

Wright State University

CORE Scholar

[Browse all Theses and Dissertations](#)

[Theses and Dissertations](#)

2011

Parent-Child Interaction Therapy (PCIT) & Maternal Depression: A Proposal for the Application of PCIT With Mothers Who Are Depressed and Their Children

Seema Jacob
Wright State University

Follow this and additional works at: https://corescholar.libraries.wright.edu/etd_all



Part of the [Psychology Commons](#)

Repository Citation

Jacob, Seema, "Parent-Child Interaction Therapy (PCIT) & Maternal Depression: A Proposal for the Application of PCIT With Mothers Who Are Depressed and Their Children" (2011). *Browse all Theses and Dissertations*. 1109.

https://corescholar.libraries.wright.edu/etd_all/1109

This Dissertation is brought to you for free and open access by the Theses and Dissertations at CORE Scholar. It has been accepted for inclusion in Browse all Theses and Dissertations by an authorized administrator of CORE Scholar. For more information, please contact library-corescholar@wright.edu.

**PARENT-CHILD INTERACTION THERAPY (PCIT) & MATERNAL
DEPRESSION: A PROPOSAL FOR THE APPLICATION OF PCIT WITH
MOTHERS WHO ARE DEPRESSED AND THEIR CHILDREN**

PROFESSIONAL DISSERTATION

SUBMITTED TO THE FACULTY

OF

**THE SCHOOL OF PROFESSIONAL PSYCHOLOGY
WRIGHT STATE UNIVERSITY**

BY

SEEMA JACOB, M.A.

**IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE**

OF

DOCTOR OF PSYCHOLOGY

Dayton, Ohio

September, 2011

COMMITTEE CHAIR: Janeece Warfield, Psy.D.

Committee Member: Eve M. Wolf, Ph.D.

Committee Member: Lane Pullins, Ph.D.

WRIGHT STATE UNIVERSITY
SCHOOL OF PROFESSIONAL PSYCHOLOGY

June 30, 2011

I HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER MY SUPERVISION BY **SEEMA JACOB** ENTITLED **PARENT-CHILD INTERACTION THERAPY (PCIT) & MATERNAL DEPRESSION: A PROPOSAL FOR THE APPLICATION OF PCIT WITH MOTHERS WHO ARE DEPRESSED AND THEIR CHILDREN** BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PSYCHOLOGY.

Janece Warfield, Psy.D.
Dissertation Director

Eve M. Wolf, Ph.D.
Associate Dean for Academic Affairs

Copyright © 2011

Seema Jacob

All Rights Reserved

Abstract

Maternal depression is often a prevalent disorder in society, which has far reaching effects on the psychological well being of both the mother as well as her child (ren). Research has indicated that maternal depression impacts the parenting skills of a woman and thereby puts her children at risk for maladaptive ways of behaving. Children of mothers who are depressed are at a higher risk of developing externalizing and internalizing problems. Many of the empirically supported treatments for depression focus on the individual aspects of the person, without considering the roles and stress of being a parent. Many treatments for children with behavior problems include parent training. Parent Child Interaction Therapy (PCIT) is one such parent training program that focuses on fostering a positive relationship between the mother and her child and helps the mother manage behavior problems of the child. This dissertation describes a proposal to amend the current PCIT to cater towards the parenting needs of a depressed mother. Based on the literature review of various treatment modalities for depressed mothers, this dissertation conceptualizes the use of Wait Watch Wonder (WWW) technique, psychoeducation, home visitation, and motivational interviewing to augment the original PCIT while intervening with depressed mothers.

Table of Contents

Chapter One	1
Chapter Two.....	5
<i>Literature Review</i>	5
<i>Depression</i>	5
<i>Symptoms and Types of Depression</i>	5
<i>Comorbid Disorders and Depression</i>	7
<i>Depression Across Life-Span</i>	7
<i>Gender Differences in Depression</i>	9
<i>Major Depressive Disorder and Mothers</i>	11
<i>Impact of Depression on Mother-Child Relationship</i>	15
<i>Assessment of Maternal Depression</i>	18
<i>Treatments Available for Depression</i>	20
<i>Motivational Interviewing and Depression</i>	22
<i>Characteristics of the Mother-Child Relationship</i>	23
<i>Recent Developments in Attachment</i>	24
<i>Interventions to Enhance the Mother-Child Relationship when Mothers are Depressed</i>	26
<i>Cognitive Behavior Therapy</i>	28
<i>Psychodynamic Approach</i>	29
<i>Infant-Parent Psychotherapies</i>	32
<i>Behavioral Approach</i>	34
<i>Interpersonal Psychotherapy</i>	35
<i>Massage Therapy</i>	35

<i>Other Programs that Facilitate the Parent-Child Relationship</i>	36
<i>Parent-Child Interaction Therapy (PCIT)</i>	37
Chapter Three.....	44
<i>Proposed Amendment for the PCIT Curriculum</i>	44
<i>Rationale</i>	44
<i>Overview of the Program</i>	50
<i>Program Logistics</i>	50
<i>Population</i>	52
<i>Pre-Program Assessment</i>	55
<i>Implementation</i>	56
<i>Format and Duration</i>	56
<i>Major Learning Concepts</i>	57
<i>Curriculum Session Outline</i>	57
<i>Evaluation of Program</i>	58
<i>Session Description</i>	59
<i>Session I: Pre-Assessment and Orientation to Therapy</i>	59
<i>Session II: Review of Test Results and Psychoeducation – Depression</i>	62
<i>Session III: Psychoeducation – Child Development</i>	66
<i>Session IV: Psychoeducation – Challenging Behaviors</i>	71
<i>Session V: Following Child’s Lead in Play using</i>	74
<i>Watch, Wait, & Wonder (WWW) Technique</i>	
<i>Session VI: CDI Sessions (Target Mastery of PRIDE Skills)</i>	81
<i>Session VII: PDI Sessions</i>	84
<i>(Target Mastery of Skills of Giving Commands and Time-Outs)</i>	

<i>Session VIII: Termination, Feedback, and Assessment</i>	86
Chapter Four	90
<i>Future Directions</i>	90
<i>Conclusion</i>	93
References	94

Acknowledgment

The writing of this dissertation has been one of the important challenges I had to ever face. I owe my everlasting gratitude to the following individuals, for without their patience, positive regard, support, guidance, and time this dissertation would have not been completed.

- Dr. Janece Warfield who undertook the act of being my advisor, (and former supervisor) despite her many other academic and professional commitments. Her wisdom, knowledge, and commitment to the highest standards continue to inspire and motivate me.
- Dr. Lane Pullins and Dr. Eve M. Wolf for agreeing to be fellow travelers on this journey and continuously providing me with unwavering support and direction throughout this process.
- Joyce Jadwin and Susan Foskuhl for their encouraging words, thoughtful criticism, time, and attention despite their busy lives.
- My colleagues for sharing their enthusiasm for and comments on my work: Taronish Irani, Shaznin Daruwalla, Patrece Hairston, Laura Solomon, Joann Mawasha, and Kristin Galloway.
- Dr. Stephen McConnell, Dr. VandeCreek, and Dr. Mary Jane Kocian, my supervisors who have helped me develop at a personal and professional level through their support, guidance, and encouragement.
- Dean Larry C. James, for providing me with the support, and help I needed to successfully complete my graduate education

- The Staff at the Administrative Office for supporting me with the administrative tasks necessary for completing my doctoral program: Cynthia C King, Susan Foskuhl, Patti Mutter, and Michael Sullivan.
- My professors at SOPP for showing me by example and through challenging coursework how to think, teach, and teach others to think.
- Pootungal Jacob Thomas and Molly Jacob, my parents, who sacrificed, supported, and believed in me, in all my endeavors.
- Elizabeth Jacob, and Thomas Jacob, my siblings & Shiju Philip, my brother-in-law who have always unselfishly supported, encouraged me, and told me that “It will be okay” in times of stress.
- My invaluable network of supportive, forgiving, and encouraging friends and extended family without whom this journey through graduate school would have been hard to survive.
- Lastly, My Almighty God, for granting me the wisdom, and courage for pursuing my dreams in life.

Dedication

I dedicate my dissertation to my family, especially...

to Dad and Mom for instilling the importance of hard work and education;

to my Sister, Brother-in-law, and Brother for your continuous support

to my Niece for your unconditional acceptance and love

to all my relatives and friends who have assisted me throughout my entire academic life.

**PARENT-CHILD INTERACTION THERAPY (PCIT) & MATERNAL
DEPRESSION: A PROPOSAL FOR THE APPLICATION OF PCIT WITH
MOTHERS WHO ARE DEPRESSED AND THEIR CHILDREN**

Chapter One

Maternal depression is more common than we realize. During recent years, maternal depression has emerged as a problem because of its significant impact on the individual's role as a mother and her relationship with and health of her child (ren). Thus, maternal depression acts as a significant risk factor that affects the overall development, and well being of a young child. Maternal depression is potentially devastating because it affects the child's physical, cognitive, and emotional growth, all of which depends on a warm and secure attachment with a mother. Children of depressed mothers are also more likely to develop depression, anxiety, or act out through anger. Thus, these children are at higher risk for psychiatric, behavioral, and academic problems (Chase-Brand, 2008). Given the pervasive negative consequences of depression in the lives of mothers, their parenting ability and their relationship with their young children, it is important to focus on interventions that could help alleviate negative symptoms of depression including loss of energy, isolation, inattention, and disinterest in activities, all of which are experienced by the mother. Further, interventions aimed at reducing depressive symptoms do little to impact parenting skills (Knitzer, Theberge, & Johnson, 2008); thus, while the mother may experience fewer symptoms, the child continues to experience ill effects of a mother's depression. As

such, it is important to use specific interventions that can help a mother focus on her relationship with her child (ren), manage discipline, and combat the above mentioned effects of maternal depression on children. Parent-Child Interaction Therapy (PCIT) is one of the relationship-based interventions that has been researched to show improving results when used with children with various behavioral problems. PCIT intervention focuses on two basic interactions: Child-Directed & Parent-Directed Interaction. Harwood & Eyberg (2006) further described these two basic interactions of PCIT, where parents learn these authoritative parenting skills, which will be described in the following sections.

In the first phase, parents learn to follow their child's lead in play by providing positive attention. During this phase, the parent actively ignores the child's negative to create a positive, nurturing parent-child interaction called the Child-Directed Interaction (CDI); (Harwood & Eyberg. 2006). The skills of CDI include praising, reflecting, imitating, describing, and being enthusiastic (PRIDE skills) (McNeil & Hembree-Kigin, 2010). The parents are coached to avoid use of commands, questions, and critical statements during the CDI (Harwood & Eyberg, 2006). Criteria for progression to the second phase include specific behavioral goals on the part of the parent. Additionally, parents are asked to implement and log the CDI skills at home in daily five-minute sessions (Bell & Eyberg, 2002).

During the second phase, the Parent-Directed Interaction (PDI), parents continue to use the PRIDE skills. In this phase they learn how to direct the child's behavior and to provide consistent consequences in the form of labeled praise after the child's compliance and time-out from positive attention after noncompliance. PDI skills include giving good

commands, praising compliance, using time-out to a chair for non compliance, and establishing house rules (McNeil & Hembree-Kigin, 2010). Thus, PCIT targets the interaction, rather than isolated parent or child behaviors (Harwood & Eyberg, 2006).

Mothers who are depressed can greatly benefit from a program that can help them build on their relationship with their child (ren) as well as manage their child's (ren) behavior. This proposed amendment is targeted for depressed mothers with children between the age of two and four years of age.

The initial chapter will focus on the review of literature on maternal depression, assessment of maternal depression, its impact on the child and mother as well as the mother-child relationship, and the available treatments for maternal depression. The literature review highlights certain key factors such as limited treatment participation of depressed mothers, lack of a positive relationship between mother and child, as well as inconsistent parenting styles, all of which impact the development of the child as well as increases maternal stress related to parenting the child.

The proposed amended curriculum of PCIT is described in chapter three. The primary aim of this amendment to the PCIT model is to help depressed mothers understand their illness and the impact it has on their parenting relationship with their child. Another goal of the program is to improve the mother's ability to manage typical/atypical preschool behaviors which are often coined as being disruptive through the use of motivational interviewing and "Watch, Wait & Wonder" (WWW) technique (Johnson, Dowling, & Wesner, 1980). The PCIT model has been widely used across different cultures and settings. The theoretical basis of PCIT primarily involves social learning theory, play therapy, and attachment theory. Research has indicated that early

intervention of maternal depression can improve children's educational achievement and emotional development as they enter elementary school (Turney, 2011). Thus, early intervention can provide greater advantages for children (McLeod & Kaiser, 2004).

Chapter Two

Literature Review

Depression

According to the National Institute of Mental Health (NIMH, 2009), human beings occasionally have fleeting feelings of sadness or feeling blue. However, when an individual experiences clinically significant depression, it interferes with his or her daily functioning, impacting both the person with the disorder and people in their immediate surroundings. Many people with a depressive illness never seek treatment yet treatment has been found to work (NIMH, 2009).

Depression is more common among women than among men. However, very rarely is depression in women, particularly maternal depression, is seen through a lens of how it affects parenting and child outcome; and what kind of interventions can prevent negative consequences for the child, for the mother, and their parenting (Knitzer, Theberge, & Johnson, 2008).

Before delving specifically into maternal depression, its effects on children, and treatment options, this chapter will review the definition of depression, the types of depression, how women are affected by depression and the types of problems they encounter with their relationships as a result of the depression.

Symptoms and Types of Depression

According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR, 2000), the symptoms of depression include

persistent sad, anxious or “empty” feelings, feelings of hopelessness and/or pessimism, feelings of guilt, worthlessness and/or helplessness, irritability, restlessness, loss of interest in activities that were once pleasurable (including sex), fatigue and decreased energy, difficulty concentrating, remembering details and making decisions, insomnia, or excessive sleeping, overeating or appetite loss, thoughts of suicide, suicide attempts, persistent aches or pains, headaches, cramps or digestive problems that do not ease with treatment. People with depressive illnesses do not all experience the same symptoms. The severity, frequency and duration of symptoms will vary depending on the individual and his or her particular illness (NIMH, 2009).

According to the NIMH, there are several forms of depressive disorders, with the most common being major depressive disorder and dysthymic disorder. Major Depressive Disorder affects the general population, and is usually associated with substantial symptom severity and role impairment (Kessler, et al., 2003). According to DSM-IV-TR (2000), the prevalence of Major Depressive Disorder in adults in community samples has varied from 5% to 9% for women and from 2% to 3% for men.

Other forms of depression have been identified as well. Dysthymic Disorder, also called Dysthymia, is characterized by long-term (two years or longer) but less severe symptoms that may not disable a person but can prevent one from functioning normally or feeling well. People with Dysthymia may also experience one or more episodes of major depression during their lifetimes. Some forms of depressive disorders exhibit slightly different characteristics than those described above, or they may develop under unique circumstances. However, not all scientists agree on how to characterize and define these forms of depression (NIMH, 2009). They include Psychotic Depression, which

occurs when a severe depressive illness is accompanied by some form of psychosis, such as a break with reality, hallucinations, and delusions. Postpartum Depression is diagnosed if a new mother develops a major depressive episode within one month after delivery. Seasonal Affective Disorder (SAD), which is characterized by the onset of a depressive illness during the winter months, when there is less natural sunlight. The depression generally lifts during spring and summer.

Comorbid Disorders and Depression

Depression often co-exists with other illnesses. Such illnesses may precede the depression, cause it, and/or be a consequence of it. It is likely that the mechanics behind the intersection of depression and other illnesses differ for every person and situation. Anxiety disorders, such as Post-Traumatic Stress Disorder, Obsessive-Compulsive Disorder, Panic Disorder, Social Phobia and Generalized Anxiety Disorder, often accompany depression. Alcohol and other substance abuse or dependence may also co-occur with depression. In fact, research has indicated that the co-existence of mood disorders and substance abuse is pervasive among the U.S. population. Depression also often co-exists with other serious medical illnesses such as heart disease, stroke, cancer, HIV/AIDS, diabetes, and Parkinson's disease (NIMH, 2009).

Depression Across Life-Span

The experience of Depression differs across life span. Research has shown that childhood depression often persists, recurs and continues into adulthood, especially if it goes untreated. The presence of childhood depression also tends to be a predictor of more severe illnesses in adulthood (Weissman, et al., 1991). In fact, children and adolescents tend to display an irritable mood, as opposed to a depressed mood. A child with

depression may pretend to be sick, refuse to go to school, cling to a parent, or worry that a parent may die. Older children may sulk, get into trouble at school, be negative and irritable, and feel misunderstood. Because these signs may be viewed as normal mood swings typical of children as they move through developmental stages, it may be difficult to accurately diagnose a young person with depression (NIMH, 2009). Before puberty, boys and girls are equally likely to develop depressive disorders. By age 15, however, girls are twice as likely as boys to have experienced a major depressive episode (Cyranowski, Frank, Young, & Shear, 2000). Depression in adolescence comes at a time of great personal change, when boys and girls are forming an identity distinct from their parents, grappling with gender issues and emerging sexuality, and making decisions for the first time in their lives. Depression in adolescence frequently co-occurs with other disorders such as anxiety, disruptive behavior, eating disorders or substance abuse. It can also lead to increased risk for suicide (Shaffer, et al., 1996; Weissman et al., 1991).

Alternatively, when older adults do have depression, it may be overlooked because seniors may show different, less obvious symptoms, and may be less inclined to experience or acknowledge feelings of sadness or grief (Gallo, & Rabins, 1999). In addition, older adults may have more medical conditions such as heart disease, stroke or cancer, which may increase risk for depressive symptoms, or they may be taking medications with side effects that contribute to depression (NIMH, 2009). Some older adults may experience what some doctors call vascular depression, also called arteriosclerotic depression or subcortical ischemic depression. Vascular depression may result when blood vessels become less flexible and harden over time, becoming constricted. Such hardening of vessels prevents normal blood flow to the body's organs,

including the brain. Those with vascular depression may have, or be at risk for, a co-existing cardiovascular illness or stroke (Krishnan, et al., 2004). Although many people assume that the highest rates of suicide are among the young, older white males age 85 and older actually have the highest suicide rate (NIMH, 2009). Many have a depressive illness that their doctors may not detect, despite the fact that these suicide victims often visit their doctors within one month of their deaths (Conwell, 2001).

Gender Differences in Depression

Apart from life spans differences, men often experience depression differently than women and may have different ways of coping with the symptoms. Men are more likely to acknowledge having fatigue, irritability, loss of interest in once-pleasurable activities, and sleep disturbances, whereas women are more likely to admit to feelings of sadness, worthlessness and/or excessive guilt (Cochran, & Rabinowitz, 2000). Men are more likely than women to turn to alcohol or drugs when they are depressed, or become frustrated, discouraged, irritable, angry and sometimes abusive. Some men throw themselves into their work to avoid talking about their depression with family or friends, or engage in reckless, risky behavior. (NIMH, 2009) And even though more women attempt suicide, many more men die by suicide in the United States (Heron, et al., 2009).

