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# THE RELATIONSHIP BETWEEN PARENTAL ANXIETY, DEPRESSION AND DISTRESS AND THEIR CHILD'S SOCIAL COMPETENCY, BEHAVIOR AND EMOTIONAL REGULATION IN A CHILDREN'S PARTIAL HOSPITAL PROGRAM

by Melisa Maria LaSpada

#### A Thesis

Submitted in partial fulfillment of the requirements of the Master of Arts Degree of The Gradate School at Rowan University 5/6/03

Approved by	Professor	
Date Approve	d 5-12-03	

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#### **ABSTRACT**

Melisa M. LaSpada
THE RELATIONSHIP BETWEEN PARENTAL ANXIETY, DEPRESSION AND
DISTRESS AND THEIR CHILD'S SOCIAL COMPETENCY, BEHAVIOR AND
EMOTIONAL REGULATION IN A CHILDREN'S PARTIAL HOSPITAL PROGRAM
2002/03

Dr. John Klanderman & Dr. Roberta Dihoff Master of Arts in School Psychology

This study investigated the effect female caretaker psychopathology had on their child's treatment gains in the Children's Intensive Emotional Behavioral Day Program of the Children's Hospital of Philadelphia. The sample consisted of 31 children and 31 female caretakers. The female caretakers symptoms of psychopathology were measured by using the SCL-90-R Checklist and the children's behaviors were measured by using the Conners' Teacher Rating Scale. The results of this study were termed important since the number of children with behavioral and emotional problems is increasing and the treatment being provided seems to be lacking. It was hoped that the study would provide researchers and clinicians with information that would act as a tool in providing the most appropriate treatment for children. The purpose of this study was to provide insight into the effects caretaker anxiety, depression and distress had on their child's improvement in a partial hospital program in the areas of social skills, oppositional behavior, and emotional lability. Results indicated that female caretaker psychopathology had no effect on the child's treatment gains in an emotional and behavioral program.

### **ACKNOWLEDGEMENTS**

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#### CHAPTER ONE

#### **NEED**

Working everyday with children who suffer from emotional and behavioral problems one soon begins to see what a serious, pervasive and costly problem this is within communities. In the majority of the cases seen with behaviorally and emotionally disturbed children and their caretakers it is impossible to decipher between nature and nurture regarding family characteristics and symptoms. One factor that is significant in the child's progress is that of family involvement and participation. Some caretakers are concerned and involved and strive to learn new ways to interact with their children and others never give it a second thought. One may ask the question "what determining factors provide caretakers with the ability to be concerned and to be eager to change the life of their child's for the better?" However, there is a more important question, "why aren't some caretakers motivated and concerned and inspired to learn and change?" The biological makeup of the parental figures may influence their behavioral patterns regarding the treatment of their child. If a parent is suffering from a mental illness or a form of psychopathology their involvement in their child's treatment may be lacking. The lack of interest may be voluntary or involuntary, yet present. This study focused on the effect a female caretaker's psychopathology had on the treatment success of their child in an intensive emotional and behavioral day treatment program. The results of this study are important since the number of children with behavioral and emotional problems is increasing and the treatment being provided seems to be lacking. It is hoped that the study will provide researchers and clinicians with information that will act as a tool in providing the most appropriate treatment for children.

#### **PURPOSE**

With the growing rate of children being diagnosed with behavioral and emotional disorders many treatments and therapies have been developed and applied. A less common type of treatment is admitting a child into a partial hospital program that consists of a structured therapeutic approach. Within this model of care, family therapy and parent involvement is critical to the child's success in the program. One of the observations made during intake and throughout treatment is that many of the caretakers suffer from some variety of psychopathology. Does this psychopathology effect the treatment and success of the child? The purpose of this study was to provide insight into the effects caretaker anxiety, depression and distress had on their child's improvement in a partial hospital program in the areas of social skills, oppositional behavior, and emotional lability.

#### **HYPOTHESIS**

When a child has been given a diagnosis within the emotional and behavioral domain the child is now living with a label. Within school districts across the country, these are the children sitting in the principle's office, sitting at home due to suspension, fighting on the playground, or distracting the class. These are children who need help.

The most influential individuals in the child's transition from maladaptive functioning to adaptive and successful functioning are the child's parents or caretakers.

When a child is placed in a partial hospital environment with the purpose of modifying their maladaptive behaviors some children succeed and some do not. Some of the caretakers are involved in their child's treatment and some are not. Does one factor effect the other? The question then becomes - why aren't some caretakers involved in their child's journey to becoming a better functioning individual? Does pathology effect parental involvement? For this research study the hypothesis was:

Female caretakers with little or no psychopathology will have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program than will children who have female caretakers with a significant level of psychopathology.

# BACKGROUND of the CHILDREN'S SEASHORE HOUSE OF THE CHILDREN'S HOSPITAL OF PHILDELPHIA

The Children's Intensive Emotional and Behavioral Program (CIEBP) is located at the Children's Seashore House in Atlantic City, NJ. This program is a part of the Pediatric Psychology Department of The Children's Hospital of Philadelphia. The therapeutic milieu of the program is centered on consistency and structure. This program integrates behavior modification techniques, crisis prevention interventions, social skills training, and emotional/cognitive therapy. Staff is trained to develop individualized behavioral and emotional goals for each child. Throughout the child's stay in the program both adaptive and maladaptive behaviors are tracked across all therapeutic activities on a daily basis (The Children's Hospital of Philadelphia).

The foundation of the CIEBP is the B.E.S.T. system. This system allows staff to provide patients with the most appropriate individualized goals based on the child's diagnostic conceptualization (D'Amico & Wolfarth). The B.E.S.T. system incorporates both the success regarding the child's goals as well tracking maladaptive target behaviors. The goals selected for each child are based on Behavioral Compliance, Behavioral Safety, Emotional Functioning, and Social Functioning. The maladaptive Target behavior is recorded during the course of treatment and may change as the patient begins to show adaptive behaviors. At the end of each therapeutic activity a Point Value Rating System (0, 1, 2, 3) is given to each child for each of their four goals. Daily scores are recorded and the data is entered into a weekly graphic analysis. Staff can then take the child's percentage rate and determine if the goal is being achieved. Behavior interventions are modified based on the child's success rate. Staff provides feedback to the child regarding the success of their goals. Staff works with the patient to help them understand what new behaviors they need to work on as well as what adaptive behaviors they have reached (D'Amico &Wolfarth).

As the children are working to decrease their maladaptive functioning the involvement of the children's families is encouraged. Parents are urged to make weekly individual counseling sessions, to observer their child in the classroom, and to attend the weekly parent group. As parents attended group and observe, they begin to learn new ways to interact with their child. Families are taught how to self-regulate their emotions and behaviors and develop family coping strategies. Both the child and family are treated to hopefully integrate them in to the community successfully.

The program treats children from 4 –12 years of age. The children are referred to the program by school, parents, and the mental health community. Each child suffers from a range of emotional, behavioral and social skill deficits that interfere with normal daily functioning. The children referred to the program have often endured much hardship including biological predispositions, disruptiveness, slowed or inconstant development progress, unsuccessful school entry or chronic failure, poor socialization, family stress, history of multiple caregivers, neglect, abuse and loss. The behaviors these children often demonstrate are aggressive, labile, noncompliant, withdrawn, and irritable (The Children's' Hospital of Philadelphia). The children stay in the program for an average of 90 days. At the end of treatment a foundation has been laid for which these children can build future success.

#### **DEFINITIONS**

Anxiety – A symptom dimension in the SCL-90-R that centers on the over whelming sensation of worry, nervousness, and tension. Individuals may also experience many physical symptoms such as trembling, sweating, heart palpitations, chest pain or discomfort. There is also a sense of apprehension, fear and dread.

Behavior Modification – An approach to the assessment, evaluation, and alteration of behavior. This technique is used to improve a variety of behaviors in everyday life.

Children's Seashore House – A branch of Children's Hospital of Philadelphia located in Atlantic City, NJ. Within this facility is the Children's Intensive Emotional Behavioral Program (CIEBP). This is a day program that incorporates behavior modification and emotional therapy for children ages 4-12.

