## COPING IN MIDDLE CHILDHOOD WITH PARENTAL ILLNESS:

## A CLOSER LOOK AT AFRICAN-AMERICAN FAMILIES

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#### ABSTRACT

It is understood that mental and physical illness can create enormous internal and external stresses for afflicted individuals as well their significant others. When we examine the effects such illnesses have on parents and their children, we find that illnesses that disrupt a parent's ability to model appropriate social behavior and emotion regulation and those that negatively impact the attachment process and emotional communication often are particularly harmful to children (Radke-Yarrow, Cummings, Kuczynski & Chapman, 1985). This study's aim was to explore the psychosocial outcomes and coping styles used by children in these unique circumstances and determine if they differed from that found in children who were not living with an ill parent. Participants included a total of 61 African-American parent-child dyads (36 sick parent, 25 well parents). Parent participants were asked to complete a Demographics Questionnaire and the SDQ. Child participants (Mage = 11.92) were asked to complete the following self-report measures: CES-DC, SCARED, YCPSS, and CCSC-R1. Results indicated that females experienced significantly more separation anxiety than boys, irrespective of their parent's health status. Furthermore, of those children experiencing high levels of caregiver stress, females exhibited greater degrees of both separation and social anxiety than boys. It was also found that, of children living with a sick parent, boys utilized distraction coping to a significantly greater degree than girls. The study's further exploratory analyses examined demographic predictors of caregiving stress and revealed interesting relationships between coping style selection and psychosocial outcomes in an African-American sample.

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#### CHAPTER 1

#### INTRODUCTION

Mental and physical illness can create enormous internal and external stresses for afflicted individuals as well their significant others. It is, without question, a challenge that calls upon the efforts of everyone involved and places demands that often times exceed the resources immediately available. The scenario becomes further complicated when we examine the effects such illnesses have on parents and their children. Mental and physical illness often disrupts parental roles, undermines children's sense of security and threatens marital harmony. Mental illnesses that disrupt a parent's ability to model appropriate social behavior and emotion regulation and those that negatively impact the attachment process and emotional communication often are particularly harmful to children (Radke-Yarrow, Cummings, Kuczynski & Chapman, 1985). Furthermore, physical illnesses that disrupt normal parental roles (e.g. participating in activities, making lunches, discussing problems), are associated with stigma (thereby limiting social support networks), or impose unwanted responsibilities for caregiving on children, will be the most negatively impactful (Aldridge & Becker, 1999).

For the children of a sick parent, the responsibility of coping with such family stress can be overwhelming. In light of such findings, it becomes paramount for initiatives to be developed to counteract the effects of such environments in which children are at risk for the cultivation of poor coping methods and the subsequent development of pathology. The scope of the current study includes parent physical illnesses of varying chronicity and severity. Similarly, the range of parent mental illnesses surveyed included, but was not limited to, mood, anxiety and substance use disorders. It is the current aim to explore the coping styles used by children in these unique circumstances and determine if they differ from those utilized by children who were not living with an ill parent. In addition, given the historical discrepancy in research on AfricanAmericans, as compared to their Caucasian peers, this study hopes to make a contribution to this growing body of literature by examining an African-American sample (Graham, 1992).

#### **Childhood Coping Strategies and Selection**

Before we can explore the complex interactions of how parent illness and coping influence the well-being of African American children, we must begin with an understanding of general coping styles and strategies and the variables that impact their selection. Coping is defined by Lazarus & Folkman (1984) as 'constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person'. The concept of appraisal is described as an evaluative process that reflects the person's subjective interpretation of the event and may influence what coping strategies the person elects to use (Pakenman & Bursnall, 2006). Researchers have defined a number of coping styles that have been categorized by some as problem-focused or emotionfocused, and others as approach or avoidant. Problem-focused coping seeks to change the stressor, while emotion-focused coping seeks to alter one's emotional reactions to the stressor; both can be further qualified as approach or avoidant oriented (Thatsum, Johansen, Gubba, Olesen & Romer, 2008). Approach strategies (which include problem solving, support seeking and acceptance) are direct efforts to alter the stressful situation; whereas, avoidant strategies (including denial and wishful thinking) do not attempt to alter the situation.

As the aforementioned definition states, we rely on our coping repertoire when we've been placed under stressful circumstances that we view as overwhelming. Finances, marriage, and child rearing are examples of parental challenges that can cause distress. However, there exist a variety of stresses that color a child's daily life. School provides a wealth of stress as children begin to socialize and develop identities, navigate increasingly challenging academic

requirements, and maintain their safety amongst bullies and in-school terrorism. When these children return home, it would be comforting to know that they are entering a place of peace and serenity where they are nurtured, cared for and protected. Quite often, however, they are dealing with complicated circumstances that require them to cope with ever increasing levels of family stress and conflict.

Hampel & Petermann's (2005) examination of age and gender differences in coping style selection suggests that the use of emotion-focused coping, described as distraction/recreation, decreases from middle childhood to adolescence. In contrast, the use of problem-focused coping (e.g. support-seeking), appears to be more stable during late childhood and early adolescence, with no significant developmental differences in its use in children 8-14 years old. Furthermore, girls were shown to utilize more maladaptive coping styles than their male peers, as evidenced by a higher reliance on "rumination", "aggression", and "resignation". In accordance with these findings, a cross-sectional study of German children in grades 3-8 revealed a similar pattern of situational specificity (i.e. children adopting different coping strategies for social versus academic stressors), indicating that children, overall, used more problem-focused, avoidant and anger-related coping strategies when faced with a social stressor, such as an argument with a friend (Eschenbeck, Kohlmann & Lohaus, 2007). However, the developmental decline in the use of emotion-focused coping was not observed in this sample, as the greatest utilization of this strategy was seen in the 7<sup>th</sup> and 8<sup>th</sup> grade. In further contrast to Hampel & Petermann's (2005) work, girls did not use more anger-related emotion regulation strategies than their male peers. They did, however, use more social support seeking and problem solving as compared to the boys' predominant use of avoidance (Eschenbeck, Kohlmann & Lohaus, 2007).

The literature on child coping, in general, suggests that children who are flexible in their coping repertoire are better able to adjust to the demands of everyday stresses (Hardy, Power & Jaedicke, 1993). When children are rigid in their coping style selection, they become unable to make situation-specific judgments on the most effective coping strategy for the current stressor. A child's use of approach or avoidant coping styles is indicative of the degree of control the child perceives they have over the situation, and adolescents who used more approach than avoidant strategies were shown by Ebata & Moos (1991) to exhibit better adjustment. Hardy et al. (1993) found that, even within the most supportive families in their sample, children adopted the use of avoidant coping when they perceived little control over the situation. This finding is important when considering the adaptive value of a realistic coping strategy given the limits of a specific circumstance.

#### **Childhood Coping with Normative Stressors**

When examining the variety of stresses children are faced with, it is a well-accepted fact that divorce is one the most stressful for children and adults alike. Nonetheless, the impact of the divorce is differentially experienced throughout the family and a child's use of specific coping styles is one of the sources of that distinction. Sandler, Tein, & West (1994) examined children of divorce in an effort to establish a model of coping styles, which they concluded to be a 4-dimensional model including active coping, avoidance and support. In their cross-sectional analysis, they found a significant path from the factor of avoidance coping to depression, anxiety and conduct problems, and it was theorized that avoidance coping, while likely adaptive *in the moment*, is less advantageous for dealing with chronic stress situations (which divorce is likely to be in the life of a child). Additionally, in their longitudinal analysis, distraction was shown to lead to lower symptoms of anxiety and depression and it was suggested that the activities used in

distraction may also have some inherent positive qualities that enhance self-evaluation and counteract the negative affect associated with divorce.

In their study of young children dealing with divorce, Hoyt, Cowen, Pedro-Carroll, & Allpert-Gillis (1990) cite children of divorce as having higher parent and teacher-rated depression scores and higher teacher and self-rated anxiety scores than children of intact families. Their increased negative outcomes may be attributed to a predominant use of avoidance coping, though coping style was not a variable in the authors' work. It has been further shown that adolescents utilize avoidance coping least often when dealing with the stress of a divorce, and for the female adolescents who did utilize avoidant coping, it was significantly related to poorer psychosocial functioning (Armistead, McCombs, Forehand, Wierson, Long & Fauber, 1990). Developmentally, adolescents may be more likely to see themselves as having increased control over their environment and, therefore, elect to use more active coping. The selection of an approach-style of coping might be a strategy better suited for the cognitive and emotional level of functioning seen in older children.

Another life stressor experienced by many children is the untimely death of a parent, as it is reported that 1 in 20 U.S. children will lose a parent before the age of 18 (U.S. Bureau of the Census, 1990). In their small study of children 8 weeks after the death of a parent, Fristad, Jedel, Weller & Weller (1993) found that bereaved children functioned similarly to normal children and *better* than depressed children of similar age and gender. These findings, in contrast to those seen for children of divorce, have interesting implications for the possibility of differential effects of permanent loss as compared to ongoing life disruption as well as the effect of the attributions made to the loss. Furthermore, the surviving parent's adjustment is often cited as the

strongest predictor of child adjustment (Stoppelbein & Greening, 2000; Kalter, Lohnes, Chasin, Cain, Dunning, & Rowan, 2002).

As previously stated, children must deal with a variety of stressors outside of the home, including those amongst their peers. The ability to cope effectively with these social stressors, as evidenced in part by the degree of self-control they exert, can set the stage for future interpersonal success, better adjustment, less pathology and better grades (Tangney, J.P., Baumeister, R.F., Boone, A.L., 2004). When examining coping styles amongst 10-13 yr olds given a written vignette depicting peer rejection, Reijntjes, Stegge & Terwogt (2006) found that the most highly endorsed strategies were behavioral distraction, problem-focused behavior, and positive reappraisal. When exploring the impact of such rejection on the child's mood, gender differences were revealed, with girls significantly more inclined to predict a sad mood impact of the rejection. Not surprisingly, those children with higher depression rating scores were also more likely to anticipate a sad mood impact. This illustrates that, despite the negative affect experienced, children appear to use more active coping approaches in the context of situations where they perceive more control.

Sontag, Graber, Brooks-Gunn, & Warren's (2008) research on girls' reactions to social stressors, specifically peer stress and early pubertal timing, revealed that girls who experienced higher levels of peer stress used fewer effective coping strategies and more often engaged in denial and wishful thinking. This poor coping style selection mediated the relationship between peer stress and internalizing symptoms, suggesting that for these girls, high levels of peer stress results in the selection of poorer coping styles and, in turn, leads to higher levels of internalizing distress (Sontag, Graber, Brooks-Gunn, & Warren, 2008).

In their work on adolescent coping with perceived social stress, Hampel and Petermann (2005) contend that girls report higher interpersonal stress (described as arguments with parent/friend or malicious gossip) and cope more often through the use of social support, passive avoidance, rumination and resignation as compared to the boys' more substantial use of distraction. Furthermore, girls with higher perceived interpersonal stress reported more anger control problems and emotional distress, while boys with similar levels of perceived interpersonal stress reported more ample (Grade 5) more often employed distraction and problem-focused strategies (i.e. positive self-instruction, social support), and scored less on measures of aggression than the older children (Grades 6 & 7) (Hampel & Petermann, 2005). These findings suggest that the use of aggression increases with age and the reliance on distraction decreases. Additionally, girls are consistently found to report more interpersonal stress and suffer greater emotional distress as a result, despite their use of the more adaptive coping strategy of seeking social support.

A qualitative synthesis of studies examining coping and psychosocial functioning in children and adolescents revealed that active coping is only positively associated with healthy social and behavioral functioning *in the context of controllable stressors* (i.e. arguments with peers). Conversely, attempts to use active coping in the context of uncontrollable stressors (i.e. parental conflict or illness) was found to be associated with poorer social competence and greater behavioral problems (Clarke, 2006). This has significant implications for understanding that interventions should be geared towards not only encouraging the use of active coping, but the ability to discern the degree of control one has in the situational stressor.

