between problem resolution and parental coping assistance existed for either the mothers,  $F(2, 127) = 1.35, ns, R^2 = 0.02$  or the fathers,  $F(2, 50) = 0.20, ns, R^2 = 0.01$ . Thus, these findings do not support the hypothesis that active or passive coping assistance would be associated with problem resolution. Finally, peer problem outcome was regressed onto both coping assistance and perceived control. Results indicated that the overall model did not significantly predict peer problem resolution for mothers,  $F(3, 115) = 0.71, ns, R^2 = 0.02$  or for fathers,  $F(3, 47) = 0.88, ns, R^2 = 0.05$  (see Tables 7-10).

Table 8

*Multiple Regression Predicting Problem Resolution from Mothers' Perceptions of Child Control as Mediated by Passive Coping Assistance*

| Test | Criterion/Outcome  | IV             | <i>b</i> | $\beta$ | <i>SE</i> | <i>p</i>          |
|------|--------------------|----------------|----------|---------|-----------|-------------------|
| 1    | Problem Resolution | Control        | -0.01    | -0.02   | 0.05      | 0.82              |
| 2    | Passive Coping     | Control        | 0.05     | 0.16    | 0.03      | 0.08 <sup>a</sup> |
| 3    | Problem Resolution | Passive Coping | -0.05    | -0.04   | 0.13      | 0.70              |
| 4    | Problem Resolution | Control        | -0.02    | -0.03   | 0.05      | 0.74              |
|      |                    | Passive Coping | 0.03     | 0.02    | 0.14      | 0.84              |

*Note.* Control = parent perception of child control. a = approaching significance

Table 9

*Multiple Regression Predicting Problem Resolution from Fathers' Perceptions of Child Control as Mediated by Active Coping Assistance*

| Test | Regressed          | IV            | <i>b</i> | $\beta$ | <i>SE</i> | <i>p</i> |
|------|--------------------|---------------|----------|---------|-----------|----------|
| 1    | Problem Resolution | Control       | 0.11     | 0.22    | 0.07      | 0.12     |
| 2    | Active Coping      | Control       | 0.06     | 0.18    | 0.04      | 0.19     |
| 3    | Problem Resolution | Active Coping | 0.04     | 0.02    | 0.22      | 0.87     |
| 4    | Problem Resolution | Control       | 0.11     | 0.22    | 0.07      | 0.13     |
|      |                    | Active Coping | -0.04    | -0.03   | 0.22      | 0.85     |

*Note.* Control= parent perception of child control.

Table 10

*Multiple Regression Predicting Problem Resolution from Fathers' Perceptions of Child Control as Mediated by Passive Coping Assistance*

| Test | Regressed          | IV             | <i>b</i> | $\beta$ | <i>SE</i> | <i>p</i> |
|------|--------------------|----------------|----------|---------|-----------|----------|
| 1    | Problem Resolution | Control        | 0.11     | 0.22    | 0.07      | 0.12     |
| 2    | Passive Coping     | Control        | -0.02    | -0.07   | 0.05      | 0.60     |
| 3    | Problem Resolution | Passive Coping | -0.11    | -0.08   | 0.21      | 0.58     |
| 4    | Problem Resolution | Control        | 0.11     | 0.22    | 0.07      | 0.13     |
|      |                    | Passive Coping | -0.08    | -0.06   | 0.21      | 0.69     |

*Note.* Control= parent perception of child control.

*Disability Status Predicting Problem Resolution as Mediated by Perceived Control*

A second multiple regression tested the relationship between disability status and peer problem resolution as mediated by parent perception of child control (Tables 11 and 12). In order to examine the direct relationship between disability status and peer problem resolution, the dependent variable, problem resolution, was regressed onto the independent variable, disability status as assessed with the two vectors contrasting the groups. Results indicated that disability status did not significantly account for variance in problem resolution as reported by the mothers,  $F(2, 127) = 1.58$ , ns,  $R^2 = 0.02$ . However, for the fathers, there was a nonsignificant trend,  $F(2, 50) = 2.62$ ,  $p = .08$ ,  $R^2 = 0.10$ . The B weights for the vectors indicated that there were trends in which the problem was somewhat more likely to be resolved by the children in both the LD group and the comparison group as opposed to the MR group. Thus, the hypothesis that children with MR have less success in solving problems than children with learning disabilities or

typically developing children was supported by trends for the fathers' but not the mothers' reports of problem resolution.

