MENTALIZATION IN DIR/FLOORTIME: FACILITATING REFLECTIVE FUNCTIONING IN PARENTS OF CHILDREN WITH DEVELOPMENTAL CHALLENGES

Dissertation presented to the Faculty of the

California School of Professional Psychology

Alliant International University

Los Angeles

In partial fulfillment of the requirements for the degree of

Doctor of Psychology

by

Kevin Gruenberg, M.A.

Approved by:

Joan Murray, Ph.D., Chairperson

Richard Cohen, Ph.D.

UMI Number: 3703391

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3703391

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.
All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346

Dedication

To Christine, Lulu, and Inez.

Acknowledgements

This project could not have been completed without the support from my dissertation committee Drs. Joan Murray and Richard Cohen. Thank you both for jumping in mid project and enlivening the process. Dr. Murray, your attention to detail and promptness has been invaluable. Dr. Cohen, our conversations about the finer points of this dissertation have helped me think through this process more carefully. Additionally, Drs. Andrea Davis and Beth Houskamp were formative during the early stages. Dr. Davis, thank you for immersing me into the world of DIR/Floortime and attachment theory.

Furthermore, Dr. John Grienenberger, Dr. Esther Hess, Dr. Debra Brause, Michelle Harwell, and Diane Reynolds, thank you for your time and insight during the field consultant interviews. It was a pleasure to interview practitioners for whom I have so much respect.

Abstract

By highlighting the profound link between Greenspan and Wieder's (2006) DIR/Floortime and Fonagy et al.'s (2002) mentalization theory, this comprehensive literature review makes more evident: 1) the wider applicability of DIR/Floortime to a range of conditions, not limited to Autism Spectrum Disorder (ASD); 2) that parents are the primary mutative agent in their child's life; 3) that ASD symptomology creates obstacles to the parents' capacity to construct optimal social-emotional learning environments, which undermines parents' unique growth promoting role; 4) parental trauma functions as a barrier to the implementation of DIR/Floortime; and lastly 5) the cultivation of parental mentalization, through attachment-based interventions, must be a central component of DIR/Floortime treatment. Additionally, this dissertation includes a summary of findings from interviews with five professionals with expertise in DIR/Floortime or mentalization-based therapy and who carefully utilize parent work in their clinical practice with children.

MENTALIZATION IN DIR/FLOORTIME	vi
List of Figures	
FIGURE 1. DIR/Floortime Model Diagram	3
FIGURE 2. List of Individual Differences in DIR/Floortime	34
FIGURE 3. Functional Emotional Developmental Capacities in DIR/Floortime	40
FIGURE 4. Greenspan's Intervention Pyramid	46
FIGURE 5. Adult Attachment, Parental Reflective Functioning & Parenting Styles	103

104

FIGURE 6. Reflective and Non-Reflective States of Mind

MENTAI	LIZATION	IN DIR	/FLC	ORTIME
		111 2111	,	

vii

Table of Contents

Dedication	iii
Acknowledgments	iv
Abstract	v
List of Figures	vi
CHAPTER I. Purpose, Goals, and Objectives	1
CHAPTER II. Comprehensive Review of the Literature	9
History: DIR/Floortime, Mentalization, and Attachment Theory	9
Bowlby, attachment, and the internal working model	9
Ainsworth's strange situation and attachment classifications	11
Greenspan and the Developmental Structuralist Approach	13
Main, attachment, and representation	16
Fonagy and mentalization	20
Slade and parental reflective function	24
Mastery of advanced social-emotional capacities through	
DIR/Floortime	28
Conclusion	29
DIR/Floortime: A Developmentally Based Therapeutic Approach	30
Individual Differences	32
Sensory integration	33
Motor planning, sequencing, and muscle tone	35
Receptive and expressive language	36
Visual-spatial processing	36

Executive functioning	36
Summary of individual differences	37
Functional emotional developmental capacities (FEDCs)	37
Milestone one: Regulation and interest in the world	41
Milestone two: Engaging and relating	44
Milestone three: Intentionality and two-way communication	45
Milestone four: Social problem-solving, mood regulation, and	a
formation of a sense of self	47
Milestone five: Creating symbols and using words and ideas	48
Milestone six: Building bridges, emotional thinking, logic, and	d a
sense of reality	50
Complex milestones	51
Milestone seven: Multicausal and triangular thinking	52
Milestone eight: Gray-area, emotionally differentiated	
thinking	52
Milestone nine: A growing sense of self and reflection	on
an internal standard	53
Summary of milestones	53
Floortime	54
Conclusion	58
Mentalization and the Construction of Optimal Learning Environments	58
Development of the mentalization capacity	61

Social biofeedback theory	63
Contingency detection mechanism	65
Mentalization as a bidirectional process	66
Affect mirroring across the lifespan	67
Developmental milestones in the formation of mentalizing capacity	61
Psychic equivalence	68
Pretend mode	71
Mentalization in DIR/Floortime	73
Cultivation of parental reflective function	74
Core components of a reflective/mentalization-based parenting	
approach	77
Holding the child in mind	78
"Holding the parent in mind" (Slade, 2006, p. 222)	79
Conclusion	81
Mentalization in the Parent-Child with ASD Dyad	82
Stress and the break down of mentalization	87
Intense negative affect	87
Parenthood and identity development	88
Loss of autonomy	89
Break down of mentalization	90
Mentalization without reciprocity	91
Mentalization-based parent work	93

Conclusion	97
States of Mind with Respect to Attachment, Mentalization, and DIR/Floortime	e
treatment for children with ASD	97
Insecure attachment, trauma, and mentalization	99
States of mind with respect to attachment	101
Secure-Autonomous state of mind with respect to attachment	101
Insecure/nonreflective states of mind with respect to	
attachment	102
Dismissing state of mind with respect to attachment	106
Dismissing state of mind in DIR/Floortime	107
Intervening with a parent with a Dismissing stat	te of
mind	108
Preoccupied state of mind with respect to attachment	109
Preoccupied state of mind in DIR/Floortime	110
Intervening with a parent with a preoccupied sta	ate
of mind	112
Unresolved state of mind with respect to attachment	113
Unresolved state of mind in DIR/Floortime	113
Intervening with a parent with an unresolved sta	ate
of mind	114
Conclusion	115
Conclusion of Comprehensive Review of the Literature	116

CHAPTER I	II. Methodology	119
	Introduction	119
	Procedures	119
	Target Audience	121
	Field Consultants	122
CHAPTER I	V. Professional Input and Feedback	124
	Field Consultant Interview Results	124
	Question 1	124
	Question 2	126
	Question 3	127
	Question 4	129
	Question 5	130
	Question 6	132
	Question 7	133
	Question 8	134
	Question 9	136
	Summary of Field Consultant Interviews	138
Chapter V. D	Discussion and Recommendations	140
	Introduction	140
	Contributions and Implications	140
	Limitations and Constraints	140
	Suggestions for Future Research	142

MENTALIZATION IN DIR/FLOORTIME	
Table of Contents Cont.	
Personal Reflections	143
References	145
Appendix A. Informed Consent for Field Consultants	170
Appendix B. Field Consultant Interview Questions	172
Curriculum Vita	174

CHAPTER I

Purpose, Goals, and Objectives

According to the Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition (DSM-V), Autism Spectrum Disorder (ASD) is a developmental disability that causes pervasive difficulties across social, communication, sensory, and behavioral domains. Starting in early childhood an individual with ASD has "persistent deficits in social communication and social interaction across multiple contexts," namely verbal and nonverbal reciprocal interaction and in "developing, maintaining, and understanding relationships" (American Psychiatric Association, 2013, p. 50). Individuals with ASD also exhibit "restricted, repetitive patterns of behavior, interests, or activities" (i.e. stereotypic and perseverative movements, obscure object use and/or speech, inflexible need for sameness and repetition, limited and "fixated interests," and unusually "hyper- or hyporeactivity to sensory input") (p. 50). Even with intensive interdisciplinary intervention, these individuals tend to have severe deficits in the capacity to develop higher-level social-emotional skills, most notably theory of mind (Baron-Cohen, Leslie, & Frith, 1985; Frith, Morton, & Leslie, 1991; Yirimiya, Erel, Shaked, & Solomonica-Levi, 1998). Theory of mind denotes the ability to deduce the thoughts, feelings, and intentions that underlie the behavior of others. Without theory of mind, an individual struggles to make meaning out of behavior and to develop meaningful relationships.

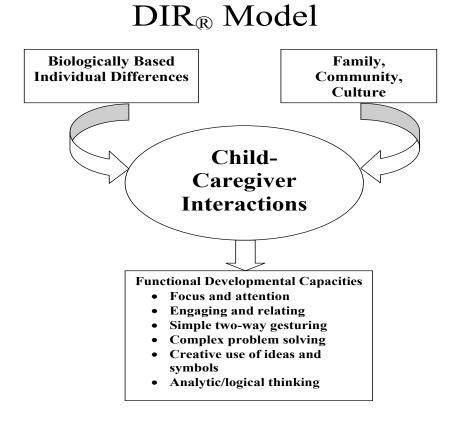
The rates of ASD have increased drastically over the past few decades. The first epidemiological studies from the 1960s and 1970s approximated that one in 2500 individuals had ASD (Gillberg &Wing, 1999). In 2000, the Center for Disease Control and Prevention (2007) identified 1 out every 150 children 8 years of age met the criteria. In 2010, the Center for

Disease Control's Autism and Developmental Disabilities Monitoring Network reported that 14.7 per 1000 children met the criteria for diagnosis (Center for Disease Control and Prevention, 2014). The significant spike in diagnoses necessitates greater scrutiny and understanding of medical, educational, and mental health services used to treat children with ASD. For this reason, this dissertation examines Greenspan and Wieder's (1998, 2006) Developmental, Individual Differences, Relationship-based (DIR)/Floortime model, a prominent alternative to Lovaas's (1987) Applied Behavior Analysis, that is practiced by mental health clinicians, educators, occupational therapists, physical therapists, and speech and language pathologists to treat ASD.

Often misunderstood as simply a treatment for children with ASD, DIR/Floortime systematically describes and mobilizes the underlying processes that contribute to human development (Greenspan, 1979, 1987, 1989, 1992, 1997; Greenspan & Lourie, 1981; Greenspan, Nover, & Scheuer, 1987). Greenspan and Wieder (1998, 2006) declare that multiple rather than singular modes of experience influence the capacity to think, feel, and behave, as well as contribute to "mental health, development, regulatory-sensory processing, language, and learning disorders in infancy and early childhood," as evident by Figure 1 (International Council of Developmental and Learning Disorders, 2005, p. 7).

DIR/Floortime theory has three major components: development (the "D" in DIR), individual differences (the "I" in DIR), and relationships (the "R" in DIR). Development refers to the foundational milestones, typically acquired by age five, that they suggest form the basis for cognition and a sense of self (Greenspan & Benderly, 1997). These milestones reflect the most critical stages of growth typically mastered in early childhood, namely 1) "Shared Attention and Regulation" 2) "Engagement and Relating" 3) "Purposeful Emotional Interactions" 4) "Long

Chains of Back-and-Forth Emotional Signaling and Shared Problem-Solving" 5) "Creating



Stanley Greenspan, M.D. & Serena Wieder, Ph.D. ©

Figure 1. DIR Model Diagram. This figure describes the multiple factors contributing to the acquisition of foundational social-emotional capacities in the DIR/Floortime model. Adapted from "DIR Model Diagram," by S. Greenspan and S. Wieder, 2005, *DIR Reader*, p. 7., Copyright 2005 by the Interdisciplinary Council on Developmental and Learning Disorders.