Conners' Teacher Rating Scale – A measure used to determine clinical significance of maladaptive behaviors in children. This scale will focus on hyperactivity, impulsivity, emotional liability, social skill deficits, oppositionality, and global functioning. For this scale, a score of 70 or higher is clinically significant.

Depression – The diagnosis of depression encompasses many clinical manifestations.

Within the SCL-90-R this dimension is represented by symptoms such as dysphoric mood and affect. There may be signs of withdrawal of life's interests, lack of motivation, and loss of vital energy. Individuals may also feel hopelessness, have thoughts of suicide and other cognitive and somatic complaints.

Distress – the intensity of the psychopathological symptoms experienced.

Hostility – A symptom dimension in the SCL-90-R represented by thoughts, feelings, or actions that are characteristic of the negative affect state of anger. The representation of hostility can be expressed as aggression, irritability, rage, and resentment.

Interpersonal Sensitivity – A symptom dimension in the SCL-90-R represented by the feelings of inadequacy and inferiority especially when comparing oneself to other people. Interpersonal interactions often result in discomfort, self-doubt, and self-deprecation.

Obsessive-Compulsive- A symptom dimension in the SCL-90-R represented as thoughts, impulses, and actions that are experienced as unremitting and irresistible and that are of an unwanted nature. The obsessions and compulsions significantly interfere with the individual's normal daily functioning, occupational functioning, or social relationships or activities with others.

Paranoid Ideation – A symptom dimension in the SCL-90-R represented as a cognitively based disorder in which the individual has hostility, suspiciousness, grandiosity, centrality, fear of loss of autonomy, and delusions.

Phobic Anxiety – A symptom dimension in the SCL-90-R represented as a persistent fear response to a specific person, place, object, or situation, that is irrational and disproportionate to the stimulus and leads to avoidance or escape behaviors.

Psychoticism – A symptom dimension in the SCL-90-R designed to represent the construct as a continuous dimension of human experience. This pathology represents symptoms of withdraw, isolation, a schizoid lifestyle and symptoms of schizophrenia such as hallucinations. This dimension provides for a graduated continuum from mild interpersonal alienation to dramatic psychosis.

SCL-90-R Instrument – A brief multidimensional self-report inventory designed to screen for a broad range of psychological problems and symptoms of psychopathology.

This instrument can be useful in the initial evaluation of patients, the measuring of patient progress during treatment and for research purposes.

Somatization – A symptom dimension in the SCL-90-R which includes problems or distress stemming from perceptions of bodily dysfunction. Symptoms for this classification include cardiovascular, gastrointestinal, respiratory, and other systems with strong autonomic reflection. The multiple somatic complaints cannot be fully explained by any known general medical condition.

Therapeutic Milieu – The organized basis of the CIEBP which is based on structure, routine and consistency. The program offers the implementation of behavior

modification techniques, the training of social skills, and personal discussion in emotional therapy groups.

#### **ASSUMPTIONS**

In conducting this research study two separate measures were be used. Both of these tools were confounding variables due to the subjectivity of the individuals completing the checklist and the individuals collecting the data. To test for caregiver psychopathology the SCL-90-R Checklist was be used. In providing this checklist to caregivers it was expected that they will answer each question honestly. It was assumed that the individuals receiving the checklist would not exaggerate or undervalue their symptoms.

For each child in the intensive emotional behavioral day program the Conners' Teacher Rating Scales was completed every 2, 6, 9, and 12 weeks by staff working at the Children's Seashore House. When completing the checklist it was assumed that every individual used the criteria appropriately to determine the most accurate score for that child.

#### LIMITATIONS

Within this research design the most significant limitation were the subjective scales used to collect the data. While the caretakers are completed the SCL-90-R they may have lied or exaggerated symptoms to meet the expectations of the administrator. Caretakers may have felt nervous and anxious and may have answered questions falsely. Also, some of the individuals who completed the SCL-90-R were not the biological

parents. They may have been grandparents, adoptive parents, foster parents, or another family member other than the biological parent. The Conners' Rating Scales that were used to determine child success in the program were scored by different observers. This factor may confound the results due the perceptions of scorers being different. Since partial hospital treatment for children with emotional and behavioral problems is rare the generalizability of these results may be limited.

Another confounding variable may be what treatment the caretakers were receiving to help them with their disorder. If the individual was receiving therapy or drug treatment, their interactions with their child are presumed to be better than those who are not receiving treatment.

#### OVERVIEW

Much more needs to be reviewed regarding caretaker psychopathology and how children are effected by both the nature and nurture of this circumstance. In Chapter 2, literature will be reviewed regarding parental psychopathology, how children are effected by such illness, and how caretaker roles are inhibited by having such illnesses. In Chapter 3, the design of the study will be discussed. The sample will be reviewed as well as the measures used to obtain the data. In Chapter 4, the results will be analyzed and interpreted. In Chapter 5, the conclusions will be provided as well as a discussion based on the results. Finally, future research ideas will be explored.

#### **CHAPTER TWO**

The following literature review will begin with a brief background of the increased rate of children being diagnosed with emotional and behavioral problems. Within this vast domain of psychiatric disorders and psychopathology, the behaviors of caretakers related to the disorders of depression, anxiety and distress will be discussed. Following each disorder the effects that the pathology has on the life of the child will be discussed regarding social competency, oppositional behavior, and emotional lability, respectively. Finally, literature will be reviewed discussing day treatment/partial hospitalization programs for children and adolescents.

#### EMOTIONAL AND BEHAVIORAL DISORDERS IN CHILDREN

There is growing concern regarding the number of children being diagnosed with emotional and behavioral disorders. One of the most contributing factors to this increase is the fact that caretakers with mental illness are not providing their children with the tools they need to lead an adaptive and functional life. Children of parents with mental psychopathology are at an increased risk for developing social or psychological problems (Rutter & Quiton, 1984). A child living with a caretaker with a psychiatric disorder is twice as likely to develop an emotional and behavioral disorder compared to children living without a mentally ill parent (Orvaschel, Walsh-Allisch, & Ye, 1988). Children

living within a stressful environment due to a caretaker's mental illness have been found to exhibit social and academic impairment (Orvaschel, Weissman, Padian, & Lowe, 1981), psychosocial stress (Cantwell & Baker, 1984), as well as various psychiatric disorders (Orvaschel, et al.1981).

# BACKGROUND INFORMATION ON ANXIETY DISORDERS AND TRANSMISSION

Of the vast array of psychiatric disorders, anxiety disorders are among the most prevalent in adulthood and childhood (Anderson, Williams, McGee, & Silvia, 1987; Kashani & Orvaschel, 1990). Within this diagnostic domain, anxiety disorders have a lifetime prevalence rate between 10 to 25 percent (Woodruff-Borden, Morrow, Bourland, & Cambron, 2002). It is conclusive from current studies that anxiety disorders aggregate in families, especially among first-degree relatives (Beidel & Turner, 1997). When comparing children of parents with an anxiety disorder and children of a normal population, children with anxious parents are seven times more likely to be diagnosed as having an anxiety disorder (Turner, Beidel, & Costello, 1987). The behavior of anxious parents effects the appropriate functioning of their children. The anxiety in the children manifests itself through different channels of behavior such as through conduct problems, depression and social skill deficits.

#### THE BEHAVIOR OF ANXIOUS PARENTS

Recent research suggests that the role of psychosocial factors as a mode for anxiety transmission has been underestimated (Tambs & Moum, 1993). The current

research conducted by Woodruff-Borden, Morrow, Bourland, & Cambron (2002) examined the behavior of anxious caretakers in interactions with their children to test hypothesis about possible psychosocial mechanisms of transmission.

The behavior of clinically anxious and non-anxious caretakers was observed and coded as they interacted with their children during mildly stressful tasks. The researchers looked for differences between the two populations in the areas of Overcontrol, Productive Engagement, Negative Interactions, and Disengagement/Withdrawal.