Table 11

*Multiple Regression Predicting Problem Resolution from Disability Status as Mediated by Mothers' Perceptions of Child Control*

| Test | Regressed          | IV        | <i>b</i> | <i>B</i> | <i>SE</i> | <i>p</i>          |
|------|--------------------|-----------|----------|----------|-----------|-------------------|
| 1    | Problem Resolution | MR vs. LD | 0.24     | 0.18     | 0.14      | 0.08              |
|      |                    | MR vs. TD | 0.19     | 0.12     | 0.15      | 0.23              |
| 2    | Control            | MR vs. LD | 0.49     | 0.19     | 0.26      | 0.07 <sup>a</sup> |
|      |                    | MR vs. TD | 0.85     | 0.26     | 0.32      | 0.01*             |
| 3    | Problem Resolution | Control   | -0.01    | -0.02    | 0.05      | 0.82              |
| 4    | Problem Resolution | MR vs. LD | 0.28     | 0.21     | 0.14      | 0.05              |
|      |                    | MR vs. TD | 0.22     | 0.14     | 0.17      | 0.21              |
|      |                    | Control   | -0.03    | -0.06    | 0.05      | 0.53              |

*Note.* Control= parent perception of child control. TD= typically developing, comparison group.

\* = significant at  $p < .05$ . \*\* = significant at  $p < .001$ . a= approaching significance.

Previous analyses (see Table 4) had demonstrated that MR disability status was associated with less control as perceived by the mothers but not the fathers. Next, to examine whether perceived control was associated with problem resolution, the outcome variable, problem resolution, was regressed on perceived control. The results indicated that there was no significant relationship between parent perception of child control and peer problem resolution for the mothers,  $F(1, 117) = 0.05$ , ns,  $R^2 = 0.00$  or the fathers,  $F(1, 49) = 2.56$ , ns,  $R^2 = 0.05$ .

Finally, problem resolution was regressed on both perceived child control and disability status (see Tables 11 and 12). Results did not indicate significance for mothers,  $F(3, 115) = 1.36$ , ns,  $R^2 = 0.03$ . For fathers, the analysis indicated that disability status remained a predictor of peer problem resolution when all the variables were considered,  $F(3, 47) = 3.01$ ,  $p < .05$ ,  $R^2 = 0.16$ . Findings for the individual predictors indicated that the problem was more likely to be resolved for the Comparison and LD groups than for the MR group (Table 12). Thus, the overall hypothesis that parent perception of child control would mediate the relationship between disability status and peer problem resolution was not supported. Although there is an expected association between MR status and poor outcomes as judged by the fathers, none of the putative mediation steps were supported, so this association could not be explained by perceptions of low control for the children with MR.

Table 12

*Multiple Regression Predicting Problem Resolution from Disability Status as Mediated by Fathers' Perceptions of Child Control*

| Test | Regressed          | IV        | <i>b</i> | <i>B</i> | <i>SE</i> | <i>p</i>          |
|------|--------------------|-----------|----------|----------|-----------|-------------------|
| 1    | Problem Resolution | MR vs. LD | 0.40     | 0.30     | 0.20      | 0.06 <sup>a</sup> |
|      |                    | MR vs. TD | 0.45     | 0.30     | 0.23      | 0.06 <sup>a</sup> |
| 2    | Control            | MR vs. LD | -0.18    | -0.07    | 0.42      | 0.67              |
|      |                    | MR vs. TD | 0.44     | 0.14     | 0.48      | 0.36              |
| 3    | Problem Resolution | Control   | 0.11     | 0.22     | 0.07      | 0.12              |
| 4    | Problem Resolution | MR vs. LD | 0.47     | 0.35     | 0.21      | 0.03*             |
|      |                    | MR vs. TD | 0.48     | 0.31     | 0.24      | 0.05*             |
|      |                    | Control   | 0.10     | 0.19     | 0.07      | 0.17              |

---

*Note.* Control= parent perception of child control. TD= typically developing, comparison group.

\* = significant at  $p < .05$ . \*\* = significant at  $p < .01$ .