Ideas" and 6) "Building Bridges Between Ideas" (Greenspan & Wieder, 2006, pp. 30).

Greenspan and Wieder (2006) call the "unique way a child processes information" individual differences (p. 40). Relationship-based signifies the profound impact the attachment bond and environmental factors have on a child's emotional, cognitive, and social growth, as well as the means through which DIR/Floortime mobilizes growth. In fact, it is the interaction between genetic, biological, and environmental factors that defines the trajectory of development and the adaptive or pathologic acquisition of key social-emotional milestones (Greenspan, DeGangi, & Wieder, 2001). Floortime is the comprehensive child-centered intervention program of DIR that builds foundations of "relating, thinking and communicating" (Greenspan & Wieder, 2006, p. 9; Greenspan & Wieder, 1998).

Fonagy, Gergely, Jurist, and Target's (2002) mentalization theory offers a unique and valuable vantage point through which to better understand DIR/Floortime and the parent-child with ASD dyad. DIR/Floortime and mentalization theory represent two of the most comprehensive and influential developmentally-based psychoanalytic approaches applied to psychopathology, child development, assessment, and psychotherapy at this time. Even though DIR/Floortime primarily focuses on developmental disorders and mentalization theory on attachment trauma and Borderline Personality Disorder, different areas of pathology, they share many foundational ideas on the acquisition of representational modes as well as treatment methodology and goals. By drawing parallels between Greenspan and Wieder's (1998, 2006) and Fonagy et al.'s (2002) emphasis on how attachment relationships construct the capacity to develop advanced social-emotional skills, such as intentionality, self-agency, intersubjectivity, and most notably mentalization, in addition to the milestones necessary to employ advanced social-emotional skills, the current paper will expand on the theory and practice of

DIR/Floortime so that DIR/Floortime practitioners can more effectively impact the lives of children and families with whom they work.

While the application and theory of DIR/Floortime methodically weds theory, assessment, and practice, Fonagy et al.'s (2002) ideas may at first glance seem less systematic, accessible, or applicable to clinicians. Contrary to initial impressions, Fonagy and Target (1998) and Fonagy et al. (2002), in fact, reformulate the practice and goal of child, family and adult psychotherapy to focus primarily on mentalization. Mentalization, a developmental achievement integrating advanced levels of cognitive and affective skills, refers to an individual's capacity to recognize that mental states, particularly the thoughts, feelings, intentions, and desires of self and others, influence behavior (Fonagy, 2008; Fonagy, Steele, & Steele, 1991; Fonagy et al., 1998). A term akin to theory of mind, it is "the process by which we realize that having a mind mediates our experience of the world" (Fonagy, et al., 2002, p. 3). Starting from birth and having critical implications for psychotherapy, Fonagy et al. emphasize that attuned, contingent, empathic attachment relationships, coupled with developmentally appropriate interactions, construct the child's awareness of self-states, personality, and the mentalizing mode. For example, the caregiver's affect mirroring of the child's distress enables the child to organize his mind and catalyzes growth along a typical growth trajectory.

By carefully examining the history and theoretical basis of DIR/Floortime within context of mentalization theory (Fonagy, 2008; Fonagy et al., 2002; Slade, 2005, 2008, 2009), this dissertation: 1) sharpens the professional understanding of the breadth and depth of DIR/Floortime so that practitioners can help a wider group of children and parents, not limited to ASD; 2) expands clinicians understanding of how to assess an individual's developmental trajectory and construct appropriate learning environments; 3) highlights the unique and

challenging conditions and experiences a parent of a child with ASD faces when interacting with her¹ child as well as implementing DIR/Floortime; 4) helps clinicians reduce the obstacles that make it more difficult for a parent of a child with ASD from functioning as the primary mutative agent in her child's life; 5) makes evident the importance of developing mentalization skills in parents of children with ASD in DIR/Floortime treatment; and lastly 6) asserts the necessity of understanding a parent's attachment history when working with a parent-child with ASD dyad because this provides an effective framework to assess the predominant modes of navigating relationships.

This dissertation is organized into five chapters. Divided into five sections, the second chapter is a comprehensive literature review. The third chapter describes the methods and procedures the author took to conduct this research. The fourth chapter summarizes a series of five interviews with expert clinicians in DIR/Floortime and mentalization theory. The fifth chapter discusses the significant implications of this research, as well as the author's personal and critical reflections about the project.

The first section of the second chapter, entitled "History: DIR/Floortime, Mentalization, and Attachment Theory," contextualizes the foundational ideas of DIR/Floortime and mentalization theory within the tradition of attachment theory. By understanding DIR/Floortime within the attachment context, practitioners will recognize Greenspan (1979, 1987) and Greenspan and Wieder (1998, 2006) as innovative practitioner-theorists. It will also help remove misconceptions that DIR/Floortime is a treatment limited to children with ASD. Furthermore, this section grounds the reader in thinking about the similarities between DIR/Floortime, mentalization, and attachment theories.

¹ For convenience and to increase the clarity and flow of the reading experience, this dissertation uses the pronoun "he/him" to represent all children and clients and "she/her" to denote all

The second section of Chapter II, entitled "DIR/Floortime: A Developmentally Based Therapeutic Approach," focuses on the development and the utilization of relationships to promote growth and thereby elaborates on the foundational ideas of DIR/Floortime. According to Greenspan and Wieder (1998, 2006), relationships construct an individual's capacity to achieve cognitive, emotional, and social skills as well as his growth trajectory. This section demonstrates how to employ a DIR/Floortime framework to conceptualize a client's level of growth, by demonstrating the ways in which psychopathology manifests in deficits in foundational developmental processes.

The third section of Chapter II, entitled "Mentalization and the Construction of Optimal Learning Environments" explores the central aspects of mentalization theory, namely: 1) how attachment relationships construct the capacity to mentalize and 2) the developmental markers necessary to utilize robust social-emotional skills. Additionally, this section highlights the profound link between Fonagy et al.'s (2002) and Fonagy's (2008) work on the acquisition of mentalization and Greenspan and Wieder's (1998, 2006) approach to helping individuals achieve the foundational social-emotional developmental capacities necessary to participate in meaningful relationships. It also establishes that mentalization is a central growth promoter and treatment goal in DIR/Floortime. Lastly, this section introduces examples of effective mentalization-based therapy models that cultivate a parent's capacity to mentalize (Grienenberger, 2007; Slade, 2005, 2008; Slade, Sadler, & Mayes, 2007).

Using the foundational principles of mentalization theory (Fonagy, 2008; Slade, 2009), the fourth section, entitled "Mentalization in the Parent-Child with ASD Dyad," identifies the multiple stressors parents of children with ASD report and how these can function as obstacles to the implementation of DIR/Floortime, as well as impact the parent-child bond. Most notably,

this section demonstrates the ways in which these conditions are impediments to a parent's ability to mentalize. Given these suboptimal parenting conditions, the research suggests that ASD treatments do not typically provide explicit social-emotional support to parents (Boyd, 2002; Slade, 2009; Solomon & Chung, 2012). Furthermore, this section asserts that clinicians must understand these conditions and find ways to help a parent to become a more active and effective mentalizing member of the treatment team. The cultivation of a parent's capacity to mentalize is the best way to prepare a parent to harness a child's core developmental processes in DIR/Floortime treatment, while mediating her own levels of stress. "What is good for the parent is good for their children. What is good for their children is good for parents. Aiming for both stimulates good outcomes" (Shahmoon-Shanok, 2000, p. 333).

The last section of Chapter II, entitled "States of Mind with Respect to Attachment, Mentalization and DIR/Floortime treatment for children with ASD," explores the relationship between a parent's attachment history and her readiness to implement DIR/Floortime. This section describes ways to assess a parent's relational and mentalization capacities and recommends clinical strategies to help a parent overcome barriers that make it difficult to function as the primary mutative agent in her child's life. This section will expand a practitioner's awareness of the challenges of working with a parent with a complicated attachment or trauma history and makes evident the value of attachment theory in ASD treatment.

CHAPTER II

Comprehensive Literature Review

History: DIR/Floortime, Mentalization, and Attachment Theory

The following section grounds Greenspan and Wieder's (1998, 2006) DIR/Floortime and Fonagy et al.'s (2002) mentalization theory within the history of attachment theory. It demonstrates the ways in which each model expanded and made early attachment research more accessible to clinicians treating a range of disorders. The first subsection explains the core tenets of Bowlby's (1958) attachment theory, followed by Ainsworth et al. (1978) research on variance in attachment classification. The third subsection describes some of the early history and the multiple influences on the DIR/Floortime model (Greenspan, 1979; 1987). This subsection highlights Greenspan's emphasis on the complex nature of development, the integration of biological/sensory factors into psychoanalytic/attachment concepts, as well as the model's roots in early childhood intervention. By understanding DIR/Floortime within this context, a clinician can recognize the wider applicability of this model to disorders not limited to ASD. The fourth subsection elucidates Main et al.'s (1985) expansion of the attachment paradigm to include representation, attention, and metacognition. The fifth subsection portrays Fonagy et al.'s (2002) research that identified mentalization as a key component to attachment, as well as their formulation of and emphasis on developmentally based theory and practice centering on mentalization. The last section describes subsequent on the cultivation of mentalization capacities in parents.

Bowlby, attachment, and the internal working model. Bowlby's (1958, 1969) mission to ground the field of psychology in the biological bases of attachment behavior, as well as in how an infant's actual and lived experiences shape reality, revolutionized child psychotherapy

and remains an unquestionable foundation of Greenspan's (1979) and Fonagy et al.'s (2002) theories. Karen (1994), a historian of attachment theory, claims, "no one, perhaps, had done more than Freud to spread the view that the child is the father to the man" than Bowlby (p. 26). He demonstrated that the environment from which one develops, marked by the "emotional quality in the home," reigns supreme (Mitchell & Black, 1997; Karen, 1994).

Despite the general recognition of infancy as a formative period for emotional well being across the lifespan within the psychoanalytic community, Bowlby (1940) was the first to research the impact these experiences have on character development. Calling the phenomenon "attachment," Bowlby (1958) argued that the intimacy that defines the infant-parent bond is biological and instinctual because it insures the infant's survival. Bowlby (1969) claimed that a series of complex and interconnected behaviors meant to maintain the infant's physical and emotional safety as well as survival define the attachment system: proximity maintenance, secure base, and safe haven (Bowlby, 1969). Proximity maintenance fosters the emotional connection between the infant and caregiver by ensuring physical proximity to a safe and protective attachment figure. "Crying, clinging, calling, and crawling to the attachment figure(s) are all part of the young child's biologically engrained repertoire for establishing proximity" (Wallin, 2007, p. 12). Second, when the attachment individual functions as a secure base and can offer ongoing safety and support when required, the infant can openly and freely explore the novel environment. Lastly, safe haven represents the caregiver's availability as a retreat during moments of distress. The infant pursues safe and connected relationships during stressful circumstances (e.g. separation, novel environments, unpleasant noises, dark spaces, etc.) (Wallin, 2007).