Woodruff-Borden et al. (2002) also explored specific behavioral differences between the two parental groups by examining their reaction to their child's negative affect. Results suggested anxious caretakers engaged in significantly less Productive Engagement and significantly more Disengagement/Withdrawal. A significant difference was also seen between the two parent groups on three individual behaviors. Anxious caretakers agreed less with their children, praised their children fewer times and ignored their children more frequently (Woodruff-Borden, et al.). Although not clinically significant, researchers noticed that the anxious parents acknowledged their children less, engaged in fewer positive and more negative behaviors, and more frequently directed implicit rejections and putdowns toward their children (Woodruff-Borden, et al.).

What this and past research provides is an understanding of what children learn from their anxious caretakers and the foundation that is set relating to interacting with others and the experience and expression of affect (Woodruff-Borden, et al., 2002). When children of anxious parents need help or are displaying a negative affect they look toward their parent for help, yet the help is not available. This may be due to the level of anxiety the caretaker is feeling. The anxious parent has used all of their resources to

manage their own distress leaving them unable to help their child. If an anxious caretaker is not available to help, their children may be left to deal with the stressful situation alone (Woodruff-Borden, et al.), thus not learning how to cope with stressors in real life situations. Anxious parents may not have effective coping skills to teach their children to handle situations such as school work, maintaining personal relationships, or regulating emotion (Woodruff-Borden, et al.).

In the study conducted by Whaley, Pinto, and Sigman (1999) multiple behaviors were observed and coded to characterize interactions between anxious mothers and their children. Seven behaviors of interest were examined based on past literature: granting of autonomy, conversational dominance, warmth, on-topic behavior, catastrophizing, maternal criticism, and maternal positivity. Statistical analysis resulted in five of the seven behaviors being clinically significant in comparing anxious mothers to a control group. Anxious mothers were significantly less granting of autonomy and displayed less warmth. Anxious mothers catastrophized more, were more critical and were less positive (Whaley, et al. 1999).

These parental behaviors increase and maintain anxiety disorders in children.

Further statistical analysis revealed that behavioral characteristics displayed by the mother during interactions with the child accounted for the largest portion of the variance in child anxiety. It is important to consider that the child's anxiety may impact maternal behavior in a cycle of mutual influence (Whaley, et al. 1999).

The family environment of anxious caretakers has been studied using standardized questionnaire methodologies. These studies reported that children of mothers with panic disorder viewed their families as less cohesive, more conflictual, less

independent, and more controlling than in normal control families (Silverman, W. K., Cerny, J. A., & Nelles, W. B. (1988). Messer and Beidel (1994) reported that children who suffer with anxiety describe their family environments as promoting less independence. The most anxious children were those who reported the most parental control. Ginsburg, Silverman, and Kurines (1995) study revealed that the behavior of anxious parents is highly conflictual and controlling, lacking familial support and cohesion, limited in their participation in recreational and social activities, and poor in communication and problem solving.

# EFFECTS OF PARENTAL ANXIETY ON CHILD SOCIAL COMPETENCE

There is an important relationship between parent and child social competence (Krantz, Webb, & Andrews, 1984). This relationship may be hindered if the caretaker is suffering from an anxiety disorder. In order to make and maintain social relationships children need to have been taught such social skills as learning how to regulate emotions, deal with stressors, handle conflict, and initiate conversation (Whaley, et al. 1999). The child may be deficient in all of these skills if their caretaker has an anxiety disorder.

In recent studies of children who fail to develop appropriate social skills and social knowledge early in life are more likely to experience an array of negative social consequences in adolescence and adulthood (Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Roff, Sell & Golden, 1972). The etiology of social competence is connected to understanding the role of the parents in providing social skill training to their children, especially within the first five years of life (Krantz, et al. 1984).

Socially active and socially appropriate caretakers are important models of social skills and provide social experiences for their children. Through watching their parent's involvement with others, children are learning the prerequisites for the initiation of social competence (Krantz, Webb, & Andrews, 1984). The children are learning social performance through observational learning and vicarious reinforcement for socially appropriate behavior (Bandura, 1977). Children also learn social problem-solving skills through observation and reinforcement (Huesman & Eron, 1989). Caretakers provide important information and well as act as models for their children. Also, "the child's cognitive processes may be influenced by the parents' own cognitive processes, that is, the scripts may be directly learned from the parents" (Keltikangas-Jarvinen, 2001). The results in the Krantz, et al. (1984) study show that "children of more socially active parents were more popular and socially accepted by their peers and more prosocial in their behavior toward peers" (Krantz, et al.).

In social interactions of children, the understanding and management of emotions has recently received increased recognition (Cassidy, Parke, Butkovsky, & Braungart, 1992; Hubbard & Coie, 1994). In managing emotions, researchers have focused on the knowledge of display rules and the ability to properly utilize the knowledge in social situations. In past research, display rules have been defined as socially appropriate responses to a given situation (Saarni, 1984; Underwood, Coie, & Herbsman, 1992). When a child uses display rules, they utilize the culturally appropriate emotional display rather than the emotion being felt (Gnepp & Hess, 1986).

McDowell & Parke (2000) examined the link between the endorsement of display rules and both peer and teacher ratings of a variety of socially competent behaviors. The

results indicate that socially competent children not only mask negative emotions, they also mask positive emotions in order to maintain social relationships with others (McDowell & Parke, 2000). In agreement with other studies (Jones, Abbey, & Cumberland, 1998) this study suggests that children who utilize more prosocial forms of display rules were rated by peers and teachers as more socially competent (McDowell & Parke, 2000). These socially competent children combine emotional regulation with other behaviors that in turn allow others to view them as socially competent. These children not only think of their own feelings and emotions, but they also think of the feelings of others. An example of prosocial forms of display rules is to mask their own feelings to keep their friend from feeling embarrassed (McDowell & Parke, 2000).

Past research has emphasized the importance of parental involvement in children's emotional socialization (Eisenberg, Cumberland, & Spinrad, 1998). Since parents do play such an important role in a child's social competency, anxious parents may not provide their children with the skills they need to be socially successful. The study conducted by Woodruff-Borden et al. (2002) revealed that anxious parents are unable to accept and help their children cope with strong negative feelings because their resources were used on trying to deal with their own negative feelings. "It is anticipated that parents who are highly accepting of children's emotions will be higher on a variety of emotional self-regulatory strategies" (McDowell & Parke, 2000). Since anxious mothers display a significant level of negative expressiveness and fail to help their children handle negative feelings (Woodruff-Borden, et al.), they endorse a lower level of prosocial display rules and endorse higher levels of self-protective display rules, thus being perceived as less socially competent (Jones, Abbey, & Cumberland, 1998).

The findings by Silverman et al. (1988) are that anxious caretakers exert a greater level of control over their children and promote a household with less independence. In the study conducted by McDowell and Parke (2000) children whose parents were more controlling were less likely to use appropriate display rules. Anxious caretakers deprive their children of the opportunity of practicing emotion regulation skills. Results indicate that either overcontrol or undercontrol of parents contribute to more negative outcomes in children (Eisenberg, Fabes, Schaller, Carlo, & Miller, 1991). When emotional expression is controlled by parents, children were rated as less socially competent (Eisenberg, Fabes, & Murphy, 1996; Roberts & Strayer, 1987).

#### BACKGROUND INFORMATION ON DEPRESSION AND

#### **TRANSMISSION**

The study of the risks to children raised by a depressed parent began 60 years ago (Kraepelin, 1921). However, the study conducted by Rutter (1966) is considered to be a modern landmark in the area of the depression (Dodge, 1990). Children of a depressed parent are two or three times more likely to be diagnosed with depression in their lifetime (Weissman & Boyd, 1985). This conclusion was reached by researchers studying the incidence of depression in the mothers of clinically depressed children (McKnew & Cytryn, 1973; Poznanski & Zrull, 1970) and by investigating the incidence of depression in the offspring of clinically depressed mothers (Billings & moos, 1983; Klein, Depue, & Slater, 1985; Weissman et al. 1984). The simplest notion of transmission of depression is genetically based, yet there are many findings suggesting other mechanisms of

transmission, including environmental, social, and interactional effects (Rutter & Quition, 1984).