### *Disability Status Predicting Problem Resolution as Mediated by Coping Assistance*

Finally, in order to test the hypothesis that both active and passive coping assistance would mediate the relationship between disability status and peer problem resolution, a multiple regression was conducted (Tables 13 and 14). The analyses so far indicated that the necessary conditions for mediation were not supported. There was no significant association between disability and outcomes for the mothers (see Table 11), and although there were trends for the fathers (see Table 12) none of the other conditions were met, including no links between coping assistance and outcome (see Tables 7-10) and only unexpected associations between disability and coping assistance (see Table 5). In fact, a full regression model with all predictors of problem resolution indicated that the model did not predict problem resolution for the mothers,  $F(4, 125) = 1.69$ , ns,  $R^2 = 0.05$ , or for the fathers,  $F(4, 48) = 1.55$ , ns,  $R^2 = 0.11$ . Thus, findings did not support the hypothesis that the relationship between disability status and peer problem resolution would be mediated by parental coping assistance.

Table 13

*Multiple Regression Predicting Problem Resolution from Disability Status as Mediated by Mothers' Coping Assistance*

| Test | Regressed          | IV             | B     | B     | SE   | p      |
|------|--------------------|----------------|-------|-------|------|--------|
| 1    | Problem Resolution | MR vs. LD      | 0.23  | 0.18  | 0.14 | 0.08   |
|      |                    | MR vs. TD      | 0.19  | 0.12  | 0.15 | 0.23   |
| 2    | Active Coping      | MR vs. LD      | -0.08 | -0.08 | 0.09 | 0.42   |
|      |                    | MR vs. TD      | -0.02 | -0.02 | 0.11 | 0.83   |
| 2    | Passive Coping     | MR vs. LD      | 0.19  | 0.21  | 0.09 | 0.03*  |
|      |                    | MR vs. TD      | 0.31  | 0.30  | 0.10 | 0.00** |
| 3    | Problem Resolution | Active Coping  | 0.20  | 0.14  | 0.12 | 0.11   |
|      |                    | Passive Coping | -0.05 | -0.04 | 0.13 | 0.70   |
| 4    | Problem Resolution | MR vs. LD      | 0.27  | 0.20  | 0.14 | 0.05   |
|      |                    | MR vs. TD      | 0.22  | 0.15  | 0.16 | 0.17   |
|      |                    | Active Coping  | 0.22  | 0.16  | 0.12 | 0.08   |
|      |                    | Passive Coping | -0.11 | -0.07 | 0.13 | 0.43   |

*Note.* TD= typically developing, comparison group.

\* = significant at  $p < .05$ . \*\* = significant at  $p < .01$ . a= approaching significance



Table 14

*Multiple Regression Predicting Problem Resolution from Disability Status as Mediated by Fathers' Coping Assistance*

| Test | Regressed          | IV             | <i>B</i> | <i>B</i> | <i>SE</i> | <i>p</i>          |
|------|--------------------|----------------|----------|----------|-----------|-------------------|
| 1    | Problem Resolution | MR vs. LD      | 0.40     | 0.30     | 0.20      | 0.06 <sup>a</sup> |
|      |                    | MR vs. TD      | 0.45     | 0.30     | 0.23      | 0.06 <sup>a</sup> |
| 2    | Active Coping      | MR vs. LD      | 0.20     | 0.19     | 0.15      | 0.20              |
|      |                    | MR vs. TD      | 0.10     | 0.09     | 0.18      | 0.56              |
| 2    | Passive Coping     | MR vs. LD      | 0.07     | 0.08     | 0.13      | 0.60              |
|      |                    | MR vs. TD      | 0.25     | 0.24     | 0.15      | 0.11              |
| 3    | Problem Resolution | Active Coping  | 0.04     | 0.02     | 0.22      | 0.87              |
|      |                    | Passive Coping | -0.12    | -0.08    | 0.21      | 0.58              |
| 4    | Problem Resolution | MR vs. LD      | 0.41     | 0.31     | 0.21      | 0.05*             |
|      |                    | MR vs. TD      | 0.50     | 0.33     | 0.24      | 0.04*             |
|      |                    | Active Coping  | 0.00     | 0.00     | 0.21      | 0.99              |
|      |                    | Passive Coping | -0.20    | -0.14    | 0.20      | 0.32              |

Note. TD= typically developing, comparison group.

\* = significant at  $p < .05$ . \*\* = significant at  $p < .01$ .