Bowlby (1973) asserted that the infant learns about the social and relational world through consistent and recurring interactions with his caregiver. In particular, the infant's evaluation of the mother's emotional availability, contingency, and reciprocity, shapes his expectations of the attachment figure in the present, as well as his understanding of himself and others. Bowlby (1973, 1980) called this an internal working model and highlighted that attachment influences life well into older adulthood. He said:

In the working model of the world that anyone builds a key feature is his notion of who his attachment figures are, where they may be found, and how they may be expected to respond. Similarly, in the working model of the self that anyone builds a key feature is his notion of how acceptable or unacceptable he himself is in the eyes of his attachment figures. On the structure of these complementary models are based that person's forecasts of how accessible and responsive his attachment figures are likely to be should he turn to them for support. And, in terms of the theory now advances, it is on the structure of those models that depends, also, where he feels confident that his attachment figures are in general readily available or whether he is more of less afraid that they will not be available—occasionally, frequently or most of the time (Bowlby, 1973, p. 203)

These ideas paved the way for the foundational principles in developmental psychology and relationship-based psychotherapy: "change arises as a function of a curative relationship with the intervener" and growth happens in relationship to others (Slade, Sadler, & Mayes, 2007, p. 13).

Ainsworth's strange situation and attachment classifications. Attempting to further develop and quantify Bowlby's (1969) theory, his closest colleague and collaborator Ainsworth, working with Blehar, Waters, and Wall, created an empirically validated laboratory assessment, called the Strange Situation, to classify various attachment behaviors (Ainsworth, Blehar,

Waters, & Wall, 1978). During a string of 3-minute sessions in a toy-filled room, the infant explores the environment under multiple conditions (e.g. with the mother present, alone, and after the mother returns). He has two separations and reunifications with the mother and also encounters a stranger (member of the research team) while alone. These stressful circumstances (e.g., novel environment, separation from the mother, and meeting an unfamiliar person) activated the attachment system so that Ainsworth et al. (1978) could observe and categorize differences in attachment behavior, which were tied to caregiving patterns.

From the research, Ainsworth et al. (1978) identified three distinct attachment classifications (Secure, Insecure-Avoidant, and Insecure-Ambivalent) and recognized that an infant has a biological imperative to modify his behavior to accommodate the strengths and weaknesses of the caregiver and insure the functionality of the attachment system. The infant classified as Secure had the ability to explore the room and also use his mother for support when distressed. The mother's general responsiveness and sensitivity to the child's distress, coupled with her emotional openness and contingency enabled the child to seek maternal support after separation in the Strange Situation and to eventually continue with his play.

Likely a product of experiencing rejection in attachment related circumstances from his primary caregiver, the Insecure-Avoidant infant, devoid of the expected attachment behavior, seemed unaffected by the mothers exit or reunion and persistently investigated the environment and play objects. The baby "inhibited virtually all communication that invited connection" and displayed no interest in proximity to the mother and seemed to block out her warmth (Wallin, 2007, p. 21). As a whole, the mothers of this group of infants routinely rejected their child's attempts for connection. The Insecure-Ambivalent infant, immersed in locating his mother's presence, was unable to flexibly explore the room (Ainsworth et al., 1978). When the mother

left, he became gravely distressed, and in some cases the researchers stopped the assessment. Ainsworth et al. divided this category into two different subgroups: angry and passive. Upon the mother's return, the angry subtype wavered between attempting to bond with the mother and rejecting her. These behaviors likely result from an infant experiencing his caregiver as unpredictable and inconsistent specifically around attachment issues. Moreover, the passive subtype, as if overwhelmed by helplessness and despair, made subtle and ineffective propositions for closeness. Inconsolable, the infant neither became regulated nor engrossed in locating the mother. In concert with this behavior, the mothers of these children had a tendency to be inconsistent, erratic, and insensitive in their ability to attend to their infants needs. They squelched the child's attempt to explore the environment and exercise independence and autonomy.

A few years later, Main and Solomon (1990) discovered a fourth category, which they called the Disorganized type because the infants behaved in a contradictory, atypical, and incomprehensible manner. The psychologists suggested that babies behave in this way when they experience their caregiver as both the "safe haven but also as a source of danger" (Wallin, 2007, p. 22). Main and Solomon explained that this type of parent is both frightening (i.e. in the case of abuse) and frightened (i.e. dissociative or withdrawn).

Greenspan and the Developmental Structuralist Approach. During this time, Greenspan (1979), who was also interested in infant development and the identification of psychopathologies in early childhood, proposed his first theoretical model of development. It sought to move beyond the conventional emotional (defense) and cognitive (adaptation) dichotomy towards a singular and integrative framework. By synthesizing Piagetian and

psychoanalytic² concepts of development and learning, he formed a developmental stage model that accounted for a multitude of typical and pathological growth trajectories. Calling this the Developmental Structuralist approach, Greenspan (1979, 1987) classified these early childhood social, emotional, and behavioral patterns within foundational stages of growth, which a clinician can use to establish greater precision in assessment and intervention.

Simultaneously, in 1977, Greenspan (1987) began a decade-long research project at the Clinical Infant Development Program (CIDP) of the National Institute of Mental Health to learn more about infant psychopathology in at-risk families. Among the many contributions to the field, this study identified: 1) patterns that determine the development of psychopathologies in very young children, including reasons why multirisk families are more likely to transmit poor coping skills intergenerationally; and 2) interventions to disrupt the problems sustaining psychopathology (Greenspan, 1987; Wieder & Greenspan, 1987).

Despite the abundance of psychoanalytic writing on the impact of disruptions occurring during early childhood on adult functioning, Greenspan's examination of psychopathology in infancy was breakthrough in the field. In fact, many of these ideas are still included in the DC: 0-3R: Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood, the diagnostic manual for children from birth to 3 years of age (ZERO TO

². In addition to attachment theory, both DIR/Floortime and mentalization theories clearly drew from and integrated key aspects of psychoanalytic philosophy into their respective models. For example, Greenspan's (1979) developmental stages appropriated ideas from Freud's (1905) psychosexual stages, Erikson's (1950) psychosocial stages, and Mahler, Pine, and Bergman's (1975) separation-individuation theory, as well as other linear growth models (Bowlby, 1951; Freud, 1965; Kernberg, 1975; Kohut, 1971; Spitz, 1945; Spitz and Cobliner, 1966; Winnicott, 1931). Fonagy, Target, Steele, and Steele (1998) identify Freud's (1911) "bindung," or binding, which essentially reflected the shift from physical to psychical (i.e. ideas, representations) association, as the first representation of mentalization. Additionally, Klein's (1945) depressive position and Winnicott's (1962) ideas on self-recognition forming out of the caregiver's ability to recognize the child share theoretical underpinnings with mentalization.

THREE, 2005). Greenspan (1979) hypothesized that psychic structures develop out of an individual's integration and organization of both the internal (i.e. drives, feelings, representations) and external (i.e. sensory input, relationships, and environmental) factors. In other words, the interaction between an infant's individual differences and the actual caregiving patterns organize his personality, as well as growth along a developmental trajectory (Greenspan & Lourie, 1981). Challenges in either domain, result in social-emotional delays. For example, the severe biological or sensory differences in a child with ASD impede his ability to reciprocate in parent-child interactions, thus impacting the acquisition of important social-emotional milestones. Moreover, neglect or abuse by a caregiver may also obstruct development, as well as present as atypical sensory-based vulnerabilities (Greenspan, 1987). Thus, the pinnacle of development is the aptitude for cognitive, emotional, and social abstraction (Piaget, 1962).

Greenspan (1979) contributed to child psychotherapy, developmental psychology, and attachment theory by incorporating multiple disciplines and lines of inquiry into his model. He also critiqued and reified Bowlby's (1969) and Ainsworth et al.'s (1978) central tenets and practices. Instead of activating the attachment system through a series of separations and reunifications like in Ainsworth et al.'s (1978) Strange Situation, the prominent mode of infant assessment at that time, Greenspan and Lourie (1981) evaluated infants in spontaneous interaction (i.e. free play) with a caregiver in natural settings instead. Greenspan and Lieberman (1988) asserted, attachment "is best studied as part of the overall progression of the capacity to form, differentiate, abstract and symbolize affective human relationships" (p. 404). They hypothesized that this type of assessment would enable a clinician to better identify adaptive and pathologic emotional, cognitive, and communicative ways of "processing, organizing, integrating, and differentiating experience" (Greenspan et al., 1987, p. 433). More simply put, a

practitioner could recognize the strengths and weaknesses of the client's functioning, along a developmental trajectory, and precisely intervene where necessary.

Greenspan (1979) included sensory experience, temperament, and individual differences in his model³. Although written about for nearly a century, integrating these concepts into the attachment literature made for an innovative and comprehensive model. In fact, the American Psychiatric Association (2013) finally included "Hyper- or hypoactivity to sensory input or unusual interest in sensory aspects of the environment (e.g. apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascinations with lights or movement)" (p. 50) as a central feature of the ASD diagnosis in the DSM-V, a concept Greenspan (1987) introduced nearly 30 years.

Despite these noteworthy divergences, Bowlby's (1969) and Ainsworth et al.'s (1978) theories appear in Greenspan's (1979, 1987) model, most notably in the emphasis on environmental factors shaping the developmental trajectory, as well as the general importance given to the mutative nature of relationships in treatment. In fact, as it became more focused on treatments of developmental disorders, and known as Greenspan and Wieder's (1998, 2005) DIR/Floortime, the significance and influence of environmental factors became secondary to individual differences, the hallmark of the approach. However, the focus on individual differences, both appropriate and groundbreaking for the ASD community, likely restricted the applicability of the model to neurotypical children, families, and adults outside of this population.

Main, attachment, and representation. Around the time that Greenspan and his

³ Greenpsan (1979) cites Bergman and Escalona (1949), Burlingham and Freud, 1942, Cameron (1919) Cravioto, and Delicardie (1973), Escalona (1968), Murphy (1974) Murphy and Moriarty (1976), Rachford, 1905, Thomas and Chess (1977), Thomas, Chess, and Birch (1968).

colleagues at the CIDP conducted their groundbreaking work on infant psychopathology, adding the new dimension of individual differences to attachment research, Main, Kaplan, and Cassidy (1985) honed in on the ways in which the attachment bond forms an individual's capacity to participate, represent, and attend to relational experience. While influential theorists and clinicians such as Freud (1940) and Fraiberg et al. (1975), hypothesized about the influence of early childhood experience on development, Main et al.'s (1985) work was the first to demonstrate how attachment experiences construct lifelong representational rules that govern "what individuals allow themselves to notice, feel, recall, and do" (Wallin, 2007, p. 36). It showed "how an adult's representation of his or her own attachment experience structures the individual's thoughts, feelings, and behavior as a parent" (Main et al., 1985).

Main et al. (1985) asserted that through iteration, rules form that both consciously and unconsciously guide "not only feelings and behavior but also attention, memory, and cognition" (pp. 66-67). In essence, these rules organize and shape experience because they function as attentional and representational schemes that preserve the mental states and behavioral patterns developed infancy that had ensured survival. Beyond simple adaptive strategies, these "rules for direction of attention and behavior serve actively and repeatedly to restrict and perhaps in some cases distort the types of information that may be made available, either through memory or through attention to the immediate environment (Main et al., 1985, p. 94). Moving away from the notion of an internal working model as a template, Main et al. (1985) described the internal working model as a phenomenon responsible for transmitting implicit procedures from one generation to the next that dictate what an individual will recognize, feel, and remember, and how he will respond, particularly in attachment-related circumstances.