#### **Parental Effects on Child Coping**

When children are capable of adopting constructive coping strategies, it is linked to greater social competence and fewer internalizing and externalizing symptoms (Gentzler, Contreras-Grau, Kerns & Weimer, 2005). It is, therefore, important to discover what factors influence a child's choice of coping style. Parents play an important role in a child's exposure to stressful situations as well their subsequent ability to cope with such situations. Over the last decade, investigations into the mechanisms through which parents influence their child's coping style selection have been more widely conducted. The work of Seiffge-Krenke & Byers (2005) detailed the relationship between attachment and coping style and found that more secure attachments lead to more social support seeking and active coping behaviors than adolescents with dismissive or preoccupied attachments. In his review, Power (2004) contends that parental warmth, support, acceptance, family cohesiveness, and firm rule enforcement are positively associated with active, approach, or problem-solving coping. However, his review provides little support for the idea that parents can directly influence child coping strategies through modeling or suggestion. What has been demonstrated is the effect a parent's reactions to a child's negative emotions can have on that child's use of particular coping strategies. In a study of 8-12 yr olds and their mothers and fathers, it was found that parents' positive reactions to the child's negative emotions were positively correlated with their child's use of constructive coping, while negative/punitive reactions were positively correlated with their child's reliance on avoidant coping (Eisenberg, Fabes & Murphy, 1996).

#### **Childhood Coping with Parental Illness**

There are few studies that focus on children's coping with parental illness; parent illness may be a unique stressor resulting in children's increased levels of depression, anxiety and behavioral problems and decreased levels of self-esteem and social competence (Siegel,

Mesagno, Karus, Christ, Banks and Moynihan, 1992). With variations in onset, duration, and degree of debilitation, both mental and physical illnesses can affect a family in very different ways. With the vast array of disease variables, one might expect that the coping mechanisms and emotional and behavioral outcomes present in the children of the afflicted should be just as variable. In examining illness factors, it is interesting to note any significant differences in the emotional and behavioral outcomes of children of parents with mental illness and those with physical illness. In a study of adolescent children of parents with either depression or rheumatoid arthritis and those with healthy parents, Hirsch, Moos & Reischl (1985) showed that, in terms of psychological symptoms, self-esteem and school activities, the functioning of adolescents in the arthritic group was not significant differences between children of affectively disorder parents and those of non-ill parents, but no significant differences between the children of affectively disordered and medically ill parents.

#### **Parental Mental Illness**

Depression, one of the most widespread and common pathologies, is chronic in its course and relentless in its disruption of lifestyle and relationships. It is most common among women and, therefore, highly common among mothers (Kessler, 2003). Because of the nature of depression and the limitations it imposes on emotion regulation and effective social and emotional communication, it is a mental illness well suited for our explorations. Depressed parents have been found to be less involved with their children and to show increased friction, resentment and helpless and decreased interaction and affection (as cited in Orvaschel, Walsh-Allis & Ye, 1988). In their study of high-risk and low-risk children (as defined by the presence or absence of a recurrently depressed parent), Orvaschel et al. (1988) found that 41% of the high-

risk group met criteria for at least one psychiatric disorder compared with 15.2% of low-risk children. Additionally, the high-risk group more frequently met criteria for multiple diagnoses than the low-risk group. Langrock, Compas, Keller, Merchant, & Copeland (2002) contend that the ways children cope with and respond to the stress of living with a depressed parent mediates the association between parental depression and symptoms of child and adolescent psychopathology. Furthermore, those who used strategies aimed at accepting or adapting to the stress of living with a depressed parent, (e.g. acceptance, distraction, cognitive restructuring) had fewer adjustment problems.

#### **Parental Physical Illness**

Pakenman & Bursnall (2006) report that parents with multiple sclerosis have found that parenting can be disrupted by symptoms of mood disturbance, cognitive impairment, fatigue, and mobility problems. In their study of HIV-infected mothers, Bauman et al. (2002) found that only one aspect of the mother's physical health-activity restrictions-was significantly related to the child's mental health. In this sense it appears that a disruption in parenting roles is the more influential factor in the negative experiences of children. Thatsum et al. (2008) found that younger children reported primarily on the ill parent's behavior, facial expressions, and physical symptoms from which they deduced the parent's emotions. When these young children observe parental expressions of severe anxiety, panic and despair, it has been shown to increase fear and anxiety (Christ, 2000). When examining children coping with a parent's cancer, Compas, Worsham, Ey & Howell (1996) found that the use of emotion-focused coping was related to more emotional stress and more avoidance of thoughts. Because of the likely feeling that one lacks direct control in instances of parental illness, it is probable that children will elect more emotion-focused, rather than problem-focused, coping.

Children of parents with chronic pain were found to exhibit higher levels of delinquency and poorer general adjustment and social skills than normal controls (Mikail & von Baeyer, 1990). Another chronic pain sample showed children 8-12 years old exhibiting more somatic complaints, absenteeism, and visits to the school nurse than children whose parents were not ill (Rickard, 1988). Similarly, Jamison and Walker (1992) found that children's somatic symptoms were positively correlated with parent's pain intensity ratings and emotional distress. This provides interesting information regarding how parents can model pain and children can, subsequently, express their negative affect through learning and imitating these behaviors.

#### **Parental Illness and Family Dynamics**

The natural instinct of a sick parent is, often times, to attempt to protect their children from the details surrounding their illness, or sometimes even to withhold the diagnosis for as long as possible. Nonetheless, Thatsum et al. (2008) found that children often prefer to be given more information about their parent's illness and that most children evaluate accompanying their ill parent to the hospital in a positive way. The older children in their sample were able to empathize with their parents' struggles and more frequently gave emotional help to their parents. In much the same vein, Gentzler et al. (2005) observed that parents who were able to discuss emotions openly with their children served as models for children in their attempts to label and talk through their own negative emotions. There is consistent research support for the idea that parents' supportive responses to a child's expressed negative emotion result in children's use of more adaptive coping or emotion-regulation strategies (as cited in Gentzler et al., 2005). This concept is illustrated by Gottman et al.'s (1996) emotion-coaching philosophy whereby parents are aware of low-intensity emotions in themselves and in their children and react to these emotions in a manner of intimacy and teaching, such that they validate the child's emotion, help

them to verbally label it, and discuss strategies for dealing with it. Open and problem-free communication between adolescents and parents has been associated with better self-esteem, more happiness and greater satisfaction with life in adolescents (Jackson, Bijstra, Oostra & Bosma, 1998).

Along similar lines, a child's observation of how parents communicate with one another and overall marital harmony has been found to mediate the relationship between parental illness and child functioning. Rutter (1971) found that marital discord affected children in families with and without personality disturbances, yet the personality disturbance had no effect on children when there was a harmonious marriage and had an additive effect when there was a discordant marriage. In their comparison between children of parents with schizophrenia and those with affective disorder, Emery, Weintraub & Neale (1982) found that children of both schizophrenic and affectively disordered parents were significantly more deviant than controls on measures of over-control (e.g. withdrawal) and under-control (e.g. aggression), yet the marital discord was more strongly related to school behavior in the affective group than in the schizophrenic group. As is found in families without the additional stress of parental illness, when marital discord exists, children are likely to blame themselves for the conflict. In families with a depressed parent, Langrock et al. (2002) observed a preponderance of disengagement coping (efforts to withdraw from the stress) when marital conflict also existed. This style of coping, along with efforts to resolve the parents' conflict, is related to higher levels of depressive symptoms in adolescents. In Fear et al.'s (2009) examination of parental depression and interparental conflict, child/adolescent reports of self-blame and degree of interparental conflict were positively correlated with both anxiety, depression and aggression. However, the parent's current depressive symptoms were only related to the current emotional symptoms of the children. It

was further demonstrated that the child/adolescent's use of self-blame was an independent predictor of more anxious/depressed symptoms and aggression behaviors. These findings illuminate the idea that when a child adopts an internal locus of responsibility (e.g. self-blame) alongside an external locus of control (e.g. high degree of parental conflict onto which they exert little influence) they experience the highest levels depression, anxiety and aggression.

An additional aspect of the impact of family dynamics is found when we examine the gender correlations present in a number of studies. These findings elucidate the more general influence of the parent-child dyad on the experience of stress responses. Grant et al. (2003) have found that girls whose mothers had cancer reported more symptoms of anxiety and depression than those whose fathers were ill and boys with either an ill mother or father. This relationship between the gender of the ill parent and that of the child is further replicated in McDowell, Kim, O'Neil & Parke's (2002) findings of a stronger relationship between parent-child interactions and child coping for mother-daughter dyads than for father-daughter or mother-son dyads. It is possible that, supportive of social learning theory (Bandura, 1962), children more often model their same sex parent and therefore suffer a greater degree of emotional stress related to insults to that parent's well being. In Gentzler et al.'s (2005) study of emotional communication between parents and children, a startling 100% of stepfathers and single fathers were coded by researchers as having a distancing/invalidating or conflictual/hostile communication style with their child. Even more interestingly, this was in direct opposition to what the same children and fathers expressed in their self-report measures. We must, then, consider how accurately fathers are able to gauge their level of openness with their children.

#### Child as Caregiver

When a parent who is looked to as the protector and guide is afflicted with mental or physical illness children are often cast into the role of *young carers*. These care-giving children and adolescents take on the duties of domestic care, general support, emotional support, personal care, and child-care for siblings (Pakenman & Bursnall, 2006). Much of the research that has been done on adult caregiving has been guided by Lazarus and Folkman (1984)'s stress and coping theory and emphasizes the importance of the caregiving context. In light of the unique position a child is in when providing caregiving services, it is important that we examine the contextual variables specific to this arrangement. Such variables can include the duration and severity of the parent's illness, the health status of the other parent, the degree of choice a child is given in providing help, the functional impairment of the sick parent, and which of the parents is ill (Pakenman & Bursnall, 2006). It is sometimes the case that when a child takes on the role of providing both instrumental and emotional support to their sick parent, a relationship distortion, described as *parentification*, can occur. In adaptive parentification, the child may derive a sense of self-worth from their contributions to the family's well-being, but in the absence of appropriate acknowledgement and support, the parentified role can be described as destructive (Jurkovic, 1997). This destructive parentification is further expressed in a qualitative exploratory study of children coping with parents with cancer, where Thastum, Johansen, Gubba, Olesen & Romer (2008) found that children would go quite far to suppress their own needs and interests in order to nurse their parents and to secure stability in the family.

The presence of a strong social support network seems paramount in creating an environment where a child can appropriately and effectively handle the stresses of an ill parent. For many children, a healthy parent, siblings and extended family provide that support and for others the responsibilities rest largely on them. For many of these children, less adaptive coping

strategies are used. The use of distraction as a coping mechanism results in an active avoidance of the stresses surrounding the illness and can be both adaptive and destructive. Conrad & Hammen (1993) found that positive self-esteem, academic success, social competence, social support and positive perceptions of maternal parenting behaviors were all useful in moderating the stressful effects of both mentally and medically-ill parents. In their analysis of HIV-infected mothers and their children, Bauman, Camacho, Silver, Hudis & Draimin (2002) found both child dispositional (productivity and independence) and family (adaptability and good parent-child relationship) protective factors were related to better child functioning. Family systems theory suggests that the family members' ability to clearly communicate about both instrumental and emotional issues is a protective factor for the child (Epstein, Bishop, Ryan, Miller & Keitner, 1993).

#### **Issues of Ethnicity**

Previous research on parental illness and childhood coping and behavioral outcomes has focused largely on Caucasian samples with a middle-class socioeconomic status. As has been recognized in APA initiatives to require minority inclusions in clinical research protocols, studies done to the near exclusion of minority populations are lacking both depth and breadth. It is hardly acceptable to assume synchrony in the behavioral trends of populations that vary in race and class; nor is it acceptable to make generalized assumptions based on data from a convenience sample of Caucasian families and neglect an opportunity to gather inclusive data. With this understanding, it is recognized that the coping strategies and emotional and behavioral outcomes of minority children and adolescents may vary dramatically from their Caucasian peers. Even in the light of comparable findings, there may exist differential pathways leading to similar coping style selection and outcomes. Furthermore, the home and school environments of minority populations may have unique effects on the way the strain of parental illness is perceived and processed (e.g. cumulative stress from economic strain, neighborhood violence, and single parent homes). Lastly, the more communal nature of African-American neighborhoods and families may provide extended social supports that are unique to these populations.