## Discussion

The current study added to prior work on parental coping assistance by investigating the contribution of particular child-related factors on the nature and outcome of parental assistance. The child-related factors were: child's disability status, child's role as victim or perpetrator, and parent perception of the child's control in the problem situation. Additionally, in focusing on

coping assistance as a feature of parenting that might be especially relevant for children with disabilities, the study contributed new insights on parenting children with disabilities. In this study, the coping assistance model was based on an existing model of individual coping, and applied to the situation of a parent helping a child to cope. Overall, the results indicated weak support for the coping assistance model as a whole, though there was support for some of the relationships imbedded within the model.

The direct effect of disability status on the quality of peer problem resolution for children was one component of the coping assistance model that was supported. Consistent with expectation, there was a trend suggesting that children with MR tended to have less success in resolving social problems than typically developing peers, but only as reported by their fathers. The less successful outcomes for children with MR may follow from their inappropriate and ineffective conflict resolution patterns. Research by Guralnick and colleagues (1998) indicates that these children use negative and maladaptive interaction behaviors, such as insistence, refusal with no reason, and insults, during peer interactions.

Another component of the research model that was partially supported involved the hypothesis that parents of children with MR would perceive their children to have little control over peer problems, regardless of the child's role as a victim or perpetrator in the problem. In contrast, other children were expected to be seen as having relatively little control only when they were seen as victims in the situation. The expectation that child's disability status would override the child's role as a perpetrator came out of the literature on attributions. Some studies have indicated that parents of children with intellectual disabilities tend to attribute their child's positive behaviors to external and unstable factors (e.g., chance) and their child's negative behaviors to internal and stable factors (e.g. lack of ability), whereas parents of typically

developing children tend to attribute positive behaviors to internal, stable, and dispositional characteristics (e.g., ability) and negative behaviors to external, unstable, situational factors (e.g., chance) (Cohen, 1995; Ly & Hodapp, 2005). Although internal causes are usually seen as controllable causes, this might not be the case when the internal cause is a disability. Thus, it seems that although parents of children who have MR attribute the negative behavior to internal and stable causes (e.g. the disability); they would perceive their child to have low control over a peer problem because having a disability is an uncontrollable characteristic that influences behavior. Ly and Hodapp (2002) found that in a sample of children with Down syndrome, mothers tended to engage in “excuse-making” attributions (e.g. my child has a disability that makes him/her act that way) about their child’s noncompliance. This finding suggests that mothers viewed their child’s noncompliance as uncontrollable and also held their child less responsible for his/her behaviors.

The findings of the current study partially supported the hypothesis that disability status would override the child’s role and indicated that parents’ perceptions of control were related to child characteristics in expected ways. Specifically, the child’s disability status and role had separate main effects on control, such that children with MR were perceived by their mothers as having less control than the typically developing children and victims were perceived as having less control than perpetrators by both parents. The link between disability and lack of control over interpersonal stress seems to be a particularly robust association which may be because parents so frequently see their children in social difficulties in which they seemed to have little control. Nonetheless, even when the child had MR, the parents tended to perceive perpetrators as having more control than victims. It seems that the parents of children with MR were holding their children more responsible for their aggressive behaviors than was originally hypothesized.

In effect, parents of children with MR attributed less control to their child compared to parents of children in the LD and typically developing groups; however, these parents also viewed their children as being responsible for perpetration, much like the parents of the children in other two groups. This finding is consistent with a previous study conducted by Chavira and colleagues (2000). In a sample of children with MR, results demonstrated that behavioral excess (e.g. fighting) was viewed by parents as more controllable than behavioral deficits (e.g. lack of speech). This outcome similarly indicates that although the negative behavior is attributed to an uncontrollable cause (e.g. the disability); aggressive actions are seen as more controllable than non-aggressive behaviors.

Although this current finding is consistent with some previous research, it is contrary to research by Ly & Hodapp (2002) who found that mothers of children with Down syndrome attributed defiant behaviors to the child's disability and subsequently, provided excuses for those behaviors. The discrepancy in results may be due to methodological differences between the two studies. Ly and Hodapp (2002) used hypothetical vignettes of misbehavior examples where parents were asked to imagine that the child in the vignette was their own. The vignettes involved a child that was exhibiting "simple disobedience" which refers to disobedience that does not result in physical or psychological harm to others. In contrast, the present study used parents' report of their own child's recent problem which often involved behaviors that were harmful to others such as gossip, exclusion, and hitting. As a result, the current study may have generated more authentic and emotion-laden parent responses in comparison to the responses generated from the vignettes. Future work might tap attributions more effectively by asking parents why they perceived their child to have a particular level of control (e.g. due to the disability).