In the article written by Dodge (1990) it is stated that children of depressed parents are not only at risk for developing depressive disorders, but they also have an increased risk to develop symptoms of depression (Boyd & Weisman, 1981), conduct problmes (Weisman et al. 1984; Zahn-Waxler, Cummings, McKnew, & Radke-Yarrow, 1984), anxiety (Weisman et al. 1984), behavior and somatic symptoms (Whiffen & Gotlib, 1989), attentional problems (Grunebum, Cohler & Kauffman, 1978, Weissman et al., 1984), difficult temperamnet (Trad, 1986), insecure attachment (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985), poor emotional regulation (Field et al. 1985), and social incompetence (Trad, 1986).

#### BEHAVIOR OF DEPRESSED PARENTS

When a caretaker suffers from a depressive disorder there is an increased risk in disruptions in parenting and in the family environment. These disruptions lead to maladaptive functioning in the child (Dodge, 1990). Rutter (1966) concluded that depressed mothers are more hostile toward their children than nondepressed mothers. Depressed mothers are reported as being irritable, uninvolved, and unaffectionate (Weissman, Paykel, & Klerman, 1972). Research by Weissman and Paykel (1974) found that depressed mother's have poor communication and friction in their relationships with their children. A depressed caretaker's psychiatric disability may result in maladaptive development and functioning in their children (Dodge, 1990).

From the beginning of the child's life a depressed mother can have a drastic impact on the child. The study conducted by Cohn, Campbell, and Matias (1990) indicated that depressed mothers were less positive with their new babies. A parent suffering with a depressive disorder tend to spend more time with their infant in a negative affect state than in a positive affect state (Fielf, Healy, Goldstein, & Guthertz, 1990).

The living environment that a depressed caretaker provides for their child is one of increased negative and unpredictable parental behavior, such as irritability and inconsistent discipline. The depressed parent provides less supportive parental behavior such as warmth, praise, and nurturance. A depressed caretaker also has an increased rate of martial conflict with their spouse causing additional stress in the home environment (Cummings & Davies, 1992). The depression interferes with successful parenting leaving the parent withdrawn, avoidant, and unresponsive to their child's needs. The parent may be intrusive, irritable toward their children or overly involved in their lives (Gelfand & Teti, 1990). Living with this type of caretaker creates a very stressful situation for the child. Studies conducted by Hammen and colleagues (Adrian & Hammen, 1993; Hammen, 1997, 2000) "provide strong evidence for the role of stress as a mediator of the impact of parental depression on child adjustment (Langrock, Compas, Keller, Merchant, & Copeland, 2002)."

Langrock et al.'s (2002) study examined the types of stressful situations children of depressed caretakers are exposed to, the ways in which the children cope with and respond to stressful situations, and the role of coping as a mediator between stress and children's emotional and behavioral problems. In this study the depressed caretaker

competed The Child Behavior Checklist to assess behaviors of anxiety, depression and aggression in their children. Parents reported that their children show moderate to high levels of anxiety/depression and a moderate level of aggression (Langrock, et al. 2002). The mean scores for the population in this study were close to the mean scores of children who are clinically referred to treatment for psychopathology. The children in this sample displayed a range of problem behaviors (Langrock, et al.).

According to the scales completed by the caretakers, the children within the sample population were exposed to moderate levels of stress related to parental withdrawal, intrusiveness, and marital conflict in the previous six months. The means scores for these three specific parental behaviors indicate that the children experienced a single stressor from each parental behavior almost every day and the children experienced multiple stressors frequently (Langrock, et al. 2002).

#### EFFECTS OF DEPRESSION ON A CHILD'S BEHAVIOR

Children of depressed caretakers are at risk for developing internalizing disorders, such as depression and anxiety, but they are also vulnerable to developing externalizing disorders, such as delinquent and oppositional behavior (Anderson & Hammen, 1993).

Oppositional behavior displayed by children of depressed parents is directly related to the coping abilities of the child. It is the coping mechanisms that are influenced by depressed caretakers. The stress of living with a depressed caretaker will predict the coping ability of the child to deal with stress in the home as well as stress outside the home (Langrock, Compas, Keller, et al. 2002).

The study conducted by Langrock, et al. (2002) investigated both voluntary/controlled and involuntary/automatic responses of a child to stress of living with a depressed caretaker. The responses involved engagement with or disengagement from a stressor and the child's emotional reactions. The purpose of the study was to examine the stressful situations children of depressed caretakers are exposed, the ways that the children cope with and respond to these situations, and the role of coping as a mediator between stress and children's emotional and behavioral problems. The researchers predicted a positive association between frequency of exposure to parental stressors and children's behavioral problems (Langrock et al.).

Results indicated that the children exhibited moderate to high levels of anxiety/depression and aggressive behavior. The symptoms of the children were directly related to parental behavior such as intrusiveness, irritability, and parental withdrawal. Also, using comparative measures on the Child Behavior Checklist with clinically referred children, the sample population approached the mean T score of the clinical referred children, both showing a range of problem behaviors (Langrock, et al. 2002). The means for the children's coping responses showed that the majority of the children used an involuntary engagement stress response. This type of stress response involves emotional and physiological arousal, intrusive thoughts and rumination. When a child uses this type of coping technique, they show an increased rate of anxiety/depression and aggression (Langrock, et al.). "Children who were unable to modulate their arousal and to shift the focus of their attention from problems they had with their parents appeared to have more adjustment problems (Langrock, et al.)."

The foundation of the relationship of depressed mothers and their children is often based on irritability and guilt (Belle, 1982). The interactions of depressed parents with their children involves the parent feeling worthless, helpless, and undeserving. These feelings within the caregiver often become overwhelming and difficult to manage alone. The parent may seek out their child to share in the suffering and guilt. Since the child may spend a lot of time with this parent, the child may soon begin to feel responsible for negative events just by being present. Through conditioning, the child may soon begin to generalize the feelings of guilt. This generalization will allow the child to feel responsible for bad things that happening outside of the home (Zahn-Waxler, Kochanska, Krupnick, & McKnew, 1990).

The discipline techniques used by depressed mothers may instill a feeling of guilt in their child. By making negative attributions toward their child, by using guilt and anxiety induction procedures, as well as stating feelings of disappointment, leave the child feeling ashamed and guilty (Susman, Trickett, Iannotti, Hollenbeck, & Zahn-Waxler, 1985). The symptom of withdrawal experienced by many parents with depression is often used as a discipline technique. The mothers will distance themselves from the child by being uninvolved and less emotionally available hence allowing the child to experience love-withdrawal, a psychological experience that is related to guilt in children (Zahn-Waxler, et al. 1990).

In the study conducted by Zahn-Waxler, et al. (1990) adaptive and maladaptive patterns of guilt were studied in different types of situations in children of different ages, as well as the relation of guilt to other emotions. The sample population consisted of children of well mothers and children of depressed mothers. Results suggested that the

basis of guilt in children of well and depressed mothers may be different. The guilt felt by the younger children of well mothers was due to empathy and concern about others and was consistent over different settings. The children of depressed mothers became overly aroused in hypothetical situations of interpersonal conflict and distress leading Zahn-Waxler, et al. (1990) to believe that the children felt high levels of responsibility and involvement. The emotions experienced by children of depressed mothers and the behavioral patterns they are taught may interfere with the child's social relationships, school success and the ability to behave appropriately.

#### BACKGROUND INFORMATION ON PSYCHOLOGICAL DISTRESS

When an individual is experiencing psychological distress he/she is not the only person feeling the effects. The consequences are felt by everyone surrounding that individual (Ge, Conger, Lorenz, Shanahan, & Elder, 1995). Studies of adult psychological distress report that individuals with emotional distress are likely to experience the same emotional distress in the future (Nolen-Hoeksema, 1990). The psychological distress felt is most often not a single event or episode, rather it is the precedent of future emotional problems (Lerner, Hertzog, Hooker, Hassibi, & Thomas, 1988). One of the greatest negative impacts of psychological distress is that of interpersonal relationships, especially within the family (Compas & Wagner, 1991). It has been demonstrated that the distress of a caretaker will significantly influence a child's chance of developing psychopathology (Ge, et al. 1995).