#### **African-American Youth and Environmental Stress**

Following their review of neighborhood effects on behavioral and emotional outcomes, Leventhal and Brooks-Gunn (2000) contend that lower SES environments are associated with adolescents' externalizing behaviors. Additionally, African-American children residing in the middle-SES neighborhoods are cited has having less peer-reported aggression even though they come from low-SES, single-parent families. Therefore, it is believed that specific neighborhood effects are at work in breeding externalizing behaviors such as aggression. In their work on protective factors for urban youth, Lee, Nussbaum & Richards (2007) discovered "confidence" to be an individual-level protective factor across both externalizing and internalizing symptoms, when poverty level was examined as a risk factor. Maton et al. (1996) reported a greater reliance on spirituality and family support for African-American adolescents and young adults as compared to their Caucasian peers when dealing with stress. The greater salience of spirituality was additionally found to increase self-esteem in the African-American population, yet had opposite effects on Caucasian adolescents. Therefore, higher levels of confidence, often influenced by family support and faith-based practices, have been shown to ameliorate the effects of poverty on negative psychological outcomes for minority youth.

#### African-American Youth and Coping Strategy Selection

The measures with which we assess coping styles have also been examined for their applicability to a low-income African-American sample. In their confirmatory factor analysis of the Child Coping Strategies Checklist (CCSC), Gaylord-Harden et al. (2008) revealed a 3-factor structure within their sample, as compared to the original 4-factor structure. It was shown that African-American youth did not utilize the Physical Release of Emotions (e.g. go skateboard riding or rollerskating, go bicycle riding) subscale to the extent of other-race peers. The authors contend that complex neighborhood factors, economic resources and expectations around family socialization are all likely contributing factors to their lesser use of this strategy and greater use of distraction activities done within the home (e.g. listen to music, reading a book) (Gaylord-Harden et al., 2008). Their subsequent cluster analysis revealed two groups, those that relied heavily on avoidant coping strategies and those that used all strategies equally often (called *diverse copers*). Diversified copers were cited as having more "major life events" and it was hypothesized that they may have yet to identify specific coping strategies for particular life stressors (Gaylord-Harden et al., 2008).

Chapman & Mullis (2000) demonstrated differential coping patterns within their sample of African-American and White adolescents, with African-Americans cited as more often using social support-seeking strategies. Furthermore, African-Americans reported using more diversions, self-reliance, demanding activities, solution of family problems, and relaxation than their White peers, who relied most heavily on avoidance and ventilating feelings (Chapman & Mullis, 2000). This can be seen as further evidence of a more diversified coping pattern, possibly within the context of a more complex stress load.

In an examination of low-income African-American youth and their experiences of chronic and episodic stress, it was found that boys most often utilized avoidant coping and this

strategy attenuated the relationship between stress and externalizing behaviors (Grant et al., 2000). Many of the stressors faced by low-income urban African American youth are likely to be stressors over which they can exert little control, and there is evidence that active coping is not effective for youth exposed to uncontrollable stress (Compas, Conner, Saltzman, Thompsen & Wadsworth, 2000). Because the use of avoidant coping is generally associated with negative long-term psychological outcomes, this trend reveals an immediate protective factor, yet a possible long-term risk factor.

Because of the unique structure to many African-American family homes (e.g. single motherhood, extended family members, economic strain), it is necessary to examine the unique effect these variables have on coping style selection. In their study of low-income African-American children, Gaylord-Harden, Campbell & Kesselring (2009) demonstrated a main effect of maternal support on the girls' use of active and support-seeking coping. For boys, this effect was found only in the context of high economic stress. Additionally, maternal psychological control interacted with high economic stress in predicting a greater use of avoidant coping within the females in this population. The differential relationship between these two aspects of maternal parenting behaviors indicates that maternal psychological control is particularly salient for girls experiencing high economic stress, whereas maternal support is salient for boys under similar economic stress (Gaylord-Harden, Campbell & Kesselring, 2009).

#### Hypotheses

An extensive review of the literature has shown a significant relationship between the utilization of specific coping styles and the resultant psychosocial outcomes. In addition, a number of variables (e.g. maternal support, economic strain, perceived control) have been found to contribute to a child's coping style selection. Through examination of both normative

stressors and major life stressors, it has been presented that coping style selection mediates the relationship between life stressor and emotional/behavioral outcomes in children and adolescents. However, the aims of this study are primarily exploratory, given the paucity of research about the impact of parental illness within an African-American population. The following research questions were addressed.

*Hypothesis* #1- Does having an ill parent increase internalizing and externalizing behaviors in African-American children? If so, does gender influence this relationship?

It was hypothesized that children living with a sick parent would have higher levels of symptomatology, including depression, anxiety and externalizing behaviors, than their peers that live with healthy parents. Furthermore, within homes with a sick parent, boys were predicted to exhibit more externalizing behaviors while females were predicted to exhibit more internalizing behaviors.

*Hypothesis* #2- Are there gender differences in the psychological outcomes of African-American children with high levels of caregiving stress?

It was hypothesized that girls experiencing high caregiving stress would have higher levels of internalizing behaviors than their male peers. It was further predicted that boys, with similar degrees of caregiving stress, would have higher levels of externalizing behaviors than their female peers.

*Hypothesis* #3- Are there gender differences in the coping styles of African-American children living with a sick parent?

It was hypothesized that boys would rely more on distraction and avoidance coping styles than their female peers. The literature did not lend itself to strong predictions about

predominant coping styles in females and, therefore, the questions about girls' coping strategies were exploratory in nature.

In addition to the formal hypotheses just discussed, a number of exploratory analyses were conducted in an effort to understand the findings within the given data set. The following posthoc questions were explored.

*Exploratory Question #1-* Which demographic variables present in the study best predict overall caregiving stress experienced by children living with a sick parent?

*Exploratory Question #2*- What is the relationship between the use of certain coping styles and the presence of symptomatology in African-American children? Does this reflect the pattern found in the majority population?

#### CHAPTER 2

#### METHOD

#### **Participants**

Participants included a total of 61 parent-child dyads residing in the Metropolitan area of Washington, DC. All participants were English-speaking African-Americans. Parents included those with and without a history of mental and/or physical illness, were identified as the primary caregiver for the child participant, and resided within the same household as the child.

**Parent Population.** Sixty-one (61) parents were included in the final sample population, thirty-six (36) of which identified as sick with at least one physical or mental illness and twenty-five (25) who denied any current or past health concerns. The parent sample was largely female (N=50), the majority of whom were employed (N=38) and had completed at least one year of college (N=39). The mean age of parents included was 42.68 years (SD = 10.57 years). The mean household income was \$40,000 -\$49,999, with most families either renting (N=29) or owning their home with a mortgage (N=24). The parent sample was primarily married (N=20) or single (N=22) with decreasingly less claiming to be divorced, separated or widowed. The mean family size was 4.00 (SD = 1.62), with an average of 2 adults (M =1.97, SD = 1.06) and 2 children (M = 2.02, SD = 1.19) in the home.

**Child Population.** Sixty-one (61) children were included in the final sample population. The child sample was equally split between males (N=30) and females (N=31), the vast majority of which were being raised by their biological parent (N=49). Most children in the study were in the 6th grade (N=21) with a mean age of 11.92 (SD = 1.23). In terms of social responsibilities, the children in this sample averaged 3.43 home chores (SD = 1.73) and 1.67 extracurricular activities (SD = 1.38). Of the thirty (30) boys in the final sample, fifteen (15) were included in each of the healthy and sick parent samples. Of the thirty-one (31) girls in the final sample, ten

(10) were included in the healthy parent sample and twenty-one (21) were in the sick parent sample.

#### Measures

**Demographics Questionnaire.** The Demographics Questionnaire (Appendix C), completed by the parent, included questions regarding the age, sex, ethnicity and race, SES, occupation, education level, marital status and health history of the parent. Additionally, the questionnaire included questions about the child's age, sex, grade level, chores in the home, and extracurricular activities.

Strengths and Difficulties Questionnaire. The Strengths and Difficulties Questionnaire (SDQ: Goodman, 1997) is a 25-item instrument designed to assess emotional and behavioral problems in children and adolescents. The instrument can be completed by either the parent or teacher and results in the identification of emotional symptoms, conduct problems, hyperactivity/inattention, peer relationships problems and prosocial behavior. The measure includes items that assess the validity of statements such as the child is 'considerate of other people's feelings', 'often loses temper', and 'often lies or cheats'. On parent-completed instruments, total scores above 13 are considered borderline, while those above 17 are considered abnormal. Within the validation sample (Goodman, 2001), parent report on the SDQ demonstrated a full-scale Cronbach's alpha reliability of .82 and subscale reliabilities between .57 (Peer Problems) and .77 (Hyperactivity). Test-retest reliabilities within the validation sample were acceptable, with .72 for full-scale parent report and subscale reliabilities ranging from .57 to .72. Within the current sample, parent report on the 25 items of the SDQ had a fullscale Cronbach's alpha reliability of .700. While still moderately reliable, it was found that the overall reliability of this scale was reduced by the low reliability of two of the subscales:

*Emotion* (5 items;  $\infty = .513$ ) and *Peer Problems* (5 items;  $\infty = .501$ ). These subscales were removed from further analyses. The remaining subscales proved moderately reliable: *Conduct* (5 items;  $\infty = .691$ ); *Hyperactivity* (5 items,  $\infty = .777$ ); *Prosocial* (5 items;  $\infty = .784$ ) and were, therefore, included in further analyses.

**Children's Coping Strategies Checklist, Revision 1.** The Children's Coping Strategies Checklist (CCSC-R1; Program for Prevention Research, 1999), to be completed by the child, is a 44-item checklist designed to assess coping styles in children and adolescents. The 10 subscales cluster around four factors that define coping style as active coping, distraction coping, social support-seeking coping and avoidant coping. The measure inquires as to the predominant coping strategy used when the child encountered problems in the past month. Sample coping strategies are: 'you imagined how you'd like things to be', 'you didn't think about it', and 'you read a book or magazine'. The scale factors have shown acceptable internal consistency ( $\alpha = .65$  to .88). Within the current sample, the 54 items of the CCSC-R1 were highly reliable (54 items;  $\alpha =$ .957). All subscales of the CCSC-R1 demonstrated acceptable reliability: *Problem-focused Coping* (12 items;  $\alpha = .873$ ); *Positive Cognitive Restructuring* (12 items;  $\alpha = .878$ ); *Active Coping* (24 items;  $\alpha = .932$ ); *Distraction Coping* (9 items;  $\alpha = .774$ ); *Avoidance Coping* (12 items;  $\alpha = .832$ ); *Support-seeking* (9 items;  $\alpha = .911$ ) and were included in further analyses.

**Center for Epidemiological Studies Depression Scale for Children.** The Center for Epidemiological Studies Depression Scale for Children (CES-DC; Weissman, Orvaschel, & Padian, 1980) is a self-report questionnaire designed to measure depressive symptomatology in children. Children respond to 20 statements along a 4-point spectrum (i.e., rarely or none, some or a little, occasionally, most or all). Sixteen of the questions are positively phrased (e.g., 'I felt like crying this week') and four questions are negatively phrased (e.g., 'I felt like I was just as good as other kids'). On the CES-DC, a total score over 15 is considered within clinical range. The CES-DC has good internal consistency ( $\propto = 0.89$ ) and satisfactory test-retest reliability (r = 0.57). Within the current sample, the 20 items of the CES-DC had a full-scale Cronbach's alpha reliability of 0.895.

Screen for Child Anxiety Related Emotional Disorders-Child Version. The Screen for Child Anxiety Related Emotional Disorders-Child Version (SCARED; Birmaher, et al., 1997) is a 38 item self-report questionnaire that yields five factors of child anxiety: somatic/panic, general anxiety, separation anxiety, social phobia, and school phobia. Children are asked to endorse the validity of such anxiety responses as 'I have nightmares of something bad happening to my parents', 'I feel nervous with people I don't know well', and 'I am scared to go to school'. They are asked to limit their reflections to the past 3 months. A total score on the SCARED that is greater than or equal to 25 may be indicative of an anxiety disorder. Both the child and parent SCARED have demonstrated good internal consistency ( $\infty = .74$  to .93), test-retest reliability (intraclass correlation coefficients = .70 to .90), discriminative validity (both between anxiety and other disorders and within anxiety disorders), and moderate parent-child agreement (r = .20 to .47, p < .001, all correlations). Within the current sample, the 41 items of the SCARED had a full-scale Cronbach's alpha reliability of .945. Additionally, the subscales of this measure demonstrated acceptable reliability: *Panic* (13 items;  $\infty = .871$ ); *GAD* (9 items;  $\infty =$ .810); Separation (8 items;  $\infty = .811$ ); Social Anxiety (7 items;  $\infty = .790$ ); School Avoidance (4 items;  $\infty = .666$ ). These subscales were included in further analyses.