Although findings supported some of the relationships within the overall coping assistance model, there was little support for other relationships imbedded within the model. In contrast to expectations, perceived child control over the problem continuing was not directly associated with the quality of peer problem resolution for children. It may be that control over the problem continuing does not necessarily reflect the child's ability to resolve the problem. One reason why control does not reflect problem resolution could be that the continuation or discontinuation of a problem is distinctly different from the resolution of the problem. For example, a child who is being victimized may be able to walk away from the situation; however, one cannot assume that the victimized child is also able to generate solutions and subsequently resolve the problem. Similarly, a child who is the perpetrator may be able to stop aggressing against another child, but the perpetration ceasing at a particular moment fails to ensure that the problem will no longer occur and that a solution has been implemented.

Similar to perceived control, type of parental coping assistance was not directly associated with problem outcome. The lack of expected findings may be due to the manner in which the coping suggestions were re-categorized into active and passive categories such that the categories may misrepresent the content and function of the suggestions. For example, one type of coping assistance that a parent could have provided, "offering advice," might have been inaccurately classified as active coping. Although this particular response was included with the other responses that represented "active" coping assistance, upon examination of parent responses, the majority of the responses stated actions related to direct commands ("I told him to go home"), teaching skills ("Told her she needs to try sharing"), and problem management ("I told her to try and get along with the other kids"). There were however a significant number of parents who offered advice to do something avoidant, or palliative ("Told him to ignore them",

“nothing in life you can control”). As a result, some of the active coping assistance data may have really been passive instead. Additionally, some of the parents provided more than one suggestion that were coded into a single response. For example, one parent told her child to: talk to the teacher, ignore the mean boys, and keep his/her hands to self, all of which were coded as “offering advice”. This procedure was problematic both because the data do not reflect the fact that the parent offered the child three strategies for coping with the problem and because the single code collapsed three very different coping suggestions into one category.

The failure to predict specific factors that influence problem outcome may also be attributable to several additional methodological shortcomings related to the interview protocol. First, the outcome was measured by parent responses to the question “Has the problem been worked out?” which failed to assess relief from emotional distress. The ability to measure emotional outcomes would be important for examining effects related to passive coping strategies, which are expected to provide relief from emotional distress (Band & Weisz, 1988; Compas, 2001). Although the interview included the question “Did anything good come out of your child coping with the problem?” in addition to the question pertaining to problem resolution, neither of these questions tapped relief from emotional distress. Examination of the parents’ responses indicated that responses to the “good effects” variable reflected lessons learned (e.g., child learned a life lesson) or problem cessation (e.g. child stopped being bullied) rather than emotional well-being.

A second problem regarding the measure of problem resolution involves the coding of parent responses. Originally, the variable included “don’t know” (“dk”) as a possible response. The “don’t know” responses were examined and those that indicated the problem had *occurred too recently* to determine if it had been resolved were coded as “no” (3 mothers and 1 father),

while the remaining “dk’s” were re-coded as “missing” (4 mothers, 4 fathers). It may have been a misassumption to include the problems that were too recent with the no’s because doing so discounts the possibility that the problem could be resolved in the future. Additionally, it is possible that the parent responded that he/she did not know if the problem was resolved because he/she had not heard any more about the problem because it had been solved.

Another set of unsupported associations involved the goodness of fit hypothesis, which is the notion that coping outcomes would be better when the coping practice was consistent with, or fit with, the controllability of the stressor (Conway & Terry, 1992; Vitaliano et al., 1990). The hypothesis implied that, overall; parents would match their coping advice to fit with the controllability of the situation. However, there was a trend that was opposite this expectation, such that mothers who perceived their children to have high levels of control over the peer situation also tended to provide passive, rather than active, coping assistance. A possible explanation may be that, because the mothers perceived their children to have high levels of control over the problem, they may have also assumed that the children could resolve the problem independently and therefore did not make additional problem-focused suggestions. Instead, they might have viewed distress relief as an area in which the child might need help and therefore, focused on alleviating their child’s emotional turmoil. In a study from the literature on altruism, Zahn-Waxler and colleagues (1979) suggested that parents provide help to their child in areas in which the child is perceived to be most in need. The study indicated that when a typically developing child did not understand the link between his/her own behavior and the emotions of the victim, the mother tended to provide aid to the child in the form of “teaching” and “explaining”. When the child witnessed a distressing event (e.g., sorrow, discomfort, or pain of others), the mother offered the child reassurance. These results support present study findings

by suggesting that mothers tend to provide their child assistance in areas that they perceive to be the most salient for their child.