Biological, life cycle, hormonal and psychosocial factors unique to women may be linked to women's higher depression rate. Researchers have shown that hormones directly affect brain chemistry that controls emotions and mood (NIMH, 2009). For example, women are particularly vulnerable to depression after giving birth, due to hormonal and physical changes, along with the new overwhelming responsibility of caring for a newborn. Many new mothers experience a brief episode of the "baby blues,"

but some will develop postpartum depression, a much more serious condition that requires active treatment and emotional support for the new mother. It is believed that between 50 and 80 percent of new mothers are affected by the baby blues, the symptoms of which are irritability and tearfulness that last for about two weeks after the birth. On the other hand, postpartum depression affects approximately 10 percent of new mothers and the symptoms include sadness and crying, self-blame, loss of control, irritability, tension, anxiety, and difficulty sleeping; the symptoms can last six months to one year after the birth. Some studies suggest that women who experience postpartum depression often have had prior depressive episodes. Some women may also be susceptible to a severe form of premenstrual syndrome (PMS), sometimes called premenstrual dysphoric disorder (PMDD), a condition resulting from the hormonal changes that typically occur around ovulation and before menstruation begins. The symptoms of PMDD typically include irritability, sudden mood swings, depressed mood, hopelessness, tension or anxiety, decrease interest in activities, changes in sleep, difficulty concentrating, feeling overwhelmed or out of control, lack of energy, other physical symptoms such as breast tenderness, bloating, and changes in appetite. The symptoms (at least 5) usually occur during the week before menses and remit within days of menses.

During the transition into menopause, some women experience an increased risk for depression. Scientists are exploring how the cyclical rise and fall of estrogen and other hormones may affect the brain chemistry that is associated with depressive illness (Rubinow, Schmidt, & Roca, 1998). Thus, women are more likely to be susceptible to depression due to the hormonal changes they undergo throughout life.

Typically, depression is discussed as an adult problem affecting women or men, and increasingly, it is recognized as a significant problem for children (Knitzer, Theberge, & Johnson, 2008). Rarely is depression, particularly maternal depression, considered through a lens that focuses on how it affects parenting and child outcomes. Additionally, there is little consideration for what kinds of strategies can prevent negative consequences for parents, regarding their parenting of young children (Knitzer et al., 2008).

Major Depressive Disorder and Mothers

Major Depressive Disorder is more common in pregnancy and postpartum than widely assumed. According to Knitzer et al. (2008), approximately 12 percent of all women experience depression in a given year and for low-income women, the estimated prevalence doubles to at least 25 percent. Relapse rates for depressive disorders are high and the postpartum period represents a time of increased vulnerability to depression (Luskin, Pundiak, & Habib, 2007). According to the DSM-IV-TR (2000), the criteria for major depression in pregnancy and postpartum is the same as those for “no puerperal (non-postpartum)” depression, although, it limits symptom onset to within 4 weeks of childbirth. But, clinicians have agreed that depression that is identified within the first postpartum year is considered to be postpartum depression (Luskin et al., 2007). In both pregnancy and postpartum, the diagnosis of depression is often missed because of cultural antipathy to the concept, and because the neurovegetative symptoms of depression (sleep and appetite disturbances, lack or low of energy, and weight changes) are misattributed to the normative changes of pregnancy and postpartum period (Luskin et al., 2007). O'Hara and Swain (1996) suggest that the average prevalence rate of non-

psychotic postpartum depression is 13%, with the strongest predictors being past history of psychopathology and psychological disturbance during pregnancy, poor marital relationship, low social support, stressful life events, and low socio-economic status. Post partum Depression has far reaching effects on the mother as well as other individuals involved in her life.

Researchers have identified post partum depression as a mental health problem that has serious implications for the welfare of the family and the development of the child (Philipps & O'Hara, 1991). Untreated perinatal depression has been found to be linked to poor birth outcomes, including low-birth weight, prematurity, and obstetric complications (Knitzer et al., 2008). Furthermore, depression has been found to negatively impact maternal-infant bonding in-utero, as well as postpartum maternal-infant bonding (Brockington, Aucamp, & Fraser, 2006). Along with maternal-infant bonding, attachment can be impacted by a mother's experience of depression. For example, Luskin et al. (2007) in their review found that maternal depression could lead to emotional deprivation in the mother-child relationship, impaired cognitive and personality development in children, child abuse, child neglect and infanticide.

The impact of maternal depression on children is multifaceted. Maternal depression is a significant risk factor affecting the well-being and school readiness of young children (Knitzer et al., 2008). Research has found that children exposed to maternal depression early, have trouble developing relationships with peers and teachers in school, and exhibit problems with regulating their emotions (Essex, Klein, Miech, & Smider, 2001). Maternal depression has been linked with negative relationships in early childhood, and with learning difficulties, which is important for early school success

(Lyons-Ruth, Connell, Grunebaum, & Botein, 1990). Some of the problems experienced by children may be attributed to how depression manifests in their mothers' lives. For example, mothers who are depressed often experience deficits in motivation and struggle to maintain consistent routines. They may also be less likely to read or to engage in cuddling, singing, or playing with their children (Paulson, Dauber, & Leiferman, 2006).

Psychologically, children of mothers with mental health problems have a higher risk for psychopathology (Downey & Coyne, 1990), behavioral problems (Cummings & Davies, 1994), and poor functioning in a range of developmental domains (Goodman & Gotlib, 1999). Maternal depression is also linked to health concerns of the child, in that mothers who are depressed are less likely to breastfeed and when they do, they do so for shorter periods of time than non-depressed mothers (Paulson et al., 2006). Additional maternal depression can impair parental safety, wherein mothers who are depressed have been found to not engage in age appropriate safety guideline such as car seats and socket covers (McLennan, & Kotelchuck, 2000).

Exposure to maternal depression is a major risk for children's social-emotional development in their early years (Goodman & Gotlib, 1999). Compared with the offspring of non-depressed controls, infants of depressed mothers have been found to be more fussy, to obtain lower scores on measures of mental and motor development, have more difficult temperaments, and less secure attachments to their mothers. Toddlers of depressed mothers have been found to react more negatively to stress and to be delayed in their acquisition of self-regulation skills (Goodman & Gotlib, 1999).

Researchers have found that children of depressed parents are at risk for a full range of adjustment problems and are at specific risk for clinical depression (Downey &

Coyne, 1990). Similarly, these children also have deficits in social and academic competence that are not due to intellectual limitations (Hammen, et al., 1987). They showed symptoms of depression and antisocial behaviors, attentional difficulties, higher rates of substance abuse, higher rates of internalizing and externalizing behavior problems including noncompliant, hostile and defiant behaviors, more poorly adjusted, and at heightened risk for affective diagnosis than normal control children (Downey & Coyne, 1990). Downey & Coyne reviewed literature on the children of depressed parents and found that children of parents with mood problems have a significantly more negative self-concept, and a more negative attributional style than children of normal parents.

Teti, Messinger, & Isabella (1995) found maternal depression to be significantly associated with attachment security in young children. Specifically, they found that mothers of secure children would be the highest functioning, but, when mothers are most chronically impaired by depression, their children lacked unitary, coherent attachment strategies. A meta-analysis conducted by Martins & Gaffan (2000) indicated that children of depressed mothers were less likely to show secure attachment and more likely to show the avoidant or disorganized forms of attachment, than children of control mothers. Further studies show that securely attached children are less distracted, and there is less need to discipline than in anxiously attached children. Moreover, securely attached children paid more attention to reading instructions, engaged in higher rates of proto-reading and performed better on emergent-literacy measures (Bus & Van Ijzendoorn, 1988).

Another area that is impacted by maternal depression is the mother's perceptions of parenting behaviors, and child behavior problems. Webster-Stratton & Hammond (1988) found that compared to non depressed mothers, depressed mothers were more critical, experienced more negative life events (such as abuse), and reported higher levels of stress in their lives. This was true, even when the behavior of the children was a controlled variable. Cornish, et al. (2006), found that depressed mothers reported higher levels of parenting stress even at 15 months post partum in comparison to mothers who are not depressed. Specifically, they discovered that mothers who experienced depression more than the period of 12 months reported negative perceptions of their child's behavior and hostile feelings towards their child.

Impact of Depression on Mother-Child Relationship

According to Wan & Green (2009), maternal mental health impacts the formation of an organized and secure attachment in infancy, and the lack of a secure attachment may confer developmental risk on the child. Research has found that maternal depression is associated with reduced parenting responsiveness, affection, and reciprocity and increased intrusion and punitiveness (Goodman & Gotlib, 1999), negative feelings towards children (Lovejoy, Graczyk, O'Hare, & Neuman, 2000), more punitive, controlling attitudes towards child rearing (Sandberg, Garcia, Vega-Lahr, Goldstein, & Guy, 1985) slower maternal responsiveness, less affectionate contact with their children (Goodman & Gotlib, 1999), increased sense of helplessness, increased hostility (Panaccione & Wahler, 1986), irritability, disengaged or intrusive interactive style, and lessened ability to deal with children (Gelfand & Teti, 1990). The integrative review by Downey & Coyne (1990) revealed that depressed mothers experience difficulties in the

parent role, view role of parent less positively than do control mothers and they often experience negativity toward the demands of parenthood and feelings of rejection and hostility toward their children. Investigators (Goldsmith & Rogoff, 1997) have found that compared to non-depressed mothers, depressed mothers spend less time mutually engaged with their children in a shared activity. Furthermore non-depressed mothers also initiate and terminate their children's attention to objects more frequently rather than encouraging sustained attention (Breznitz & Friedman, 1998). When their children resisted their attempts at control, depressed mothers avoided confrontation, either immediately dropping their original demands or persisting at control but failing to achieve a mutually negotiated compromise (Kochanska, Kuczynski, Radke-Yarrow, & Welsh, 1987). In terms of the parenting strategies, other researchers identified that depressed mothers chose strategies such as, enforcing obedience unilaterally or withdrawing when faced with child resistance, all of which require less cognitive effort. In comparison, control mothers, were more likely to negotiate a solution with their child (Kochanska et al., 1987). Goodman & Gotlib (1999), in their review found that depressed mothers and their toddlers and preschool-aged children have been found to engage in patterns of coercive mutual interpersonal influence, including revenge and retaliation. Thus, in designing a parenting program for depressed mothers, it is important to equip the mothers with relationship-building and disciplining skills.

The depressed mother's behaviors toward her children and others have been attributed to different reasons, some of which will be described in the paragraphs that follow. Cummings & Cicchetti (1990) hypothesized that symptoms of depression such as sadness, fatigue, irritability, and social withdrawal, may contribute to parents being

psychologically unavailable, which prevents them from interacting in an optimally sensitive manner with their children and may contribute to insecure attachment (Trapolini, Ungerer, & McMahon, 2007). In their integrative review, Downey & Coyne (1990) mentioned that depressed individuals are less likely to foster positive relationships with significant others because they speak less often and with less intensity in social situation, they gaze at their partner less frequently, and respond more slowly. The researchers believed that the reduced rate of behavior can be attributed to reduced energy levels and self absorption that are symptomatic of depression. Researchers have (Downey and Coyne, 1990; Weissman, Paykel, & Klerman, 1972) further elaborated about depressed individuals' difficulty with parenting. They discussed that depressed parents found it difficult to sustain effortful behavior that is required when interacting with young children. In addition, use of an exaggerated affective tone (lots of positive affect) and tolerance for aversive behavior required efforts beyond the depressed parents' ability. Bettes (1988) suggested that depression impeded mothers' ability to imbue their speech with the affective signals thought to play an important role in the socialization of affect modulation in children.

The depressed mother's behaviors towards her child also impact her child.

Research has indicated that children exposed to maternal depression are at increased risk of insecure/disorganized attachment during the preschool years (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985; Martins & Gaffan, 2000), are more fussy, tend to obtain lower scores on measures of mental and motor development, have more difficult temperaments, react more negatively to stress, and tend to be delayed in their acquisition of effective self-regulation strategies, have more school problems, to be less

socially competent, and to have lower levels of self-esteem and higher levels of behavior problems (Goodman & Gotlib, 1999). According to Cicchetti & Schneider-Rosen (1986), for toddlers and preschool-aged children, parents must provide the external support necessary for their children to develop an accurate understanding of social situations and emotional responses. Support ranges from providing children with emotional language acquisition, guiding the behaviors of toddlers in social referencing situations, facilitating the children's relationships with peers and other adults, engaging children in extracurricular activities and helping children develop socially and cognitively (Gottman, Katz, & Hooven, 1996). Cicchetti et al., (1986) have found that toddlers or pre-school aged children whose parents did not provide for these needs was identified to have difficulties in the emergence of effective autonomous functioning, in the management of emotionally arousing situations, and in their ability to organize and coordinate environmental resources.

Assessment of Maternal Depression

Assessment of maternal depression is a vital step towards treatment. Some of the main measures used as screening tools will be described in the following paragraphs. The Beck Depression Inventory – Second Edition (BDI-II) was developed to measure the behavioral aspects of depression in adults and it reflects the DSM-IV criteria for depression (Yonkers & Samson, 2000). It is a 21-item self report test that continues to be used in many setting for diagnosing major depression. There is a four-point scale for each item ranging from 0 to 3. Total score of 0-13 is considered minimal range, 14-19 is mild, 20-28 is moderate, and 29-63 is severe (Yonkers & Samson, 2000).

The Edinburg Postnatal Depression Scale (EPDS) is one of the most commonly used screening tools for postpartum depression (Kendall-Tackett, 2005). The EPDS is a 10-item self-report questionnaire, with each item having four possible responses ranging from 0 to 3, indicating the severity of the symptom. Some items have the most severe answer first, and other items have the most severe response last (Yonkers & Samson, 2000). Possible scores range from zero to 30 and a score above 12 is indicative of probable major or minor depression. According to Yonkers & Samson (2000), the EPDS is well accepted in screening as well as measuring the severity of depression. The scale is considered to have high reliability and validity (Cox, Holden, & Sagovsky, 1987).

Both these measures will be used as pre and post measures of maternal depression in the amended PCIT program described in chapter three.

As mentioned prior that maternal depression is associated with increased parenting stress (Cornish et al., 2006). As per Messer & Reiss (2000) one of the common measures of parenting stress is developed by Abidin (1995) called the Parenting Stress Index (PSI). The PSI quickly screens for stress in the parent-child relationship. It identifies dysfunctional parenting and predicts the potential for parental behavior problems and child adjustment difficulties within the family system. While its primary focus is on the preschool child, the PSI can be used with parents whose children are 12 years of age or younger. Written at a fifth-grade reading level, the PSI consists of 101 items and takes 20--25 minutes for the parent to complete. It yields a Total Stress Score plus subscales in two domains (Child & Parent characteristics). A Short Form of the PSI is also available, which is composed of 36 items from the full-length PSI and completed in just 10 to 15 minutes, and it yields a Total Stress Score. In addition, the short form consists of a subset

of identical items from the full version, organized into three 12-item subscales i.e. difficult child temperament, dysfunctional parent-child interaction, and parental distress. The PSI short form is used as a measure of parenting stress in the amended program described in chapter three.

Treatments Available for Depression

Depression, even the most severe cases, is a highly treatable disorder. As with many illnesses, the earlier that treatment can begin, the more effective it is and the greater the likelihood that recurrence can be prevented (NIMH, 2009). Once diagnosed, a person with depression can be treated with a number of methods. The most common treatments are medication and psychotherapy.

Antidepressants work to normalize naturally occurring brain chemicals called neurotransmitters, notably serotonin and norepinephrine. Other antidepressants work on the neurotransmitter dopamine. Scientists studying depression have found that these particular chemicals are involved in regulating mood, but they are unsure of the exact ways in which they work (NIMH, 2009). The newest and most popular types of antidepressant medications are called Selective Serotonin Reuptake Inhibitors (SSRIs). SSRIs include fluoxetine (Prozac), citalopram (Celexa), sertraline (Zoloft) and several others. Serotonin and Norepinephrine Reuptake Inhibitors (SNRIs) are similar to SSRIs and include venlafaxine (Effexor) and duloxetine (Cymbalta). SSRIs and SNRIs are more popular than the older classes of antidepressants, such as tricyclics and Monoamine Oxidase Inhibitors (MAOIs) because they tend to have fewer side effects. However, medications affect everyone differently. Therefore, for some people, tricyclics or MAOIs may be the best choice. For all classes of antidepressants, patients must take regular doses

for at least three to four weeks before they are likely to experience a full therapeutic effect. They should continue taking the medication for the time specified by their doctor, even if they are feeling better, in order to prevent a relapse of the depression. Medication should be stopped only under a doctor's supervision. Some medications need to be gradually stopped to give the body time to adjust (NIMH, 2009). Although antidepressants are not habit-forming or addictive, abruptly ending an antidepressant can cause withdrawal symptoms or lead to a relapse. Some individuals, such as those with chronic or recurrent depression, may need to stay on the medication indefinitely (Rubinow et al., 1998).

Apart from medications, psychotherapy has also been another treatment for depression. Two types of psychotherapies, Cognitive-Behavioral Therapy (CBT) and InterPersonal Therapy (IPT)—have been shown to be effective in treating depression. By teaching new ways of thinking and behaving, CBT helps people change negative styles of thinking and behaving that may contribute to their depression. IPT helps people understand and work through troubled personal relationships that may cause their depression or make it worse (NIMH, 2009). For mild to moderate depression, psychotherapy may be the best treatment option. Overall, interventions for depression aim at symptom reduction and individual change rather than interventions that focus on the family systems or parenting the child.

According to Knitzer et al. (2008), most interventions for depression address only the adult; they do not address the adult as a parent, and they do not actively include strategies to prevent or repair damage to the early parent-child relationship, which is critical to healthy early development. However, before one looks into the research for

interventions that focuses on parent-child relationship, it is important to consider the development of mother-child development and how it is impacted by maternal depression, which will be reviewed in the following section.

Motivational Interviewing and Depression

Miranda, Azocar, Komaromy, & Golding (1998) discovered in their study 21.5% of women in a public sector gynecologic clinic had current major depression, but their access to mental health treatment was limited. Zuckoff, Swartz, & Grote (2008) attributed this limited treatment participation to cost, problems with child care, cultural factors, and symptoms of depression (low energy, hopelessness, and cognitive slowing). So they speak of motivational interviewing as an optimal technique to engage depressed women in mental health treatment. They argue that motivational interviewing resolves women's ambivalence about treatment in the context of an empathic understanding for these women's hopes, concerns, and perspectives. Zuckoff et al. (2008) spoke of a motivational interviewing based approach called the "engagement session." This session they describe as "a single-session pre therapy intervention focused on communicating the therapist's understanding of patients' individual and culturally embedded perspective, helping patient see how the potential benefits of treatment align with their own priorities and concerns, facilitating identification and resolution of ambivalence, and problem-solving barriers to engagement."

Zuckoff et al. (2008) also provided example of research done utilizing the engagement session with non-suicidal mothers of adolescents that showed that individuals who attended an engagement session were more likely to complete a full course of therapy. The use of motivational interviewing with depressed mothers is still a

fairly new concept and seems promising in the engaging mothers into treatment, however, more work needs to be done in the area. Given the possible utility of motivational interviewing in engaging depressed mothers in treatment, it is included in the proposed amendment of PCIT described in Chapter three.

Characteristics of the Mother-Child Relationship

The quality of mother-infant interaction is a significant determinant of attachment style and developmental outcomes (Foss, Hirose, & Barnard, 1999), such as child psychopathology, and academic success. According to Williams, et al. (1987), the development of maternal interaction and attachment is a gradual process that begins before the baby is born and continues even after the child is born. While the process of attachment is gradual, the types of interactions and attachment are influenced by behaviors, attitudes, and mental well being of each individual in the dyad (Foss et al., 1999).