In order to gain access to "representational processes [that] cannot be witnessed directly," George, Kaplan, and Main (1985) developed the Adult Attachment Interview (AAI), a semi-structured protocol focused on the memories, beliefs, and representations of one's attachment experience (Main et al., 1985, p. 78). Similar to Strange Situation, the AAI has a complex system to code adult attachment classification, which correlates to Ainsworth et al.'s (1978) three primary categories (George et al., 1985; Main & Goldwyn, 1991, 1994). However, unlike the infant assessment, which measures qualitative aspects of the actual parent-infant bond, George et al. (1985) specifically designed their tool to gain access to "representational artifacts" (Main, 1991, p. 130) so that they could measure the participant's primary "state of mind with respect to attachment" (Main, 1995, p. 437).

Contrary to early assumptions, Main et al. (1985) hypothesized that these attachment categories represented "structured processes serving to obtain or limit access to information" (p. 66) because they denote "individual differences in mental representation" "(Main, 2000, p. 1056) or variances "flexibility of attention" (p. 1056) in response to the activation of the attachment system. Main (1995) explains that the classifications signify the level of flexibility within the individual's organization of attention and action. Furthermore, the behavioral displays of these rules reflect "relative degrees of flexibility of attention in the face of attachment related stress" and mark the differences in attachment experience (Main, 2000, p. 1056). These rules to preserve states of mind formed in infancy are "actively perpetuated by corresponding patterns of awareness, affective experience, and behavior—including eventually, parenting behavior" (Wallin, 2007, pp. 36-37).

Main et al. (1985) highlighted remarkable differences in these psychological domains between a child and parent with Secure attachment and those categorized as Insecure. For

example, Main's and Goldwyn's (1991, 1994) Secure-Autonomous classification on the AAI corresponds to Secure attachment category on the Strange Situation, and represents an overall openness, coherence, and ease in the depiction of attachment related experience as well as a flexible navigation of changing conditions. An adult who is Insecure, either of the Dismissing or Preoccupied type, relies on limiting attention and behavior to cope with stressful conditions (e.g. Strange Situation) (Main, 2000). The Dismissing type on the AAI corresponds to the Insecure-Avoidant group in the Strange Situation. It represents a stance of belittling the importance of attachment bonds. Finally, the Preoccupied type, related to Insecure-Anxious-Ambivalent classification, represents a psychological over-dependence and a fixation on attachment relationships.

In addition to these major contributions, Main et al. (1985) also demonstrated: 1) the long-term stability of the attachment classifications; 2) the attachment bond's pervasive influence across cognitive, affective, and behavioral domains; and 3) the intergenerational transmission of these patterns. They also revealed that 75% of the infant's attachment categorizations derived from the Strange Situation predicted security of attachment. Elaborating on these findings, Main (1991) demonstrated how adverse experiences with attachment lead to specific types of memory encoding, which infringes on the development of metacognitive skills. This discovery precipitated the work on mentalization by Fonagy et al. (1991).

Furthermore, Van IJzendoorn's (1995) landmark meta-analysis of 18 studies across six culturally, ethnically, and socioeconomically different countries confirmed Main et al.'s (1985) results regarding the longitudinal stability of attachment classification, as well as the intergenerational transmission of attachment. In his meta-analysis, he found that the parent's AAI classification predicted the baby's Strange Situation categorization (i.e. his internal working

models and attentional and representational rules) 75 % of the time. Van IJzendoorn (1995) concluded that a Secure baby usually grows up to be a Secure-Autonomous adult and raise a Secure child; an Insecure-Avoidant infant typically grows up to become Dismissing adult who tends raise an Insecure-Avoidant infant; and finally, an Insecure-Ambivalent baby tends develop into Preoccupied adult who often has an Insecure-Ambivalent child. For the purpose of this dissertation, these findings contextualize the multiple ways in which attachment shapes a parent's representational and attentional capacities. This has important implications for working with parents of children with ASD from a DIR/Floortime perspective and will be addressed at length in "States of Mind with Respect to Attachment and DIR/Floortime Treatment for Children with ASD" (section 5).

Fonagy and mentalization. Influenced by Main's (1991) work on attachment and metacognition, Fonagy, Steele, and Steele (1991) and Fonagy, Steele, Steele, Moran, and Higgit (1991) studied the relationship between mentalization and attachment. In their first landmark study, Fonagy, Steele, and Steele (1991a) administered the AAI to 100 primarily middle class, third-trimester expectant couples (mothers and fathers) between the ages of 22 and 42. About 12 to 18 months after the birth of their child, the researchers gave the Strange Situation procedure to the infant and parent in order to identify the congruency between the attachment classification of the parent and infant (Ainsworth, et al., 1978). They found that the representation of the attachment relationships during pregnancy, as defined by the AAI, predicted the security of the infant-mother attachment classification (Secure versus Insecure) at 1 year with 75 % accuracy (consistent with Van IJzendoorn's [1995] meta-analysis). The researchers concluded that "predictive power resides, it seems, not in the quality of past experience but in the overall organization of mental structures underlying relationship and attachment related issues" (Fonagy,

Steele, and Steele, 1991, p. 901). Additionally, the quality of a caregiver's attunement to the child's mental states, which is constructed out of the parent's representation and experience of her own attachment bond, influences the ability to predict an infant's attachment classification has much do with. Furthermore, the study reinforces that parents transmit attachment patterns intergenerationally their child.

Using the AAI, Strange Situation transcripts and data from Fonagy et al.'s (1991b) previously mentioned study. Fonagy et al. (1991a) applied their newly created Reflective Self-Functioning scale, the first operational definition of mentalization, to measure the relationship between attachment classification and mentalization (Ainsworth et al., 1978; Main & Goldwyn, 1991). They discovered that the parents with high levels reflective self-functioning on the AAI were predominantly categorized as Secure-Autonomous and most often had securely attached infants at 12 to 18 months on the Strange Situation. The parents with lower reflective selffunctioning scores were predominantly categorized as insecure on the AAI and most often had insecurely attached children. Fonagy et al. also concluded that parent's capacity to mentalize his child's actions mediates the aptitude for sensitive and contingent caregiving behavior, which explains the correlation between reflective self-functioning and attachment classification. Because the attachment bond constructs the capacity to mentalize, a mentalizing parent is likely to have had a mentalizing attachment figure in his own childhood. Less reliant on defensive processes, the mentalized child will become capable of mentalizing. Moreover, Fonagy et al. (1991) concluded that parents with low levels of reflective self-functioning, dominated by their own concerns, create suboptimal caregiving environments marked by inaccurate or nonexistent reading of infant cues. For this reason, their offspring struggle to develop the capacity to mentalize.

In 1998, Fonagy, Target, Steele, and Steele published the "Reflective Functioning" Manual, Version 5.0, For Application to Adult Attachment Interviews," a valid and reliable rating system for the AAI that guides trained assessors to identify a participant's level of reflective function (i.e. "Awareness of the nature of mental states; ... The explicit effort to tease out mental states underlying behavior; ... Recognizing developmental aspects of mental states; ... Mental states in relation to the interviewer") (pp. 15-19). Reflective Function (RF) denotes the operationalized ability to mentalize or the individual's aptitude to recognize the influence mental states have on experience, and to comprehend and derive meaning from behavior. The authors no longer used the term reflective self-function, even though these terms represent the same concepts. In fact, Fonagy et al. (1998) states that these terms "operationalized definitions of individual differences in adults' metacognitive capacities" on the RF scale and that "metacognition, mentalisation and reflective-functioning are seen as expressions of the RF on which, in large part, depends the development of the self who thinks and feels" (Fonagy, Target, Steel, & Steele, 1998, p. 6). Lastly, the authors highlight that individuals vary in their capacities to mentalize.

Expanding on Bowlby's (1980) internal working model and the empirical research underlying how qualitative differences in the attachment relationship influence the formation of the self, Fonagy et al. (2002) stress that the evolutionary function of the attachment bond because it constructs the foundation to understand behavior as a reflection of mental states in self and other. Similar to Main et al. (1985), they challenged Bowlby's assumption that early bonds form templates for subsequent relationships, claiming that early experience impacts psychological and neuropsychological development. Attachment relationships shape the capacity to comprehend the social world. For example, participants classified Insecure have deficits in their capacity to

mentalize, a critical skill to navigate the complex social world. Insecure attachment forces individuals to rely on rigid or chaotic strategies to navigate intimate relationships. Furthermore, Fonagy et al. emphasize that the attachment categories represent individual differences in the capacity to understand, regulate, and cope with close relationships.

A likely result of the Cartesian assertion that an individual has "direct and infallible access" (Fonagy et al., 2002, p. 3) to his own mind, Fonagy et al. claim that both psychoanalysts and cognitivists (Morton & Frith, 1995) have overlooked the processes that support the development of the "self as mental agent" or "the psychological self" (p. 3). For this reason, their theory outlines the developmental trajectory of the "agentive and the representational aspects of the self: both the 'I' and the 'Me.'" (p. 3). Fonagy et al. assert that the accomplishment of the mentalizing mode, the pinnacle of social experience, is a "hard-won" (p. 3) relationally constructed skill and not innate or prewired. Summarizing their work, Choi-Kain and Gunderson (2008) state that Fonagy synthesized the psychoanalytic "self-oriented and affectively rich dimensions" with the "empirically derived, externally or other-oriented, cognitively focused construct of theory of mind" (p. 1129).

Taken as a whole, Fonagy et al. (2002) established an approach to psychotherapy that incorporates developmental, psychoanalytic, and philosophy-of-mind theory as well as neuropsychological and clinical research. Like Greenspan's (1997) and Greenspan and Wieder's (1998, 2006) model, Fonagy et al. emphasize the mutative nature of relationships. Most notably, they stress that mentalization, the representation of the child's mental states, not interpretation, is the primary mode through which to facilitate change (Fonagy & Target, 1998). An individual learns affect regulation and obtains a greater awareness of his thoughts, feelings, and behaviors

through the experience of being mentalized. To conclude, Fonagy and Target identify mentalization as the single most critical intervention strategy child psychotherapy.

Slade and parental reflective function. To better understand the relationship between a mother's attachment classification and RF capacitates, as well as the infant's attachment to her, Slade, Grienenberger, Bernback, Levy and Locker (2005) measured 78 well educated (50% graduate level), employed, White (90%) pregnant women (an average of 31.8 weeks) across several attachment related domains. These women had two pregnancy and four postpartum appointments, where they participated in an AAI, videotaped play with their infant (at 4 months), and a Parent Development Interview (PDI) (Aber, Slade, Berger, Bregsi, & Kaplan, 1985; Slade, Aber, Bregsi, Berger, & Kaplan, 2004) (10 months postpartum), a 45 question semi-structured interview "designed to assess a mother's representations of her child, herself as a parent, and her relationship with her child" (Slade et al., 2005, p. 288). Unlike the AAI, this protocol measures mentalization processes in the present as opposed to reflecting on the past. The authors rated the PDI using the Addendum to the Reflective Functioning Scoring Manual (Slade et al., 2004). When the infant turns 14 months, the infant-mother attachment was also assessed in the Strange Situation (Ainsworth et al., 1978).