The coping assistance model also addressed how disability status would influence the goodness of fit between perceived control and subsequent coping assistance. Essentially, it was expected that parents of children with disabilities, particularly MR, would tend to presume that their children have limited control over peer situations, and therefore the parents would either make few active, problem-focused suggestions and relatively more passive, emotion-focused coping suggestions or would not provide any suggestions. The findings indicated that as expected, the mothers of children with MR tended to perceive their children to have the least amounts of control over the problem continuing in comparison to mothers of children in the other two groups. Contrary to the hypotheses, however, the mothers of children with MR were least likely to provide their children with passive coping assistance. Instead, they tended to provide active suggestions in situations of perceived low control more so than mothers of children in the other two groups. One possible explanation for this pattern is that under the circumstances in which the child had little control, the mothers may have been trying to teach or encourage the child to do things that would potentially give him/her more control by suggesting active strategies. For example, if the child is being picked on by another child, a parent might tell the child to “go get an adult” who has more control over the situation, which is an active strategy that, in effect, makes the situation more controllable for the child. From the standpoint of fit, by suggesting that the child who has little control seek the aid of an adult who has control, the situation becomes more controllable, which “fits” with the active suggestion. Thus, it may be that the “goodness-of-fit” model is only applicable under very specific circumstances, when a stressor can be viewed as either controllable or uncontrollable without the possibility of being



brought under control by the individual or some other agent. Perhaps the total controllability isn't the case in many circumstances, such as when difficulties with peers might be under greater control by an accessible adult. In this case, the child does not have direct control, but instead has indirect control through a teacher. It may be possible that the parent is responding to the perceived indirect control which was not measured in the current study.

Although the goodness of fit model has received considerable support from research (Endler et. al, 2000; Folkman & Lazarus, 1980; Forsythe & Compas, 1987; Parkes, 1984; Sorgen & Manne, 2002), it also has been challenged in other circumstances (Carver & Scheier, 1998; Conway & Terry, 1992; Roberts, 1995). Most importantly, the current findings suggest that it might not be an appropriate framework for understanding parents' actions when trying to assist their children to cope with peer problems. Instead, parents' actions might follow from a hierarchy of motives that are not necessarily consistent with goodness-of-fit coping. That is, solving the problem may take precedence over taking care of feelings, and parents only emphasize passive/palliative coping when the child appears to have the capacity to solve the problem on his/her own. Therefore, the "fit" is a fit with the child's perceived abilities, under the goal of helping to solve the problem. Future work on parental coping assistance should test this notion as an alternative framework for understanding parents' actions.

Although there was mixed support for some of the relationships imbedded within the overall model, there was very little support for the coping assistance model as a whole. One possible explanation is that coping assistance does not directly map on to coping, therefore, using a coping model to examine coping assistance is faulty. More specifically, the coping model was developed from the notion of self-coping which is qualitatively distinct from helping someone else cope. The coping process is initiated by an individual in response to his/her appraisal of

some harm, loss, or threat within a specific context, and involves taking actions to alter the stressor and/or modulating the emotional response to the stressor (Compas, 2001). Coping assistance is similar to the concept of coping in that it represents an attempt to deal with a stressor; however, it differs in that it involves acts by one person intended to facilitate coping by someone else (Prinstein et al., 1996). Acts that facilitate coping might not mimic or even resemble the coping behaviors. For example, advice giving is an active strategy on the part of the parent, but the advice may be to do something passive. Thus, the parents' behaviors as a facilitator of coping do not match the nature and quality of the coping behaviors themselves. Another explanation for the lack of support for the overall model is that the coping differs for individuals with intellectual disabilities as opposed to individuals with average or higher cognitive abilities, which thereby complicates the task of providing coping assistance. In order to engage in coping that involves problem-solving and/or the regulation of emotions in response to stressors, linguistic and metacognitive skills are required (Compas, 2001). Skills that might facilitate coping, such as emotion-regulation abilities for emotion-focused coping and information-processing skills for problem-focused coping are areas of difficulty for children with intellectual disabilities and, thus, impede their ability to manage peer-related difficulties (Guralnick et al., 2006).