According to Bowlby (1969), attachment refers to a biologically primed behavioral system which under threatening conditions, enables infants to seek safety through proximity to their mothers. He further suggested that attachment security depends on the experience that infants have with their mothers, especially in relation to their emotional responsiveness, physical accessibility and physical proximity when distressed. For example, infants whose mothers are available and responsive to their needs establish a sense of security. The infant knows that the caregiver is dependable, which creates a secure base for the child to then explore the world.

Concepts of attachment were further studied by Ainsworth, who identified three basic infant attachment patterns: secure, insecure-avoidant, and insecure ambivalent.

According to Ainsworth, Blehar, Waters, & Wall (1978), sensitive care-giving gives rise to secure attachment, which promotes optimal development, whereas an insecure pattern arises from “lower care-giving sensitivity.”

Sensitivity relates to the mother's ability to perceive and to interpret accurately the signals and communications implicit in her infant's behavior, and given this understanding, to respond to them appropriately and promptly. Thus the mother's sensitivity has four essential components: (a) her awareness of the signals; (b) an accurate interpretation of them; (c) an appropriate response to them; and (d) a prompt response to them (Ainsworth et al., 1978).

Main and Solomon (1990) viewed the insecure-avoidant and insecure-ambivalent attachment patterns as coherent, organized strategies used by infants to access their attachment figures in times of stress. They relate both these attachment to insensitive and unresponsive parenting. Main and Solomon (1990) added a fourth category, disorganized-disoriented, to describe infants who lack a coherent strategy for accessing their attachment figures and as a result show confused, conflictual, or fearful behaviors in novel situations. Main and Solomon suggested that profiling attachment styles maybe inappropriate beyond 21-22 months of age, because of the social-cognitive sophistication of children by the end of the second year.

Recent Developments in Attachment

Sharp and Fonagy (2008) found that for the past ten years, in the area of parenting, there has been a focus on the parents' capacity to view their child as a psychological agent (a system which can reason about either their own or other people's explicit goals, intentions, and beliefs). They reviewed different constructs that explain

parents' capacity to ascribe thoughts, feelings, ideas, and intentions to self as well as their children. This capacity is termed as parental mentalizing and is used to anticipate and influence ones as well as others' behavior. Sharp and Fonagy (2008) also asserts that secure attachment is fostered via appropriate parental mentalization and this process is bi-directional or is affected by both the parent and child characteristics. One such construct that they found in literature was Reflective Functioning (RF). Fonagy and Target (1997) termed RF as an individuals' ability to mentalize, or appropriately attribute mental states and beliefs of self and others. They also revealed that the mothers' ability to perceive, tolerate, and/or comment upon their own and their infants' emotional experience is an important predictor of infant attachment security. Fonagy, Target, Steele, & Steele (1998) developed a RF scale to assess the adults' capacity to reflect upon memorialized childhood relationships with their parents in mentalistic terms.

In their review of various constructs that have been developed to operationalize parental mentalizing, Sharp and Fonagy (2008) discovered that PDI (Parent Development Interview) is used to examine parents' representations of their children, of themselves as parents, and of their relationships with their children. The PDI is a 45-item semi-structured clinical interview that also provides an assessment of how well parents understand their child's behavior, thoughts and feelings. The PDI has also been coded using the RF scale, and three levels of PDI-RF were found (Sharp & Fonagy, 2008). Low RF is when a parent seems unaware to the fact that the child has feelings or thoughts, which are particularly personal to the child, in combination with a denial of the parent's own experience of parenting. Moderate RF is when the parent recognizes that the child has mental states, but their responses still lack reflection on their own mental states and

the recognition that the child's mental states or their own mental states are connected to behavior. High RF is when parent can have such recognition and reflection. Sharp and Fonagy (2008) found in their review that High RF in parents fosters autonomy, self-regulation, and mentalizing capacity in their children.

Reflective functioning seems to be an important aspect in fostering a positive mother-child relationship, which will be included in the amended PCIT program.

Interventions to Enhance the Mother-Child Relationship when Mothers are Depressed

According to Cramer (1993), postpartum depression can be best understood as a relational disturbance. He further elaborated that many psychological tasks imposed by the baby induce a disorder affecting parenting and mother-baby exchanges. These psychological demands tap on the mothers' psychological functioning. Cramer, et al. (1990) studied the depressed affect of mothers by evaluating outcome of brief mother-infant psychotherapy in 75 dyads. The mother, infant, and the mother-infant relationship were evaluated through the following variable - symptoms, interactions, affect displays, and representations of the mother. These variables were rated before and after therapy with standardized tests. Two therapies were compared: first a psychodynamic brief mother-infant therapy that aimed at modifying the maternal representations of her child and self, by interpreting what mothers' project onto their child, and the link between present and past conflicts. The second was a therapy of interactional coaching aimed at modifying interactive patterns by making mothers more aware of their interactive styles, and emphasizing harmonious interactions over pathological ones. It was found that infants of mothers with medium to severely depressed mood score much higher on

distress during interactions than infants of mothers with no or mild depression, but after therapy the distress levels decreased. Similarly, it was found that infants of depressed mothers exhibited sleep disorders, but after therapy the sleep disorders diminished. Additionally, researchers found that mothers showed more doubts about their maternal competence as evidenced by their low levels of self-esteem, but post therapy, there was an improvement in maternal self-esteem and their subjective maternal representations. Thus in short, the study by Cramer et al., 1990 indicated that maternal depression is lifted when psychotherapy is aimed at the mother-infant relationship. This finding is significant to the current project's choice to amend an empirically supported treatment for helping parents deal with challenging behaviors of their children.

Forman, et al. (2007) studied mothers experiencing depression who underwent 24 weeks of IPT treatment. Mother and their infants then participated in a series of videotaped tasks designed to measure infant emotionality and parenting. Results indicated that depressed mothers were observed to be significantly less responsive to their infants, experienced more parenting stress, and rated their infants' temperaments as more negative than were non depressed mothers. Additionally, 18 months following treatment, the depressed mothers than were non depressed mothers continued to rate their children as high in negative temperament, as less securely attached, and as higher in behavior problems than did the mothers who had not been depressed postpartum. Furthermore, treatment did not improve mothers' reports of child behavior problems or of the quality of the mother-child relationship. Finally, although treatment did significantly reduce reported levels of parenting stress, it did not bring parenting stress down to the level experienced by non depressed mothers. This study clearly indicated that treating the

mother's depression, even successfully, is not in itself sufficient to change the mother-child relationship, or the mother's negative view of her child. Forman et al. (2007) explained their results in terms of two possible explanations. Firstly, IPT treatment leads to improvement only in targets of the therapy, but not non-targets, as the mother-infant relationship is not a central focus of this manualized treatment. A second possible explanation put forth by Forman et al. (2007) was that the depressed mother's relationship with her child was formed at a time when she was depressed and thus the entire relationship early on was in the context of depression. This contrasts with other important relationships whose more positive histories may have made it easier for her to imagine or to recreate a more positive relationship with recovery. In conclusion, this study suggests that treatment for depression in the postpartum period should target the mother-infant relationship in addition to the mothers' depressive symptoms since the main source of stress seems to be the mother-child relationship.

Thus, the studies by Cramer et al. (1990) and Forman et al. (2007) point out that maternal depression can be conceptualized as stemming from the stress associated with parenting and mother-child relationship as well as a biological vulnerability to depression. So treatment for maternal depression needs to focus on the helping the mother improve her relationship with her child (ren) as well as giving the mother a framework to understand her illness. Given this, many researchers and clinicians have developed a number of intervention strategies for maternal depression. The following sections will review some of the available psychological treatments for maternal depression.

Cognitive Behavior Therapy.

In Home Cognitive Behavior Therapy (IH-CBT) (Gloaguen, Gottraux, Cucherat, Blackburn, 1998) is an adapted form of CBT that is delivered in the home setting, uniquely designed for young, low income new mothers, and is explicitly integrated with home visitation. This type of intervention focuses on the identification of maladaptive thought patterns through daily monitoring, the elucidation of irrational thought processes, and the replacement with more rational beliefs (Ammerman, et al., 2007). In addition, it contains specialized treatment that is designed to meet the needs of new mothers by seamlessly providing the treatment through ongoing home visitation services (Whitton & Appleby, 1996). Researchers (Ammerman et al., 2007) have found that IH-CBT, provided in conjunction with home visitation, lead to increased improvement in mood, self-sufficiency of depressed mothers, and an improvement in the mother-infant relationship.

Psychodynamic Approach.

The psychodynamic psychotherapeutic approaches are also used to impact the mother-infant relationship. The underlying premise of this model is based on having the mother explore assumptions derived from her relationships with her own parents (Fraiberg, Adelson, & Shapiro, 1987). Through the therapeutic relationship, insights are assumed to be facilitated by the reenactment or repetition of the mother's early and other past relationships in her current relationship with her infant (Cohen, et al., 1999). It is assumed that the mother's increasing capacity to differentiate her infant from herself, will result in shifts in maternal sensitivity and responsiveness, thus enabling the mother to

perceive her infant more objectively and to respond accurately to her infant's needs (Cohen et al., 1999).

Researchers have found that psychodynamic approach can be utilized in home-based infant-parent psychotherapy. Infant-parent psychotherapy was based on the premise that disorders of attachment stem from the baby's engulfment in the parents' unresolved psychological conflicts (Lieberman, 1992). Such an approach helped the mother who suffered from severe postpartum depression to build her ego strength in order to stabilize precarious defenses and to support her bonding with her baby (Jacoby-Miller, 1985); Gelfand, Teti, Seiner, & Jameson (1996) studied 73 depressed mothers using a double-blind technique in a home-based early intervention and found that home-based intervention was successfully improved in mothers' depressed mood.

Another relationship based treatment is the Mother-Infant Therapy Group (M-ITG) model, which has been designed for women who are experiencing depression in the postpartum period, their infants, and their significant others (Clark, Tluczek, & Brown, 2008). The M-ITG is structured in a two-part format to address the individual emotional needs of mothers, infants, and family members as well as their needs in mother-infant dyadic and family interactions. During the first 90 minutes, mothers meet in a therapy group while their infants meet in a developmental therapy group. These groups are followed by a half-hour session during which mothers and infants reunite for dyadic group therapy. The optimal number for the group process is six to eight families. The group meets weekly for 12 consecutive weeks.

The relational focus of a group offers mothers opportunities to understand how depression affects them and their relationships with others and to develop better ways of

relating and coping more effectively. The assumption is that when mothers' social and emotional needs have been met, they may become more emotionally available to their infants' psychosocial needs.

A concurrent developmental therapy group addresses the infant's psychosocial and developmental needs while the mother–infant dyadic therapy component fosters healthy attachment relationships. Infants in the developmental therapy group receive one-to-one consistent interaction with a therapist, who provides affective attunement, responsive caregiving, and developmental stimulation.

The dyadic component of this treatment helps the mother–infant dyad by (a) creating a safe atmosphere for mother to explore alternative ways of interacting with her infant that support her infant's growth and development, (b) providing opportunities for mutually enjoyable interactions for mother and infant, (c) promoting reciprocity between mother and infant, and (d) enhancing the mother's feelings of competence in the parenting role.

Recognizing the important role that spouses/fathers can play as a source of emotional support to their partners and in mitigating the impact of the mother's depression on the infant, this intervention contains a component designed to enhance the quality of the partner relationship.

The goals of the M-ITG approach are to (a) ameliorate the mother's depressive symptoms; (b) address the mother's intrapsychic conflicts related to her own experiences of being parented; (c) reduce the mother's social isolation; (d) provide an emotionally responsive environment for the infant that supports his or her development; (e) facilitate positive mother–infant interactions; (f) enhance the quality of the mother's relationship

with her partner, including the communication and problem-solving capacities of both; and (g) improve the mother's functioning within and outside her family.

Clark et al. (2008) conducted a pilot study using the mother-infant therapy group (M-ITG) model for women with moderate to severe depressive symptoms, and they found that in comparison to the control group, mothers in the M-ITG model reported improved interaction with their infants. They also noted that mothers reported a reduction in their depressive symptoms.

Infant-Parent Psychotherapies.

Based on Selma Fraiberg's work with blind infants in the 1970's, this intervention focuses on the parent and infant jointly. Other important contributors to the theoretical framework for this therapeutic intervention have included Jeree Pawl, Alicia Lieberman, and more recently, Joy Osofsky (*Zero to three*, n.d.).

The notion of the infant as an initiator in infant-parent psychotherapy was first proposed by Maher, Levinson, and Fine (1976), but further explored by Johnson and his colleagues (Johnson, Dowling, & Wesner, 1980; Wesner, Johnson, & Dowling, 1962) who named a technique, "Watch, Wait, and Wonder (WWW)," as a reminder to mothers of their role in this therapy. The WWW utilizes a psychodynamic model, and it works at both the behavioral and the representational levels (Muir, 1992). In this infant-led psychotherapy, half of the session the mother is instructed to get down on the floor with her infant. She is instructed to observe her infant's self initiated activity and to interact only at her infant's initiative. This allows the mother to acknowledge and accept the infant's spontaneous and undirected behavior and also being physically accessible to him/her. Thus the mother becomes the observer of her infant's activity, potentially

gaining insight into the infant's inner world and relational needs (Cohen et al., 1999). By engaging parents in "wondering" what else might be behind a child's behavior or mood, Slade (2006) suggests that a parent will become more accustomed to thinking of the child's thoughts and feelings, which may subsequently lead to more sensitive care-giving and more benign representations of the child. In other words, WWW seems to help the mother to learn the skill of reflective parenting.

In the second half of the session, the mother is asked to discuss her observations and experiences of the infant-led play. Through play and the mother's discussion, mother and infant are presumed to modify or revise their models in light of their new mutual experiences together in therapy. Thus, this psychotherapy focuses directly on maternal sensitivity and provides an arena in which the infant can work through relational struggles (Muir, 1992). Cohen et al. (1999) studied a sample of 67 ten-to-thirty-month-old infants and their mothers who attended a child mental health clinic. In some cases, presenting problems were manifested as functional problems in the infant involving feeding, sleeping, and behavioral regulation. In other cases, referrals were due to maternal depression and feelings of failure in bonding or attachment, all factors that impeded the mothers' ability to relate to their infants. In most cases, problems were longstanding. In their study, Cohen et al. (1999) found that the WWW group showed a greater shift towards a more organized or secure attachment relationship and a greater improvement in cognitive development and emotional regulation than infants in the traditional mother-infant psychotherapy. In addition, they also found a larger increase in parenting satisfaction and competence and decrease in depression (lowered BDI scores) and parenting stress compared to mothers in the traditional mother-infant psychotherapy.

In summary, the WWW technique teaches the mother to build her relationship with her child through following the child's lead in play. Given, the usefulness of this technique in use with depressed mothers; it will be used in this amended program to help the depressed mother interact with her child.

Another form of infant-led psychotherapy, "Floor Time" was developed by Greenspan (1992). This is an individual approach and it focuses on specific developmental and relational goals. At the same time, this approach works on the assumption that sensitive and appropriate responsiveness is essential. In "Floor Time," however, the therapist more actively models and guides the mother in ways to interact with her infant in a sensitive and responsive manner (Cohen et al., 1999).

Behavioral Approach.

Behaviorally-oriented therapies are represented by interventions, such as interactional guidance. In this approach, videotaped interactions of mother and infant are used by therapists to help mothers recognize their own positive responses and interactions with their infants and to elaborate appropriate responsiveness. Mutual enjoyment is emphasized and pleasurable interactions between mother and infant are encouraged, which is presumed to build maternal confidence in her parenting role. It is the therapist's role to guide the mother to selected infant cues and characteristics to which she is encouraged to attend and respond (Cohen et al, 1999).

According to Sanders & McFarland (2000), the Behavioral Family Intervention (BFI) is an effective treatment for children with disruptive behavior problems. BFI is a skill-based approach that teaches the parents to reduce the disruptive behaviors by controlling the antecedents (e.g. clear instructions, engaging activities), and consequences

of behaviors (attention, and praise to prosocial behaviors, & time-outs and ignoring to disruptive behaviors). Parents are taught these skills through coaching, instructions, modeling, rehearsal, feedback following direct observation of parent-child interaction, and home work assignments. However, the specific therapeutic potential of BFI for depressed mothers is enhanced when cognitive therapy components were added to BFI (Sander, & McFarland, 2000).

Interpersonal Psychotherapy.

Interpersonal Psychotherapy (IPT) has been used with depressed clients and recently adapted to depression during pregnancy, miscarriage (Neugebauer, et al., 2006) and the postpartum period (O'Hara, Stuart, Gorman, & Wenzel, 2000). Weissman, Markowitz, & Klerman (2007), explains that birth of a child is major role transition for women in that women have to give up other roles, lose their time and income. They also explain the becoming a mother also involves roles disputes (such as disputes about autonomy, about feeling overwhelmed when caring for the child etc), learning new parenting skills, and managing new responsibilities while maintaining old relationships. Weissman et al. (2007) explains that IPT usually focuses on educating the mother about her experiences, defining the problem as a role transition, and learning of new skills to help the mother have a more realistic expectation of situations.

Massage Therapy.

Another possible strategy for improving mother-infant interaction when mothers are depressed is for them to learn to massage their infants (Onozawa, Glover, Adams, Modi & Kumar, 2001). In this therapy, the mother is taught the techniques of infant massage by encouraging her to observe and respond to her infant's body language and

cues and adjust her touch accordingly. Onozawa et al. (2001) studied depressed mothers and their infants who attended one hour weekly massage classes for a period of five weeks, and the mothers also attended a support group. Results indicated that a greater improvement in depression scores for mothers in the massage group and there was a consistent and marked improvement in infants' mood and behavior and in their interaction in comparison to mothers who only attended the support group.

Researchers have also found that massage therapy may enhance the behavior and development of infants of depressed mothers (Field, et al., 1996; Onozawa et al., 2001). In this study, Field et al. (2001), examined one-to-three month's old infants born to depressed adolescent mothers, who were provided a 15-minute massage 2 days per week for a 6-week period and their behaviors were compared to infants who had rocking session, wherein the infant was held in a cradled position and rocked in a rocking chair. Results indicated that the massage-therapy infants gained weight, improved on temperament dimensions including emotionality, sociability, and soothability, experienced increased alertness and enhanced sleep.

Other Programs that Facilitate the Parent-Child Relationship.

There are also specific program that have been developed to facilitate the relationship between a mother and child. One such program is The Mothers' and Toddlers' Program (MTP), developed by Suchman and her team (2006), helps mothers in drug-abuse outpatient settings to address problems in mother-child relations. According to Suchman, Pajulo, DeCoste, & Mayes (2006), their model is based on the assumption that a mother must first develop the capacity to recognize her own denied or distorted feelings about her child and their relationship in order to understand the emotional states

underlying her child's behavior. They further elaborated that without this capacity, a mother would presumably have difficulty understanding her child's behavior and responding to it appropriately and effectively. As a result, the child's development is impaired due to the mother's limited understanding of her own mental states.

The MTP program includes two stages. The therapeutic alliance stage focuses on strengthening the emotional relationship between mother and child. To do this, the therapist encourages the mothers to explore their feelings regarding their experiences and those of their children in the caregiving relationship (Suchman et al., 2006). Helping the mother to make inferences about a child's intention states is the next treatment stage. The therapist's role is to encourage mothers to become curious about their children's thoughts, wishes, and feelings, particularly during stressful interactions so that the mother understands the reasons for the child's distress. Thus, the MTP intervention aims to "undo" affective distortion and/or denial at the representational level and improve a caregiver's understanding of children's intentionality. These improvements at the metacognitive level are expected to lead to an increase in mothers' sensitivity to toddlers' emotional cues. In turn, better caregiver sensitivity is expected to lead to toddlers' increased open expression of emotional bids for comfort and development of the capacity for self-regulation, a capacity that the researchers viewed as essential for optimal psychosocial development (Suchman et al., 2006).