Slade et al. (2005) found a strong relationship between maternal attachment (measured using the AAI) and maternal reflective functioning. Additionally, the level of a mother's RF was associated to her child's attachment status. More specifically, the structure and representation (coherence, organization, quality) of an adult's attachment working model translates into how she forms a representational model of her child. Mothers with the highest levels of RF were Securely attached, as well as had Securely attached infants. These mothers appeared to comprehend the infant's mental states and his "tendencies to seek proximity, closeness, and

comfort" (p. 293). Furthermore, the way in which the mother articulated her attachment history on the AAI seemed to indicate the mother's level of preparedness to mentalize her child's behavior. The mothers with lower levels of RF were classified Preoccupied or Dismissing with respect to attachment and had Insecure infants. The Insecurely attached women with the lowest levels of RF were categorized as Disorganized with respect to attachment.

These findings endorse Fonagy et al.'s (2002) theory that the better a caregiver understands the mental states of the infant, the more the baby will experience the relationship as safe and secure. It also demonstrates how an individual's internal working model of attachment shapes "the way a parent thinks about her child's emotional experiences, and makes meaning of her child's attachment behaviors and states of mind" (p. 293). Lastly, this study places maternal RF as one of the main processes that underlie the intergenerational transmission of attachment, a phenomenon that Van IJzendoorn's (1995) meta-analysis identified was inadequately explained by the research of that time.

In order to further investigate the connection between mother's capacity for reflective functioning and the actual characteristics of her caregiving behavior pertaining to "affective communication," Grienenberger, Kelly, and Slade (2005) studied 45 mothers and their infants 10 to 14-month-of age (p. 302). The team utilized The Atypical Maternal Behavior Instrument for Assessment and Classification, Verson-2 (AMBIANCE) (Lyons-Ruth et al., 1999a, 1999b), the Parent Development Interview (PDI) (Aber et al., 1985) and The Strange Situation (Ainsworth et al., 1978). The AMBIANCE systematically classifies atypical caregiver behavior during the Strange Situation Paradigm. These maternal behaviors include terror-inducing, fear, dissociation and/or withdrawal, as well as ruptures in emotional communication in the dyad. The 45-question, semi-structured interview is "designed to assess a mother's representations of her child,

herself as a parent, and her relationship with her child" (p. 288, Aber et al., 1985; Slade, Aber, Bregsi, Berger, & Kaplan, 2004). The authors also rated the PDI using the Addendum to the Reflective Functioning Scoring Manual (Slade et al., 2002). Additionally, Grienenberger et al. measured the infant's attachment using the Strange Situation at 14 months.

Grienenberger et al. (2005) found that mothers with higher levels of reflective function had fewer disturbances in affective communication between the mother and baby. Higher levels of maternal RF seemed to act as a protective factor against disturbances "in affect regulation during times of distress" (p. 306), because RF helps contain the infant's negative emotional states and promote attachment security. The children categorized Secure had mothers with low AMBIANCE scores and high levels of maternal RF. On the contrary, the children classified Disorganized had mothers with the highest scores on the AMBIANCE and very low maternal RF.

Grienenberger et al. (2005) identified that the caregiver's specific regulating behaviors during periods of distress, influenced by RF, directly affect attachment. They asserted, "Parents are not equally prepared to meet the psychological burdens of parenthood. As a result, there is a great range in the degree to which parent-child interactions become dominated by the emotional needs of the parents versus those of the child" (p. 309). For example, the mothers skilled at mentalization were better equipped to cope with "infant vulnerability without becoming overwhelmed by their own unintegrated fear and hostility" (p. 308). Additionally, this article identifies certain caregiving behaviors that impact a child's internal representation of the attachment relationship. A parent who becomes "easily dysregulated or disorganized by their infant's distress" will not be able to see his behavior as a reflection of mental states (p. 308). The team deduced that RF mediates maternal behavior.

Both studies have several important implications to clinical work with parents and young children. Slade et al. (2005) suggest that parental reflective functioning, or the parent's capacity to "hold the child in mind" (p. 220) or recognize and represent the child's behavior as influenced by mental states, may be a critical aspect of how/why attachment styles are passed from one generation to the next (Slade, 2008; Van IJzendoorn, 1995). Slade et al. (2005) state, "if reflective functioning in a parent is indeed a key to a child's socioemotional adaptation, then clinical interventions need to address the development of this capacity. ... reflective functioning may well bridge the gap between behavior and representation, and thus be a potent agent of change" (p. 296).

For these reasons, Slade (2005) formulated a series of interdisciplinary reflective parenting programs specifically tailored to enhance the parent's mentalization capacities, especially for those at-risk of traumatizing their very young children (Slade, Sadler, Dios-Kenn, Webb, Currier-Ezepchick, & Mayes, 2005; Slade, Sadler, & Mayes, 2007). Focused on the parents, she explains that parent work should focus on the development of a mentalizing stance (Slade, 2008).

For the purpose of this dissertation, these studies have important implications for practitioners working with children with ASD in DIR/Floortime treatment (addressed at length in "Mentalization in the Parent-Child with ASD Dyad" and "States of Mind with Respect to Attachment and DIR/Floortime treatment for children with ASD" [sections 4 and 5]). Most notably, DIR/Floortime clinicians: 1) cannot assume that a parent is psychologically equipped to effectively implement DIR/Floortime with her child with ASD, and 2) must seek to enhance a parent's mentalization capacities as a central part of treatment.

Mastery of advanced social-emotional capacities through DIR/Floortime. During this same time Wieder and Greenspan (2005) conducted a landmark 10-to-15 year follow up study of Greenspan and Wieder's (1997) case review challenging the assumption that children with ASD could not develop advanced social-emotional skills like Theory of Mind and "learn to be related. empathic, creative, reflective thinkers" (p. 40; Baron-Cohen, Leslie, & Frith, 1985; Yirimiya, Erel, Shaked, & Solomonica-Levi (1998). The study consisted of 16 boys between the ages of 12 and 17 (mean 13.9 years of age) and diagnosed between 12-and-24 months who received intensive and individually focused DIR/Floortime program, with 5 to 13 types (average 8) of interventions, usually occurring between the ages of 2 and 8.5, depending on the child's specific needs. They all participated in Floortime at home, the hallmark of the program, as well as had consultation with Serena Wieder or Stanley Greenspan (the authors and founders of DIR/Floortime). Parents reported "an average of nine hours [two to 16 hours] of Floortime each week" for an average of 5 (2.5 to 10.4) years (p. 58). Over half of the children received additional Floortime services. Nearly 70% followed the DIR/Floortime's peer play date recommendation schedule. Additionally, all the children participated in speech and language, and occupational therapy, as well as auditory integration training. In retrospect, the parents emphasized that the home-based Floortime, one-on-one Floortime therapy with a trained clinician, and the peer play dates accounted for the success of the overall treatment and most importantly the growth of their child.

Wieder and Greenspan (2005) measured the participants across a variety of domains (e.g. emotional, social, sensory, cognitive, and academic). They examined video recordings and interviews of the children and rated their Functional Emotional Developmental Capacities (FEDCs). They also conducted parent interviews and administered the Functional Emotional

Developmental Questionnaire, a parent evaluation of their child's FEDCs. Additionally, Wieder and Greenspan reviewed academic and cognitive reports, as well as the Child Behavior Check List—Achenbach Scales (Achenbach, 1991).

Wieder and Greenspan (2005) discovered that a portion of these children exhibited empathy, at higher levels than their peers with ASD. Additionally, some of the participants cultivated skills in music, writing and poetry and majority demonstrated better than average academic skills. Despite a range of environmental stressors (e.g. family conflict, divorce, illness, and developmentally expected stressors related to age) this group not only sustained their initial FEDCs, they advanced beyond the core processes developed in their original study (Greenspan & Wieder, 1997). According to Wieder and Greenspan, the mental health problems fell in a typical range and seemed connected with specific environmental factors. They praised these individuals for having skills to deal with the "stressors of adolescence and life events" (p. 42). The authors declared that these children developed a social, emotional, and cognitive foundation beyond the symptoms and core deficits that characterize ASD and "became warm, related, and sensitive young people who have the foundations for an optimistic future. ... [as well as,] empathetic, creative, and reflective, with healthy peer relationships and solid academic skills" (p. 59)

Conclusion. By demonstrating some of the ways in which Greenspan (1979, 1987) used attachment theory as a spring board for DIR/Floortime and highlighting the models pioneering research on infant psychopathology, clinicians can better recognize DIR/Floortime as a comprehensive and innovative psychotherapy model for all types of delays in social-emotional development, not limited to ASD. Despite differences in the treatment population, emphases, and practices of DIR/Floortime and mentalization theory, their shared foundations helps

contextualize the reason for using Fonagy et al.'s work to better understand DIR/Floortime.

DIR/Floortime: A Developmentally Based Therapeutic Approach

Greenspan and Wieder's (1998, 2006) DIR/Floortime is a comprehensive child-centered assessment and intervention system that helps children build the necessary social, emotional, and intellectual foundations to build nourishing relationships. DIR/Floortime uses relationships (i.e. parent-child and practitioner-child) to activate developmental processes and stimulate growth, while simultaneously supporting and capitalizing on individual differences. Greenspan and Wieder formulated effective ways to forge optimal learning environments for children with severe developmental and emotional challenges.

Similar to the following section entitled "Mentalization and the Construction of Optimal Learning Environments," this section focuses on two critical aspects of DIR/Floortime: 1) developmental foundational milestones and 2) the utilization of relationships to promote growth. This section describes in detail the central principles of Greenspan and Wieder's (1998, 2006) DIR/Floortime theory and highlights the merits of a developmentally based therapeutic approach to assessment and intervention. By demonstrating how psychopathology manifests in deficits in foundational developmental processes, a clinician can recognize the model's applicability to children, families, and adults with a range of diagnoses, not limited to ASD. Additionally, a practitioner will learn specific ways in which relationships construct an individual's capacity to achieve cognitive, emotional, and social skills as well as trajectory of development. This section outlines ways to promote the growth of developmental processes in order to facilitate growth. Lastly, this section provides a foundation for comprehending arguments made in "Mentalization in the Parent-Child with ASD Dyad" and "States of Mind with Respect to Attachment and DIR/Floortime treatment for Children with ASD" (sections 4 and 5).

In order to introduce the reader to one of the central tenets of DIR/Floortime and prepare her to understand the influence of neuropsychogical factors on the formation of developmental milestones, the first subsection entitled "Individual Differences" outlines Greenspan and Wieder's (1998, 2006) concept of individual differences. Often overlooked by mental health clinicians, a basic knowledge of this domain expands a therapist's conception of the multiple factors that influence growth. The second subsection entitled "Functional Emotional Developmental Capacities" (FEDCs) details the foundational capacities that enable meaningful participation in relationships, as well as form the basis for a robust sense of self. These milestones represent universal social emotional capacities that can be mastered at any age. This portion also explains adaptive and maladaptive presentations of each milestone and defines factors that contribute to the ways an individual organizes experience. It shows how the caregiver-child bond constructs the child's social, emotional, and cognitive functioning. Moreover, this subsection describes relevant ways to use a developmental framework for assessing a client's functional capacities, rather than simply on symptom presentation, and activating developmental processes for individuals with delays or weaknesses at certain milestones. Different from most descriptions of DIR/Floortime, this subsection does not solely focus on ASD, rather it demonstrates the wider applicability of a developmental framework. The third subsection entitled "Floortime" delves into DIR/Floortime's approach to relationship-based intervention and how to harness emotionally meaningful learning interactions that enable a child to "climb the ladder of milestones, one rung at a time, to begin to acquire the skills he is missing" (Greenspan & Wieder, 1998, p. 121; Greenspan & Wieder, 2006).