The way in which the coping assistance categories were analyzed may have also contributed to the lack of support for the coping assistance model. The current study coded parent behaviors as active (yes/no) or passive (yes/no). As a result, parent behaviors could be coded as active, passive, both active and passive, or neither. In the analysis, the "both" and "neither" categories were not used because of the small number of parents who fell in those categories. Thus, the results may have failed to represent the behaviors of parents who provided

neither or both types of coping assistance. Prior research by Forsythe & Compas (1987) examined the relative use of both types of coping (problem- and emotion-focused) rather than the absolute level of either type. In the study, the proportion of the two types of coping used by individuals was computed. The rationale for coding behaviors in this manner is that a person who uses a great deal of active coping strategies in combination with passive strategies differs from a person who uses the same amount of active coping alone. In the future, perhaps using the relative frequency of behaviors would better capture the coping assistance that parents provide.

It is important to consider that there may have been both parent- and child-related factors that influenced the types of suggestions parents made which were not included in the current study. For example, the parents' own use of coping strategies, whether the child tended to do what the parent suggested, and whether the gender of the child matched the gender of parent may all have played some part in how parents responded to their child's needs. Research indicates that parents are most likely to suggest coping strategies that they themselves use. Kliever and colleagues (1995) indicated that parents who tended to use active, support-seeking, and reframing strategies also tended to suggest active, support-seeking, and reframing options to their children. Similarly, parental use of denial was associated with suggesting fewer active and more avoidant strategies to their children. In addition to the parents' preferences, the child's tendency to follow the coping suggestions may influence the type of coping assistance the parent provides. Moreover, the coping suggestions might be guided by the parents' perceptions of the child's abilities to follow the suggestions. If the child tends not to follow the parent's advice, the parent may make no suggestions, or may get directly involved. Research indicates that particular disorders predispose children to show etiology-related behaviors which in turn directly lead to helping and reinforcing behaviors from parents (Hodapp, 1999; Ly & Hodapp, 2005). It is

reasonable to speculate that parent suggestions may have been influenced by parent knowledge of the child's abilities and behaviors which were disorder-specific. Finally, the gender of the parent and the gender of the child may influence how children listen to advice. In a group of typically developing children, Kliewer and colleagues (1996) demonstrated that children tended to follow the advice of their same-sex parent, but not the other parent.

In addition to measurement problems, it is important to recognize a few limitations of the present study. First, the sample size for fathers was notably small ( $N = 65$ ), causing the analyses involving fathers to be underpowered. Second, the validity and reliability of the questions and the coding categories are unknown as this protocol has not been used in previous research. The third limitation is related to the theoretical model of coping used in the current study, specifically the two-factor model. Recent literature has shown that using a six-factor model more accurately captures coping assistance efforts (Ayers et al., 1996). Most relevant to the current study, Kliewer and colleagues (1994) conducted a confirmatory factor analysis assessing coping socialization and discerned that a six-factor model best fit the data. The six-factor model consisted of problem-focused, positive cognitive restructuring, avoidance, distraction, seeking support, and negative actions coping suggestions.

#### *Future Directions/Clinical Implications*

Although the literature documents the parental influences on child coping strategies through parenting styles and modeling, direct coping assistance by parents as a form of socialization of coping has failed to receive adequate attention. Future studies should incorporate parent and teacher direct involvement in relation to coping assistance outcomes. The use of these reports may provide a broader perspective on parent and teacher behaviors that directly impact conflict resolution and influence child coping strategies. Additionally, it would be useful to use

self-reports from the children as a measure of their willingness to follow advice and ability to perform suggested coping actions. In addition to short-term outcomes (e.g. distress relief, problem resolution), future studies should also examine more distal outcome variables such as number of consistent friendships or continued life problems that would reflect long-term effectiveness of coping assistance. In an effort to better understand the intended aim of the assistance provided and to gain a clearer sense of the coping factors that suggestions map on to, it might also be important to examine parent goals. Future research might also further examine the role of gender on the coping assistance that parents provide to their children and subsequent coping efforts of the children. Continued interest in and examination of the influences on and outcomes of parental coping assistance are needed in order to facilitate improved social relationships for children with intellectual disabilities. Such research may also lead to the development of parent training interventions that aim to help parents learn how to make more effective suggestions and improve their child's coping and subsequent social competence skills.

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