Parent-Child Interaction Therapy (PCIT)

Another program that is widely researched and used in the clinical realm of dealing with young children with disruptive behavior disorders is PCIT (Brestan & Eyberg, 1998; Schuhmann, Foote, Eyberg, Boggs, & Algina, 1998). It is different from

the other approaches, in that it is a behavioral approach that has been very evidenced-based (Chambless & Ollendick, 2000). Most of the interventions that focus on parent-child relationship have focused on infants. However, PCIT has been used with children aged two to seven with modification up to twelve years. PCIT coaches the mother to improve her relationship with her child through the use of certain behavioral skills, something that the other approaches do not specify. In addition, PCIT also coaches the mother to use consistent disciplining strategies to help her manage her child's behavior, which other relationship building strategies do not focus on. Thus, PCIT program seems to be a very useful behavioral intervention as it concretely helps the depressed mother to learn skills to help her become an effective parent. PCIT is the premise of the proposed program in this dissertation. The following section will explain the original PCIT program and the theoretical basis of the program.

The PCIT training program was developed by Dr. Sheila Eyberg and it involves working with parents and their young children aged two to seven (McNeil & Hembree-Kigin, 2010). In this approach, the therapist coaches the parent during real-time interactions with the child, from behind a one way mirror, and using a hearing device called a bug-in-the-ear (McNeil & Hembree-Kigin, 2010). According to Bell & Eyberg (2002), PCIT is different from other parent training programs because of its emphasis on parental responsiveness and the importance of the parent-child relationship, using a behavioral approach. PCIT is conducted in weekly 1-hour sessions and the average length of the treatment program is 12 sessions (Bell & Eyberg, 2002; McNeil & Hembree-Kigin, 2010). PCIT is conducted in two phases, Child-Directed Interaction (CDI) and Parent-Directed Interaction (PDI).

The first phase, CDI, aims to restructure the parent-child relationship and provide the child with a secure attachment to his or her parent. In this phase, parents are coached to follow their child's lead in play by providing positive attention. During this phase, the parent actively ignores the child's negative behaviors to create a positive, nurturing parent-child interaction called the child-directed interaction (CDI) (Harwood & Eyberg, 2006). The skills of CDI include Praising, Reflecting, Imitating, Describing, and being Enthusiastic (PRIDE skills); (McNeil & Hembree-Kigin, 2010). The parents are trained to avoid use of commands, questions, and critical statements during the CDI (Harwood & Eyberg, 2006). Criteria for progression to the second phase include specific behavioral goals on the part of the parent. For example, parents must show evidence of ten behavioral descriptions, ten reflective statements, ten labeled praises, and no more than three questions, commands or criticisms. Additionally, parents are asked to implement and log the CDI skills at home in daily five-minute sessions (Bell & Eyberg, 2002).

On the other hand, the second phase, PDI, aims to help the parent deal with challenging behaviors of their child by establishing consistent contingencies. During this phase, the Parent-Directed Interaction (PDI), parents continue to use the PRIDE skills, but also coached on how to give effective directions in the form of commands and to provide consistent consequences in the form of labeled praise after child compliance and time-out from negative attention after noncompliance. PDI skills include giving good commands, praising compliance using time-out in a chair for non compliance, and establishing standing house rules (McNeil & Hembree-Kigin, 2010). Thus, PCIT targets

the interaction, rather than isolated parent or child behaviors (Harwood & Eyberg, 2006).

The PCIT intake assessment uses interviews with parents and teachers, behavior rating scales and behavioral observations to obtain an accurate understanding of the child's behavior problems. After the initial interview, the parent completes the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999), which is a 36-item questionnaire with two scales – intensity scale (measures the frequency of the behavior problems) and the problem scale (measures the extent to which the child's behavior is problematic to the parent). If the initial interview suggests problems in the preschool setting as well, the child's teacher completes the Sutter-Eyberg Student Behavior Inventory - Revised (SESBI – R; Eyberg & Pincus, 1999), which assesses behavior problems at school. Parents are also asked to complete self-report scales of individual and parent functioning, such as the Parenting Stress Index (PSI; Abidin, 1995) and the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), all of which quantify and give information about how the treatment needs to be tailored to the family (Bell & Eyberg, 2002).

Some of the theoretical basis of the PCIT approach is reviewed in the following paragraphs. Hembree-Kigin & McNeil (1995) explains that Dr. Eyberg was heavily influenced by the work of Dr. Constance Hanf with two-stage operant model for modifying oppositional behavior of young children. Specifically, Dr. Eyberg found that parents could be taught the operant skills of differential attention as well as traditional play therapy skills of following the child's lead, providing undivided attention,

describing play activities, reflecting and expanding on child verbalizations, and imitation.

According to Harwood & Eyberg (2006), PCIT is also based on Diana Baumrind's work on parenting styles, which holds that authoritative parenting (combination of nurturance, good communication, and firm control) produces optimal child mental health outcomes. Eyberg (1988) stressed the two phases of PCIT paralleled Baumrind's concept of authoritative parenting, nurturance, and limit-setting.

Additionally, in developing PCIT, Eyberg was heavily influenced by attachment theory, operant theory, traditional child psychotherapy, and early child development (McNeil & Hembree-Kigin, 2010). Some of the key features of PCIT include working together with the parents and children, direct coaching of the parent-child interactions, using test data to guide treatment, sensitivity to developmental concerns, intervening early, targeting the interaction patterns (rather than the discrete behaviors), and a positive non judgmental philosophy (McNeil & Hembree-Kigin, 2010).

PCIT has been demonstrated to be effective across a spectrum of child behavior problems and parent-child interaction problems in a variety of populations. These studies have shown that child physical abuse among physically abusive parents is reduced, preschool children with conduct problems, adjustment disorders, poverty or cognitive deficits (Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993; Schuhmann, Foote, Eyberg, Boggs, & Algina, 1998; Herschell, Calzada, Eyberg, & McNeil, 2002; Chaffin, et al., 2004).

Recently, researchers found that PCIT is an effective intervention for improving the observed parenting skills of both depressed and non depressed caregivers with young

children, but PCIT is not directly associated with reducing caregiver's depressive symptoms (Scholes, Zimmer-Gembeck, & Thomas, 2009). In this study, participants were 95 mothers with children between the ages of 3 and 7. The mother-child dyads were randomized to immediate PCIT or a supported waitlist. In total, there were 68 dyads who received PCIT and 27 who were allocated to a 12-week supported waitlist. The BDI-II, a clinical interview, and the Measure of Observed Depressive Symptoms (MOODS) were used to measure caregivers' depressive symptomatology. Caregivers who were diagnosed as depressed on the clinical interview or scored 20 and above on the BDI-II were classified as depressed. Caregivers who were not diagnosed as depressed on the clinical interview and scored below 20 on the BDI-II were classified as nondepressed. Because the MOODS assessment was not used to identify depressed caregivers, it was used as an outcome measure when depressed and nondepressed caregivers were compared. In the PCIT condition, weekly sessions were held and the mothers involved had a range of 1 to 47 sessions prior to completing treatment. On the other hand, in the supportive waitlist condition, the mothers received weekly telephone contact from a PCIT therapist, in order to provide supportive counseling with personal issues and parenting-related stressors. There were 3 aims of the study by Scholes et al. (2009). The first aim was to examine the association between maternal depression and treatment retention/dropout after using a multimethod approach to identify caregivers who were or were not depressed. The second aim was to investigate whether there was a moderating effect of caregiver depression on intervention effectiveness, with effectiveness measured by repeated observations of caregiver verbalizations when interacting with their young children. Finally, the third aim was to test whether the

parenting intervention had an influence on caregiver depressive symptoms when compared to a supported waitlist.

Results indicated that no significant associations between maternal depression and treatment dropout rates. It was also discovered that there were no significant differences in parent-child interactions (i.e., praises, reflections/descriptions, instructions, questions, and negative talk) between depressed and non depressed caregivers at pre-assessment. Furthermore, depressed and non-depressed caregivers did not significantly differ in the amount of change in parent-child interactions from pre- to the 12-week assessments. Instead, improvements in parent-child interactions were found among all treatment participants when compared to those on the waitlist (Scholes et al., 2009).

In summary, PCIT seems to be an effective strategy in helping mothers improve their relationship with their children as well as helping them parent their child. Even though PCIT focuses on enhancing the parenting behavior, research has shown that it does not necessarily reduce the depressive symptomatology of the mother (Scholes et al., 2009). Thus, it puts the mother at increased risk for relapse, and even possibly risks the maintenance of long term effects of PCIT treatment. It would be important to incorporate intervention targeted at reducing the depressed mother's symptoms, in addition to helping her behavioral skills of parenting her child. This project will further extend the implementation of PCIT proposing the use of PCIT with mothers who are depressed. In turn, an amended version of PCIT has been created for psychologists who are working with depressed mothers and who want to strengthen their parent-child relationship or want to improve their parenting skills. More details about this amended version are described in the next chapter.

Chapter Three

Proposed Amendment for the PCIT Curriculum

Maternal Depression is widespread and associated with both parenting problems and heightened child psychopathology (Gelfand, Teti, Seiner, & Jameson, 1996). It has significant impact on the individual's role as a mother and her relationship with and health of her child (ren). Maternal depression is potentially devastating because it affects the child's physical, cognitive, and emotional growth, all of which depends on a warm and secure attachment with a mother. Children of depressed mothers are also more likely to develop depression, anxiety, or acting out behaviors such as anger. Thus, these children are at higher risk for psychiatric, behavioral, and academic problems (Chasebrand, 2008). In the previous literature review chapter two, the Parent-Child Interaction Therapy (PCIT) model was identified as an evidenced-based behavioral approach that addresses the parent-child relationship and helps parents address behavior problems that the child may be demonstrating. Since behavior problems are common in children of depressed mothers, the proposed amendment for the PCIT curriculum will focus on providing suggestions as to how PCIT can be implemented with mothers who are depressed with children between the ages of two and four years of age.

Rationale

Research has found that maternal depression is associated with reduced parenting responsiveness, affection, and reciprocity and increased intrusion and punitiveness (Goodman & Gotlib, 1999), negative feelings towards children (Lovejoy, Graczyk,

O'Hare, & Neuman, 2000), more punitive, controlling attitudes towards child rearing (Sandberg, Garcia, Vega-Lahr, Goldstein, & Guy, 1985) slower maternal responsiveness, less affectionate contact with their children (Goodman & Gotlib,1999), increased sense of helplessness, increased hostility (Panaccione & Wahler, 1986), irritability, disengaged or intrusive interactive style, and lessened ability to deal with children (Gelfand & Teti, 1990).

Investigators (Goldsmith & Rogoff, 1997) have found that compared to non-depressed mothers, depressed mothers spend less time mutually engaged with their children in a shared activity. In terms of the parenting strategies, other researchers identified that depressed mothers choose strategies such as, enforcing obedience unilaterally or withdrawing when faced with child resistance, all of which require less cognitive effort. In comparison, control mothers, were more likely to negotiate a solution with their child (Kochanska et al., 1987). Goodman & Gotlib (1999), in their review found that depressed mothers and their toddlers and preschool-aged children have been found to engage in patterns of coercive mutual interpersonal influence, including revenge and retaliation. Given the interaction patterns of many depressed mothers, it is important to develop a program that help the mother build a positive relationship as well as engage in consistent parenting with her child.

PCIT is one such parenting program that helps the mother manage her children's behavior. Even though PCIT focuses on enhancing the parenting behavior, research has shown that it does not necessarily reduce the depressive symptomatology of the mother (Scholes et al., 2009). Thus, it puts the mother at increased risk for relapse, and even possibly risks the maintenance of long term effects of PCIT treatment. It would be

important to incorporate intervention targeted at reducing the depressed mother's symptoms, in addition to helping her behavioral skills of parenting her child.

Thus taking into account the depressed mother's psyche/ mental state, the amended version of PCIT will integrate three main interventions including Motivational Interviewing, the Watch, Wait, & Wonder (WWW) Technique, and home visiting.

Motivational Interviewing is recommended to assist and better help depressed mothers to be able to work with their children. Motivational interviewing can be defined as a "client-centered directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (Miller & Rollnick, 2002, p.25). It is based on four principles including expressing empathy, developing discrepancy, rolling with the resistance, and supporting self-efficacy (Miller & Rollnick, 2002). It is an important skill that the clinician needs to use to engage depressed mothers who are resistant to treatment.

This could be done by ensuring that the mother believes she is understood, focusing on her views especially on the importance of change in her life, and focusing in her worldview of the problems. The clinician needs to offer a reframe of the mother's current problems with an emphasis on her problems comprising of a medical condition (that can be treated and following, she can deal with her life situation more effectively), learning a range of skills to engage with her child (which can help her parent more effectively). During motivation interviewing, the clinician also needs to explore the mother's beliefs about treatment, identify possible barriers to treatment(s), explore her coping mechanisms and strengths, and instill hope about the possible positive change of treatment. In the end, the clinician needs to invite the mother to attend treatment sessions and, if she agrees, the procedures for treatment will be discussed. However, if the mother

does not want treatment at the time, the clinician will inform the mother about future treatment options.

The Watch, Wait, Wonder (WWW) technique developed by Johnson and his colleagues is one of the amendments to this proposal. The WWW is an infant-led psychotherapy that utilizes a psychodynamic model, and works at both the behavioral and the representational levels (Muir, 1992). In this infant-led psychotherapy, half of the session the mother is instructed to get down on the floor with her infant. She is instructed to observe her infant's self initiated activity and to interact only at her infant's initiative. This allows the mother to acknowledge and accept the infant's spontaneous and undirected behavior and also being physically accessible to him/her. Thus the mother becomes the observer of her infant's activity, potentially gaining insight into the infant's inner world and relational needs (Cohen et al., 1999). This technique seems to be a useful tool in building the skill of reflective functioning in the mother.

Reflective functioning is an individuals' ability to mentalize, or appropriately attribute mental states and beliefs of self and others. Specifically, it is the mother's ability to perceive, tolerate, and/or comment upon her own and her child's emotional experience. Reflective functioning seems to be an important aspect in the fostering of mother-child relationship as it is an important predictor of infant attachment security. PCIT is a behavioral approach that coaches the mother to utilize skills to improve the relationship. Even though it helps her build on her relationship with her child, PCIT skills does not necessarily allow the mother to develop the skill of reflective functioning, which is the mother's ability to mentalize, or appropriately attribute mental states and beliefs of self and others. According to Suchman, Pajulo, DeCoste, & Mayes (2006), a mother must

first develop the capacity to recognize her own denied or distorted feelings about her child and their relationship in order to understand the emotional states underlying her child's behavior. They further elaborated that without this capacity, a mother would presumably have difficulty understanding her child's behavior and responding to it appropriately and effectively. As a result, the child's development is impaired due to the mother's limited understanding of her own mental states.

This technique uses a psychodynamic perspective, in which half of the session the mother is instructed to get down on the floor with her child. She is instructed to observe her child's self initiated activity and to interact only at her child's initiative. This allows the mother to acknowledge and accept her child's spontaneous and undirected behavior and also being physically accessible to him/her. Thus the mother becomes the observer of her child's activity, potentially gaining insight into the child's inner world and relational needs (Cohen et al., 1999).

By engaging parents in "wondering" what else might be behind a child's behavior or mood, Slade (2006) suggests that a parent will become more accustomed to thinking of the child's thoughts and feelings, which may subsequently lead to more sensitive care-giving and more benign representations of the child. In other words, WWW seems to help the mother to learn the skill of reflective parenting. In the second half of the session, the mother is asked to discuss her observations and experiences of the child-led play. Through play and the mother's discussion, mother and child are presumed to modify or revise their models in light of their new mutual experiences together in therapy. Thus, this psychotherapy focuses directly on maternal sensitivity and provides an arena in which the infant can work through relational struggles. In summary, the WWW technique

seems to be basic skills to help the depressed mother build on her relationship with her child by understanding her own mental state, and thereby understanding her own child's behavior as well as responding to it effectively. The WWW technique would also reinforce the skills she will learn in PCIT, specifically the CDI's PRIDE skills of "Reflection," and "Description," where the mother develops and practices reflective parenting. This technique of WWW would augment the other skills the mother would learn in CDI & PDI stages of PCIT.

Lastly, the mothers in this program will benefit from having home visits to help them apply the skills learned in the program at their homes with their children as well as ensuring the mother's motivation to seek treatment.

The amended program is to be used with depressed mothers and their children aged two and four years. PCIT has been developed for use with children aged two to twelve. This program is intended for early intervention with a specific focus on a narrow child age range, and thus focused on children between the ages of two and four. Early intervention literature states that infants and very young children are especially vulnerable to abuse and neglect (Shaw & Goode, 2005). Thus, early intervention is key to prevent child abuse and neglect and its long term consequences. Researcher, Timmer (2005), examined the effectiveness of PCIT with maltreating parent-child dyads and he found that PCIT was effective in decreasing child behavior problems, decreasing parental stress and decreasing the abuse-risk from pre-to post-treatment for dyads with a history of maltreatment.

The amended program has also adapted the criteria for mastery of CDI skills wherein the mastery limit has been reduced to 6 (from 10) to keep the mother's motivated

to attend and participated in the session. The basis for the mastery level is the Child-Adult Relationship Enhancement (CARE) model, which is a modification of specific PCIT skills for general usage by adults who work with traumatized children (Putnam, et al., 2006).

Overview of the Program

The aim of this amendment to the PCIT program is to help depressed mothers understand their illness and the impact it has on their parenting relationship with their child. Another goal of the program is to help mothers manage typical/atypical preschool behaviors which are often coined as being disruptive. The PCIT program has been widely used across different cultures and settings. The theoretical basis of PCIT primarily involves social learning theory, play therapy, and attachment theory. The proposed amendment also integrates motivational interviewing, principles of behavioral activation, and behavioral principles.

Program Logistics

The program is targeted for depressed mothers with children between the age of two and four years, the program can take place in any outpatient mental health setting (such as community mental health centers, primary health care settings, and pediatric clinics) in any individual therapy situation where the clinician has access to one way mirror rooms, video recording capabilities, and wireless listening devices that allow the clinician to observe, as well as train, the mother. In situations, if a one way mirror is not present the clinician needs to sit quietly in the corner of the therapy room. This program is intended for individuals who are professionally trained according to PCIT training guidelines.

This amended model could also be adapted for use with either a group or individual format. If conducting the program in a group method, it is recommended that the group consist of four to six mothers. The larger group would come together for group processing during the psychoeducation, as well as first sessions of Child-Directed Interaction (CDI), and Parent-Directed Interaction (PDI). The primary purpose of the group is to provide mothers with social support and allow them to assist each other with CDI/PDI skills, or to deal with personal challenges. Niec, Hemme, Yopp, & Brestan (2005) discussed that PCIT conducted in group format could have potential benefits such as reducing treatment costs, reducing therapist hours, intervening with larger number of families in a short period of time, and parental perceptions of support, acceptance and social reinforcement from other group members. If conducting PCIT individually, the individual therapy sessions should contain only the mother and her identified child.