Young Carers Perceived Stress Scale. The Young Carers Perceived Stress Scale (YCPSS; Early, Cushway, & Cassidy, 2006) is a 31 item, 5 factor measure of perceived stress, developed and standardized for use with young carers. The scale measures the carer's perceptions of the caring role in terms of a range of positive and negative items, e.g. 'It feels good to know I can help my relative' (positive item) & 'It bothers me that caring takes over everything in my life' (negative item). The 5 factors of the scale have demonstrated good internal consistency with alpha reliabilities ranging from .79 (Social Restrictions) to .86 (Devaluation of *Role*). Within the current sample the 31 items of the YCPSS, used only within the sample of children living in the home with a sick parent, had a full-scale Cronbach's alpha reliability of .790. Overall Stress was calculated by adding the items that comprise the subscales of Social Restrictions, Devaluation and Overload. The Overall Stress scale demonstrated good internal consistency with a Cronbach's alpha reliability of .791. Two of the measure's subscales exhibited poor reliability and were dropped from further analyses (*Social Restrictions*: 5 items;  $\infty$ = .035; *Family Cohesion*: 4 items;  $\infty$  = .227). The remaining subscales showed adequate reliability: Value of Role (6 items;  $\infty = .826$ ); Devaluation (8 items;  $\infty = .715$ ); Overload (8 items;  $\infty = .703$ ) and were, therefore, included in further analyses.

#### Procedure

The current study took place in the Metropolitan area of Washington, DC and consisted of a battery of self-report questionnaires administered to parents and their children aged 9-14. Fifty (50) Charter schools were identified through a directory of campuses and administrators available on the District of Columbia Charter School Board website. Initial school contact was made by direct phone call and/or email to the Head of School at each charter school in the directory. Initial correspondence included a formal presentation of the investigator's

background, proposed research goals, study dates and potential participant benefits. Upon a school administrator showing initial interest in participating in the study, arrangements were made to conduct an in-person meeting where more specific questions/concerns were presented and addressed. Ultimately, five (5) schools chose to participate in the research study.

Following final approval from the appropriate school administrators, arrangements were made to speak to parents at organized parent meetings at the school (i.e. Back to School Night). At the parent meetings, the entire available parent body was addressed and a summary of the research was presented. Interested parents were asked to meet the research team following the meeting, were they were presented with a consent form and, upon written consent for participation, a Demographics Questionnaire and the Strengths and Difficulties Questionnaire (Goodman, 1997). Contact information was collected from those parents who wished to participate but did not have time to do so at that moment. The investigator made contact with each of these parents and provided them with a unique ID number and link to the online version of the study at www.surveymonkey.com. On the website, parents were able to provide their electronic consent and complete the study with their personal ID number. Overall parent participation (both in person and online) took approximately 20 minutes.

In an effort to capture parents who may have not been present at the school meetings, the investigator drafted a recruitment letter that, upon approval from the school administrator, was emailed by the schools' family coordinator to the entire parent body. Hard copies of the letter were also given to students to carry home to their parents. The letter provided the investigator's email address and those parents interested in participating in the study made direct contact with the investigator in order to receive their unique ID number and a link to the online version of the study.

Following parent completion of the study, the children elected by their parent as the indicated child participant were scheduled for a group administration of the child battery of measures. Child participation was conducted at administrator-appointed times during the school day at each of the participating schools. Seated in a classroom with the research team, children provided their initial written assent for participation and were then administered the Children's Coping Strategies Checklist (CCSC-R1; Program for Prevention Research, 1999), the Center for Epidemiological Studies Depression Scale for Children (CES-DC; Weissman, Orvaschel, & Padian, 1980), the Screen for Child Anxiety Related Emotional Disorders (SCARED; Birmaher, et al., 1997) and the Young Carers Perceived Stress Scale (YCPSS; Early, Cushway, & Cassidy, 2006). The research team remained available to address any participant questions while each child worked independently. Group administration took approximately 45 minutes and children were given passes to return to their respective classes.

Following study completion, each parent was entered into a raffle, amongst those participants in their school, for a \$50 gift card. One gift card was awarded at each school and the odds of winning ranged from 1:8 to 1:26. Additionally, the research team revisited each school and conducted a pizza party for the child participants. During the pizza party, children were further debriefed and led in an open discussion of coping with psychosocial stressors.

#### CHAPTER 3

#### RESULTS

#### Descriptives

Preliminary analyses of the data set were conducted to examine the general pattern of responding within each of the major groups (i.e. healthy vs. sick, boys vs. girls) on the study's outcome measures. While these analyses did not reveal many significant group differences, in Table 1 we see that children in healthy homes are seen as participating in significantly more activities than those in homes with a sick parent (t(59) = 3.56, p = .001).

As can be seen in Table 2, the overall sample scored below cutoffs on each outcome measure of adjustment. Perhaps most notable are the relatively large standard deviations seen for each of the measures, indicating a high degree of variability in the individual responses within both the healthy and sick parent sample.

Given this study's aim to discriminate between the experiences of children living with a sick parent and those living in healthy homes (in addition to any gender differences within those samples), the differential associations between these groups on the major outcome measures were explored. It should be noted that only those correlations with a p-value < .01 were selected for further analysis. This more conservative alpha level was set to reduce the Type I error rate inherent in the number of correlations performed. In order to test for the statistical significance of the difference between correlation coefficients, a Fisher r-to-z-transformation was performed (Hays, 1988).

In Table 3, we see the differential Pearson correlations found between the samples of children living in healthy and sick homes. None of the significant correlations (p < .01) found in each sample were determined, by means of the Fisher r-to-z transformation, to differ significantly from the opposing sample's corresponding correlation.

Table 1

Means on All Major Outcome Measures by Child Gender and Parent Health Status

K <sup>a</sup> K <sup>a</sup>	Extracur        Ores      Activity        64      2.6        47      1.2        30      2.0        33      1.1	rricular tities SI 7.8.8 0 6.	90 87 67 50	CESDC 13.13 12.86 16.10 15.48	SCARED 22.00 16.67 21.20 27.10	YCPSS Overall Stress 37.27 - 39.81	CCSC Active 2.46 2.52 2.52 2.52 2.53	CCSC Distraction 2.31 2.60 2.60 2.36 2.09	CCSC Support- Seeking 2.34 2.35 2.36 2.36 2.25	CCSC Avoidance 2.30 2.50 2.70 2.55
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<sup>a</sup> n=15

<sup>b</sup> n=10

<sup>c</sup> n= 21

## Table 2

Means on All Subscales of Outcome Me	easures by Parent Health Status
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	Scale Cutoff	Mean <sup>a</sup>	SD <sup>a</sup>	Mean <sup>b</sup>	SD <sup>b</sup>
SDQ					
Total Difficulties	13	7.32	4.56	9.47	6.59
Conduct	3	1.36	1.87	1.86	2.09
Hyperactivity	5	3.52	2.55	3.58	2.73
Prosocial	10	8.28	1.97	8.64	1.84
CES-DC					
Total	15	14.32	12.45	14.43	9.74
SCARED					
Overall Anxiety	25	21.68	17.33	22.75	13.74
Panic	7	5.08	5.88	4.81	4.45
GAD	9	5.32	4.49	5.56	3.76
Separation anxiety	5	4.04	3.80	4.94	3.41
Social anxiety	8	5.24	3.53	5.14	3.46
School Avoidance	3	2.00	2.02	2.31	1.74
CCSC-R1					
Active Coping	-	3.54	2.49	3.96	2.43
Distraction Coping	-	3.78	2.33	4.00	2.30
Support-seeking	-	3.67	2.35	4.00	2.29
Avoidance	-	3.58	2.46	3.42	2.53
YCPSS					
Devaluation	-	-	-	14.22	5.49
Value of Role	-	-	-	17.00	5.53
Overload	-	-	-	14.36	5.53

<sup>a</sup> healthy parent, n=25

<sup>b</sup> sick parent, n= 36

## Table 3

Differential Pearson Correlations on Major Outcome Measures by Parent Health Status

Correlated Variables	Healthy Parent <sup>a</sup>	Sick Parent <sup>b</sup>
SCARED.total : CCSC.avoidance.coping	.428, p = .033	.572, p = .000*
CCSC.active : CCSC.distraction.coping	.447, p = .025	.503, p = .002*
CCSC.distraction.coping : CCSC.support.seeking	.392, p = .053	.423, p = .010*
CCSC.distraction.coping : CCSC.avoidance.coping	.473, p = .017	.422, p = .010*

<sup>a</sup> n=25

<sup>b</sup> n=36

\*p < .01

In Table 4 we examine the differential associations found within child gender. Of the significant correlations (p < .01) found in each sample, the positive association between active and distraction coping styles in boys (r(30) = .692, p = .000) differed significantly (p < .05) from that found in girls (r(31) = .298, p = .103). Additionally, the positive association between distraction and support-seeking (r(30) = .631, p = .000) found in boys differed significantly (p < .05) from that found in girls (r(31) = .197, p = .288). Lastly, the positive association between distraction and avoidance coping found in boys (r(30) = .691, p = .000) differed significantly (p < .05) from that found in girls (r(31) = .276, p = .133). Because males show significant associations between each of the coping styles of the CCSC-R1 (Program for Prevention Research, 1999), a pattern not found in the female sample, it suggests that they do not demonstrate a highly varied coping style selection.

#### Table 4

Differential Pearson Correlations on Outcome Measures by Child Gender

Correlated Variables	Boys <sup>a</sup>	Girls <sup>b</sup>
SDQ.total : CCSC.active.coping	257, p = .171	484, p = .006*
SDQ.total : CCSC.support.seeking	252, p = .180	443, p = .013*
SCARED.total : CCSC.active.coping	.461, p = .010*	.243, p = .188
CCSC.active.coping : CCSC.distraction.coping	.692, p = .000*	.298, p = .103
CCSC.distraction.coping : CCSC.support.seeking	.631, p = .000*	.197, p = .288
CCSC.distraction.coping : CCSC.avoidance.coping	.691, p = .000*	.276, p = .133

<sup>a</sup> n=30

<sup>b</sup> n=31

\*p < .01
Table 5 present the significant associations found in regards to caregiving stress within the sample of children living with a sick parent. None of the differential associations found were determined to differ significantly between the samples of boys and girls.

Table 5

Differential Pearson Correlations within Sick Parent Population by Child Gender

Correlated Variables	Boys <sup>a</sup>	Girls <sup>b</sup>
YCPSS.overall.stress : CESDC.total	.713, p = .004*	.292, p = .198
YCPSS.overall.stress : CCSC.support.seeking	.146, p = .603	.562, p = .008*

a n=15

<sup>b</sup> n=21

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*p < .01
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#### **Research Questions**

**Hypothesis #1.** It was hypothesized that children living with and caring for a sick parent would have higher levels of symptomatology, including depression, anxiety and externalizing behaviors, than their peers living with healthy parents. Furthermore, boys living with sick parents were predicted to exhibit more externalizing behaviors than their female peers, who were predicted to exhibit more internalizing symptoms.

A series of two-way ANOVAs were conducted to examine the impact of parent health status and child gender on child depression, anxiety, and externalizing behaviors. In the first two-way ANOVA (Table 6), no significant group differences were found in levels of depression, overall anxiety, or externalizing behaviors. A second two-way ANOVA (Table 7) was conducted to explore the impact of parent health status and child gender on the anxiety subscales that comprise the SCARED measure, yielding non-significant group differences in levels of panic, GAD, social anxiety, and school avoidance. However, a significant group difference in levels of separation anxiety was found (F(3,57) = 3.47, p = .022). Specifically, a main effect of gender was demonstrated (F(1,57) = 5.14, p = .027) with girls (M = 5.74, SD = 3.47) scoring higher than boys (M = 3.37, SD = 3.31). Finally, an additional two-way ANOVA (Table 8) was conducted to explore the impact of parent health status and child gender on the subscales of the SDQ, which revealed no group differences in conduct or hyperactivity.