This dissertation does not designate a specific section for the relationship-based component of DIR/Floortime. Relationships are a central aspect of individual differences,

development, and Floortime. Relationships represent the foundation of DIR/Floortime, as: 1) a critical influence on development; and 2) the vehicle and mechanism through which to intervene and change.

Individual differences. Greenspan and Wieder (1998, 2006) identified a range of neurobiological domains that commonly influence development. Although many theorists have used the term individual differences to describe variances in cognitive, emotional, and social capacities, such as Main et al. (1985) in the previous section, Greenspan and Wieder (1998, 2006) specifically utilizes this expression to denote the unique way that an individual's brain integrates and uses information at the neurobiological or sensorial level. Individual differences represent inborn variances in a person's ability to regulate and process sensory information, muscle tone, motor ability, auditory processing, and language skills, as well as his ability to plan, organize and complete actions (see Figure 2) (Greenspan & Wieder, 1998, 2006). In fact, Greenspan and Wieder (1998) emphasize that these areas "determine how we sense, understand, and react to the world" (p. 34). When severe, as common with a child with ASD, individual differences delay the acquisition of the foundational social emotional capacities, making it difficult to participate in and utilize relationships as the catalyst for growth.

Virtually outside of conscious attention, the optimally functioning central nervous system (i.e. sensory reactivity and processing, muscle tone, and executive functioning) synthesizes and incorporates a range of internal and external stimuli so that the individual can extract critical information from the environment, particularly in relationship, and execute behavior. When performing sub-optimally, as evident in a child with ASD, an individual experiences delays or deficits in the foundational social-emotional milestone, which typically result in serious challenges to his capacity to relate to others. Moreover, the behaviors associated with Greenspan

and Wieder's (1998, 2006) individual differences overlap with behaviors commonly related to traumatized very young children (Greenspan, 1987). For this reason, therapists must have a basic understanding of this domain so that they can accurately differentiate sensory problems from environmental factors.

This subsection outlines some of Greenspan and Wieder's (1998, 2006), commonly observed biological challenges, namely sensory regulation, motor planning and sequencing, expressive and receptive language, visual-spatial processing, and executive functioning.

Additionally, this section briefly addresses the bidirectional influence of individual differences and how they can impact a parent's capacity to create an optimal learning environment.

Sensory integration. Greenspan and Wieder (1998, 2006) designate regulatory capacities and sensory integration as one of the primary individual difference domains. One of the main tasks of the brain is to organize, integrate, and utilize proprioceptive, vestibular, auditory, visual, tactile, gustatory, and olfactory information, which come from both outside and inside the body (e.g. assessment of sensations related to skin, muscles, teeth, etc.). As evident by chaotic or rigid behavior, social avoidance, and a need for repetition, these systems can function in an overreactive, and/or under-reactive (sometimes a combination of the two) manner, which causes dysfunction in a range of areas.

For example, a child over-reactive to tactile stimuli may experience light touch as painful or unbearable. This poses multiple challenges to the child and parent attempting to soothe him through touch. Cuddles, hugs, and kisses, common caregiving behaviors used to connect and regulate, may exacerbate the child's dysregulation and make him more likely to avoid other people. Additionally, an over-reactive tactile system will prevent the child from extracting important information and skills (e.g. attachment, reciprocal communication, pretend play, etc.)

INDIVIDUAL DIFFERENCES											
Regulatory Capacities (reactivity)	Postural Control for Functions	Response to the Sounds, Gestures and Verbal Communication (in back and forth reciprocal interactions for communication)	Use of Vocalizations, Gestures, Words and Language for Communication (in back and forth reciprocal interactions for communication)	Response to Visual Environment	Praxis - Executive Function - Prefrontal cortex orchestrating information for function. Praxis is the moment from which one faces the future with the resources gained from the past experiences.						
Indicate +I = hyper -I = hypo ± = both responsivity in each sensory domain auditory visual tactile vestibular proprioceptive tastes odors Dominant Functional Profile (Describe):	Can sequence purposeful gestures and actions, to obtain desires, to - 1. Simple physical actions to indicate desires (gaze, reach) 2. Physically mirror gestures 3. Physically imitate gesture 4. Imitate physical actions with purpose. 5. Obtain desires 6. Problem solve steps with body to move in space to interact with people & objects in environment - for exploration for function and purposeful use of toys - for self help - for back and forth interactions with family and peers. (#steps recorded)	Observations of the child's ability to attune and orient to the auditory environment, to affect and gestures and to comprehend words (w) (with benefit of signs/gestures (s) and/or visual (v) strategies. 1. Orient to the auditory source in the environment (auditory figure ground). 2. Attune to key tones in another's vocalizations. 3. Respond to key gestures in another interaction. 4. Respond to key words in another interaction. 5. Switch auditory attentions auditory attention back and forth between self and others (self monitor, other monitor & integration) 6. Follow directions (record #), 7. Understand questions (how, who, what, where, when, what if, if then). 8. Engage in conversations with abstract ideas.	1. Mirror vocalizations with the intention to communicate 2. Mirroring gestures with intention to communicate. 3. Intentional use of unique non-verbal gestures to convey intentions. 4. Intentional use of affective tones and sounds to convey intentions. 5. Uses single meaningful words to convey intentions, actions and desires. 6. Uses two word phrases meaningfully. 7. Uses sentences meaningfully. 8. Uses phrases and sentences in back and forth exchanges with a logical flow.	The child uses visual spatial strategies systematically to explore and discriminate desired objects. The child can - 1. Observe and focus on desired object 2. Alternate gaze (initiate joint attention visually) 3. Follow another's gaze to determine the object of their attention and their intent. (respond visually) 3. Switch visual attention back and forth between self and other (self monitor, other monitor & integration) 4. Differentiate salient visual stimuli from background stimuli (visual figure ground) 5. Actively search for object she sees hidden 6. Can explore two areas of room and search for desired object 7. Can explore more than two areas with active visual assessment of space, shape and materials.	Praxis encompasses all of these individual processing differences as it depends on the child's – I Ideation Planning Sequencing Execution Initiates ideas in play with clear goals and purpose. Is able to associate sensory perceptions from the body, visual system, auditory system to develop a plan. Develop the steps of the sequence (# steps - 1, 2, 3, 4) Execute the steps and persist. Adapt plan if it does not work or is interfered with by another's action.						

Figure 2. List of individual differences. This figure illustrates the individual difference areas assessed by DIR/Floortime clinicians and is used by ICDL for training purposes. Adapted from Interdisciplinary Council on Developmental and Learning Disorders, personal communication, 2015

constructed in the parent-child bond. To further illustrate, a child under-reactive to proprioceptive input may require an excessive amount of physical stimulation in order for his brain to recognize or feel his limbs. This difference would likely manifest as clumsy, careless, and insensitive behavior because his body requires excessive stimulation. He may be prone to knocking over other children's' building blocks, making it difficult to make friends. Lastly, a child over-reactive to sound may only tolerate the softest and quietest noises. Loud noises such as a vacuum cleaner, fire trucks, or a child screaming in the yard may cause the child to hide from others or behave in odd or peculiar ways. These simple examples demonstrate how sensory regulatory problems disrupt social-emotional functioning. A child with ASD typically has multiple individual differences, making it more challenging to help him regulate and to comprehend his needs.

Motor planning, sequencing, and muscle tone. Motor planning and sequencing, Greenspan and Wieder's (1998, 2006) second individual difference domain, represents the way an individual organizes and responds to external and internal stimuli (sounds, sights, desires, thoughts, etc.) through physical movements like gaze, hand and face gesturing, and goal-directed body movement (Greenspan & Wieder, 1998, 2006). At the most complex level, this area represents the body's ability to investigate physical space, utilize objects, and interact with others. Motor planning and sequencing are also central to problem solving.

Greenspan and Wieder also observe significant challenges in muscle tone, a related capacity. A child with poor muscle tone may struggle to keep his head up or to sit up straight, and want to lie on the floor for extended periods. Low muscle tone can force an individual to spend excessive amounts of the minds limited attentional resources coping with his body's needs. This makes him prone to overlooking the information from the environment (e.g.

caregiver's gestures, affect mirroring, etc.).

Receptive and expressive language. Greenspan and Wieder (1998, 2006) also recognize the receptive and expressive components of auditory and verbal processing as another common individual difference area, particularly with a child with ASD. Receptive auditory processing reflects the ability to locate, attend to, and understand auditory stimuli, specifically words. This skill enables the individual to find the source, hone in, respond, and attend to the sounds flowing between individuals in a conversation (self included). It is largely responsible for following, understanding, and responding to spoken directions and questions, in addition to participating in more complex dialogue. Expressive language, ranging from mirroring gestures to the participation in logical and abstract conversation, denotes the ability to convey intentions, wishes, and behaviors using non-verbal or verbal communication. A child who cannot understand directions or communicate intention will struggle in the interpersonal domain. Additionally, an infant who struggles to orient to his mother's voice will show delays in foundational social-emotional milestones because he will be unable to optimally extract the essential ingredients of what the caregiver has to offer (i.e. regulation, reciprocity, opening and closing of communication circles, etc.).

Visual-spatial processing. Greenspan and Wieder (1998, 2006) explain that visual-spatial processing, or the ability to organize, discriminate, and prioritize visual information represents another common individual difference domain. This area includes spatial body awareness, mindfulness of the location of body parts in relation to other objects as well as within space, sense of body movement, the relationship between different parts of the body, and the objectivity of visual perception.

Executive functioning. Executive functioning reflects the ability to integrate different

types of sensory input to form an idea or goal, draft a plan, sequence the behavioral steps, execute the plan, and adapt to the results (Greenspan & Wieder, 1998, 2006). What may appear to be forgetfulness or distractibility may be a neurobiological challenge in executive functioning.

Summary of individual differences. Addressed in greater detail in "Mentalization and the Construction of Optimal Learning Environments" and "Mentalization in the Parent-Child with ASD Dyad" (sections 3 and 4), individual differences have a bidirectional impact on relationships. Commonly observed in relationships with a child with ASD, Greenspan (1979, 1987) recognized that an infant's biological constitution can impact caregiving behavior, making it hard for the parent to provide the necessary conditions to regulate her child. An individual's sensory needs, coupled with the caregiver's difficulty providing good enough learning conditions for the unique needs of the child, contribute to the formation of negative feedback loops and delays in growth (Slade, 2009). A clinician who has a basic understanding of individual differences can more effectively treat the whole person and facilitate change throughout the system.

Functional emotional developmental capacities. Integrating the work of psychoanalyst, attachment, and cognitive theorists, Greenspan, Wieder, and DeGangi (2001) assert that the assimilation of environmental and biological factors, or caregiving and individual differences, shapes the course of development. They state "the interplay between age appropriate experience and maturation of the central nervous system determines the characteristics of the organizational capacity at each phase" (p. 6). By utilizing preexisting developmental stage models⁴, Greenspan (1979) and later Greenspan and Wieder (1998, 2006)

⁴ See Erikson, 1950; Freud, 1905; Freud, 1965; Kernberg, 1975; Kohut, 1971; Mahler, Pine, and Bergman, 1975 Kernberg, 1975; Kohut, 1971; Piaget, 1962; Spitz, 1945; Spitz & Cobliner, 1966; Winnicott, 1931

identified and classified the foundational social-emotional milestones into an applicable assessment and intervention model with individuals across the lifespan, particularly for very young children. The following subsection explains both the adaptive and pathologic presentations of each of the six foundational capacities (the FEDCs of DIR/Floortime), as well as the factors that contribute to development going off course. This subsection focuses on common caregiver behaviors that contribute to healthy and pathologic patterns of functioning and strategies to mobilize growth at each milestone. Unlike behaviorally-oriented interventions common for children with ASD (Lovaas, 1987), these focus on the mobilization core developmental processes for individuals at different stages of development and living with a wide range of diagnoses and conditions. Moreover, this subsection defines DIR/Floortime's three complex social-emotional milestones of development, which signify the integration of advanced cognitive and emotional skills.