Home visitations could be conducted at regular intervals (mentioned below) to facilitate the mother's utilization of skills at home, helping her with difficult child-related behavioral situations, as well as monitor her progress in the program. Home visits occur at Session 2 of WWW, at the last session of WWW, at Session 2 of CDI, at the last Session of CDI, at Session 2 of PDI, and at the last session of the program. Follow-up visits to the mother's home can also be done after 30 days, and 60 days of completion of treatment to identify the mother's progress after completing the program.

Another possible issue that could interfere with program completion is "missed sessions" on part of the mother. Thus, in Session I, it is important to speak about the importance of regular attendance to make progress in treatment. Mothers also need to be informed that they need to call ahead to if they know they will miss a session and try to

reschedule the session in the same week, if possible. If, however the mother cannot reschedule a session in the same week, then the clinician can schedule a home-visit as a way to make-up for the missed session. If the mother misses three or more session without calling ahead to reschedule, then treatment needs to end since it will be not be effective without regular attendance.

Population

This program is suggested for mothers aged 18 years and above, with mild-to-moderate levels of maternal depression as evidenced by Beck Depression Inventory (BDI) scores of 29 and below & Edinburgh Postnatal Depression Scale (EPDS) scores of 12 and above; currently on antidepressants; moderate to high level of maternal stress as evidenced by percentile score of 81 and above on the Total Stress Score, and the other three subscales on the Parenting Stress Index-Short Form (PSI-SF); moderate to high level of social support as evidenced by the presence of at least one adult in the household to assist the mother; currently have at least one child in the household; absence of any other mental illness; no involvement with Children Services, absence of current ongoing physical, sexual, or emotional abuse in the home; Average or higher level of cognitive functioning; at least fourth grade reading level; and personal commitment to the treatment program. The children involved in this program need to have the following characteristics: be two-to-four years of age, presenting with externalizing or internalizing behavior problems in the moderate to severe range and absence of a psychotic disorder.

A possible barrier to treatment could be generational differences regarding how a parent should handle challenging behaviors (discipline versus punishment). There are families who do not believe or engage in positive parenting. In such cases, when mothers

learn the skills of WWW and CDI in treatment, they might be faced with possible barriers to utilize the skills at home, due to lack of belief/practice of positive parenting skills (due to cultural or personal values) by other adult members in the mother's household. In such cases, the child's behavior needs to be reframed for the mother as well as help her explain the same to the other family members who interact with the child. To illustrate, the use of parenting strategies in African American families is described in the next few paragraphs.

According to Halfon and Olson (2004), the most common discipline strategies include spanking, taking away a toy or treat, yelling, using time out, and providing explanations and African American caregivers use spanking with the intention to punish, teach, or correct a child's misbehavior (Regalado, Sareen, Inkelas, Wissow, & Halfon, 2004). Research has found cultural differences between African American and Caucasian parenting practices, specifically, an increased use of corporal punishment within African American families (Graham, 1992). Most explanations of this finding point to the social and economic disadvantages faced by a disproportionate number of African American families, suggesting that such adverse conditions foster a reliance on more authoritarian parenting practices in order to protect children from dangers in their environment and promote their chance of survival and success (Kelly, Power, & Wimbush, 1992). The meaning of disciplining children for Black parents has been correlated by Alvy's work (1994) to represent that 30% of parents see discipline associated with punishment where punishment refers to punish, restricted, no privilege, isolate, time-out; spank, whip is associated with 18% to correspond with beat, belt, corporal punishment, hit, slap, swat; and explaining and teaching refers to teaching right from wrong, guidance, learning, modeling, and correcting.

Traditional forms of discipline take the form of authoritarian style of parenting. It stems from the philosophy “spoil the rod, not the child” wherein a parent wants to help a child to survive in by having the child to be afraid of the parent so the child does what the parent wants. This traditional notion of disciplining also ensures that the parent raises an obedient and passive child who would not oppose authority figures regardless of whether the adult figure is right or wrong. Traditional parenting strategies may put parents and caregivers at higher risk for encountering children’s protective services (Alvy, 1994). A traditional view of discipline has little to no emphasis on positive consequences (Alvy, 1994). However, a more authoritarian style can cause the child to exhibit a low self-esteem, less self-control, more behavior problems in comparison to children raised with a more authoritative style of discipline. An authoritative style of discipline is based on equality and respect, providing choice that fits child’s age and development and it leads to children who are more self-disciplined, demonstrate warmth, and self-control.

The Modern view of discipline involves focusing more on a relational aspect with the parent/caregiver. The goal is not to make the child afraid of the parent but help the child to become self-disciplined by controlling their anger and aggressiveness, being respectful to self and others, following family guidelines and it takes into account, that socially sanctioned practices are geared towards protecting the child. Thus, disciplinary practices that are culturally sensitive to African American children can utilize non-physical disciplinary components to address common behavior problems through techniques of confrontive “I” statements, problem solving, and contingent management. Also, disciplinary practice need to help build and maintain the relationship between the

child and parent/caregiver, and teach the child how to utilize self- discipline and take pride in being black through enhancing self-esteem (Alvy, 1994).

A second barrier to successful completion of treatment is missed sessions and cancellations. To address this issue, mothers need to be informed that they need to call ahead to if they know they will miss a session and try to reschedule the session in the same week, if possible. If, however a mother cannot reschedule a session in the same week, then the clinician can schedule a home-visit as a way to make-up for the missed session. On the other hand, incentives should be provided for mothers' who attend the session. The incentives could include gift cards or a meal (either lunch/dinner).

Pre-Program Assessment

Prior to the clinician implementing this curriculum, it is suggested that each participant undergo a screening. Since the curriculum is intended for young mothers struggling with mild to moderate depression and wanting to improve their relationship with their two to four year old children, it is important to screen the participants using specific outcome tools. The screening procedure consists of an interview, assessments such as Beck's Depression Inventory (BDI), Eyberg Child Behavior Inventory (ECBI), Edinburgh Postnatal Depression Scale (EPDS), Parenting Stress Index –Short Form (PSI-SF) and the Marschack Interaction Method (MIM). Participating families can come from outpatient settings such as community mental health centers and hospital settings. When mothers and children are identified as individuals who could benefit from the program, an interview with the identified mother, informants and other mental health professionals involved with the family would be necessary to obtain a detailed understanding of the presenting problems and family history. Furthermore, assessments such as BDI, EPDS,

ECBI, PSI-SF and the MIM are to be administered to the mother in order to understand current level of depression, current level of maternal stress, extent and intensity of problems, and the interaction patterns between the mother and the child.

Implementation

The proposed program will be similar to the original PCIT program, in that the program will have the same core structure (CDI & PDI), core principles (grounded in social learning theory, assessment driven, and performance-based), and core procedures (coaching, coding, and both the parent and child together). However, the proposed program will also incorporate principles of motivational interviewing, psychoeducation about depressive symptomatology, role transitions, normal child development, activity scheduling, and utilize the WWW technique. These additions are specifically targeted at helping the mother understand her illness and its impact on her child and others, as well as to help her engage with treatment and better facilitate a better working relationship with her child. Following the treatment, this program involves follow-up home visitations to check the progress of the mothers who attended program.

Format and Duration

The format of this adapted program's CDI & PDI is similar to that of the original PCIT. However, the initial sessions would be spent on educating the mother about depression, the effects of depression on child rearing, challenging child behaviors, and child development. Each session will be scheduled for an hour. Subsequent sessions will involve the mother mastering the CDI and PDI skills. The first session of CDI will give information about the skills required for each phase, and role-playing. Each additional session will be structured to include a general time-line consisting of: check-in for 10

minutes, followed by 30 minutes of the CDI/PDI, and 20 minutes of providing feedback and assigning homework.

Major Learning Concepts

The curriculum will be based on the following major learning concepts:

- i) Psychoeducate the mother about her symptomatology and how it impacts her parenting skills, her interactions with her child (ren), her role transitions from a independent woman to a mother, and in turn, the identified child's behavior.
- ii) Psychoeducate the mother about normal child development and some of the key elements of child rearing and disciplining.
- iii) Understanding the basis for secure attachment, especially how to set limits, manage a child's behavior, as well as increase the level of playfulness between mother and child.
- iv) Monitor the mother's current level of depressive symptoms, her medication management, and maintain the mother's level of motivation in the program.

Curriculum Session Outline

- I. Pre-Assessment & Orientation to Therapy
- II. Review Test Results & Psychoeducation – Maternal Depression (*This session can be conducted in a group format, with two or more mothers*)
- III. Psychoeducation –Child Development (*This session can be given in group format, with two or more mothers*)
- IV. Psychoeducation – Challenging Behaviors
- V. Following child's lead in play using the Watch, Wait, & Wonder (WWW) technique

- a. First Session
 - b. Following Sessions
- VI. CDI sessions (target mastery of PRIDE skills)
- a. First Session
 - b. Second Session
 - c. Following Sessions
- VII. PDI sessions (target mastery of skill of giving commands & time outs)
- a. First Session
 - b. Following Sessions
- VIII. Termination and Feedback and Assessment
- IX. Follow-up Home Visits

Evaluation of Program

The clinician is advised to evaluate each participant for efficacy and have each participant complete pre and post testing. The following assessment measures are suggested for use: Beck's Depression Inventory (BDI), Eyberg Child Behavior Inventory (ECBI), Parenting Stress Index-Short Form (PSI-SF) and the Marschack Interaction Method (MIM) to help understand a mother's current level of depression, current level of maternal stress, extent and intensity of problems, as well as the interaction patterns between the mother and the child.

Amendment for the PCIT Curriculum

Session Description

Session I: Pre-Assessment & Orientation to Therapy

**Indicates information from the original PCIT program*

Materials Needed: Beck's Depression Inventory (BDI), Eyberg Child Behavior Inventory (ECBI), Edinburgh Postnatal Depression Scale (EPDS), Parenting Stress Index-Short Form (PSI-SF) and the Marschack Interaction Method (MIM) materials, Policy for Cancellations and No Shows *

Purpose of this Session:

- Participants will complete diagnostic assessment and intake.
- Participants will complete required pre-assessment.
- Participant will complete the PCIT Baseline Assessment
- Clinician will establish rapport with family.
- Clinician will work with mother using motivational interviewing (if she is not ready to engage with child).
- Clinician will familiarize mother with treatment steps.

Note: This session can be conducted in two meetings, if the participant is unable to complete the required assessment in one meeting

Treatment Session Format:

1. Clinician will complete a diagnostic assessment of the presenting problem. Focus needs to be on gathering historical data as well as checking the level of the mother's motivation to engage in therapy.
2. Clinician will utilize motivational interviewing, if the mothers are resistant to therapy.

3. Clinician will conduct pre-assessments for those mothers that agree to treatment.

Administered assessments will be :

- Beck's Depression Inventory (BDI-II)
- Edinburgh Postnatal Depression Scale (EPDS)
- Parenting Stress Index-Short Form (PSI-SF)
- Eyberg Child Behavior Inventory (ECBI)
- The Marschach Interaction Method (MIM)
- Baseline Assessment for PCIT

4. Clinician will describe the purpose of therapy.*

- a. Clinician will also mention an additional therapy purpose, which involves
“helping the mother manage her depression effectively.”

5. Clinician will provide support to mother for various stressors and barriers to treatment.*

6. Clinician will also discuss attendance policy* with mother. See Session I-Handout A for details of the attendance policy as would be discussed with mothers. The mother and the clinician need to sign the attendance policy prior to start of treatment.

7. When scheduling for next appointment, encourage mother not to bring her child to the next session.

Session I Handout A: Policy for Cancellations & No



Shows

- ✓ Due to the large number of families who want treatment, we must strictly enforce the policy for missed appointments.
- ✓ A family will be withdrawn from treatment if they miss **three** scheduled appointments without canceling in advance (no shows).
- ✓ Families may cancel appointments 24 hours in advance and reschedule within 5 days without consequence.
- ✓ A family will be withdrawn from treatment if they cancel more than **three** scheduled appointments with less than 24-hour notice.
- ✓ Whenever a family no shows or calls to cancel, the therapist will try to reschedule another appointment time within the same week if possible, or schedule a home visit, so that the family can make up for the missed appointment and not delay their progress in treatment.
- ✓ A letter of treatment closure will be sent to any family that must be withdrawn from treatment due to missed appointments.

Parent Signature

Date

Therapist Signature

Date

Session II: Review of Test Results and Psychoeducation – Depression

Materials Needed: Test Results and Handouts

Purpose of this Session:

- Clinician will review test results and discuss possible barriers to treatment.
- Clinician will continue building relationship with mother.
- Clinician will provide information to mother about depression and its impact on functioning effectively in various aspects of life.

Treatment Session Outline:

1. Clinician will facilitate introductions (*if in a group format, all the mothers meet together for this session*) and continue building rapport.
2. Clinician will review test findings (*in a group format, the clinician will have individualized detailed test review sessions with each mother*)
3. Clinician will provide more in-depth information on:
 - Maternal Depression
 - Effects of Depression
 - Causes of Depression
4. Schedule next appointment and tell mother not to bring her child to the next session.

Session II Handout A: Maternal Depression

Maternal Depression

Encompasses a wide range of mood disorders that can affect a woman during pregnancy and after the birth of her child.

This includes prenatal depression, the "baby blues," postpartum depression, and postpartum psychosis.



Symptoms of Maternal Depression

- ✓ Restlessness or irritability
- ✓ Profound sadness and frequent crying
- ✓ Withdrawing from loved ones and social isolation
- ✓ Feelings of hopelessness and powerlessness
- ✓ Loss of motivation and interest in normal activities
- ✓ Irregular sleep patterns and constant fatigue
- ✓ Lack of interest in one's self or children
- ✓ Appetite Disturbance
- ✓ Mood Instability
- ✓ Difficulty concentrating or making decisions
- ✓ Confusion
- ✓ Agitation
- ✓ Guilt

How Common is Maternal Depression?

- Maternal depression is **very common** and most often begins in early adulthood.
- It is estimated that **more than one third of women** in their child bearing and child rearing years have depressive symptoms.
- Prevalence Rate:
 - a. *Perinatal Depression* = 10-20% of pregnant woman
 - b. *Baby Blues* = 80% of new mothers
 - c. *Post Partum Depression* = 10-20% of new mothers
 - d. *Post Partum Psychosis* = 1-2 per 1000 new mothers

Adapted from http://www.health.state.ny.us/community/pregnancy/health_care/perinatal/docs/maternal_factsheet.pdf

Session II Handout B: Maternal Depression (cont...)

Effects of Maternal Depression

- Mothers have poor birth outcomes, including low-birth weight, prematurity, and obstetric complications
- Mothers who are depressed lack the energy to carry out consistent routines, to read to their children, or have fun with them, singing, playing, and cuddling them.
- Disrupt parent child bonding
- Children whose mothers are depressed may:
 - o Act out more
 - o Have problems learning
 - o Have difficulty forming friendships and getting along with peers
 - o Affects the well-being and school readiness of young children
 - o Are at higher risks of developing depression
 - o Higher risk of having behavioral problems
- Family discord
- Impact on partner and other family members

Can Maternal Depression be Treated? YES

There are various modalities to treatment including Medications, Therapy, & Support Groups

Despite available treatments, mothers do not come for treatment due to lack of awareness, stigma, or no access to health care



Adapted from http://www.health.state.ny.us/community/pregnancy/health_care/perinatal/docs/maternal_factsheet.pdf &

http://www.nccp.org/publications/pdf/text_791.pdf

Session II Handout C: Maternal Depression (cont...)

CAUSES OF DEPRESSION

❖ Physiological Factors

- Hormonal Changes
- Fatigue and lack of Sleep
- Biological Vulnerability
- Prior History of Depression

❖ Psychological Factors

- Feelings of doubt about pregnancy
- Loss of freedom
- Loss of identity
- Discrepancy between the expectations and realities of motherhood
- Stress levels

❖ Societal / Cultural Factors

- Social / Familial support
- Societal beliefs and expectations about motherhood
- Social practices that impact the well-being of a mother



Adapted from http://www.who.int/mental_health/prevention/suicide/MaternalMH/en/ and <http://www.motherhood-cafe.com/causes-of-postpartum-depression.html>

Session III: Psychoeducation – Child Development

Materials Needed: Handouts

Purpose of this Session:

- Clinician will continue building relationship with mother.
- Clinician will answer mother's questions from last sessions.
- Clinician will provide information about child development.

Treatment Session Outline:

1. Clinician will facilitate introductions (*if in a group format, all the mothers meet together for this session*) and continue building rapport.
2. Clinician will provide more in depth information of :
 - Normal Physical Development of child
 - Normal Mental Development of a child
 - Normal Socio Emotional Development of a child
3. When scheduling for next appointment, encourage mother not to bring her child to the next session.

Session III Handout A: Child Development

NORMAL PHYSICAL DEVELOPMENT		
2 Years	3 Years	4 Years
<p><i>Two-year-olds like to be independent! Favorite words are "Mine" and "No" and "I do it!" A great deal of time is spent exploring, pushing, pulling, filling, dumping, and touching.</i></p>	<p><i>The 3-year-old is full of wonder, and spends a lot of time observing and imitating. They love to spend time with parents and enjoy helping out with simple household tasks.</i></p>	<p><i>Energetic and imaginative best describes four-year olds. They are able to learn new words quickly, and use them in chatting with you, telling you jokes and wild stories.</i></p>
<ul style="list-style-type: none"> • weight: 22-38 pounds • height: 32-40 inches • has almost a full set of teeth • walks up and down stairs by holding onto railing • feeds self with spoon • experiments by touching, smelling, and tasting • likes to push, pull, fill, and dump • can turn pages of a book • stacks 2-4 objects • scribbles with crayons or markers • many children (but not all) will learn to use toilet • walks without help • walks backwards • tosses or rolls a large ball • stoops or squats • opens cabinets, drawers • can bend over to pick up toy without falling 	<ul style="list-style-type: none"> • weight: 25-44 pounds • height: 34-43 inches • develops a taller, thinner, adult like appearance • develops a full set of baby teeth • sleeps 10-12 hours at night • sleeps through most nights without wetting the bed (occasional accidents are still quite common) • uses the toilet with some help (many boys may not be ready for toilet learning until age 3 1/2) • puts on shoes (but cannot tie laces) • dresses self with some help (buttons, snaps, zippers) • feeds self (with some spilling) • tries to catch a large ball • throws a ball overhead • kicks a ball forward • hops on 1 foot • walks short distance on tiptoe • climbs up and down a small slide by self • pedals a tricycle 	<ul style="list-style-type: none"> • weight: 27-50 pounds • height: 37-46 inches • uses a spoon, fork, and dinner knife skillfully • needs 10-12 hours sleep each night • dresses self without much help • walks a straight line • hops on 1 foot • pedals and steers a tricycle skillfully • jumps over objects 5-6 inches high • runs, jumps, hops, skips around obstacles with ease • stacks 10 or more blocks • forms shapes and objects out of clay or play dough • threads small beads on a string • catches, bounces, and throws a ball easily