# Table 6

	Dependent	Type III Sum		Mean		
Source	Variable	of Squares	df	Square	F	Sig.
Corrected Model	CESDC.total	110.598	3	36.866	.302	.824
	SCARED.total	943.776	3	314.592	1.370	.261
	SDQ.total	96.640	3	32.213	.907	.444
Health.Category	CESDC.total	2.835	1	2.835	.023	.879
0,1	SCARED.total	1.013	1	1.013	.004	.947
	SDQ.total	69.829	1	69.829	1.965	.166
Child.Gender	CESDC.total	109.201	1	109.201	.895	.348
	SCARED.total	326.090	1	326.090	1.420	.238
	SDQ.total	.038	1	.038	.001	.974
Health.Category x	CESDC.total	.423	1	.423	.003	.953
Child.Gender	SCARED.total	443.156	1	443.156	1.930	.170
	SDQ.total	24.183	1	24.183	.681	.413
Error	CESDC.total	6833.586	56	122.028		
	SCARED.total	12860.624	56	229.654		
	SDQ.total	1989.543	56	35.528		
Total	CESDC.total	19357.000	60			
	SCARED.total	43910.000	60			
	SDQ.total	6541.000	60			

2 x 2 Anova of Parent Health Status and Child Gender on Full Scale Outcome Measures

# Table 7

		Type III Sum		Mean		
Source	Dependent Variable	of Squares	df	Square	F	Sig.
Corrected Model	SCARED.panic	52.814	3	17.605	.682	.567
	SCARED.gad	41.562	3	13.854	.842	.476
	SCARED.separation	118.232	3	39.411	3.474	.022
	SCARED.social.anxiety	33.531	3	11.177	.932	.431
	SCARED.school.avoidance	8.997	3	2.999	.872	.461
Health.Category	SCARED.panic	1.939	1	1.939	.075	.785
	SCARED.gad	.430	1	.430	.026	.872
	SCARED.separation	4.419	1	4.419	.390	.535
	SCARED.social.anxiety	.941	1	.941	.079	.780
	SCARED.school.avoidance	.442	1	.442	.129	.721
Child.Gender	SCARED.panic	6.283	1	6.283	.243	.624
	SCARED.gad	3.196	1	3.196	.194	.661
	SCARED.separation	58.313	1	58.313	5.140	.027
	SCARED.social.anxiety	12.657	1	12.657	1.056	.309
	SCARED.school.avoidance	7.167	1	7.167	2.084	.154
Health.Category	SCARED.panic	37.871	1	37.871	1.467	.231
x Child.Gender	SCARED.gad	32.340	1	32.340	1.966	.166
	SCARED.separation	28.862	1	28.862	2.544	.116
	SCARED.social.anxiety	14.510	1	14.510	1.210	.276
	SCARED.school.avoidance	.026	1	.026	.008	.931
Error	SCARED.panic	1471.776	57	25.821		
	SCARED.gad	937.586	57	16.449		
	SCARED.separation	646.686	57	11.345		
	SCARED.social.anxiety	683.486	57	11.991		
	SCARED.school.avoidance	196.019	57	3.439		
Total	SCARED.panic	3000.000	61			
	SCARED.gad	2797.000	61			
	SCARED.separation	2041.000	61			
	SCARED.social.anxiety	2354.000	61			
	SCARED.school.avoidance	495.000	61			

2 x 2 Anova of Parent Health Status and Child Gender on Anxiety Measure Subscales

### Table 8

		Type III Sum				
Source	Dependent Variable	of Squares	df	Mean Square	F	Sig.
Corrected Model	SDQ.conduct	4.185	3	1.395	.338	.798
	SDQ.hyperactivity	6.173	3	2.058	.285	.836
Health.Category	SDQ.conduct	3.458	1	3.458	.837	.364
	SDQ.hyperactivity	.186	1	.186	.026	.873
Child.Gender	SDQ.conduct	.050	1	.050	.012	.912
	SDQ.hyperactivity	.683	1	.683	.095	.759
Health.Category x	SDQ.conduct	.362	1	.362	.088	.768
Child.Gender	SDQ.hyperactivity	5.971	1	5.971	.828	.367
Error	SDQ.conduct	235.586	57	4.133		
	SDQ.hyperactivity	410.876	57	7.208		
Total	SDQ.conduct	407.000	61			
	SDQ.hyperactivity	1189.000	61			

2 x 2 Anova of Parent Health Status and Child Gender on SDQ Subscales

**Hypothesis #2.** It was hypothesized that girls experiencing high caregiving stress would have greater levels of internalizing behaviors than their male peers. It was further predicted that boys, with a similarly high degree of caregiving stress, would experience greater levels of externalizing behaviors than their female peers.

After using a median split to determine the sample of children experiencing high levels of caregiving stress, twenty (7 males, 13 females) children were identified. A one-way ANOVA was conducted within this sample to examine the impact of child gender on depression, overall anxiety and externalizing behaviors. The results of the ANOVA did not indicate group differences in levels of depression (F(1,18) = .108, p = .747), overall anxiety (F(1,18) = 3.757, p

= .069), or externalizing behaviors (F(1,18) = .006, p = .937). A second one-way ANOVA was conducted to examine the impact of child gender on the anxiety subscales of the SCARED. Results indicated significant group differences in separation anxiety (F(1,18) = 15.224, p = .001), with girls (M = 8.23, SD = 2.68) scoring significantly higher than boys (M = 3.71, SD = 1.98). In addition, significant differences were found in levels of social anxiety (F(1,18) = 8.097, p = .011), whereby girls (M = 8.08, SD = 2.47) were more likely to experience social anxiety than boys (M = 4.43, SD = 3.21). A final one-way ANOVA was conducted within the sample of children experiencing high caregiving stress to examine the impact of child gender on the subscales of the SDQ, revealing non-significant differences in conduct (F(1,18) = .068, p = .798) and hyperactivity (F(1,18) = .098, p = .758).

**Hypothesis #3.** It was hypothesized that boys living with a sick parent would rely more on distraction and avoidance coping styles than their female peers. To examine the impact of child gender on coping style selection amongst children living with a sick parent, a one-way ANOVA was conducted. The results revealed significant group differences in the use of the distraction coping style (F(1,34) = 5.031, p = .032), with boys (M = 2.60, SD = 0.72) relying more on this style than girls (M = 2.09, SD = 0.64). It was found, however, that boys (M = 2.50, SD = .59) demonstrated an equivalent use of avoidance coping as that found in girls (M = 2.55, SD = .63).

#### **Exploratory Findings**

**Demographic predictors of caregiving stress.** A best subsets regression method was performed in *R* statistical computing software to determine which of the demographic variables surveyed significantly contributed to the degree of overall caregiving stress experienced by children who live with a sick parent. This relationship was explored given the hypothesized

impact of cumulative stressors on caregiving responsibilities and perceived stress. The YCPSS scale of Overall Stress is composed of a sum total of scores on the subscales of Overload, Devaluation, and Social Restrictions. Initially, all demographic variables collected were entered into a linear regression model predicting Overall Stress. Then the best subsets method, which fits all possible models  $(2^x)$  and returns those that best adhere to model-fitting criterion, was applied to the data. Based on the criteria of Adjusted-R<sup>2</sup>, Mallow's Cp, and BIC, the predictors that were selected as best fitting the model were: *parent education, parent employment status, family housing type, child gender, child age,* and *parent-child relationship* (F(11,15) = 3.404, p = .015). Housing type (F(3,15) = 5.66, p = .008) and child age (F(1,15) = 13.065, p = .003) were found to be the most significant predictors of overall caregiving stress.

#### Table 9

Best Subsets Regression	of	Demographic	Variabl	les on	Overall	Caregiving	Stress
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Predictor	β	Std. Error	t-statistic	P-value	df
Intercept	-55.708	36.147	-1.541	0.14411	
EDUCATION					1,15
College	-13.399	5.931	-2.259	0.03918	
EMPLOYMENT					1,15
Employed	22.885	8.866	2.581	0.02087	
HOUSING TYPE					3,15
<i>Owned w/o mortgage</i>	-6.693	8.332	-0.803	0.43433	
Rent	15.320	9.174	1.670	0.11567	
Occupied w/o rent	30.300	11.744	2.580	0.02091	
CHILD GENDER					1,15
Female	15.940	6.495	2.454	0.02681	
CHILD AGE	8.379	2.837	2.954	0.00986	1,15
CHILD RELATIONSHIP					4,15
Adoptive Parent	18.739	11.750	1.595	0.13161	
Grandparent	4.236	9.819	0.431	0.67231	
Great Grandparent	8.786	15.365	0.572	0.57592	
Great Aunt	12.058	12.180	0.990	0.33788	

**Coping styles and symptomatology.** As previously highlighted, the coping styles chosen by children faced with what are considered normative stressors are often predictive of symptomatology (Sandler et al., 1994; Sontag et al., 2008). Because the literature reflects distinct patterns in the manner in which girls and boys respond to stress and differential implications of their coping style choices, these patterns were explored within the current study of African-American children (Eschenbeck et al., 2007; Hampel & Petermann, 2005). All variables were, first, centered around the mean, and then a series of hierarchical linear regressions were performed with child gender and all available coping styles (active, distraction, avoidance, and support-seeking) predictive of internalizing and externalizing symptoms. It was found that girls who selected active forms of coping showed a significant decrease in depression symptoms (t = -3.07, p = .005), whereas the use of active coping did not significantly contribute to depression symptoms in boys (t = 1.22, p = .235). Interestingly, however, the relationship between boys' use of active coping and depression trended in the opposite direction, suggesting that active coping is not as effective a strategy for the boys in this sample. As further evidence of the apparent non-benefit of active coping in the sample of boys, an increase in use of active coping was significantly predictive of social anxiety symptoms (t = 2.28, p = .032), a reversal of the pattern found in girls. It is, however, unclear as to why girls who utilized support-seeking strategies were found to have a significant increase in social anxiety symptoms (t = 2.23, p =.035).

An exploratory analysis that would inform understanding of coping styles and symptomatology in African American children was conducted within the total group. A series of linear regressions revealed that the selective use of either active or avoidance coping styles contributes significantly to resultant depression and anxiety symptoms. Specifically, a greater use of active coping is predictive of less depressive symptomatology (t = -2.01, p = .05) and a greater use of avoidance coping is predictive of more depressive symptomatology (t = 2.87, p = .006). Furthermore, the dominant use of avoidance coping is predictive of an increase in overall anxiety symptoms (t = 2.27, p = .027), highly predictive of the experience of both separation (t = 2.79, p = .007) and social (t = 2.25, p = .028) anxiety, and its impact on symptoms of GAD (t = 1.88, p = .066) and school avoidance (t = 1.90, p = .063) trended towards significance. It was further found that the predominant use of an active coping style was predictive of fewer conduct issues (t = -2.21, p = .031).

#### **CHAPTER 4**

#### DISCUSSION

Previous research on the impact of parental illness has shown that a disruption to parentchild attachment processes and normal parental roles can have deleterious effects on growing children (Aldridge & Becker, 1999; Radke-Yarrow, et al., 1985). Furthermore, when a child living with a sick parent assumes the role of caregiver by taking on domestic duties and assuming an emotionally supportive role, they can become parentified in a manner that can be seen as either adaptive or destructive (Jurkovic, 1997; Pakenman & Bursnall, 2006). The current sample was predicted to exhibit a unique pattern of outcomes, given the protective factor of a supportive, extended family network often found in African-American communities (Wilson, 1989). Additionally, the unique impact of cumulative environmental stressors (i.e. low SES, neighborhood effects) was predicted to affect the manner in which African-American children responded to the potential stress of caregiving. The goal of the current study was to gather data from an African-American sample of children in an effort to explore patterns in the coping mechanisms and behavioral and emotional outcomes of African-American children living with a sick parent. Analysis of the data raised interesting questions that were not originally addressed in the formal hypotheses. These post-hoc interests included an analysis of the demographic factors that best predict caregiving stress within the sample of children living with a sick parent as well as the general coping patterns and symptomatology within the African-American sample of middle school children as a whole.

It was hypothesized that children living with a sick parent would have higher levels of symptomatology, including depression, anxiety and externalizing behaviors, than their peers living with healthy parents. It was further predicted that boys living with sick parents would exhibit more externalizing behaviors than their female peers, while girls were predicted to

exhibit more internalizing symptoms than boys. Contrary to the initial hypothesis, no group differences were found between children living with healthy vs. sick parents on the measures of depression, anxiety, and externalizing behaviors. Interestingly, children in both sets of homes scored below clinical cutoff on the measures of depression (Cutoff: 15; Healthy Mean: 14.32; Sick Mean: 14.43), anxiety (Cutoff: 25; Healthy Mean: 21.68; Sick Mean: 22.75), and externalizing behavior (Cutoff: 13; Healthy Mean: 7.32, Sick Mean: 9.47). While prior research (Siegel, et al., 1992) has presented a pattern of negative psychosocial outcomes associated with parental illness, the current study may have lacked the necessary power to find such differences. The observed power was below 20% for the tests of depression, anxiety and externalizing behaviors as compared to the sufficient power standard of at least 80%. A larger, more differentiated group may have better suited the analysis, as the current groups had means on each measure that differed by less than 2 points. Additionally, the categorization of the sick and healthy samples may have been flawed due to its basis in parent self-report. With only one parent asked to complete the demographic questionnaire, it is possible that the un-surveyed parent *did* have a significant health history that was not captured, therefore leaving to question whether a number of the children identified as part of the healthy sample were in fact a part of the sick sample.