#### PSYCHOLOGICAL DISTRESS IN PARENTS

There is a relationship between maternal distress and psychological problems in their children (Kinsman, 2001). However, this relationship has been cautioned because parents under psychological distress may perceive their children more negatively and report more maladaptive behaviors than would a parent without psychological distress (Boyle & Pickles, 1997). In the study conducted by Kinsman (2001) mothers who reported personal psychological distress also felt that the family had poor adaptability skills and less cohesion. They also reported more behavior problems in their child's daily functioning. In a study conducted by Gaetano (1998) children self-reported better daily functioning than did their mothers who were clinically significant for distress. Kinsman (1997) reported that for mothers with psychological distress, child's behavior, family functioning, and child's daily functioning were seen as one a single factor. The children in Kinsman's (1997) study were able to discriminate among the many factors of every day life while their mothers were not.

Many researchers have raised the question of whether the increased rate of childhood behavior problems is due to the over-reporting of distressed parents' distorted perceptions of their child's behavior (Sawyer, 1998). Sawyer (1998) conducted a study in which he had two-parent families as well as the child complete the Child Behavior Checklist. Both maternal and paternal distress only had a small effect on their individual reports of their children's emotional and behavioral problems (Sawyer)." Sawyer's findings suggest that, "although distress may have an effect on parents' reports of children's emotional and behavioral problems, for the great majority of parents participating in community-based epidemiological studies the size of this effect is likely

to be very small (Sawyer)." This study was different from past studies that investigated the influences of parental distress on the reporting of children's behaviors, in that others studies focused on parents with depression and anxiety, where as Sawyer concentrated on maternal distress as a whole.

# EFFECTS OF PARENTAL DISTRESS ON A CHILD'S EMOTIONAL REGULATION

The distress levels of caretakers influence the level and adaptive functioning of emotional regulation their children are capable of performing. When caretakers are emotionally distressed they react to their children's negative emotions by using negative control strategies (Fabes, Leonard, Kupanoff, & Marin, 2001). Caretakers may believe that their children are displaying negative emotions to manipulate others or parents may perceive the behavior as inappropriate or harmful. Gottman (1997) reported that parents would punish their children or minimize the negative emotion to stop the expression of the feeling. The stopping of the emotion relieves the parent from the uncomfortable feeling, not the child.

When comparing distressed mothers to neutral or happy mothers, mothers who feel angry respond more negatively to their children and believe that they need to treat their children in a harsh manner (Dix, Reinhol, Zambarano, 1990). Fabes, Poulin, Eisenberg, and Madden-Derich (in press) found that responding to a child's negative emotions with distress is connected to harsh socialization practices. The negative responses of caretakers to their children's negative emotions and behaviors hinder adaptive adjustment and functioning (Cassidy, Parke, Bukowsky, & Braungart, 1992). A

distressed reaction with severe control responses from the caretaker produces children who are less emotionally expressive and less able to decode others' emotions. Emotional reactions from the parent may undermine the child's emotional security and regulation (Fabes, et al. 2001). Cummings and Davies (1996) reported that it is important for a child to feel emotionally secure. If there is an interruption in the emotional security, negative experiences within the family begin to accumulate, resulting in a pattern of dysfunctional emotional regulation.

Theory suggests that caretakers who respond negatively to their children's negative emotions produce children who are "less emotionally competent and have difficulty optimally regulating their emotions or behaviors (Fabes, et al. 2001)." Buck's (1984) research states that increased negative emotional arousal and anxiety are produced in children who are forced to suppress negative emotions. Children learn to store their negative feelings over time which results in an explosion of emotions that is difficult for the child to regulate (Buck, 1984). If caretakers can remain emotionally controlled when their children have negative feelings they are more likely to be supportive, thus teaching their child regulated ways to balance their emotions (Denham & Grout, 1992).

Distressed caretakers are unlikely to be supportive through the negative emotional expression of their child. A distressed parent is more likely to respond by feeling emotionally disorganized and punishing the child (Gottman, 1997; Fabes et al. 1993).

Fabes et al's. (2001) study investigated the "moderating role that parental emotional distress plays in influencing the relation between parental coping with children's negative emotions and children's negative emotional displays (Fabes et al. 2001)." It was expected that the increase of parental distress would strengthen the

relationship between negative parental coping strategies and children's emotional response (Fabes et al. 2001). The results confirmed the hypothesis that "parental distress moderates the relation of harsh parental coping to children's negative emotions (Fabes et al. 2001)." It was also found that "children's emotional intensity mediates the relations between harsh and distressed parental responses to children's negative emotions (Fabes et al. 2001)."

#### PSYCHIATRIC DAY TREATMENT PROGRAMS

Day treatment programs are becoming an increasing popular therapeutic intervention for children and adolescents with psychiatric disorders (Kotsopoulos, Walker, Beggs, & Jones 1996). The children that attend day treatment/partial hospitalization programs are children who suffer from emotional and behavior disorders. These programs treat children and adolescents with moderate to server disturbances. Each program is unique in interventions, modalities used, as well as the patient population served and the intensity of the program (Milin, 2000). Day treatment programs are preferred to inpatient programs because they are more cost efficient for the family and less disruptive to the child and the family. Programs such as these help prevent the child from becoming totally dependent on services (Kotsopoulos, et al. 1996; Milin, 2000).

Most day treatment programs operate 5 days a week and provide services for 8 hours a day. The programs usually contain a small population of about 19 patients on average, who were referred to the program from school systems or family members.

Most children within the programs present disruptive behavior disorders, such as conduct

disorder or oppositional defiant disorder, as well as affective disorders, such as depression or adjustment disorder (Milin, 2000; Kotsopoulos et al. 1996).

Day treatment programs can range in the level of therapeutic care provided. The program can provide acute care, meaning the patient stayed for 30 days or less with treatment focus on stabilization and symptom reduction. Medium care is characterized as the patient staying in the program from 30 to 90 days. Long term care provides the patient with treatment for 90 or more days and focuses on rehabilitative and re-educative interventions and relapse prevention (Milin, 2000).

Research has focused on day treatment programs in Canada and has shown behavioral and academic improvement from admission to discharge (Grizenko & Sayegh, 1991). Research has shown improvements in the areas of a lowered frequency of behavioral problems, increased global functioning and higher reading scores (Grizenko et al. 1994; Kotsopoulos et al. 1996). In another Canadian study, Blackman and colleagues (1986) investigated the outcomes of adolescents attending a long-term day and evening treatment program that used multiple modes of interventions. Results showed that the adolescents had significant improvements at their time of discharge in the areas of self-concept and internalizing disorders. There were not significant improvements in the areas of family functioning or externalizing disorders (Milin, 2002).

Kiser et al. (1996) attempted to investigate two multimodal, long-term partial hospitalization programs in the United States. Positive outcome was related to mental health treatment and negative outcome was connected with disruptive disorders, out of home placements, and pervious hospitalization or residential placement (Kiser et al. 1996).

Study conducted by Milin (2000) evaluated outcome over a three-year period of pre-post program improvements after attending a day treatment unit. Factors investigated were changes in emotional, behavioral, family, and academic functioning. Investigators also identified pre-admission and admission variables that influenced treatment outcomes. They also evaluated the adjustment of the adolescents one year after discharge (Milin, 2000). Results showed significant gains in behavioral improvements from admission to discharge. Improvements in functioning included both externalizing and internalizing behaviors for both parent and child. Maintenance of behavioral-emotional gains was seen at follow-up as well. Other studies as well have reported significant behavioral improvements from admission to discharge (Ketwell, Jones, & Jones, 1985, Kiser et al. 1996). The adolescents also continued to show academic improvements such as improving academic grades (Milin, 2000). Investigators found that negative outcomes for the children were increased if the child had a disruptive disorder, were in an out of home placement, and if the patients previous treatment history had failed (Kiser, et al. 1996).

#### CHAPTER THREE

## **SAMPLE**

This study was based on 31children who attended the Children's Seashore House of the Children's Hospital of Philadelphia in Atlantic City, New Jersey. This program is for children who suffer from emotional and behavioral disorders. Children are recommended to this program for an array of emotional and behavioral problems. For the purpose of this study focus was aimed in the areas of oppositional behavior, social skill deficits, and emotional lability for the 31 patients. The ages of the children in this study ranged from 4 to 12 years of age. Out of the 31 children, 15 were African American, 3 were Hispanic, and 12 were Caucasian. Within this sample 25 of the patients were male and 6 were female.