Ages & Stages Handouts from ages 2 – 4 years, as taken from

http://www.extension.iastate.edu/homefamily/children/development/ages_stages.htm



Session III Handout B: Child Development

NORMAL MENTAL DEVELOPMENT		
2 Years	3 Years	4 Years
<ul style="list-style-type: none"> • enjoys simple stories, rhymes, and songs • uses 2-3 word sentences • says names of toys • hums or tries to sing • enjoys looking at books • points to eyes, ears, or nose when asked • repeats words 	<ul style="list-style-type: none"> • 75-80 percent of speech is understandable; • talks in complete sentences of 3-5 words. "Mommy is drinking juice." "There's a big dog." • stumbles over words sometimes - usually not a sign of stuttering • listens attentively to short stories; likes familiar stories told without any changes in words • repeats words and sounds • enjoys listening to stories and repeating simple rhymes • able to tell simple stories from pictures or books • enjoys singing and can carry a simple tune • understands "now," "soon," and "later" • asks who, what, where, and why questions • stacks 5-7 blocks • enjoys playing with clay or play dough (pounds, rolls, and squeezes it) • puts together a 6-piece puzzle • draws a circle and square • recognizes everyday sounds • matches object and picture • identifies common colors • can count 2-3 objects 	<ul style="list-style-type: none"> • can place objects in a line from largest to smallest • can recognize some letters if taught and may be able to print name • recognizes familiar words in simple books or signs (STOP sign) • understands the concepts of tallest, biggest, same, more, on, in, under, and above • counts 1-7 objects out loud • understands order of daily routines (breakfast before lunch, lunch before dinner, dinner before bedtime) • speaks fairly complex sentences. "The baby ate the cookie before I could put it on the table." • enjoys singing simple songs, rhymes, and nonsense words • adapts language to listener's level of understanding. To baby sister: "Daddy go bye bye." To Mother: "Daddy went to the store to buy food." • learns name, address, and phone number if taught • asks and answers who, what, when, why, where questions • continues 1 activity for 10-15 minutes • names 6-8 colors and 3 shapes • follows two unrelated directions: "Put your milk on the table and get your coat on"



Ages & Stages Handouts from ages 2 – 4 years, as taken from

http://www.extension.iastate.edu/homefamily/children/development/ages_stages.htm

Session III Handout C: Child Development



NORMAL SOCIO-EMOTIONAL DEVELOPMENT		
2 Years	3 Years	4 Years
<ul style="list-style-type: none"> • plays alongside others more than with them • acts shy around strangers • likes to imitate parents • easily frustrated • affectionate—hugs and kisses • insists on trying to do several tasks without help • enjoys simple make-believe like talking on phone, putting on hat • very possessive—offers toys to other children, but then wants them back 	<ul style="list-style-type: none"> • accepts suggestions and follows simple directions • sometimes shows preference for one parent (often the parent of the opposite sex) • enjoys helping with simple household tasks • can make simple choices between two things • enjoys making others laugh and being silly • enjoys playing alone, but near other children • spends a great deal of time watching and observing • enjoys playing with other children briefly but still does not cooperate or share well • enjoys hearing stories about self, playing “house,” imitating • can answer the question, “are you a boy or a girl?” 	<ul style="list-style-type: none"> • takes turns and shares (most of the time); may still be bossy • understands and obeys simple rules (most of the time) • changes the rules of a game as she goes along • likes to talk and carries on elaborate conversations • persistently asks why; may name call, tattle freely • enjoys showing off and bragging about possessions • fearful of the dark and monsters • begins to understand danger—at times can become quite fearful • has difficulty separating make believe from reality • lies sometimes to protect self and friends, but doesn’t truly understand the concept of lying—imagination often gets in the way • likes to shock others by using “forbidden” words • still throws tantrums over minor frustrations • expresses anger verbally rather than physically (most of the time) • pretending goes far beyond “playing house” to more elaborate settings like fire station, school, shoe store, ice cream shop • loves to tell jokes that may not make any sense at all to adults

Ages & Stages Handouts from ages 2 – 4 years, as taken from

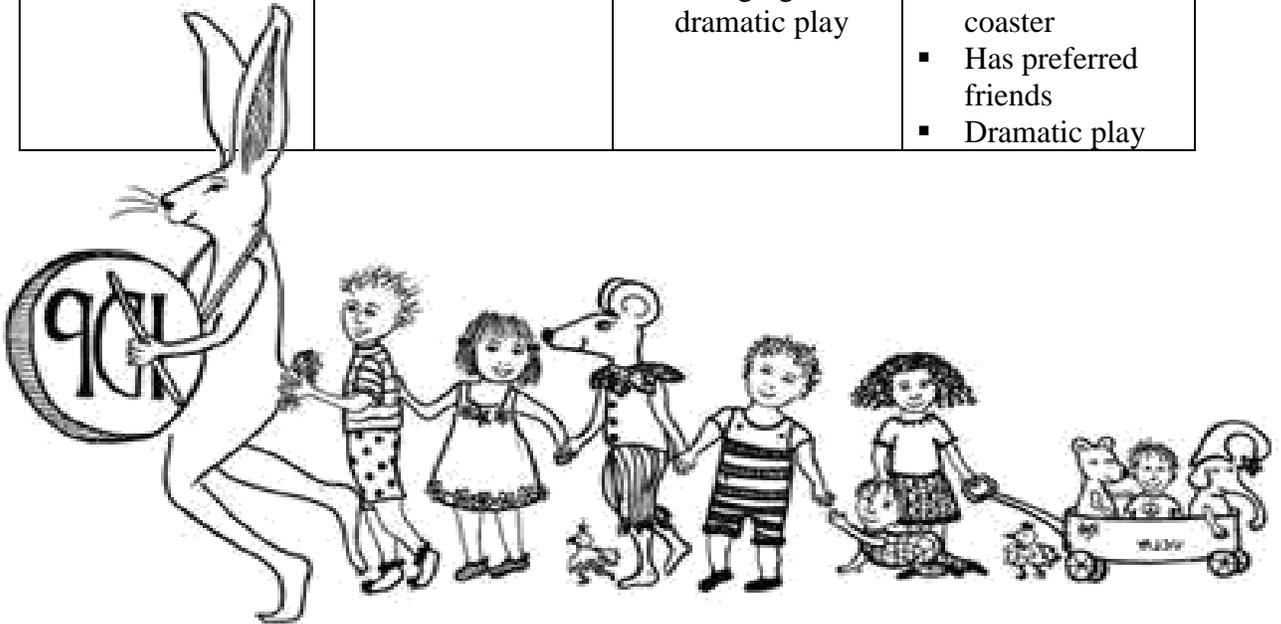
http://www.extension.iastate.edu/homefamily/children/development/ages_stages.htm



SESSION III Handout D: Child Development



BEHAVIORAL CHARACTERISTICS			
<p><i>2-year old (24-36 months) "The NO word Reigns Supreme"</i></p>	<p><i>3-year-old (36-42 months) "The YES word appears, but Don't Be Fooled"</i></p>	<p><i>3-year-old (42-48 months) "The YES word appears, but Don't be Fooled"</i></p>	<p><i>4-year-old (48-60 months) "Totally Out of Bounds"</i></p>
<ul style="list-style-type: none"> ▪ Perpetual motion ▪ Distractible ▪ Rigid ▪ Poor adaptability ▪ Asserts autonomy ▪ Unpredictable ▪ Tantrum prone ▪ Engages in solitary and parallel play ▪ Does not share 	<ul style="list-style-type: none"> ▪ Secure ▪ Engages in parallel play and associative play ▪ Shares ▪ Spontaneously and with encouragement more flexible 	<ul style="list-style-type: none"> ▪ Insecurity ▪ Difficulty coordinating body movements, nail biting, and thumb sucking ▪ masturbation ▪ demanding of attention ▪ jealous ▪ whines, nags, and complains ▪ emerging dramatic play 	<ul style="list-style-type: none"> ▪ Loud ▪ Silly ▪ Strong sex identity ▪ Fact vs. fiction (an invisible time) ▪ Pushes limits to the maximum ▪ Inappropriate language ▪ Emphasis on active play ▪ Emotional roller coaster ▪ Has preferred friends ▪ Dramatic play



Developed by: Tawara D. Taylor, Georgetown University Child Development Center, University Affiliated Program

Session IV: Psychoeducation – Challenging Behaviors

Materials Needed: Handouts

Purpose of this Session:

- Clinician will answer any questions or concerns for mother, based on the information presented in the last session on “Child Development.”
- Clinician will provide information to mother about “Challenging Behaviors.”

Treatment Session Outline:

1. Clinician will answer questions or clarify concerns that mother brings in the session based on the information presented in the previous sessions (*if in a group format, all the mothers meet together for this session*).
2. Clinician will provide more in-depth information on:
 - Challenging behaviors from a mother’s perspective
 - Why challenging behaviors occur?
 - What is typical/atypical for this age?
 - How depressed mother may have difficulty parenting as a result of the depression?
3. Clinician will explain how will Watch, Wait and Wonder (WWW) & Parent-Child Interaction Therapy (PCIT) help in parenting?
 - Clinician will provide a brief overview of PCIT.*
4. Clinician will explain the structure of therapy sessions. *
5. Clinician will explain therapy guidelines.*
6. Clinician will administer the BDI, ECBI, EPDS, PSI-SF, & Baseline PCIT

Session IV Handout A: Challenging Behavior

Challenging behavior is any form of behavior that interferes with children's learning or normal development; is harmful to the child, other children or adults; or puts a child in a high risk category for later social problems or school failure.

Challenging behaviors include things that children do that need an adult to respond, stop, and change the behavior.

Common/Typical Challenges

- Aggression
- Defiance
- Inconsolable Crying
- Children who are slow-to-warm-up
- Sleep Challenges
- Tantrums
- Whining
- Opposition in the form of "No"



Reasons for Challenging Behavior occurs?

Normal for child's age

Boredom

Attention

Not understanding what is expected

Change in the environment

Frustrated about not getting one's needs met

Cannot control one's emotions

Attention Seeking

Not feeling valued

Testing limits

Inability to express or deal with one's strong emotions



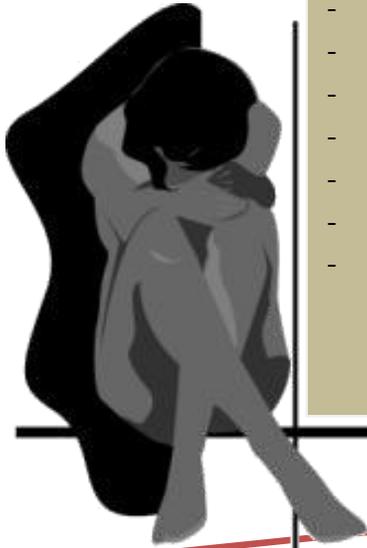
Adapted from http://www.additionalneeds.net/Challenging_Behaviour/whatis.htm

& http://www.challengingbehavior.org/do/resources/documents/facts_about_sheet.pdf

Session IV Handout B: Challenging Behavior

Depressed Mother and Parenting

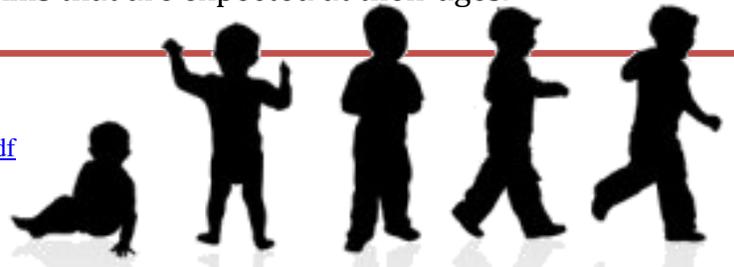
- Perceive Self as inadequate (as an individual and parent)
- Feels helpless about child's behaviors
- Might engage with child in depressive style
- Constantly criticize child
- May react with anger, hostility, or apathy
- Over Involved or under involved
- Feelings higher level of parenting stress
- Feelings of guilt, anger, loss associated with parenting
- Feels overwhelmed by responsibility of taking care of the child



To Prevent and Handle Challenging Behaviors

- Use words, hugs, and kisses to recognize positive behaviors.
- Remove from your child's reach things that are not for children or are dangerous.
- Always have toys and fun things at home, in the car, in your bag, and when you travel.
- Think of your children's needs when you plan things to do with them.
- Don't put young children in adult situations.
- Avoid situations that cause negative behaviors.
- Use everyday situations to remind children of your rules.
- Teach children behaviors and skills that are expected at their ages.

Taken from <http://actagainstviolence.apa.org/11.pdf>



Session V: Following Child's Lead in Play using Watch, Wait, & Wonder (WWW)

Technique

a. First Session of WWW

Materials Needed: Handouts, an enclosed space with a one way mirror, Constructional and Representational toys (such as building blocks, legos, dolls, doll houses, farm houses, trucks/cars, animals etc) and Home Work Sheets

Purpose of this Session:

- Clinician will answer any questions or concerns for mother, based on the information presented in the last few sessions.
- Clinician will provide information to mother about the “Watch, Wait, Wonder” technique.
- Clinician will reinforce the mother for her use of the Watch, Wait, Wonder Technique in session.

Treatment Session Outline:

1. Clinician will answer questions or clarify concerns that mother brings in the session based on the information presented in the previous sessions (*if in a group format, all the mothers meet together for this session*).
2. Review test scores from BDI, PSI-SF, EPDS, & Baseline PCIT
3. Clinician will provide more in-depth information on:
 - Watch, Wait, Wonder Technique
4. Clinician will observe the mother use WWW technique with her child for a period of 15 minutes (through a one way mirror or in the room).

5. Clinician will process with mother what she observed and experienced in the play session using the WWW technique.
6. Clinician will explain homework.
 - Clinician will distribute homework sheet and encourage mother to practice using the WWW technique (for a period of 10 minutes) at least thrice at home before she comes back to the next session.

b. Subsequent Sessions: *The next four sessions would include practice of WWW technique so that there is improvement of mother-child relationship (mother feels comfortable with her child, shift in interactional pattern). The basic structure of all the WWW sessions would be the following*

Materials Needed: Constructional and Representational toys (such as building blocks, legos, dolls, doll houses, farm houses, trucks/cars, animals etc), Home Work Sheets

Purpose of this Session:

- Clinician will answer any questions or concerns for mother, based on the information presented in the last few sessions.
- Clinician will address the importance of homework.
- Clinician will reinforce the mother for her use of the Watch, Wait, and Wonder Technique in session.

Treatment Session Outline:

1. Clinician will answer questions or clarify concerns that mother brings in the session based on the information presented in the previous sessions.

2. Clinician will review homework sheets for 10 minutes. Clinician will follow up on any home work problems, process mother's observations and experiences and other issues that may arise.
3. Clinician will observe the mother use WWW technique with her child for a period of 30 minutes (through a one way mirror or in the room).
4. Clinician will process with mother what she observed and experienced in the play session using the WWW technique.
5. Clinician will explain homework.
 - Clinician will give homework sheet and encourage mother to practice using the WWW technique (for a period of 20 minutes) at least thrice at home before she comes back to the next session.
6. During the last WWW session, clinician will encourage mother not to bring her child to the next session (CDI teaching session).
7. During the last WWW session, clinician will also administer the BDI, ECBI, EPDS, & PSI-SF.

SESSION V Handout A: Watch, Wait, & Wonder (WWW)

Technique

Maternal Depression & its Impact on Parent-child Relationship

- ❖ Reduced parenting responsiveness, affection, and reciprocity and increased intrusion and punitiveness (Goodman & Gotlib, 1999)
- ❖ Depressed mothers also tend to report feeling less attached to, and more negative toward their children (Lovejoy, Graczyk, O'Hare, & Neuman, 2000).
- ❖ Psychologically unavailable and prevent them from interacting in an optimally sensitive manner with their children.
- ❖ Perceive children as hostile, rejecting, or overwhelming.

How would Watch, Wait & Wonder (WWW) Help?

- "*Watch, Wait & Wonder*" has been developed by Muir et al. (1999) to help mother develop a secure relationship during infancy and early childhood
- Research indicated that parents who used the WWW technique showed increased secure attachment, improved emotional regulation in infants & mothers reported increased parenting satisfaction and competence and decrease in depression (Muir et al., 1999; Cohen et al., 2002)



Session V Handout B: Watch, Wait, & Wonder (WWW)

Technique (cont...)

What does one do during WWW technique?

It directly involves the child in therapy. For half of the session, you need to:

- get down on the floor with your child
- follow the child's lead
- **You DO NOT initiate any activities**
- be sure to respond when your child initiates but not to take over the activities in any way
- allow your child the freedom to explore; whatever the child wants to do is okay as long as it is safe
- remember to watch, wait, and wonder



WATCH: Observe, Attend, Notice, Do Not Judge

WAIT: Give Time & Space, Wait to see what happens next, Don't Rush In

WONDER: About Your observations (child, self), & your experiences of being with your child in here and now

Taken from www.mbhv-psykologerna.com/filarea/category/6-phoca_catkal?download

PLAY TIME HOME WORK SHEET



Child's Name: _____

Mother's Name: _____

Special Play time - Watch, Wait, & Wonder - 10 minutes, 3 times a week

Remember: Observe, Do not Judge, Do not Rush in, Give Time & Space

Date	Yes	No	Observations (Child)	Observations (Self)	Experience
Monday: _____					
Tuesday: _____					
Wednesday: _____					
Thursday: _____					
Friday: _____					
Saturday: _____					
Sunday: _____					



During the 10 minutes: Get down on the floor with child - Allow child freedom to explore as long as it is safe.



PLAY TIME HOME WORK SHEET

Child's Name: _____

Mother's Name: _____

Special Play time - Watch, Wait, & Wonder - 20 minutes, 3 times a week

Remember: Observe, Do not Judge, Do not Rush in, Give Time & Space

Date	Yes	No	Observations (Child)	Observations (Self)	Experience
Monday: _____					
Tuesday: _____					
Wednesday: _____					
Thursday: _____					
Friday: _____					
Saturday: _____					
Sunday: _____					



During the 10 minutes: Get down on the floor with child - Allow child freedom to explore as long as it is safe.

Session VI: CDI Sessions (Target Mastery of PRIDE Skills)

a. First Session

Materials Needed: Suggested Toys for CDI*, CDI Homework Sheets*, CDI Handouts*, ECBI Graph*

Purpose of this Session:

- Clinician will teach mother CDI skills (*This session is conducted in group format*).
- Clinician will provide the rationale for each skill so that mother understands why each skill and CDI as a whole are important to their child and further build on her relationship with her child.

Treatment Session Outline:

1. Clinician will review homework sheets.
2. Clinician will explain homework in PCIT & provide homework sheet.*
3. Clinician will explain CDI.*
 - Why CDI Phase is taught first?*
 - Overview of CDI*
 - Explain the basic rule of CDI*
 - Avoid Commands*
 - Avoid Questions*
 - Avoid Criticisms*
 - Overview of the PRIDE (Praise – Reflection – Imitation – Description – Enthusiasm) skills*
 - Discuss what mother does when child misbehaves*
4. Model CDI for mother (*in group set-up the women can role play with one another*).

5. Discuss the kinds of toys that are best to use for CDI at home and why.*
6. Discuss setup for CDI play session at home.*
7. Review the importance of practicing CDI at home for 5 minutes.
8. Distribute homework sheets.
9. When scheduling for next appointment, encourage mother not to bring her child to the next session.

b. Second Session

Materials Needed: Suggested Toys for CDI*, CDI Homework Sheets*, CDI Handouts*, ECBI Graph*

Purpose of this Session:

- Clinician will continue to teach mother CDI skills (*This session is conducted in group format*).

Treatment Session Outline:

1. Clinician will review homework sheets.*
2. Review test scores from BDI, PSI-SF, EPDS, & ECBI.
3. Clinician will review CDI rules and PRIDE skills.*
4. Model CDI skills for mother (*in group set-up the women can role play with one another*).
5. Distribute homework sheets.

c. Following Sessions: The sessions from here onwards follow the original PCIT session. format (First CDI coaching session) until the mother reaches mastery criteria (see below).