Relational synchrony enables a child to handle cognitive and emotional tasks requiring greater skill and complexity. For this reason, a child typically acquires these foundational capacities within the context of the child-parent dyad. These milestones reflect the success of two individuals collaborating to increase the "coherence and complexity" in their system and are best understood as dyadic achievements (Tronick et al., 1998, p. 296)⁵. Moreover, these milestones do not represent innate or prewired skills that come online at a certain time; rather the parent-child bond constructs these capacities. As Shahmoon-Shanok (2000), a DIR/Floortime expert, states, "the action is in the interaction" and the synchrony of the interaction dictates the

⁵ To further elaborate, Brazelton, Koslowski and Main (1974) found, through quality, timing, and rhythm each member of the mother-infant dyad reciprocally devises interactional rules. Stern (1974) also discovered that an infant, at 3 to 4 months of age, and his caregiver have a bidirectional impact on each other. Infants elicit certain behavior (e.g. mothers vocal/facial expression) to help regulate arousal and negative affect.

trajectory of growth for both individuals (p. 339).

To reiterate, although typically acquired within an expected age range, an individual can master these stages at different periods of his life (See Figure 3 for DIR/Floortime worksheet used to evaluate a child's FEDCs). As evident by Greenspan and Wieder's (1999) 200-person case review, they found that DIR/Floortime treatment helped developmentally delayed children with ASD move up the developmental ladder and master FEDCs at his own speed (Greenspan & Wieder, 1999).

To underscore the essential role environmental factors have on growth, even for a child with severe neurobiological deficits, Greenspan and Wieder (2006) assert:

An important factor that prevents children from mastering advanced thinking capacities is the way we teachers, therapists, and parents work with them in educational programs, therapeutic programs, and everyday interactions at home. If we just say, "That's bad" or "No, no, no," we may think we are teaching the child discipline, but we're actually teaching extreme, polarized, all-or-nothing thinking. ... Abstract thinking is difficult for all children. ... The fact that, historically, efforts to help more children with ASD achieve these advanced levels have shown little success reflects in part a failure to challenge them in the right way. They need more practice than other children do, just as children with other developmental problems may need more practice learning to walk, sit up, or use words in the first place." (p. 120)

In order to create an optimal learning environment for a child, a practitioner and parent must understand the basics of child development and how to meet the child's individual's needs at his functional level. In fact, development is not a linear process and children work to acquire multiple foundational milestones simultaneously. Maladaptive behavioral patterns arise when

NDRC - NEURO-DEVELOPMENTAL DISORDERS OF RELATING & COMMUNICATION - FUNCTIONAL EMOTIONAL DEVELOPMENTAL LEVELS

Child:	Caregiver:		Examiner:		Date:	Diagnosis:	sis:	
	1	2	3	4	5	6	7	
Draw line through To highest level (1-6) child has reached The more robust and qualitative, the higher the rating.	Not reached	Barely even with support- very intermittent (very in and out)	With persistent and/or predictable support has islands of this capacity	With structure and scaffolding, given high affect, gestural, language, sensorimotor support can expand	Not at age- expected level, immature- fragmented; may be cyclical but comes back for more	Age-appropriate level but vulnerable to stress and/or with constricted range of affects	Age-appropriate level with full range of affect states.	
Functional Capacities								
I. Self-Regulation And Attention Take in sights and sounds and maintain shared attention								
II. Engagement And Relating Woo another or be wooed, stay engaged through emotions								
III. Use Affect to Convey Intent - Two Way Communication For requests, emerging back and forth interactions								
IV. Behavioral Organization Problem Solving Continuous flow of affective interactions with people for shared social problem solving								
V. Creates and Elaborates With Symbols .Represents ideas and emotional themes.								
VI. Emotional Thinking Logical –Abstract Bridges ideas, elaborates and can reflect on actions, motives, aware of time and space								

1->4: Child requires caregiver support; 5->6; Child attains developmental level independently but constricted; Z: Age appropriate

Figure 3. Functional emotional developmental capacities assessment. This figure lists the Functional Emotional Developmental Capacities and functions as a rating scale for each milestone. It is used by the ICDL for training purposes. Adapted from Interdisciplinary Council on Developmental and Learning Disorder, personal communication, 2015.

individuals do not gain developmentally appropriate mastery over core emotional capacities. In these circumstances, a child's biological age may be quite different than his developmental age.

By emphasizing how relationships construct the development of the critical capacities and presenting Greenspan and Wieder's (1998, 2006) model of development, a therapist can recognize the merits of a developmental framework, especially for assessing the specific needs of her clients. Furthermore it will help her to mobilize the core processes rather than relying solely on symptom modification. Lastly, readers of this dissertation may recognize that many of her client's symptoms correlate with deficits in specific foundational capacities typically mastered in early childhood.

Milestone one: Regulation and interest in the world. Typically acquired during the first 3 months of life and due to a combination of maturational and central nervous system factors, as well as caregiver patterns (i.e. attention and responsiveness to nonverbal cues and biorhythms, calmness, interest in the infant, face-to-face contact, general modulation of intensity, duration and quality of affect, etc.⁶) an infant learns basic modulation or regulation of physiological states (i.e. hunger, sleep-wake cycle, etc.). This enables him to delegate interest and attention to his sensory experience, relationships, and the outside world (Greenspan, DeGangi & Wieder, 2001; Greenspan & Lieberman, 1988; Greenspan & Wieder, 1998, 2006; Lillas & Turnbull, 2009). It is through these domains that self and affect regulation develop. Greenspan and Wieder (2006) call the first capacity "Regulation and Interest in the World," the most foundational building block of cognitive and emotional life (p. 43). Infants that display a calm, alert, and attentive state denote the robust acquisition of Milestone One. In large part, this is due to the accuracy

⁶ Brazelton (2006) offers an in depth and comprehensible description of the bio-and-relational-rhythms of this period.

and reciprocity of caregiver's responsiveness to the infant's physiological requirements and emotional cues (Feldman, Greenbaum, & Yirimiya, 1999; Sroufe, 1996).

Like Greenspan and Wieder (1998, 2006), Tronick et al. (1998) also highlight that modulation of an infant's states, especially around physical needs, happens dyadically through "a collaborative process" with the caregiver (p. 293). The infant must cooperate with the adult in order to successfully achieve a regulative state. As Winnicott (1960) exemplified in the mother-infant unit, an infant's regulatory system has the caregiver embedded within it. Tronick et al. (1998) calls this regulatory phenomenon a "dyadically expanded state of consciousness" and asserts that it "expands the complexity and coherence of the infant's [and child's] state of brain organization" across all milestones (p. 292, 295). In fact, the caregiver's regulatory role in early development serves as a model for understanding the effect of co-regulatory emotional scaffolding across each of Greenspan and Wieder's (1998, 2006) milestones and through the lifespan (i.e. benefits of adult psychotherapy)⁷.

To further illustrate co-regulation, Sander (2002) scrutinized frame-by-frame film footage of fathers putting their infants to sleep. He found that the infant falls asleep in his father's arms at the precise instant of fittedness between the father's behavior and the properties that biologically organize the infant's sleep.

Lacking robustness in Milestone One impacts the acquisition of all subsequent milestones because this capacity denotes the entrance into shared experience. Contingent upon caregiving that is "invested, dedicated, protective, comforting, predictable, engaging and interesting"

⁷ In fact, The Boston Change Process Study Group (BCPSG) (2002), comprised of developmental researchers and psychoanalysts interested in applying certain principles in infant research to psychotherapy, assert that the infant-caregiver relationship during this stage represents a model for thinking about non-interpretive mutative processes in psychotherapy (Stern et al., 1998). Although not in the scope of this dissertation, Greenspan and Wieder's (1998, 2006) model exemplifies a practical application to BCPSG's ideas.

(Greenspan et al., 1987, p. 435), an infant's ability to regulate internal sensory experience so that he can be calm and interested in the world represents mastery of this milestone. A pathologic organization of Milestone One includes dysregulation manifesting as hyper-or-hypo-excitability and a lack of interest in the world. This behavior corresponds to unpredictable, withdrawn, unsafe, abusive, neglectful, and/or hypo-or-hyperstimulating parenting patterns. Severe individual differences can also cause an individual to lack robustness at Milestone One.

If an individual shows deficits in these capacities, Greenspan and Wieder (1998, 2006) suggest using interventions centered on sensory and motor experience, in order to help the child learn regulatory and self-soothing skills. A regulated state will enable him to enter joint or shared attention with another individual. Similar to how one would interact with an infant, a clinician should activate the sensory-affective-and-motor systems to facilitate interest, wonder, and joy. These are all entry points into shared experience. Over time, the practitioner can help the parent expand the length and intensity of the interactions, making the child more capable of sustaining attention with someone else. Throughout each of the milestones, the therapist both implements interventions with the child, as well as provides coaching to the parent to do the same. In this way, the parent and clinician target the same foundational developmental processes in the child.

Additionally, according to Greenspan (1987), the therapeutic relationship for the earliest milestones should model "predictable, regular, comforting" (p. 382) behavior, especially when there are deficits due to environmental factors (i.e. early attachment trauma, neglect, abuse, etc.). A clinician should help reduce parental stressors so that the parent can provide the necessary conditions to facilitate attachment (discussed at length in sections 4 and 5). Furthermore, Greenspan suggests that deficits in a child's early milestones warrant dyadic parent-child

psychotherapy (Greenspan et al., 1987). He also emphasized that a child must have all of his basic needs (i.e. nutrition, medicine, physical care, safe environment) met in order to have greater treatment efficacy (see Figure 4 for Greenspan's clinical hierarchy of needs).

Milestone two: Engaging and relating. Typically, between an infant's second and seventh month, he develops the aptitude for "Engaging and Relating," DIR/Floortime's second FEDC (Greenspan & Wieder, 2006, p. 44; Greenspan & Wieder, 1998, see also Greenspan, DeGangi & Wieder, 2001; Greenspan & Lourie, 1981; Greenspan & Wieder, 1998). This milestone depicts an infant's ability to form a relationship or emotional bond, attach, and engage pleasurably in the animate world, particularly with a caregiver. Marked by an infant's highly affective and sensorially rich interaction with his caregiver, he begins to decode gestures and show preference to people rather than objects. Like the first capacity, healthy parenting behaviors (i.e. ability to connect, warmth, responsiveness to the infant's affect and non-verbal gestures, developmentally appropriate stimulation, repair of ruptures, facilitation of infant exploration of environment while providing secure base) help encourage mastery of Milestone Two (Lillas & Turnbull, 2009). If the child experiences disturbances in the relational matrix (i.e. caregiver does not respond in genuine, nurturing and contingent ways) or severe individual differences, the infant may present as withdrawn, disinterested and distant from the affective dimension of the relationship with the parent (Greenspan et al., 1987). Essentially, the caregiver constructs these abilities through the quality of interactions she creates.