The sample also included the female caretakers of the 31 children. The female caretakers have been the primary caretaker for the child for at least one year. Based on the results of the SCL-R-90 Checklist, the female caretakers were classified as showing symptoms of depression, anxiety, global distress, other symptom presentations, and no symptoms. From the female caretaker population, 15 were the biological mothers, 12 were other family female caretakers, and 4 were foster/adoptive parents.

## **MEASURES**

In the analysis, three maladaptive behaviors of the children, including oppositional behavior, social skill deficits, and emotional lability, were examined in

relation to domains of parental pathology including depression, anxiety, and distress, respectively.

## CHILDREN'S MALADAPTIVE FUNCTIONING

While the child was in the Intensive Emotional Day Program data collection was gathered every 2, 6, 9, and 12 weeks by using the Conners' Teacher Rating Scale-Revised: Long Form (CRS-R:L). The Conners' Rating scale contained 59 items and covered many subscales of dysfunction. This scale indicated when a child showed significant levels of maladaptive behaviors in many domains of functioning. For this study, the domains of oppositional behavior, social skill deficits, and emotional lability were studied.

The revised Conners' Rating Scales is based on 30 years of research on childhood and adolescent psychopathology and problem behavior. The normative sample is based on 1,973 children and adolescents between the ages of 3 and 17.

#### RELIABILITY OF THE CONNERS' RATING SCALE

The internal consistency was measured using the Cronbach's alpha coefficient.

For the CTRS-R:L the coefficients for internal reliability ranged from around 0.882 to 0.952. The standard error aspect of reliability contains the standard error of measurement and the standard error of prediction. The standard error of measurement is the standard deviation of observed scores if the true score is held constant. The standard error of measurement ranged from 0.572 to 2.102 for ages 3-17. The standard error of prediction is the standard deviation of predicted scores if the obtained score is held constant. The

standard error of prediction ranged from 0.027 to 2.940. Test-retest reliability coefficients ranged from .47 to .88.

## VALIDITY OF THE CONNERS' RATING SCALE

Intercorrelations were examined for males and females regarding factorial validity. The mean intercorrelation for males was .36 and for females, .27. Discriminant validity of the CTRS-R:L was completed using three groups of children and adolescents with ADHD. The three groups differed in age [F(2,436)= 20.81, p<.001] and a series of one-way ANOVAs were completed and the effect for group was found to be significant for all of the CTRS-R:L subscales.

## MEASURES OF FEMALE CARETAKER'S PSYCHOPATHOLOGY

Parental symptoms of depression, anxiety and global distress were gathered by administering the Symptom Checklist –90-R (SCL-90-R). The SCL-90-R is a 90-item self-report symptom inventory used to investigate the psychological symptom patterns of an individual. The SCL-90-R is scored and interpreted based on nine symptom domains and three global indices of distress. For this study the three domains that were used to indicate parental pathology were Depression (DEP), Anxiety (ANX), and the Global Severity Index (GSI).

## RELIABILITY OF THE SCL-90-R CHECKLIST

To determine the internal consistency coefficients for the symptom dimensions, 209 symptomatic volunteers (Derogatis, Rickels, & Rock, 1976) and 103 psychiatric

outpatients (Horowitz, Rosenderg, Baer, Ureno & Villasenor, 1988) were used as sources. For both sources, the coefficient alpha was used the determine reliability. Coefficients from both studies were satisfactory. Coefficients ranging from a low of .77 for the Psychoticism to a high of .90 for Depression were found by Derogatis, et al. (1976), and coefficients from a low .79 for Paranoid Ideation to a high of .90 for Depression were found by Horowitz et al. (1988).

Derogatis, et al. (1976) investigated 94 heterogeneous psychiatric outpatients who. were assessed during an initial evaluation and reassessed one week later before beginning a therapy session. The test-retest reliability coefficients found were between .80 and .90. Horowitz et al. (1988) reported test-retest coefficients between .68 for Somatization to .83 for Paranoid Ideation after an elapsed time of ten weeks.

## VALIDITY OF THE SCL-90-R CHECKLIST

Derogatis and Cleary (1977) created a study to test for internal structure of the SCL-R-90. This was done by casting the hypothesized dimensional structure in to the form of a hypothesis matrix. The results showed that the SCL-R-90 can be recovered from real clinical data and that the empirical measures correlate well with established and accepted external criterion measures. Factorial invariance was also studied by Derogatis and Cleary (1977), stating acceptable levels of invariance for all nine dimensions of the SCL-R-90 across the domain of gender. By using the invariance coefficient by Pinneau and Newhouse (1964), high levels of agreement, .60-. 85 were found between males and females structural definitions of eight of the nine dimensions. To test for convergent-discriminant validity the SCL-R-90 was compared to the MMPI, the Wiggins content

scales, and the Tyron's cluster scales. Acceptable levels of convergent-discriminant validity were found with the correlations ranging from .41 to .75.

## **DESIGN**

As the patients entered the program the guardian of the child was given the SCL-90-R checklist to complete. For the purpose of this study, only the checklists of female caretakers of at least one year were utilized. This checklist was explained to the guardian by the social worker and then time was given to complete the checklist. The completed inventory was scored and placed in a specific binder containing other completed checklists.

The Conners' Teacher Rating Scales were completed by the Behavioral Specialists for each child every 2, 6, 9, and 12 weeks while the child was in the program. The scale was scored on the same scoring sheet to compare improvements or declines in behavior throughout the child's treatment in the program.

For this study, archival data, consisting of completed and scored SCL-90-R's and CTRS-R:L's of 31 patients and their female caretakers were investigated. A data sheet was used to record the child's scores on the Conners' Scale for oppositional behavior, social skill deficits, and emotional lability at 2, 6, 9, and 12 week intervals. A data sheet was also used to record the score the caretaker received on the SCL-90-R in the domains of depression, anxiety, and global distress, as well as if they had symptoms of other psychopathologies or if they presented no psychopathological symptoms. The investigation of the archival data indicated if parental symptoms of pathology effect their child's success in the program. The caretaker's scores in the areas of anxiety, depression,

and distress were compared to the child symptoms of social skill deficits, oppositional behavior and emotional lability.

## **TESTABLE HYPOTHESIS**

Null hypothesis: Female caretakers with little or no psychopathology would not have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program compared to female caretakers with a significant level of psychopathology.

Alternate hypothesis: Female caretakers with little or no psychopathology would have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program than would children who have female caretakers with a significant level of psychopathology.

## **ANALYSIS**

After obtaining the completed SCL-90-R's, the raw score for each of the female caretakers was converted to a T-score. For the basis of this study a T-score of 65 or greater was considered clinically significant. The female guardians whose T-scores on the SCL-90-R were clinically significant for anxiety, depression and distressed were grouped according to psychopathology. However, after breaking the female caretakers' psychopathologies into groups there was not enough of female caretakers in each group to perform a multivariate ANOVA. The female caretaker group was then divided into two groups, a group that displayed symptoms of psychopathology and a group that did not report symptoms of psychopathology. The female caretaker scores were then compared to the scores on the Conners' Teacher Rating Scales in the domains of social skills,

oppositional behavior, and emotional lability. A T-score for the three domains of the Conners' was also recorded. A T-score of 65 or greater was considered clinically significant. The Independent Variables for the study were 1) Female caretakers with symptoms of psychopathology 2) Female caretakers with no symptom presentation and 3) Treatment over time of the children, consisting of two repeated measures – 2 weeks and 12 weeks. The Dependent Variables for the study were the Conners' scores of the child in three domains of functioning – 1) Social Skill Deficits, 2) Oppositional Behavior, and 3) Emotional Lability.

The statistical analysis that was used for this study was a multivariate ANOVA.

This type of analysis allows for more than one dependent variable - social skills deficits, oppositional behavior, and emotional liability.