- During the last CDI session, encourage mother not to bring her child to the next session.
- During the last CDI session, Clinician will administer the BDI, ECBI, EPDS, & PSI-SF.

Adapted CDI Mastery Criteria for Use with Depressed Mothers

Criteria for Beginning PDI Phase of Treatment

In a 5-minute observation of CDI, at least

___ 6 Behavioral Descriptions

___ 6 Reflections

___ 6 Labeled Praise

And no more than a total of 3 of the following:

___ Questions

___ Commands

___ Criticisms

Session VII: PDI Sessions (Target Mastery of Skills of Giving Commands and Time-Outs)

a. First Session

Materials Needed: ECBI, “Eight Rules of Effective Commands in PDI “Handout*, CDI Homework Sheet*

Purpose of this Session:

- Clinician will teach mother the skill of “giving commands.” (*This session can be conducted in a group format*).
- Clinician will provide rationale for each step in giving commands.

Treatment Session Outline:

1. Clinician will review homework sheets.
2. Review test scores of BDI, ECBI, EPDS, & PSI-SF
3. Clinician will explain how PDI will be taught* (*skills of PDI will be taught for 2 sessions, and then following session PDI procedure will be used*).
4. Clinician will present an overview of PDI* (*explain giving commands*).
5. Model PDI for mother (*in group set-up the women can role play with one another*).
6. Distribute homework sheets.
7. When scheduling for next appointment, encourage mother not to bring her child to the next session.

b. Second Session

Materials Needed: ECBI, Time Out Diagram*, “Using a time-out room in your home” handout*, CDI Homework Sheet*

Purpose of this Session:

- Clinician will teach mother the skill of “Time-out.” (*This session can be conducted in group format*).

Treatment Session Outline:

1. Clinician will review homework sheets.
2. Review information about “giving commands”.
3. Clinician will provide information about “time-out chair”*, & “time-out room”.*
4. Model PDI for mother (*in group set-up the women can role play with one another*).
5. Distribute homework sheets.

c. Following Sessions: The sessions from here onwards follow the original PCIT session format (First PDI coaching session) until the mother reaches mastery criteria (see below).

- During the last PDI session, Clinician will administer the BDI, ECBI, EPDS, & PSI-SF.

PDI Mastery Criteria for Use with Depressed Mothers

Criteria for Ending PDI Phase of Treatment

In a 5-minute coding at the beginning of the session, mother must

- Give at least 3 commands, of which at least 75% must be “effective.”
- Show at least 75% correct follow-through after effective commands
- If the child requires a time out that begins during the observation, the mother must successfully follow-through with the PDI procedure.*

Session VIII: Termination, Feedback, and Assessment

Materials Needed: Test Scores, Graduation Certificate, Graphs (ECBI, BDI, EPDS),

Parent Child Interaction Summary Sheets*,

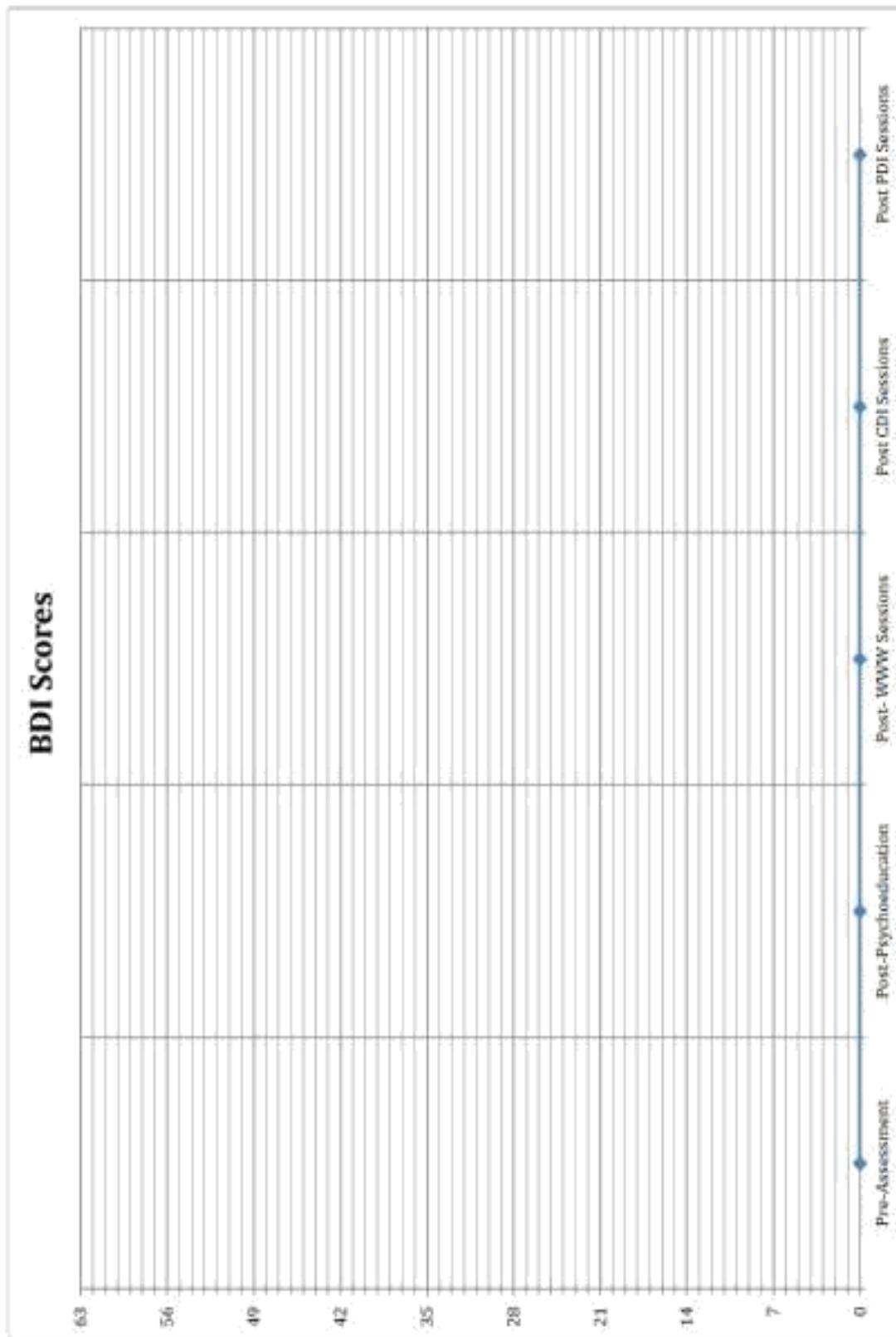
Purpose of this Session:

- Clinician will complete the final steps of treatment.
- Clinician will convey a sense of pride and confidence in mother's ability to manage her depressive symptoms, and child's behavior even after treatment has ended.

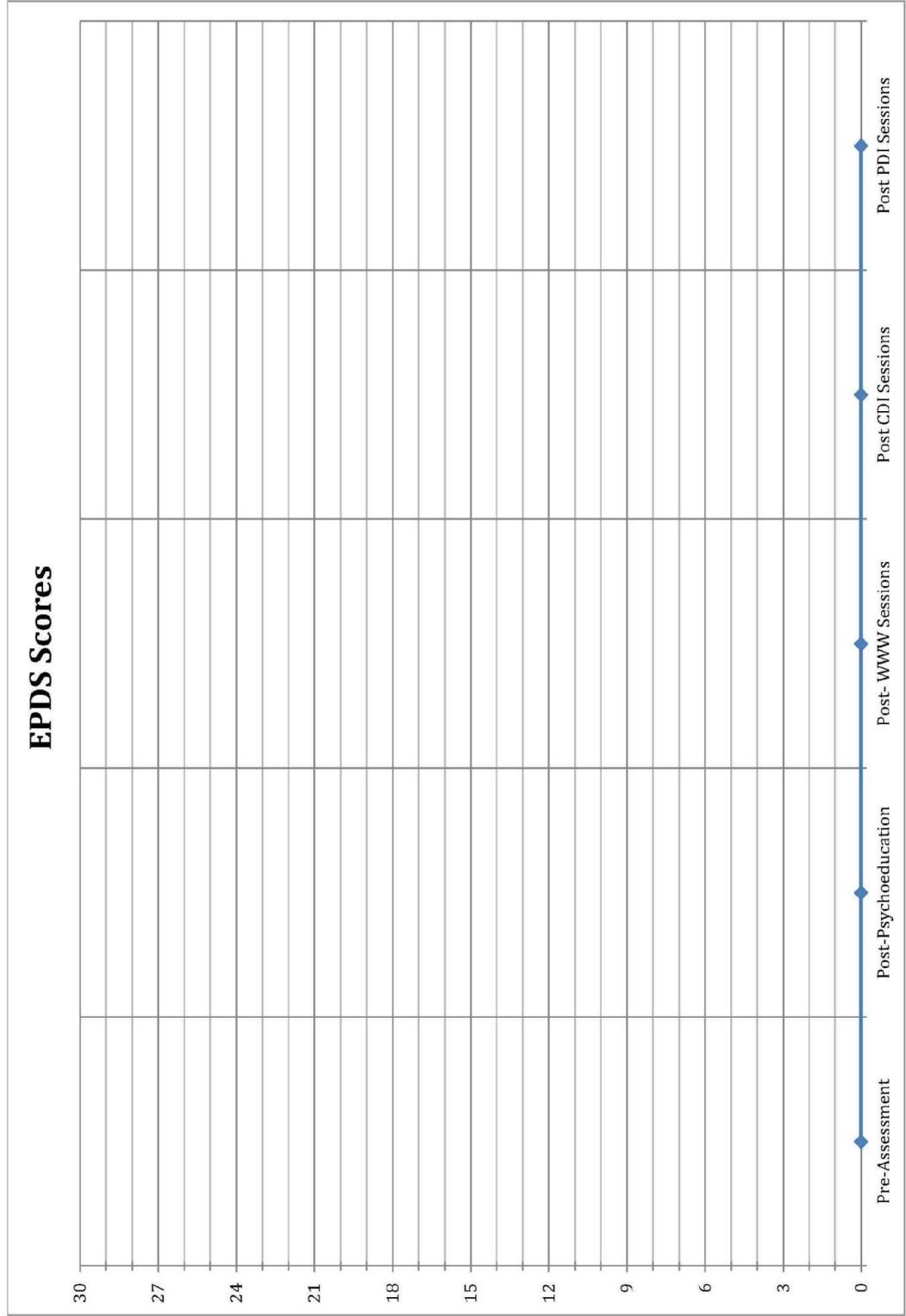
Treatment Session Outline:

1. Clinician will review homework sheets.
2. Review test scores of BDI, ECBI, EPDS, & PSI-SF.
3. Clinician will follow the graduation session format as indicated in the original PCIT materials.*
4. Clinician will schedule follow up session after 1 month, 3 months, 6 months, and 12 months. (These sessions could be help at the clinic or the clinician could visit the home.)

BDI Graph (Change over Course of Treatment)



EPDS Graph (Change over Course of Treatment)



Certificate of Completion



Awarded to

*For successful completion
of PCIT curriculum for
depressed mothers*

Signature

Date

Chapter Four

Future Directions

The current dissertation does not take into consideration cultural factors in parent training. However, given the need for researchers and clinicians to engage in culturally inclusive treatment programs, one could include cultural variables in future research of the program. In terms of cultural factors, one factor could be generational differences regarding how a parent should handle challenging behaviors (discipline versus punishment) needs to be considered. In addition to generational differences, there are certain cultures that do not engage in positive parenting to deal with challenging behaviors. In such cases, an alternative reframe of the child's behavior needs to be given. Another cultural factor is that in certain cultures the extended family members (such as grandparents, uncles and aunts, cousins etc.) are also involved in disciplining the child. In such cases, clinician needs to involve the main family head so that he/she understands the utility of positive parenting in helping the depressed mother and her child. In order for this model to be applied to different cultures / countries, then there needs to be modification of the content in the various handouts. For example, this model can be applied women from Asian-Indian culture by modifying the pictures in the handout to reflect a more conservative Indian woman. Another key feature would be to simplify the handouts for ease of translation into local languages. Further investigation has to be done to identify if there are local cultural (Asian-Indian) factors that affect the application of PCIT. The Asian-Indian culture is a more conservative culture than the American culture,

as a result, either the language has to be toned down for communication or indirect techniques must be developed to identify related indicators.

One of the shortcomings of this dissertation is that it is a proposal and lacks a quantitative study to assess its efficacy and success. So future research of the program can also focus on implementation of the proposed curriculum, program evaluation and assessing the efficacy of the curriculum. Another shortcoming is the lack of consideration of contextual variables such as marital conflict, physical abuse etc when using with mothers from different backgrounds. A potential concern for the proposed program would be the length of the psycho educational component, and possible disengagement of the mother from treatment. However, this concern can be addressed by highlighting the important information during the session and asking the mother to read the materials at home, and going over some of the material during the home visiting sessions.

Another short coming of the proposed model is the length of treatment and age limit of the mother as well as children. In such cases, a relatively newer modification of PCIT skills has been introduced by Putnam, et al., (2006), called the Child-Adult Relationship Enhancement (CARE) model could be used. This model has been developed for general usage by non-clinical adults who work with traumatized children. This model seems to be brief version of the relationship enhancement skills and could be further modified to use teenage depressed mothers. Specifically, the CARE model coaches the individual to avoid using three Q's i.e. avoid unnecessary Questions, Quash the need to lead by avoiding commands, and Avoid negative talk such as Quit, no, don't, stop, and not when interacting with the child. On the other hand, the individual is coached to use

the three P's i.e. Praise (labeled) appropriate behavior, Paraphrase appropriate talk, and Point out the child's appropriate behavior. In addition, individuals are taught the skills of active ignoring, giving commands, and broken record to help manage negative behaviors in a child. The CARE model could be used with teenage mother.

A recent area of research interest includes fathers who are depressed and its impact on child rearing and disciplining. The current proposed amendment of the CARE model could be used with fathers, but a possible concern would be the fathers' willingness to seek help as well as easy access to mental health treatment.

In terms of future directions, marketing is a critical factor in ensuring the success of this program. Primary family physicians, pediatricians, and OB/GYN's are the medical professionals with the highest probability of encountering mothers with depression. They should be educated about the application of this methodology and its benefits. It will make them great advocates of the program and will refer their potential patients to trained clinical psychologists. Presenting at national medical conferences and publishing articles in professional periodicals for family physicians can increase the awareness of the program and its effectiveness.

School counselors and Head Start specialists often work with young children and families that might be affected by maternal depression. These people can be another set of professionals, who should be targeted as spokespersons for the methodology. They should be provided with marketing literature like pamphlets that explain the occurrence of depression of mothers and treatments available for it.

Word of mouth is usually the best form of marketing. It will be great to publish pamphlets and other marketing literature that contain the testimonials of depressed mothers who received treatments and are living improved and better lives.

Finally, with the advent of internet, social media has grown into great prominence in every field including marketing. Facebook and Twitter are the biggest communication tools in this decade. They should be utilized to increase the awareness of the issues and related available treatment. Additional posting must be posted on different blogs for working moms, single moms, army moms etc. Furthermore, discussion around this topic must be encouraged in related professional and social online communities.

Conclusion

In summary, the proposed curriculum finds an innovative way to combine behavioral activation and parent training skills to help the depressed mother relate to her child. The program promotes better parenting skills, increased insight into one's behavior, new ways of engaging with one's child, reduced maternal stress, and stronger sense of self, through a curriculum that focuses on a positive, nurturing, collaborative and healthy relationships.

References

- Abidin, R. R. (1995). *Parenting stress index* (3rd Ed.). *Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- AdditionalNeeds.net (2011). What is challenging behavior? Retrieved from http://www.additionalneeds.net/Challenging_Behaviour/whatis.htm
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- Alvy, K. (1994). *The Effective Black Parenting Program (EBPP)*. Center for the Improvement of Child Caring.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders, Fourth Edition, Text Revision (DSM-IV-TR)*. Washington, DC: Author.
- American Psychological Association (2008). Adults and Children together Against Violence: How to Prevent Challenging Behaviors. Retrieved from <http://actagainstviolence.apa.org/11.pdf>
- Ammerman, R. T., Bodley, A. L., Putnam, F. W., Lopez, W. L., Holleb, L. J. Stevens, J., & Van Ginkel, J. B. (2007). In-Home cognitive behavior therapy for a depressed mother in a home visitation program. *Clinical Case Studies*, 6(2), 161-180.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for Beck Depression Inventory - II*. San Antonio, TX: Psychological Corporation.

- Bell, S. K. & Eyberg, S. M. (2002). Parent-Child interaction therapy: A dyadic intervention for the treatment of young children with conduct problems. *Innovations in clinical practice: A sourcebook*, 20, 57-74.
- Bettes, B. (1988). Maternal depression and motherese: Temporal and intonational features. *Child Development*, 59, 1089-1096.
- Bowlby, J. (1969), *Attachment and loss*, Vol. 1: Attachment. New York: Basic Books.
- Brestan, E., & Eyberg, S.M. (1998). Effective psychosocial treatments for conduct-disordered children and adolescents: 29 years, 82 studies, and 5272 kids. *Journal of Clinical Child Psychology*, 27, 179-188.
- Breznitz, Z., & Friedman, S. L. (1998). Toddlers' concentration: Does maternal depression make a difference? *Journal of Child Psychology and Psychiatry*, 29, 267-279.
- Brockington, I. F., Aucamp, H. M., & Fraser, C. (2006). Severe disorders of the mother-infant relationship: Definitions and frequency. *Archives of Women's Mental Health*, 9(5), 243-251.
- Bus, A. G. & Van Ijzendoorn, M. H. (1988). Mother-Child interactions, attachment, and emergent literacy: A cross-sectional study. *Child Development*, 59(5), 1262-1272.
- Chaffin, M., Silovsky, J. F., Funderburk, B., Anne Valle, L., Brestan, E. V., Balachova, T., Jackson, S., Lensgraf, J., & Bonner, B. L. (2004). Parent-child interaction therapy with physically abusive parent: Efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology*, 72(3), 500-510.

- Chambless, D. L., & Ollendick, T. H. (2000). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, 52, 685–716.
- Chase-Brand, J. (2008). Effects of maternal postpartum depression on the infant and older siblings. In S.D. Stone & A. E. Menken (Eds.), *Perinatal and Postpartum Mood Disorders* (pp. 41-83). New York: Springer Publishing Company
- Cicchetti, D., & Schneider-Rosen, K. (1986). An organizational approach to childhood depression. In Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission. *Psychological Review*, 106, 458-490.
- Clark, R., Tluczek, A., & Brown, R. (2008). A mother-infant therapy group model for postpartum depression. *Infant Mental Health Journal*, 29(5), 514-536.
- Cochran, S. V., & Rabinowitz, F. E. (2000). *Men and Depression: clinical and empirical perspectives*. San Diego: Academic Press. In National Institute of Mental Health (2009). *Depression*. Retrieved September 24, 2009 from <http://nimh.nih.gov/health/publications/depression/nimhdepression.pdf>
- Cohen, N. (2009). Watch, Wait, and Wonder: An infant led intervention for treating troubled parent-infant relationships. Retrieved from www.mbhv-psykologerna.com/filarea/category/6-phoca_catkal?download
- Cohen, N. J., Muir, E., Lojkasek, M., Muir, R., Parker, C. J., Barwick, M., & Brown, M. (1999). Watch, wait, and wonder: Testing the effectiveness of a new approach to mother-infant psychotherapy. *Infant Mental Health Journal*, 20(4), 429-451.