In partial accordance with the hypothesis, gender differences were found in the experience of anxiety. Specifically, girls were found to exhibit more separation anxiety than their male peers, regardless of the health status of their parent. Research in the general population has shown females to generally be more prone to overall anxiety as compared to their male peers (Lewinsohn, Gotlib, Lewinsohn, Seeley, & Allen, 1998). While full-scale anxiety differences were not observed in this sample, differences in separation anxiety are supported in

the prevailing literature (Masi, Mucci, Favilla, Romano & Poli, 1999). It is interesting to note that, while this sample was composed entirely of African-American children, a similar trend was observed. This is in accordance with research stating that while reporting of fears and anxiety are often higher in young girls than in boys, there do not appear to be differences in these rates between Caucasian and African-American youth (Treadwell, Flannery-Schroeder & Kendall, 1995). However, in their cross-sectional analysis of trends in gender and race of childhood anxiety symptoms, Compton, Nelson & March (2000) found that while females endorsed more separation anxiety than their male peers, White children endorsed significantly more social anxiety and less separation anxiety than African-American children.

Because 82% of parents surveyed were females, this finding may be further understood by research stating that girls with sick mothers exhibit more symptoms of depression and anxiety than boys, due in part to the same-sex relationship between the ill parent and child (Grant & Compas,1994). It was of interest, however, that there were no significant gender differences in levels of externalizing behaviors. This is in contrast to prevailing research showing boys typically higher on scales of hyperactivity and externalizing behaviors (Gaub & Carlson, 1997).

Within the sample of children experiencing high degrees of caregiving stress, it was hypothesized that girls and boys would have differential reactions to such stress. Specifically, it was predicted that boys would exhibit more externalizing behaviors than girls, who were predicted to display more internalizing behaviors. Several approaches were made to identify the sample of children experiencing "high" caregiving stress. A quartile split only captured 7 children (2 males, 5 females) and left within-group analyses severely underpowered. Overall caregiving stress was then treated as a continuous variable and the low variability within the sample made it difficult to identify significant group differences. Finally, a median split

approach was used to identify the high stress group, which resulted in any child with an Overall Stress score of 35 or greater on a scale of 105 being categorized as experiencing "high" caregiving stress. While results did not show group differences on the full-scale measures of depression, anxiety, or externalizing behaviors, girls did experience a significantly greater degree of separation and social anxiety than boys. This finding is an extension of the results of Hypothesis 1, which demonstrated higher degrees of separation anxiety in girls than in boys, regardless of the health status of their parent. Because the previous approaches used in identifying a "high" caregiving stress sample resulted in non-significant gender group differences, our ultimate findings should be interpreted with caution. It is possible that the median split analysis over-captured the high stress group and accounted for findings that were not in line with existing research. For example, the observed gender difference in social anxiety comes in contrast to previous work on gender differences in social anxiety, which finds that gender differences are not widely present in childhood (Beidel, Turner, & Morris, 1999). In addition, Turk, et al. (1998) contend that although gender differences in adult social phobia are often cited, men and women present for treatment in equal numbers. Furthermore, gender differences in the rates of generalized anxiety disorder, panic disorder and school avoidance were not observed in the sample of children experiencing high caregiving stress, though research has shown young girls higher than boys on these anxiety subtypes (Spence, 1998).

It was also hypothesized that boys living with a sick parent would rely more on distraction and avoidance coping styles than their female peers. In partial accordance with this prediction, boys did utilize distraction coping to a significantly greater degree than girls living with a sick parent. Both of these methods of coping are classified as emotion-focused, or an attempt to alter one's reactions to the stressor rather than to change the stressor itself, and are

generally utilized when a child sees little control over the stressor (Hardy et al., 1993; Thatsum, et al., 2008). Distraction does, however, have an element of activity within it in that it requires the child to replace their focus on the stressor with some distracting task. This need to *do something*, in spite of a lack of control over the direct situation, is not often credited to girls, who have been shown to be prone to emotion-focused reactions such as "rumination" and "resignation" (Hampel & Petermann, 2005). Broderick (1995)'s work with 4<sup>th</sup> and 5<sup>th</sup> graders has shown similar results, with boys relying more on problem-solving and distraction coping and girls more on rumination.

In contrast to previous work that has illustrated boys' predominant use of avoidant coping, this trend was not observed in this sample (Eschenbeck, et al., 2007). In fact, girls and boys used avoidant coping equivalently. Perhaps both girls and boys are cognizant, within these circumstances, of the little control they have over stressors within their family, specifically that of a sick parent. Furthermore, the recognition of this fact and the use of avoidant strategies have been shown to be adaptive and may actually be ameliorating some of the expected negative psychosocial outcomes that were not observed (Hardy, et al., 1993). Much of the non-adult research on gender differences in coping style selection has focused on the adolescent population (Herman-Stabl, Stemmler & Petersen, 1995; Seiffge-Krenke & Klessinger, 2000; Washburn-Ormachea, Hillman, & Sawilowsky, 2004), lending credence to the need for the exploratory analyses conducted in this study on coping styles in middle childhood.

The first exploratory analysis examined the demographic predictors of caregiving stress within the sick households. This relationship was explored with the intention of determining which factors within the family makeup, outside of having a sick parent, may significantly contribute to the experience of overall caregiving stress in children. Factors such as parent/child

gender and age, parent education and employment status, family size, and household income were taken into account. It was determined, through a best subsets regression, that a parent's education and employment status, the family's housing type, and the child's age, gender and biological relationship to the sick parent, contributed significantly to the experience of caregiving stress in those children living with a sick parent. Though socioeconomic status, as often assessed by household income, has been indicated in increasing the level of caregiving stress in families, this did not arise as a factor contributing to caregiving stress on a child in the context of a sick parent (Pearlin, Mullan, Semple & Skaff, 1990). This could be due, in part, to the fact that most research regarding caregiving stress variables is conducted within an adult population often caring for an ailing parent or spouse; a scenario in which household income would be a considerably more salient factor. In contrast, previous research findings suggest that the variables that influence the caregiving child's psychological well-being are: the number of activity restrictions placed on the sick mother (Bauman et al, 2002) and observations of the sick parent's expressions of anxiety, panic and despair (Christ, 2000). It has been further stated in the literature that a child providing caregiving services to a sick parent can exhibit increases absenteeism and somatic complaints as a result of the sick parent's pain intensity (Jamison & Walker, 1992). Thus, the existing research has focused primarily on illness variables and how they affect a caregiving child's degree of stress and psychological well-being, suggesting a need in the field for further examination of family context variables.

The second set of exploratory analyses was conducted to explore the relationship between the coping style choices of African-American children and resultant emotional and behavioral symptomatology. Gender and age differences in the use and impact of particular coping styles are evident in the prevailing literature (Eschenbeck et al., 2007; Hampel & Petermann, 2005). In

the current sample, the differential relationships between coping styles and symptomatology in girls versus boys were examined. Age was not taken into account, as the entire sample would be considered within the same developmental age group. Results indicated that girls' use of active coping significantly decreased their symptoms of depression, whereas this relationship was not found in boys. Interestingly, the use of social support-seeking strategies led to a significant increase in social anxiety symptoms in girls but not in boys. A similar finding in Hampel & Petermann's (2005) work suggested that despite the use of social-support seeking strategies, girls report more interpersonal stress leading to greater emotional distress. Active coping was found to be maladaptive in the sample of boys, leading to significant increases in social anxiety. While this is not entirely clear, it is possible that boys are less effective in choosing appropriate approach behaviors.

Within the entire sample of children, these analyses revealed a relationship between the use of active coping and the experience of depression, such that an increased use of an active coping style was predictive of less depression. Interestingly, this approach-oriented style of coping is seen in the literature to be adaptive in the case of controllable stressors, but less adaptive in the context of stressors over which the child has less control (Clarke, 2006). Having a sick parent would be considered, by most standards, an *uncontrollable* stressor and would be expected to lead to less positive outcomes. However, in the case of African-American middle schoolers, it proved to decrease symptoms of depression and was additionally associated with less conduct issues. An additional relationship between the use of avoidance coping and an increase in symptoms of depression and anxiety was also found. Again, avoidance coping is often seen as the coping style of choice in situations where children lack control (Hardy et al, 1993), yet it is consistently found to lead to depression, anxiety and conduct problems (Sandler,

Tein, & West, 1994). Interestingly, correlates were not found between distraction or supportseeking strategies and psychosocial outcomes. As previously stated, African-Americans are typically found to have extended family networks (Wilson, 1985) and access to a number of adults in the home was proposed as a potential buffer to negative psychosocial outcomes. However, the families with a sick parent in this sample had a mean of 2.18 adults in the home, which was likely not large enough to observe a unique impact of increased social-support.

It should be noted that some of the measures used in the current study have not been validated within a sample of African-American youth. As previously discussed, the psychometric properties of the CCSC-R1 (Program for Prevention Research, 1999) in an African-American adolescent sample yielded comparable internal reliability scores, yet revealed a 3-factor structure, as opposed to the 4-factor structure found in the Caucasian validity sample (Gaylord-Harden et al., 2008). Similarly, the internal reliability of the SCARED (Birmaher, et al., 1997) within an African-American adolescent population was acceptable, yet revealed a unique 3-factor structure, as opposed to the 5 factors found in the primarily White samples used in establishing validity (Boyd, et al., 2003). While the SDQ (Goodman, 1997), YCPSS (Early, Cushway, & Cassidy, 2006) and CES-DC (Weissman, Orvaschel, & Padian, 1980) do not have published validity data for an African-American sample of children, the psychometric properties of these measures in the current study's sample were comparable to those found in the samples used used to validate the scales.

Overall, the findings from this study suggest that the African-American girls dealing with the stress of living with a sick parent respond in ways comparable to the general population, in that they show a greater increase in anxiety symptoms than boys. In addition to greater overall anxiety, they exhibit higher separation anxiety than the males coping with the same stressor. It

was not found, as predicted, that females would also demonstrate higher levels of depressive symptomatology as the overall sample was actually found to be normative in the experience of depression. In the context of caregiving stress, this gender difference in overall anxiety was repeated in those girls experiencing "high" caregiving stress; with them, in addition to showing more separation anxiety, also showing a greater degree of social anxiety than boys. A higher degree of caregiving stress did not, however, result in a gender difference in depressive symptoms, as proposed. Additionally, African-American boys coping with living with a sick parent were found to rely on distraction coping to a greater extent than their female peers. They did not, as predicted, rely more heavily on avoidance coping, as girls and boys did not differ in their use of this strategy when faced with the stressor of having an ill parent. The exploratory findings in this study provide information about coping in a sample of African-American middleschoolers, which will be important in increasing the literature on coping in minority populations. Within the entire sample, active coping was found to decrease depression and conduct issues, while avoidance coping was found to increase symptoms of anxiety. Furthermore, the relationship between poor coping style choices and symptomatology observed in the prevailing literature was not found in the context of having a sick parent. Lastly, active coping was not found to be an adaptive strategy for African-American boys, contrary the anticipated benefit of such a problem-solving oriented approach.

#### **CHAPTER 5**

#### LIMITATIONS AND FUTURE DIRECTIONS

The current study was conducted with a number of limitations that should be taken into consideration when interpreting the results. Of primary concern was the modest number of respondents to the survey. Within the District of Columbia, charter schools are a common alternative to city public or private schools. They are generally chartered by individuals or organizations with a specific mission in mind and service a predominately minority population. With approximately 50 charter schools in active status at the time this study was conducted, 10% consented to participate in the current research study. Common factors contributing to a lack of participation included an unresponsive administration, an over-taxed staff with little to no additional time to facilitate such a project, and frequent school closings due to lack of funds and low enrollment. In the future, it is advisable that more established schools with sufficient staff and existing proposal review procedures be approached for participation in such a project. Furthermore, given the sensitive relationship minorities historically have with research studies, steps should be taken to individually address these concerns with respondents and perhaps more individualized data collection procedures be employed (e.g. direct interview, one-on-one survey completion). Similarly, the portion of the survey regarding medical history was met with varying degrees of resistance and, given the apprehension to respond to such inquiries, future work with a mentally or physically ill general population should take a sensitive approach to acquiring such information.