## **SUMMARY**

This research intended to investigate the connection between a female caretaker's psychopathology and their child's maladaptive behaviors. If the findings of this study support a connection between female caretaker's psychopathology and the extent and specificity of their children's maladaptive behaviors, then it can help to target new interventions for both caretaker and child. Interventions could be based on teaching children more effective skills to handle the stress of living with a depressed parent (Langrock, Compas, Keller, Merchant, & Copeland, 2002). Caretakers could be educated about the interrelationship between their difficulties and those of their child and targeted interventions could be developed with the parent that would alleviate some of these dynamic variables.

#### CHAPTER FOUR

To characterize the property of the significigance between the psychopathology of female caretakers and the treatment gains their children make in an Intensive Emotional Behavioral Day Program a multivariate ANOVA was conducted. Three maladaptive behaviors in the children – oppositional behavior, social skills deficits, and emotional lability were examined in relation to domains of parent psychopathology. The hypothesis was:

Female caretakers with little or no psychopathology will have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program than will children who have female caretakers with a significant level of psychopathology.

The domains of parent psychopathology were to be broken down into depression, anxiety, and distress, however due to a small sample size the female caretakers were grouped into either a psychopathology group or a no symptom psychopathology group.

## RESULTS REGARDING OPPOSITIONAL BEHAVIOR

It was hypothesized that 1) the children would show treatment gains in oppositional behavior from 2 weeks in the program to 12 weeks in the program and 2) that the children of female caretakers with symptoms of psychopathology would show less treatment gains than those children whose female caretaker did not have significant levels of psychopathology. The multivariate test regarding the within-subject factor of treatment gains over time for oppositional behavior was significant, p<0.01. The

multivariate tests comparing effect over time in oppositional behavior and psychopathological symptoms in female caretakers was not significant (Table 4.1).

TABLE 4.1- With-in Subject Factor of Treatment Gains for Oppositional Behavior

EFFECT	SIGNIFIGANCE VALUE	N
Children with Oppositional Behavior		31
Female Caretakers with Psychopathology		19
Female Caretakers without Psychopathology		12
Oppositional 2wk vs. 12wk	0.014	

## RESULTS REGARDING EMOTIONAL LABILITY

It was hypothesized that 1) the children would show treatment gains in emotional lability from 2 weeks in the program to 12 weeks in the program and 2) that the children of female caretakers with symptoms of psychopathology would show less treatment gains than those children whose female caretaker did not have significant levels of psychopathology. The multivariate test regarding the within-subject factor of treatment gains over time for emotional lability was not significant. The multivariate tests comparing effect over time in emotional lability and psychopathological symptoms in female caretakers was not significant.

## RESULTS REGARDING SOCIAL SKILLS DEFICITS

It was hypothesized that 1) the children would show treatment gains in social skill deficits from 2 weeks in the program to 12 weeks in the program and 2) that the children

of female caretakers with symptoms of psychopathology would show less treatment gains than those children whose female caretaker did not have significant levels of psychopathology. The multivariate test regarding the within-subject factor of treatment gains over time for social skill deficits was not significant. The multivariate tests comparing effect over time in social skill deficits and psychopathological symptoms in female caretakers was not significant.

## 2 WEEK VS. 12 WEEK INTERVALS FOR OPPOSITIONAL BEHAVIOR

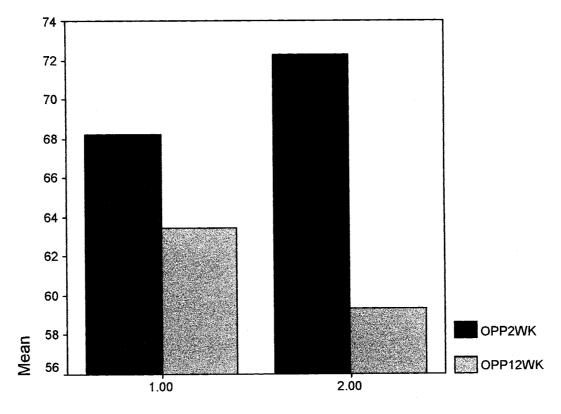
At the two week interval, children of parents without symptoms of psychopathology had a higher average T-score value for oppositional behavior than did the children with female caretakers who had symptoms of psychopathology. At the 12 week interval children of female caretakers with no symptoms showed greater treatment gains than did children of female caretakers with symptoms. The children of female caretakers with symptoms of psychopathology showed a 5 point improvement between the 2 week and the 12 week intervals. The children with female caretakers with no symptoms of psychopathology showed a 14 point improvement between the 2 week and the 12 week intervals (Figure 4.1). Although there was a difference between the two groups, the difference was not clinically significant due to the large range in the standard deviation of the Conners' Rating Scale scores in the domain of oppositional behavior.

## 2 WEEK VS. 12 WEEK INTERVALS FOR EMOTIONAL LABILITY

At the two week interval, children of female caretakers with symptoms of psychopathology had a 66 point mean T-score value and the children of female caretakers

without symptoms of psychopathology had an average T-score of 65 points. The children of caretakers with symptoms had a 4 point decrease in emotional lability and the children of parents without symptoms had a 6 point decrease (Figure 4.2). The difference between the two groups is not clinically significant due to the larger range in the standard deviation of the Conner's Rating Scale scores in the domain of emotional lability.

FIGURE 4.1 2 WEEK VS. 12 WEEK INTERVAL FOR OPPOSITIONAL BEHAVIOR

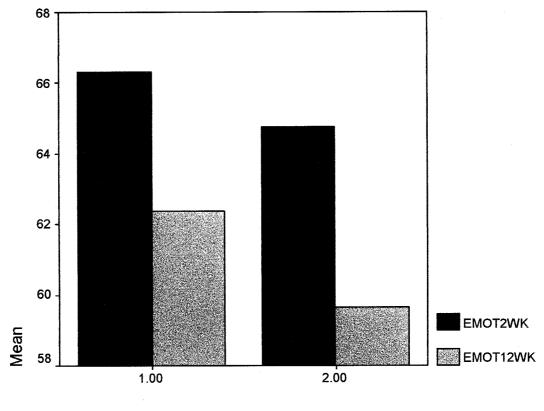


**DIAGNOS1** 

<sup>\*</sup>Diagnosis 1 - Female caretakers with symptoms of psychopathology

<sup>\*</sup>Diagnosis 2 – Female caretakers without symptoms of psychopathology

FIGURE 4.2 2 WEEK VS. 12 WEEK INTERVAL FOR EMOTIONAL LABILITY



#### **DIAGNOS1**

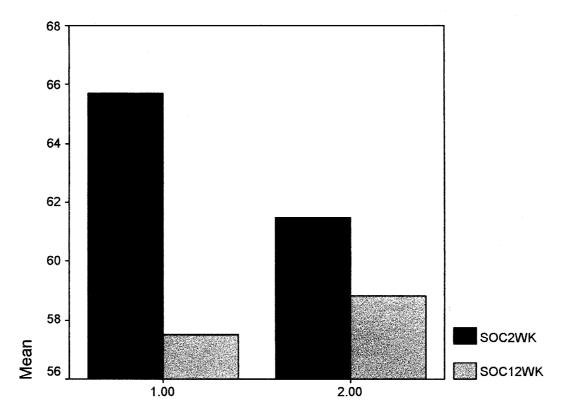
- \*Diagnosis 1 Female caretakers with symptoms of psychopathology
- \* Diagnosis 2 Female caretakers without symptoms of psychopathology

## 2-WEEK VS. 12-WEEK INTERVALS FOR SOCIAL SKILLS DEFICITS

At the 2-week interval, the children whose female caretakers reported symptoms of psychopathology had an average T-score value of 65 for social skill deficits. The children with female caretakers who did not show symptoms of psychopathology had a 61 point average t-score value at the 2 week interval for social skill deficits. The children whose female caretaker did show symptoms of psychopathology had an 8 point decrease

in social skill deficits, where the children whose female caretaker did not have symptoms of psychopathology only had a 2 point decrease in social skill deficits (Figure 4.3). The difference between the two groups is not clinically significant regarding social skill deficits due to the large range in the standard deviation (Table 4.2).