- Conwell, Y. (2001). Suicide in later life: a review and recommendations for prevention. *Suicide and Life Threatening Behavior*, 31, 32-47.
- Cornish, A. M., McMahon, C. A., Ungerer, J. A., Barnett, B., Kowalenko, N., & Tennant, C. (2006). *Journal of Reproductive and Infant Psychology*, 24 (2), 121 – 132.
- Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of Postnatal Depression- Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786.
- Cramer, B. (1993). Are postpartum depressions a mother-infant relationship disorder? *Infant Mental Health Journal*, 14(4), 283-297.
- Cramer, B., Robert-Tissot, C., Stern, D. N., Serpa-Rusconi, S., De Muralt, M., Besson, G., Palacio-Espasa, F., Bachmann, J. F., Knauer, D., Berney, C., & D'Arcis, U. (1990). Outcome Evaluation in brief mother-infant psychotherapy: A preliminary report. *Infant Mental Health Journal*, 11, 278 – 300.
- Cummings, E. M., & Cicchetti, D. (1990). Towards a transactional model of relations between attachment and depression. In Trapolini, T., Ungerer, J. A., & McMahon, C. A. (2007). Maternal depression and children's attachment representations during the preschool years. *British Journal of Developmental Psychology*, 25, 247-261.
- Cummings, E. M., & Davies, P. T. (1994). Maternal depression and child development. *Journal of Child Psychology and Psychiatry*, 35, 73-112.
- Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression. *Archives of General Psychiatry*, 57, 21-27.

- Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin*, 108(1), 50-76.
- Eisenstadt, T., Eyberg, S., McNeil, C., Newcomb, K., & Funderburk, B. (1993). Parent-child interaction therapy with behavior problem children: Relative effectiveness of two stages and overall treatment outcome. *Journal of Clinical Child Psychology*, 22, 42-51.
- Essex, M. J., Klein, M. H., Miech, R. & Smider, N. A. (2001). Timing of initial exposure to maternal major depression and children's mental health symptoms in kindergarten, *British Journal of Psychiatry*, 179 (2), 151 – 156.
- Eyberg, S. M. (1988). Parent-child interaction therapy: Integration of traditional and behavioral concerns. *Child & Family Behavior Therapy*, 10, 33-46.
- Eyberg, S. M., & Pincus, D. (1999). *Eyberg Child Behavior Inventory and Sutter-Eyberg Student Behavior Inventory-Revised: Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Field, T., Grizzle, N., Scafidi, F., Abrams, S., Richardson, S., Kuhn, C., Schanberg, S. (1996). Massage therapy for infants of depressed mothers. *Infant Behavior and Development*, 19(1), 107–112.
- Fonagy, P. & Target, M. (1997). Attachment and Reflective Functioning: Their role in self organization. *Development and Psychopathology*, 9, 679 – 700.
- Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). Reflective-functioning manual, version 5.0, for application to adult attachment interviews. London: University College London.

- Forman, D. R., O'Hara, M. W., Stuart, S., Gorman, L. L., Larsen, K. E., & Coy, K. C. (2007). Effective treatment for postpartum depression is not sufficient to improve the developing mother-child relationship. *Development and Psychopathology*, 19, 585-602.
- Foss, L. A., Hirose, T., & Barnard, K. E. (1999). Relationship of three types of parent-child interaction in depressed and non-depressed mothers and their children's mental development at 13 months. *Nursing & Health Sciences*, 1(4), 211-219.
- Fraiberg, S., Adelson, E., & Shapiro, V. (1987). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. In Cohen, N. J., Muir, E., Lojkasek, M., Muir, R., Parker, C. J., Barwick, M., & Brown, M. (1999). Watch, wait, and wonder: Testing the effectiveness of a new approach to mother-infant psychotherapy. *Infant Mental Health Journal*, 20(4), 429-451.
- Gallo, J. J., & Rabins, P. V. (1999). Depression without sadness: alternative presentations of depression in late life. *American Family Physician*, 60(0), 820-826.
- Gelfand, D. M., & Teti, D. M. (1990). The effects of maternal depression on children. *Clinical Psychology Review*, 10, 329-353.
- Gelfand, D. M., Teti, D. M., Seiner, S. A., & Jameson, P. B. (1996). Helping mothers fight depression: Evaluation of a home-based intervention program for depressed mothers and their infants. *Journal of Clinical Child Psychology*, 25(4), 406-422.
- Gloaguen, V., Gottraux, J., Cucherat, M., & Blackburn, I. M. (1998). A meta-analysis of the effects of cognitive therapy in depressed patients. *Journal of Affective Disorders*, 49, 59-72.

- Goldsmith, D. F., & Rogoff, B. (1997). Mothers' and toddlers' coordinated joint focus of attention: Variations with maternal dysphoric symptoms. *Developmental Psychology*, 33, 113-119.
- Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission. *Psychological Review*, 106, 458-490.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10, 243-268.
- Graham, S. (1992). Most of the subjects were White and middle class: Trends in published research on African-Americans in selected APA journals, 1970 – 1989. *American Psychologist*, 47, 629 – 639.
- Greenspan, S. I. (1992). *Infancy and early childhood: The practice of clinical assessment and intervention with emotional and developmental challenges*. Madison, CT: International Universities Press.
- Halfon, N., & Olson, L. M. (2004). Content and Quality of Health Care for Young Children: Results from the 2000 National Survey of Early Childhood Health. *Pediatrics*, 112 (6), Retrieved from <http://www.healthychild.ucla.edu/Supplement/Supplement.pdf>
- Hammen, C., Adrian, C., Gordon, D., Burge, D., Jaenicke, C., & Hiroto, D. (1987). Children of depressed mothers: Maternal strain and symptom predictors of dysfunction. *Journal of Abnormal Psychology*, 96, 190-198.

- Harwood, M. D., & Eyberg, S. M. (2006). Child-Directed Interaction: Prediction of change in impaired mother-child functioning. *Journal of Abnormal Child Psychology*, 34(3), 335 – 347.
- Hembree-Kigin, T. L., & McNeil, A. B. (1995). *Parent – Child Interaction Therapy*. New York: Plenum Press.
- Heron, M., Hoyert, D. L., Murphy, S. L., Xu, J., Kochanek, K. D., & Tejada-Vera, B. (2009). Deaths: Final data for 2006. *National Vital Statistics Report*, 57 (14). Retrieved September 25, 2009 from http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf
- Herschell, A. D., Calzada, E. J., Eyberg, S. M., & McNeil, C. B. (2002). Parent-Child interaction therapy: New direction in research. *Cognitive and Behavioral Practice*, 9, 9-16.
- Iowa State University Extension (2011). Ages and Stages Publications. Retrieved from http://www.extension.iastate.edu/homefamily/children/development/ages_stages.htm
- Jacoby-Miller, E. S. (1985). Successful treatment of the mother-infant relationship in a mother suffering from severe postpartum depression. *Infant Mental Health Journal*, 6(4), 210-213.
- Johnson, F. K., Dowling, J., & Wesner, D. (1980). Notes on infant psychotherapy. *Infant Mental Health Journal*, 1, 19–33.
- Kelly, M. L., Power, T. G., & Wimbush, D. D. (1992). Determinants of disciplinary practices in low-income black mothers. *Child Development*. 63. 573 – 582.
- Kendall-Tackett, K. A. (2005). *Depression in New Mothers: Causes, Consequences and Treatment Alternatives*. New York: Hawthorn Maltreatment and Trauma Press

- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K.R., Rush, A. J., Walters, E. E., & Wang, P. S. (2003). The epidemiology of Major Depressive Disorder: Results from the National Comorbidity Survey Replication (NCS-R). *Journal of the American Medical Association*, 289 (23), 3095-3105.
- Knaak, S. (n.d.) Causes of Postpartum Depression. Retrieved May 1, 2011 from <http://www.motherhood-cafe.com/causes-of-postpartum-depression.html>
- Knitzer, J., Theberge, S., & Johnson, K. (2008). *Reducing maternal depression and its impact on young children: Toward a responsive early childhood policy framework*. Columbia: National Center for Children in Poverty. Retrieved September 17, 2009 from http://www.nccp.org/publications/pdf/text_791.pdf
- Kochanska, G., Kuczynski, L., Radke-Yarrow, M., & Welsh, J. D. (1987). Resolutions of control episodes between well and affectively ill mothers and their young child. *Journal of Abnormal Child Psychology*, 15, 441-456.
- Krishnan, K. R. R., Taylor, W. D., McQuoid, D. R., MacFall, J. R., Payne, M. E., Provenzale, J. M., & Steffens, D. C. (2004). Clinical characteristics of magnetic resonance imaging-defined subcortical ischemic depression. *Biological Psychiatry*, 55 (4), 390-397.
- Lieberman, A. F. (1992). Infant-parent psychotherapy with toddlers. *Development and Psychopathology*, 4, 559 – 574.
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, 20(5), 561-592.

- Lusskin, S. I., Pundiak, T. M., & Habib, S. M. (2007). Perinatal Depression: Hiding in plain sight. *The Canadian journal of psychiatry*, 52(8), 479-488.
- Lyons-Ruth, K., Connell, D. B., Grunebaum, H. U., & Botein, S. (1990). Infants at Social Risk: Maternal Depression and Family Support Services as Mediators of Infant Development and Security of Attachment. *Child Development*, 61(1), 85-98.
- Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized-disoriented during the Ainsworth Strange Situations. In Teti, D. M., Gelfand, D. M., Messinger, D. S., & Isabella, R. (1995). Maternal Depression and the quality of early attachment: An examination of infants, preschoolers, and their mothers. *Developmental Psychology*, 31(3), 364-376.
- Mahrer, A. R., Levinson, J. R., & Fine, S. (1976). Infant psychotherapy: Theory, research, and practice. *Psychotherapy: Theory, Research and Practice*, 13, 131–140.
- Martins, C., & Gaffan, E. (2000). Effects of early maternal depression on patterns of infant–mother attachment: a meta-analytic investigation. *Journal of Child Psychology and Psychiatry & Allied Disciplines*, 41(6), 737–746.
- McLennan, J. D., & Kotelchuck, M. (2000). Parental prevention practices for young children in the context of maternal depression. *Pediatrics*, 105, 1090 – 1095.
- McLeod, J. D., & Kaiser, K. (2004). Childhood emotional and behavioral problems and educational attainment. *American Sociological Review*, 69, 636 – 658.
- McNeil, C.B., & Hembree-Kigin, T. (2010). Parent-Child Interaction Therapy: Second Edition. New York: Springer.

- Miller, W. R., & Rollnick, S. (2002). *Motivational Interviewing: Preparing people for change* (2nd ed.). New York: Guilford Press.
- Miranda, J., Azocar, F., Komaromy, M., & Golding, J. M. (1998). Unmet mental health needs of women in public-sector gynecologic clinics. *American Journal of Obstetrics and Gynecology*, 17, 212 – 217.
- Muir, E. (1992). Watching, waiting, and wondering: Applying psychoanalytic principals to mother–infant intervention. *Infant Mental Health Journal*, 13, 319-328.
- National Institute of Mental Health (2009). *Depression*. Retrieved September 24, 2009 from <http://nimh.nih.gov/health/publications/depression/nimhdepression.pdf>
- Neugebauer, R., Kline, J., Markowitz, J. C., Bleiberg, K. L., Baxi, L., Rosing, M. A., Levin, B., & Keith, J. (2006). Pilot randomized controlled trial of interpersonal counseling for subsyndromal depression following miscarriage. *Journal of Clinical Psychiatry*, 67, 1299 – 1304.
- New York State Department of Health (May, 2005). Understanding Maternal Depression. Retrieved from http://www.health.state.ny.us/community/pregnancy/health_care/perinatal/docs/maternal_factsheet.pdf
- Niec, L. N., Hemme, J. M., Yopp, J. M., & Brestan, E. V. (2005) Parent-Child Interaction Therapy: The rewards and challenges of a group format. *Cognitive and Behavioral Practice*, 12, 113 – 125.
- O’Hara, M.W., Stuart, S., Gorman, L. L., & Wenzel, A. (2000). Efficacy of interpersonal psychotherapy for postpartum depression. *Archives of General Psychiatry*, 57, 1039 – 1045.

- O'Hara, M. W., Swain, A. M. (1996). Rates and risk of postpartum depression - A meta-analysis. *International Review of Psychiatry*, 8(1), 37-54.
- Onozawa, K., Glover, V., Adams, D., Modi, N., & Kumar, R. C. (2001). Infant massage improves mother-infant interaction for mothers with postnatal depression. *Journal of Affective Disorders*, 63, 201-207.
- Panaccione, V., & Wahler, R. (1986). Child behavior, maternal depression, and social coercion as factors in the quality of child care. *Journal of Abnormal Child Psychology*, 14, 273-284.
- Parent-Child Interaction Therapy (2011). Retrieved May 25, 2011, from <http://pcit.phhp.ufl.edu/>
- Parent-Child Mental Health Interventions (n.d.) In Zero to Three online publication.
Retrieved from <http://courts.oregon.gov/Marion/docs/Services/ParentChildMentalHealthInterventions.pdf>
- Paulson, J. F., Dauber, S., & Leiferman, J. A. (2006). Individual and combined effects of Postpartum Depression in mothers and fathers on parenting behavior. *Pediatrics*, 118(2), 659-668.
- Philipps, L. H., & O'Hara, M. W. (1991). Prospective study of postpartum depression: 4 1/2 year follow-up of women and children, *Journal of Abnormal Psychology*, 100 (2), 151-155.
- Radke-Yarrow, M., Cummings, E. M., Kuczynski, L. & Chapman, M. (1985). Patterns of attachment in two-and three-years-old in normal families and families with parental depression. *Child Development*, 56, 884-893.

- Regalado, M., Sareen, H., Inkelas, M., Wissow, L. S., & Halfon, N. (2004). Parents' discipline of young children: Results from the National Survey of Early Childhood Health. *Pediatrics*, 113 (5), 1952 – 1958.
- Rubinow, D. R., Schmidt, P. J., & Roca, C. A. (1998). Estrogen-serotonin interactions: implications for affective regulation. *Biological Psychiatry*, 44(9), 839-850.
- Sander, M. R., & McFarland, M. (2000). Treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Behavior Therapy*, 31, 89 – 112.
- Scholes, M., Zimmer-Gembeck, M. J., & Thomas, R. (2009). *Depression and a Parenting Intervention: Can caregiver depression bring a good parenting program down? The case of Parent-Child Interaction Therapy*. Retrieved April 8, 2009 from http://74.125.155.132/scholar?q=cache:94jpZ4-F5QJ:scholar.google.com/+scholes+et+al+pCIT&hl=en&as_sdt=0,36
- Schuhmann, E. M., Foote, R. C., Eyberg, S.M., Boggs, S. R., & Algina, J. (1998). Efficacy of Parent-Child Interaction Therapy: Interim report of a randomized trial with short-term maintenance. *Journal of Clinical Child Psychology*, 27(1), 34-45.
- Shaffer, D., Gould, M. S., Fisher, P., Trautman, P., Moreau, D., Kleinman, M., & Flory, M. (1996). Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry*, 53(4), 339-348.
- Sharp, C. & Fonagy, P. (2008). The Parent's Capacity to Treat the Child as a Psychological Agent: Constructs, Measures and Implications for Developmental Psychopathology. *Social Development*, 17(3), 737 – 754.

- Shaw, E., & Goode, S. (2005). The Impact of Abuse, Neglect and Foster Care Placement on Infants, Toddlers and Young Children: Selected Resources. Retrieved June 14, 2011 from, <http://www.nectac.org/~pdfs/pubs/abuseneglect.pdf>
- Slade, A. (2006). Reflective Parenting Program: Theory and Development. *Psychoanalytic Inquiry*, 26 (4), 640 – 657.
- Suchman, N., Pajulo, M., DeCoste, C., & Mayes, L. (April, 2006). Parenting Interventions for Drug-Dependent Mothers and Their Young Children: The Case for an Attachment-Based Approach. *Family Relations*, 55(2), 211-226.
- Taylor, T. D. (1989). Behavioral Characteristics. Washington DC: Georgetown University Hospital, Child Development Center.
- Teti, D. M., Gelfand, D. M., Messinger, D. S., & Isabella, R. (1995). Maternal Depression and the quality of early attachment: An examination of infants, preschoolers, and their mothers. *Developmental Psychology*, 31(3), 364-376.
- Timmer, S. G. (2005). Parent-child interaction therapy: Application to maltreating parent-child dyads. *Child Abuse and Neglect: The International Journal*, 29(7), 825-842.
- Trapolini, T., Ungerer, J. A., & McMahon, C. A. (2007). Maternal depression and children's attachment representations during the preschool years. *British Journal of Developmental Psychology*, 25, 247-261.
- Turney, K. (2011). Chronic and proximate depression among mothers: Implications for child well-being. *Journal of Marriage and Family*, 73(1), 149-163.
- University of South Florida (November, 2004). Facts about young children with challenging behaviors. Retrieved from http://www.challengingbehavior.org/do/resources/documents/facts_about_sheet.pdf

- Wan, M. W., & Green, J. (2009). The impact of maternal psychopathology on child-mother attachment. *Archives of Women's Mental Health*, 12(3), 123-134.
- Webster-Stratton, C. & Hammond, M. (1988). Maternal Depression and its relationship to life stress, perceptions of child behavior problems, parenting behaviors, and child conduct problems. *Journal of Abnormal Child Psychology*, 16 (3), 299 – 315.
- Weissman, M. M., Markowitz, J. C., Klerman, G. L. (2007). *Clinician's quick guide to interpersonal psychotherapy*. New York: Oxford University Press.
- Weissman, M. M., Paykel, E. S., & Klerman, G. L. (1972). The depressed woman as a mother. *Social Psychiatry*, 7, 98–108.
- Weissman, M. M., Wolk, S., Goldstein, R. B., Moreau, D., Adams, P., Greenwald, S., Klier, C. M., Ryan, N. D., Dahl, R. E., Wichramaratne, P. (1991). Depressed adolescents grown up. *Journal of the American Medical Association*, 281(18), 1701-1713.
- Wesner, D., Johnson F., & Dowling, J. (1962). What is maternal–infant intervention? The role of infant psychotherapy. *Psychiatry*, 45, 307–315.
- Whitton, A., & Appleby, L. (1996). Maternal thinking and the treatment of postnatal depression. *International Review of Psychiatry*, 8, 73-78.
- Williams, T. M., Joy, L. A, Travis, L., Gotowiec, A., Blum-Steele, M., Aiken, L. S., Painter, S. L., & Davidson, S. M. (1987). Transition to Motherhood: A longitudinal Study. *Infant Mental Health Journal*, 8(3), 251-265.
- World Health Organization (2011). Maternal Mental Health & Child Health and Development. Retrieved from http://www.who.int/mental_health/prevention/suicide/MaternalMH/en/

- Yonkers, K. A., & Samson, J. (2000). Mood Disorders Measures. In Rush, A. J., Pincus, H. A., First, M. B., Blacker, D., Endicott, J., Keith, S. J., Phillips, K. A., Ryan, N. D., Smith Jr., G. R., Tsuang, M. T., Widiger, T. A., & Zarin, D. A. (Eds). Washington, DC: American Psychiatric Association.
- Zuckoff, A., Swartz, H. A., & Grote, N. K. (2008). Motivational Interviewing as a prelude to psychotherapy of depression. In H. Arkowitz, H. A. Westra, W. R.