An additional limitation within the current study was the lack of specificity for defining the "carer" population. Children were identified as "carers" based solely on their parent's endorsement of an illness, not on the child's personal testament to having caregiving responsibilities. Furthermore, when completing the *Young Carers Perceived Stress Scale* (Early,

Cushway, & Cassidy, 2006), children were not asked to identify about which family member they were responding. Presumably, children may have answered questions about the caregiving experience with their *grandmother*, whereas their *mother* completed the parent survey. In the same vein, the parent survey did not inquire about other sick family members in the home to whom the child could possibly be a caregiver. In the future, researchers should utilize a measure that specifies if the child does/does not consider themselves a caregiver and to whom.

A further limitation existed in the utility of the illness type variable within this population. Primarily due to the small sick sample (n=36), there wasn't enough reoccurrence of any particular type (i.e. breast cancer) or category (i.e. mental or physical) of illness to analyze for their differential effects. In the same vein, few respondents completed the "degree of interference" portion of their health history, which left the researcher unable to determine the relative impact of incapacitation. Future work should limit the scope of illnesses examined when working with a smaller sample to ensure sufficient power to make comparisons.

Given the results of the exploratory analyses conducted on the overall sample, future work should further examine the relationships between coping styles and resultant internalizing and externalizing behaviors amongst African-Americans in middle childhood. Additionally, the impact of family demographics on the experience of young caregivers should be further explored, with an emphasis on the impact of family structure and parent education and employment. The current study did not collect data on the young carers' social support network, sense of self-esteem or environmental stressors, all of which are sources of future study into the dynamics that contribute to the experience of caregiving stress in children.

In conclusion, the current study offers a focused look at the coping styles and symptomatology associated with African American children living with a sick parent. While

existing literature has highlighted the experiences of parents caring for sick children, far les work has been done to examine the impact of having sick parents on children. Furthermore, research within minority populations is still significantly less available and the current study will add to that growing body of literature.

#### APPENDIX A

#### PARENT RECRUITMENT LETTER



Greetings, Parents of {School Name}! My name is Nikia Scott and I am a student at American University working towards my PhD in Clinical Psychology. My studies began here in Washington, DC as an undergraduate student at Howard University after which I began teaching within the DC Public Charter School System. Both of my experiences as a student and teacher have cultivated my desire to study developmental psychology and the family system. I am deeply committed to the children my work may one day help and I hope that you too will see its value.

I am currently conducting a research study at your child's school and would like to invite your participation. In order to enroll in the study, your child must be at least **10 yrs old**. The study consists of a few questionnaires to be completed by *one* parent in the home and *one* child. As a parent, you would need to sign a consent form agreeing to participate and then you would be asked to fill out two questionnaires that take approximately 15-20 minutes (total time) to complete. The questionnaires will ask you questions surrounding your family demographics, personal health history, and observations you have made of your child. These forms can be completed **online** and must be done in one sitting. At a later date, I will schedule a time (during the school day) where your child will complete their questionnaires in a classroom with the other children of parents enrolled in the study. Your child's questionnaires will ask them questions about their day-to-day feelings as well as any stresses they may experience and how they cope with them.

Research is *so* very important to the development of quality interventions for children and adolescents and your participation is <u>the key</u> to making that happen. I implore you to please take the time to join the study, as the small donation of time you make will have lasting effects on the support available to children just like yours.

Each family at your school that completes the study will be entered into a raffle for a \$50 gift card as a small token of my appreciation for your efforts. In addition, when the study results are available my research team and I will return to the school to discuss them with your children during a pizza party in their honor.

If you interested in participating in the study, please email me at <u>nikiascott@gmail.com</u> and I will send you the link to complete the study. Additionally, should you have any questions at all regarding the study please do not hesitate to contact me.

Thank you in advance, *Nikia Scott* 

# APPENDIX B

### CONSENT/ASSENT FORMS

#### **Consent to Participate in Research**

#### Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Nikia Scott from American University. The purpose of this study is to examine childhood coping styles and behavioral/emotional outcomes in the context of families who may or may not be dealing with various health issues. This study will contribute to the student's completion of her master's thesis.

#### **Research Procedures**

Should you decide to participate in this research study, you will be asked to sign this consent form once all of your questions have been answered to your satisfaction. This study consists of surveys that will be administered on the school campus to individual parent participants. You will be asked to provide answers to a series of questions related to your current/past health conditions as well as to select your child's hobbies, chores, and typical behaviors.

#### **Time Required**

Participation in this study will require 20 minutes of your time.

#### Risks

The investigator does not perceive more than minimal risks from your involvement in this study. The investigator perceives the following are possible risks arising from your involvement with this study: discomfort in answering questions of a sensitive nature regarding health history. Participants are assured that their completion of the surveys is completely confidential through the coding of their identity and administration of the surveys is done in a mixed group format whereby parents with and without a health history are grouped together.

#### **Benefits**

Potential direct benefits from participation in this study include your entry into a participant drawing for the prize of a \$50 gift card. Additionally, your participation in this study will contribute useful information to the ongoing study of coping strategies and emotional and behavioral outcomes of children with parents who may or may not be dealing with health issues. Overall, it may help schools and psychological services better tailor their interventions to the custom needs of each individual child coping with these family stressors.

#### Confidentiality

The results of this research will be presented at American University at the Master's Thesis Defense meeting, which will include psychology department faculty and students. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers will be destroyed.

#### **Participation & Withdrawal**

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. You may also refuse to answer any individual question without consequences.

### Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Nikia Scott Psychology Department American University ns9953a@american.edu

Carol Weissbrod, PhD Psychology Department American University (202) 885-1726 <u>cweissb@american.edu</u>

#### Questions about Your Rights as a Research Subject

Dr. David Haaga Chair, Institutional Review Board American University (202) 885-1718 <u>dhaaga@american.edu</u> Matt Zembrzuski IRB Coordinator American University (202) 885-3447 irb@american.edu

# **Giving of Consent**

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

Name of Participant (Printed)

Name of Participant (Signed)

Date

Name of Researcher (Signed)

Date

#### Assent to Participate in Research

My name is Nikia Scott. I am a student at American University. I want to tell you about a research study I am doing. A research study is a way to learn more about something. I would like to find out more about how children your age deal with things that bother them. I would also like to find out more about how children feel when one of their parents is sick and they have to help take care of them. You are being asked to join the study because you are old enough to participate and your parent/guardian has agreed to allow you to participate.

If you agree to join this study, you will be asked to answer questions on a few surveys that will ask you about your feelings in many different situations. It will take you about 45 minutes to finish the surveys.

Some of the questions may ask you about times when you have felt bad and it may be hard for you to think about these situations. If any of the questions make you uncomfortable you can tell us and stop at any time.

If you decide to join this study, we may learn something that, some day, will help other children in dealing with things that bother them. This study will also help us learn more about how children feel when they have a sick parent that they may have to help take care of.

If you decide to be in the study I will not tell anyone else what you say or do in the study. Even if your parents or teachers ask, I will not tell them about what you say or do in the study.

You do not have to join this study. It is totally up to you. You can say okay now and change your mind later. All you have to do is tell us you want to stop.

Before you say **yes or no** to being in this study, we will answer any questions you have. If you join the study, you can ask questions at any time. Just tell me that you have a question.

Signing here means that you have read this form or have had it read to you and that you want to join this study.

Subject's printed name	
Signature of subject	Date
Signature of investigator	Date

### APPENDIX C

### PARENT QUESTIONNAIRES

#### **Demographics Questionnaire**

Date:

ID:

Gender □ Male □ Female

#### Age

What is your birthdate (MM/DD/YYYY)? \_\_\_\_\_

#### **Marital Status**

What is your marital status? Married Widowed Divorced Separated Never married

### Education

What is the highest degree or level of school you have completed? If currently enrolled, mark the previous grade or highest degree received.

- □ No schooling completed
- □ Nursery school to 8th grade
- □ 9th, 10th or 11th grade

□ 12th grade, no diploma

- □ High school graduate high school diploma or the equivalent (for example: GED)
- □ Some college credit, but less than 1 year
- □ 1 or more years of college, no degree
- Associate degree (for example: AA, AS)
- □ Bachelor's degree (for example: BA, AB, BS)
- □ Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)
- □ Professional degree (for example: MD, DDS, DVM, LLB, JD)
- Doctorate degree (for example: PhD, EdD)

#### **Employment Status**

Are you currently...?

- Employed for wages; Hrs/week
- □ Self-employed; Hrs/week
- □ Out of work and looking for work; How long\_\_\_\_\_(yrs/months/days)

□Y □N Receiving resources while out of work

- □ Out of work but not currently looking for work \_\_\_\_\_(yrs/months/days)
- $\Box$ Y  $\Box$ N Receiving resources while out of work
- Homemaker
- □ Student
- □ Retired

Unable to work

# Housing

Is your house, apartment, or mobile home:

• Owned by you or someone in this household with a mortgage or loan?

• Owned by you or someone in this household free and clear (without a mortgage or loan)?

□ Rented for cash rent?

• Occupied without payment of cash rent?

### **Household Income**

What is your *total* household income?
Less than \$10,000
\$10,000 to \$19,999
\$20,000 to \$29,999
\$30,000 to \$39,999
\$40,000 to \$49,999
\$50,000 to \$59,999
\$60,000 to \$69,999
\$70,000 to \$79,999
\$80,000 to \$89,999
\$90,000 to \$99,999
\$100,000 to \$149,999
\$150,000 or more

# Ethnicity

Please specify your ethnicityHispanic or LatinoNot Hispanic or Latino

# Race

Please specify your race
American Indian or Alaska Native
Asian
Black or African American
Native Hawaiian or Other Pacific Islander
White

# **Family Size**

How many adults live in your household (including yourself)? \_\_\_\_\_ How many children live in your household who are... Less than 5 years old? \_\_\_\_\_ 5 through 12 years old? \_\_\_\_\_ 13 through 17 years old? \_\_\_\_\_

# Health Status

Place a checkmark to indicate all "Current" and/or "Past" conditions (Only select those for which you have received a professional diagnosis)

Health Condition	Current	In	Full	Age of	Degree of
		Remission	Recovery	Onset	Interference
					$(0-3)^*$
Arthritis					
Aneurysm					
Blood Disorder(s)					
Cancer:					
Breast					
Colon					
Prostate					
Lung					
Other					
specify:					
Diabetes					
Epilepsy					
Eye Condition(s)					
Fibromyalgia					
Heart Disease					
High Blood Pressure					
High Cholesterol					
HIV/AIDS					
Kidney Disease					
Lung Disease					
Multiple Sclerosis					
Osteoporosis					
Psychiatric Disorder:					
Depression					
Anxiety					
Substance Abuse					
Eating Disorder					
Bipolar Disorder					
Schizophrenia					
Other					
specify:					
Seizures/Epilepsy					
Stroke					
Thyroid Disorder					
Tuberculosis					
Ulcer					

\* rank from 0 (no interference at all) to 3 (greatly interfered) with family's normal functioning

List the details of any other any other major illnesses, surgeries, treatments or conditions, including those related to military service:

Please answer the following questions about the *one* child that will be participating in the study.

Full Name:	
Gender: $\Box M \Box F$	
Birthdate (MM/DD/YYYY):	
Grade in school:	_
Your relation to the child:	
□ Biological Parent □ Step Parent □ Foster Pare	nt 🗖 Adoptive Parent 🗖 Grandparent
Select (or supply) any jobs or chores the child has:	
Mowing lawn	Cleaning bathroom
□ Baby-sitting	U Washing car
□ Making bed	Doing Laundry
U Washing dishes	□ Paper route
□ Cooking	Working in a store
Others:	č

List any organized sports your child is involved in (i.e. basketball, football, cheerleading, etc.)

List any clubs/organizations your child is involved in (i.e. yearbook, debate, band, etc.)

List any hobbies your child is involved in (i.e. collecting stamps, computers, singing)

# Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of this young person's behavior over the last six months or this school year.