FIGURE 4.3 2 WEEK VS. 12 WEEK INTERVAL FOR SOCIAL SKILLS DEFICITS



## **DIAGNOS1**

<sup>\*</sup>Diagnosis 1- Female caretakers with symptoms of psychopathology

<sup>\*</sup>Diagnosis 2 – Female caretakers without symptoms of psychopathology

TABLE 4.2 DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std.
					Deviation
OPP2WK	31	45.00	90.00	69.7742	14.0231
OPP12WK	31	45.00	90.00	61.8710	12.3389
EMOT2W	31	44.00	90.00	65.7097	14.6565
K					
EMOT12W	31	45.00	83.00	61.3226	11.9510
K					
SOC2WK	31	45.00	90.00	64.0645	14.8210
SOC12WK	31	45.00	90.00	58.0323	13.5289
Valid N	31				
(listwise)					

# **SUMMARY**

The null hypothesis that - Female caretakers with little or no psychopathology will not have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program compared to the children with female caretakers with a significant level of psychopathology was accepted. The alternate hypothesis that – Female caretakers with little or no psychopathology will have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program than will children who have female caretakers with a significant level of psychopathology was rejected. Within the three domains of child maladaptive functioning, oppositional behavior, emotional lability, and social skill deficits, only oppositional behavior showed a clinically significant difference between the two-week and the twelve-week intervals.

## **CHAPTER FIVE**

#### **SUMMARY**

This study investigated the effect female caretaker psychopathology had on their child's treatment gains in the Children's Intensive Emotional Behavioral Day Program at the Children's Seashore House. The results of this study were termed important since the number of children with behavioral and emotional problems is increasing and the treatment being provided seems to be lacking. It was hoped that the study would provide researchers and clinicians with information that would act as a tool in providing the most appropriate treatment for children. The purpose of this study was to provide insight into the effects caretaker anxiety, depression and distress had on their child's improvement in a partial hospital program in the areas of social skills, oppositional behavior, and emotional lability.

The results of this study accepted the null hypothesis that - Female caretakers with little or no psychopathology will not have children that show greater treatment gains in an Intensive Emotional Behavioral Day Program compared to the children with female caretakers with a significant level of psychopathology. Within the three domains of child maladaptive functioning, oppositional behavior, emotional lability, and social skill deficits, only oppositional behavior showed a clinically significant difference between the two week and the twelve week intervals.

## CONCLUSIONS

The data obtained and analyzed by a multivariate ANOVA did not confirm the hypothesis that the children of female caretakers would have greater treatment gains in an intensive behavioral partial hospital program. Due to the small number of the sample size in the female caretaker population the symptoms of psychopathology could not be broken down into depression, anxiety, distress, other symptoms of psychopathology, and no symptoms of psychopathology as anticipated. The female caretaker group was divided into a psychopathology group and a no psychopathology group. Each female caretaker group was compared to the child's improvement in the partial hospital program. The behaviors of the children that were analyzed were oppositional behavior, social skill deficits, and emotional lability. After the statistical analysis was completed the following conclusions could be made:

- From the 2 week interval to the 12 week interval oppositional behavior showed significant improvement in all of the children.
- From the 2 week interval to the 12 week interval emotional lability was not significant for improvement in all of the children.
- From the 2 week interval to the 12 week interval social skill deficits was not significant for improvement in all of the children.
- The treatment gains the children made in oppositional behavior from 2 weeks
  to 12 weeks was not significantly effected by whether or not the female
  caretakers had symptoms of psychopathology or if they had no symptoms of
  psychopathology.

- The treatment gains the children made in emotional regulation from 2 weeks to 12 weeks was not significantly effected by whether or not the female caretakers had symptoms of psychopathology or if they had no symptoms of psychopathology.
- The treatment gains the children made in social skill deficits from 2 weeks to
   12 weeks was not significantly effected by whether or not the female
   caretakers had symptoms of psychopathology or if they had no symptoms of
   psychopathology.

The treatment gains the children made in oppositional behavior from 69.77 at 2 weeks to 61.87 at 12 weeks indicated that the behavior modification interventions that took place in the partial hospital program were effective. The incidents of oppositional behavior decreased in a 10 week period by almost 8 points. This significant decrease also indicated that children with oppositional behavior are responsive to behavior modification techniques.

When the 2 week T-score and the 12 week T-score for emotional lability were compared, the children also showed a decrease in this behavior, thus showing more emotional regulation. However, this decrease was not significant which indicated that emotional disorders and emotional lability are more difficult to decrease in a 10 week period than are oppositional behaviors. Also, once the oppositional behaviors have decreased, the underlying emotional problems are exposed.

The children also had a six point decrease in social skill deficits from the 2 week interval to the 12 week interval. Proper social skills are learned and used appropriately by repeated practice. Within the 10 week time interval the children have been exposed to

a social skills curriculum, however, this time span is not sufficient to see a significant decrease in social skill deficits. The exposed emotional disorders may have also influenced the children's poor social skill behaviors.

The results indicated that children with emotional and behavioral disorders require treatment whether or not their female caretaker has symptoms of psychopathology. The average T-scores for oppositional behavior, emotional lability, and social skill deficits indicated that the children did improve in all areas. The decrease in maladaptive behaviors could be strengthened with lengthened stay in the Children's Intensive Emotional Behavioral Day Program.

## DISCUSSION

Day treatment, partial hospital programs are becoming more of a therapeutic intervention for children with emotional and behavioral disturbances. There is a growing concern regarding the number of children being diagnosed with emotional and behavioral disorders. As the rate of children with more severe emotional and behavioral disorders increases, treatment modalities to address the level of disturbance are needed. Day treatment programs are increasingly being utilized as a therapeutic intervention for children and adolescents with psychiatric disorders (Kotsopoulos, Walker, Beggs, & Jones, 1996). One factor contributing to this increase may, in part, be due to parental mental illness (Rutter & Quiton, 1984). Research has long suggested that children of parents with psychiatric disorders are twice as likely to develop an emotional and behavioral disorder compared to children living without a mentally ill parent (Orvaschel, Walsh-Allisch, & Ye, 1988). Children living within a stressful environment due to a caretaker's mental illness have been found to exhibit social and academic

impairment (Orvaschel, Weissman, Padian, & Lowe, 1981), psychosocial stress (Cantwell & Baker, 1984), as well as various psychiatric disorders (Orvaschel, et al.1981).

The results from this study were not predicted and prompt the question as to why the groups did not differ. Past research indicates the importance of parental involvement and caretakers perception on their children and the outcomes of their children in a behavioral and emotional program (Krantz, Webb, Andrews, 1984). The treatment gains are influenced by parental psychopathology. Symptoms of psychopathology in the parent allows for greater negative outcomes for the children in a behavioral and emotional program. Studies carried out at the Lyall Preadolescent Day Treatment Program of the Douglas Hospital in Verdun, Quebec resulted in significant improvements in the children in behavioral and personality domains. They found that the children that showed the greatest treatment gains were those children who had the least family disturbances. The children at this treatment program stayed for an average of 7 months (Kotsopoulos, Walker, Beggs, & Jones, 1996).

The following were important limitations: the children at the Children's Seashore House only stayed an average of 3 months. When compared to past research and positive outcomes the children stay for a much longer period of time. Within 3 months only so much modification and implementation can take place. This corresponds to the results obtained when comparing the children's behavior at the 2 week and 12 week intervals where oppositional behavior was the only behavior that showed significant improvement. Oppositional behavior is more easily modified with behavior modification techniques than are social skill deficits and emotional lability. Also, the scores on the Conners'

Teacher Rating Scales ranged from 45 to 90 points. This range caused the standard deviation to be high and limited the significance of the results. The number of the sample size, which consisted of only 31 families, was a major limitation. This small sample size did not allow for the female caretakers to be broken down by disorder. This prevented the research from investigating the role specific parental psychopathologies had on a child's treatment gains in a partial hospital program. There was no control group in this study which made it difficult to generalize the results when they reflect only a small sample population.

## IMPLICATIONS FOR FUTURE RESEARCH

For future research investigators should have a larger sample size so that the caretakers can be broken down in to psychopathology groups. This will allow researchers to conclude if certain mental illnesses affect their child's treatment gains more than others. The time span in which treatment gains are distinguished should be greater than 10 weeks. The longer the time span of treatment the more improvements the child can make.

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