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings			
Restless, overactive, cannot stay still for long			
Often complains of headaches, stomach-aches or sickness			
Shares readily with other youth, for example books, games, food			
Often loses temper			
Would rather be alone than with other youth			
Generally well behaved, usually does what adults request			
Many worries or often seems worried			
Helpful if someone is hurt, upset or feeling ill			
Constantly fidgeting or squirming			
Has at least one good friend			
Often fights with other youth or bullies them			
Often unhappy, depressed or tearful			
Generally liked by other youth			
Easily distracted, concentration wanders			
Nervous in new situations, easily loses confidence			
Kind to younger children			
Often lies or cheats			
Picked on or bullied by other youth			
Often offers to help others (parents, teachers, children)			
Thinks things out before acting			
Steals from home, school or elsewhere			
Gets along better with adults than with other youth			
Many fears, easily scared			
Good attention span, sees work through to the end			

# APPENDIX D

# CHILD QUESTIONNAIRES

# Center for Epidemiological Studies Depression Scale for Children (CES-DC)

### INSTRUCTIONS

Below is a list of the ways you might have felt or acted. Please check how much you have felt this way during the past week.

DURING THE PAST WEEK	Not At All	A Little	Some	A Lot
1. I was bothered by things that usually don't bother me.	0	0	0	0
2. I did not feel like eating, I wasn't very hungry.	0	0	0	0
3. I wasn't able to feel happy, even when my family or friends tried to help me feel better.	0	0	0	0
4. I felt like I was just as good as other kids.	0	0	0	0
5. I felt like I couldn't pay attention to what I was doing.	0	0	0	0
6. I felt down and unhappy.	0	0	0	0
7. I felt like I was too tired to do things.	0	0	0	0
8. I felt like something good was going to happen.	0	0	0	0
9. I felt like things I did before didn't work out right.	0	0	0	0
10. I felt scared.	0	0	0	0
11. I didn't sleep as well as I usually sleep.	0	0	0	0
12. I was happy.	0	0	0	0
13. I was more quiet than usual.	0	0	0	0
14. I felt lonely, like I didn't have any friends.	0	0	0	0
15. I felt like kids I know were not friendly or that they didn't want to be with me.	0	0	0	0
16. I had a good time.	0	0	0	0
17. I felt like crying.	0	0	0	0
18. I felt sad.	0	0	0	0
19. I felt people didn't like me.	0	0	0	0
20. It was hard to get started doing things.	0	0	0	0

# Screen for Child Anxiety Related Disorders (SCARED) Child Version-Pg. 1 of 2

### INSTRUCTIONS

Below is a list of sentences that describe how people feel. Read each phrase and decide if it is "Not True or Hardly Ever True" or "Somewhat True or Sometimes True" or "Very True or Often True" for you. Then for each sentence, fill in one circle that corresponds to the response that seems to describe you for the last 3 months.

	0	1	2
	Not True or	Somewhat	Very True
	Hardly	True or	or Often
	Ever True	Sometimes	True
		True	
1. When I feel frightened, it is hard to breathe.	0	0	0
2. I get headaches when I am at school.	0	0	0
3. I don't like to be with people I don't know well.	0	0	0
4. I get scared if I sleep away from home.	0	0	0
5. I worry about other people liking me.	0	0	0
6. When I get frightened, I feel like passing out.	0	0	0
7. I am nervous.	0	0	0
8. I follow my mother or father wherever they go.	0	0	0
9. People tell me that I look nervous.	0	0	0
10. I feel nervous with people I don't know well.	0	0	0
11. I get stomachaches at school.	0	0	0
12. When I get frightened, I feel like I am going	•	•	•
crazy.	0	0	0
13. I worry about sleeping alone.	0	0	0
14. I worry about being as good as other kids.	0	0	0
15. When I get frightened, I feel like things are not	0	0	0
real.			
16. I have nightmares about something bad		•	
happening to my	0	0	0
parents.		•	
17. I worry about going to school.	0	0	0
18. When I get frightened, my heart beats fast.	0	0	0
19. I get shaky.	0	0	0
20. I have nightmares about something bad	0	0	0
happening to me.			

# Screen for Child Anxiety Related Disorders (SCARED) Child Version-Pg. 2 of 2

	0	1	2
	Not True or	Somewhat	Very True
	Hardly Ever	True or	or Often
	True	Sometimes	True
		True	
21. I worry about things working out for me.	0	0	0
22. When I get frightened, I sweat a lot.	0	0	0
23. I am a worrier.	0	0	0
24. I get really frightened for no reason at all.	0	0	0
25. I am afraid to be alone in the house.	0	0	0
26. It is hard for me to talk with people I don't	•	•	•
know well.	0	0	0
27. When I get frightened, I feel like I am choking.	0	0	0
28. People tell me that I worry too much.	0	0	0
29. I don't like to be away from my family.	0	0	0
30. I am afraid of having anxiety (or panic) attacks.	0	0	0
31. I worry that something bad might happen to my	•	•	•
parents.	U	0	0
32. I feel shy with people I don't know well.	0	0	0
33. I worry about what is going to happen in the	•	•	•
future.	U	0	0
34. When I get frightened, I feel like throwing up.	0	0	0
35. I worry about how well I do things.	0	0	0
36. I am scared to go to school.	0	0	0
37. I worry about things that have already	0	0	0
happened.	U	U	Ŭ
38. When I get frightened, I feel dizzy.	0	0	0
39. I feel nervous when I am with other children or			
adults and I have to do something while they	0	0	0
watch me (for example: read aloud, speak, play	Ŭ	U	Ŭ
a game, play a sport.)			
40. I feel nervous when I am going to parties,			
dances, or any place where there will be people	0	0	0
that I don't know well.			
41. I am shy.	0	0	0

# Young Carers Perceived Stress Scale (YCPSS) Short Version-Pg. 1 of 2

# INSTRUCTIONS

After reading each statement please check a box to indicate what you feel is most true for you.

	Never	A Little	Sometime	A Lot	Always
1. Getting teased because of the caring I do is a problem for me	0	0	0	0	0
2. I have plenty of energy for doing other things	0	0	0	0	0
3. I find that looking after my relative is easy	0	0	0	0	0
4. It bothers me that I can't take part in clubs or activities after school	0	0	0	0	0
5. I feel that there is no break from caring	0	0	0	0	0
6. I worry that if I wasn't caring I wouldn't know what to do with myself	0	0	0	0	0
7. Feeling different from other kids is a problem for me	0	0	0	0	0
8. It bothers me that caring takes over everything in my life	0	0	0	0	0
9. Caring helps me to feel trusted by my family	0	0	0	0	0
10. Caring can get in the way of having a boy or girlfriend	0	0	0	0	0
11. I am bothered that I have missed too much school	0	0	0	0	0
12. My family gets on well together	0	0	0	0	0
13. It bothers me that other people don't understand what I do to help my family	0	0	0	0	0
14. It bothers me that I don't know where I belong in my family	0	0	0	0	0
15. It bothers me that people never say they are pleased with my caring	0	0	0	0	0
16. It bothers me that I can't have a life of my own	0	0	0	0	0

# Young Carers Perceived Stress Scale (YCPSS) Short Version-Pg. 2 of 2

	Never	A Little	Sometime	A lot	Always
17. I get extra privileges like money or treats because of the caring I do	0	0	0	0	0
18. My family let me know how pleased they are with the work I do as a carer	0	0	0	0	0
19. I feel tired because of the caring I do	0	0	0	0	0
20. It bothers me that my family argues about the caring	0	0	0	0	0
21. I feel I know more about how to look after myself than other kids my age	0	0	0	0	0
22. It's hard to get a rest from caring	0	0	0	0	0
23. It bothers me what other kids will say if I take time off school	0	0	0	0	0
24. Caring for my relative helps me to feel important in my family	0	0	0	0	0
25. I worry about what I will do in the future	0	0	0	0	0
26. It bothers me what teachers will say if I fall behind at school	0	0	0	0	0
27. Having an ill or disabled relative helps me think about the good things in life	0	0	0	0	0
28. I feel left out in my family	0	0	0	0	0
29. Caring helps me to feel better about my relative's illness or disability	0	0	0	0	0
30. I feel closer to people in my family because of the caring I do	0	0	0	0	0
31. It bothers me that the teachers don't understand about my caring	0	0	0	0	0

# Children's Coping Strategies Checklist-Revision 1 (CCSC-R1) Pg. 1 of 3

# INSTRUCTIONS

Sometimes kids have problems or feel upset about things. When this happens, they may do different things to solve the problem or to make themselves feel better. For each item below, choose the answer that BEST describes how often you usually did this to solve your problems or make yourself feel better during the past month. There are no right or wrong answers, just indicate how often YOU USUALLY did each thing in order to solve your problems or make yourself feel better during the past month (or since a particular event).

When you had problems in the past month	Never	Sometimes	Often	Most of the time
1. You thought about what you could do before you did something.	0	0	0	0
2. You tried to notice or think about only the good things in your life.	0	0	0	0
3. You tried to ignore it.	0	0	0	0
4. You told people how you felt about the problem.	0	0	0	0
5. You tried to stay away from the problem.	0	0	0	0
6. You did something to make things better.	0	0	0	0
7. You talked to someone who could help you figure out what to do.	0	0	ο	ο
8. You told yourself that things would get better.	0	0	0	0
9. You listened to music.	0	0	0	0
10. You reminded yourself that you are better off than a lot of other kids.	ο	ο	ο	ο
11. You daydreamed that everything was okay.	0	0	0	0
12. You went bicycle riding.	0	0	0	0
13. You talked about your feelings to someone who really understood.	0	0	0	0
14. You told other people what you wanted them to do.	0	0	0	0
15. You tried to put it out of your mind.	0	0	0	0
16. You thought about what would happen before you decided what to do.	ο	0	ο	ο
17. You told yourself that it would be OK.	0	0	0	0
18. You told other people what made you feel the way you did.	0	0	0	0
19. When you had problems in the past month, you told yourself that you could handle this problem.	0	0	0	0
20. You went for a walk.	0	0	0	0

# Children's Coping Strategies Checklist-Revision 1 (CCSC-R1) Pg. 2 of 3

	Never	Sometimes	Often	Most of the time
When you had problems in the past month				
you feel upset.	0	0	0	0
22. You told others how you would like to solve the problem.	0	ο	0	0
23. You tried to make things better by changing what you did.	0	0	0	0
24. You told yourself you have taken care of things like this before.	0	ο	ο	ο
25. You played sports.	0	0	0	0
26. You thought about why it happened.	0	0	0	0
27. You didn't think about it.	0	0	0	0
28. You let other people know how you felt.	0	0	0	0
29. You told yourself you could handle what ever happens.	0	0	0	0
30. You told other people what you would like to happen.	0	0	0	0
31. You told yourself that in the long run, things would work out for the best.	0	0	0	0
32. You read a book or magazine.	0	0	0	0
33. You imagined how you'd like things to be.	0	0	0	0
34. You reminded yourself that you knew what to do.	0	0	0	0
35. You thought about which things are best to do to handle the problem.	0	0	0	0
36. You just forgot about it.	0	0	0	0
37. You told yourself that it would work itself out.	0	0	0	0
38. You talked to someone who could help you solve the problem.	ο	ο	ο	ο
39. You went skateboard riding or roller-skating.	0	0	0	0
40. You avoided the people who made you feel bad.	0	0	0	0
41. You reminded yourself that overall things are pretty good for you.	0	0	0	0
42. You did something like video games or a hobby.	0	0	0	0
43. You did something to solve the problem.	0	0	0	0
44. You tried to understand it better by thinking more about it.	0	0	0	0
45. You reminded yourself about all the things you have going for you.	0	0	0	0
## Children's Coping Strategies Checklist-Revision 1 (CCSC-R1) Pg. 3 of 3

When you had problems in the past month	Never	Sometimes	Often	Most of the time
46. You wished that bad things wouldn't happen.	0	0	0	0
47. You thought about what you needed to know so you could solve the problem.	0	0	0	0
48. You avoided it by going to your room.	0	0	0	0
49. You did something in order to get the most you could out of the situation.	0	0	0	0
50. You thought about what you could learn from the problem.	0	ο	0	ο
51. You wished that things were better.	0	0	0	0
52. You watched TV.	0	0	0	0
53. You did some exercise.	0	0	0	0
54. You tried to figure out why things like this happen.	0	0	0	ο

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