If there are delays or deficits in Milestone Two, Greenspan and Wieder (1998, 2006) recommend following the child's lead and focusing the interactions on what brings the child pleasure in order to mobilize this core developmental capacity. They suggest building on the child's inherent motivation, and like capacity one, activate/engage with the child's sensory-

motor-and-affective experience, particularly highlighting physical nurturance, comfort, and closeness. Furthermore, let the child know that he is safe and secure and entice him to take delight in being with someone else. Over time, the practitioner can integrate the child's negative affect states, through affect mirroring and reflective listening, while helping him stay connected.

Milestone three: Intentionality and two-way communication. Usually between the third and tenth month, the infant's central nervous system matures and he exhibits greater interactional complexity and joy in the infant-parent dyad (Greenspan & Wieder, 2006). This shift denotes the "Intentionality and Two-Way Communication" milestone or the ability to participate in reciprocal affective signaling or "circles of communication" (pp. 44-45). The infant demonstrates early signs of intentionality, identity, sense of reality, and dialogue by using nonverbal gestures to open and close communication circles. Without words, the baby starts to express his needs and desires. A responsive caregiver (i.e. one who expresses contingent responsiveness to and effective understanding of child's desires, intentions, and behavior, actively participates in these interactions, encourages the infant to respond and explore, etc.) facilitates the child's basic reciprocity and communication (Lillas & Turnbull, 2009). An infant may seem scattered, nonpurposeful, unpredictable, restricted, stereotyped, or inflexible if exposed to a caregiver who consistently disregards his behavior or if he has severe biological challenges as in the case of ASD (Greenspan et al., 1987).

Reciprocal and contingent communication at the gestural or nonverbal level mobilizes the development of Milestone Three (Greenspan & Wieder, 1998, 2006). By following the child's lead and understanding his behavior as purposeful, regardless of how incomprehensible it may be, the adult can help to promote back-and-forth interaction and the opening and closing of circles of communication. The goal is to extend the back-and-forth as long as possible, as well

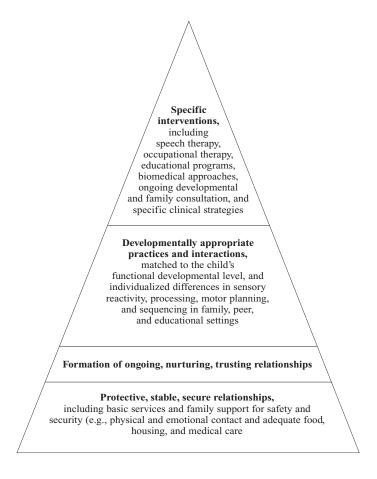


Figure 1. The Intervention Pyramid for Children with Special Needs

Figure 4. Greenspan's intervention pyramid. This figure was adapted from "Principals of clinical practice for assessment and intervention" by S. Greenspan, 2000, *Clinical practice guidelines: Redefining the standards of care for infants, children, and families with special needs* (p. 67). Copyright 2000 by the Interdisciplinary Council on Developmental and Learning Disorders.

as to encourage the child's basic problem solving skills. Greenspan and Wieder even suggest to add obstacles to the play that challenge the child to utilize his emerging skill set.

Milestone four: Social problem-solving, mood regulation, and a formation of a sense of self. Unlike the third capacity primarily centered on sensorimotor and gestural communication, the fourth milestone, "Social Problem-Solving, Mood Regulation, Formation of a Sense of Self" represents complex interactions, whereby a child, typically between the ages of 9 to 18 months, employs an array of deliberate gestures to express him self (Greenspan & Wieder, 2006, p. 45; see also Greenspan & Lieberman, 1988; Greenspan & Lourie, 1981; Greenspan & Wieder, 1998). Prior to speaking, he understands the organization, sequence, and logical structure of intentional behavior, which enables the toddler to more successfully fulfill his desires, regulate emotions, and solve basic problems. Greenspan et al. (1987) assert that the robust acquisition of Milestone Four depends on the parent's capacity to stretch the child's communication skills by encouraging problem solving and self-assertion, and expanding ideas while simultaneously remaining attentive to the child's inherent motivations, and by increasing and diversifying cognitive and affective stimulation (Lillas & Turnbull, 2009). Deficits in central nervous system functioning, as well as overly manipulative, domineering, and disturbing caregiving patterns, can squelch the toddler's growing autonomy and can produce disoriented, scattered, repetitive, stereotyped, aggressive, and dichotomous behavior.

According to Greenspan and Wieder (1998, 2006), when deficits arise, a clinician should strive to activate the child's problem-solving skills and challenge him to increase his reciprocally communicated responses until they become continuous and fluid. Clinicians should be highly interactive and engaging, and strive to merge affective gestures and behavior. Additionally, practitioners should facilitate the display and exploration of a range of the child's emotions,

including his desire for independence as well as his need for connection and scaffolding. Particularly at this milestone, Greenspan et al. (1987) recommend promoting parental self-observation and reflective skills so that a parent can respond contingently and empathically to a range of feeling states and behavioral patterns. Reflective skills will help the parent understand the complexity of the child's social-emotional cues and support his individuation, exploration, and openness. Sections 3, 4, and 5 describe specific models dedicated to the enhancement of parental reflective capacities (Slade et al., 2005).

Milestone five: Creating symbols and using words and ideas. Typically between the age of 18 and 30 months, a child enters the representational world, "Creating Symbols and Using Words and Ideas" (Milestone Five), and starts to utilize symbols and understand the meaning behind words (Greenspan & Wieder, 2006, p. 48). Often recognized through imaginative play, the toddler generates ideas to symbolize or represent real life events. This stage takes cognitive flexibility, reason, and problem-solving skills because toddlers use words to express physical sensations, feelings, and ideas. Similar to the previous milestones, a caregiver must welcome, encourage, participate in, sustain, and elaborate on the multiple themes of a child's pretend play and symbolic thinking (Lillas & Turnbull, 2009). In addition to individual differences, a caregiver who restricts a child's attempt to symbolize and undermines his child's communication ruptures his aptitude to represent and expand on experience (Greenspan et al. 1987). Problematic environmental conditions can also manifest as deficits in self-other differentiation, labile mood, poor impulse control, and compromised reality testing.

In order for the child to function in a robust manner at Milestone Five, a practitioner can encourage the child's expression and elaboration of ideas and feelings in a multitude of settings (Greenspan & Wieder, 1998, 2006). In pretend play, as well as in realistic settings, a clinician

should support the child to connect thoughts, feelings, and action, as well as to expand the child's imagination. They should support his dramatic and imaginative play, in addition to promoting more precision in his communication of needs, desires, thoughts and feelings, eventually using spoken words. Greenspan and Wieder (2006) assert that the goal is to build:

A symbolic world by associating new words and concepts with meaning through reallife experiences that are invested with the child's emotions, *and* through pretend play (which is also emotional) that gives symbolic meaning to the child's inner world. Over time the child gets more imaginative: spaceships go off to the moon, sea monsters scare everyone, or a ballerina impresses an audience. (p. 99)

A therapist should participate in the play with the child and ask poignant questions to develop ideas, themes, and narratives, in addition to exploring challenging topics and feeling states. These skills will help the child investigate various aspects of him self. In real life scenarios, a practitioner can encourage a parent to ask the child who, what, where, why, when, and how questions about his thoughts and feelings, to stretch his capacity to generate and label thoughts and feelings. At Milestone Five, the promotion of identifying and expressing thoughts and feelings is preferred over enacting them (e.g. telling a peer, "I'm angry," instead of knocking over his blocks). Furthermore, a practitioner should also help a parent magnify her representational skills and affective range so that she can promote this in her child (Greenspan, 1987).

Greenspan (1987) suggests that a child at Milestone Five can meaningfully transition into one-on-one psychotherapy, centered on expanding his emerging symbolic capacities. At this point in development a child has the aptitude to explore themes in imaginative play, which is the precondition to a more traditional approach to play therapy.

Milestone six: Building bridges, emotional thinking, logic, and a sense of reality. The sixth FEDC, "Building Bridges, Emotional Thinking, Logic, and a Sense of Reality" characterizes the child's aptitude to connect logical and affective ideas with increasingly complex narratives (Greenspan & Wieder, 2006, p. 30; Greenspan & Wieder, 1998). Typically between 30 and 48 months, the child has an increased ability for self-recognition because he can bridge "different perceptions, ideas and emotions, utilization of greater verbal skills and abstract thinking as well as to predict experience through basic understanding of time and space" (Greenspan & Wieder, 1998, p. 86). Caregivers challenge the child by introducing reality-based ideas in addition to a wider variety of emotional themes and problem-solving tasks. This helps add complexity to the child's narrative and helps him to build connections between thoughts. feelings and behavior (Lillas & Turnbull, 2009). When a parent helps a child to navigate heightened cognitive and emotional complexity, the child develops the prototype of a sophisticated representational system (Greenspan et al., 1987). A caregiver challenged by the "child's age-appropriate propensities (e.g. competitiveness, pleasure orientation, growing competence, assertiveness, and self-sufficiency)" (Greenspan, 1987, p. 437) can easily become distant or overinvolved, squelching the emergence of representational and adaptive emotional capacities necessary for participation in more sophisticated school-and-adolescent-age relationships.

In order to construct the acquisition of this foundational capacity, Greenspan and Wieder (1998, 2006) suggest incorporating a reality or logical perspective into the interactional matrix. For example, help the child respond contingently to themes of the conversation, as well as to bridge more nuanced thoughts and feeling states, especially when ideas seem illogical. A practitioner can facilitate these skills by asking a range of who, what, where, why, and how

questions. Developmentally speaking, these questions may be too complex for an individual functioning at lower levels. A therapist can also encourage the child to find reasons for why he behaved a certain way, further developing his sense of agency and ability to mentalize. She can even negotiate and debate with him. These "W" questions help establish self-other distinction as well as promote independence. In general, a clinician should draw a child into a reality orientation by making his human interactions more meaningful than the pretend world. This particular "capacity is a foundation for higher level thinking, problem solving and such capacities as separating reality from fantasy, modulating impulses and mood, and learning how to concentrate and plan" (Feder, 2010). In other words, Milestone Six represents the entrance into a mentalizing mode, discussed at length in the next section.

Moreover, a therapist should support a parent's capacity for differentiating her own experience from external reality, which will enable her to facilitate this distinction in her child (Greenspan, 1987). Generally speaking, the services provided to a child and family should promote greater independence, foster new friendships, and incorporate a wider range of emotional themes.

Complex milestones. Although sparsely discussed in the literature as a whole, Greenspan and Wieder (2006) expanded on the original six FEDCs by adding three complex cognitive and emotional milestones or "higher levels of abstract and reflective thinking" (p. 115). Contingent upon the robust acquisition of the six foundational milestones, the combination of "Multicausal and Triangular Thinking," "Gray-Area, Emotionally Differentiated Thinking," and "A Growing Sense of Self and Reflection on an Internal Standard" denote the pinnacle of development in DIR/Floortime (pp. 51-53). The integration of these three capacities represents the ability to robustly utilize mentalization.

Milestone Seven: Multicausal and triangular thinking. Typically achieved around age seven, Milestone Seven or "Multicausal and Triangular Thinking" represents an individual's recognition of numerous rather than singular causes to events and circumstances, even emotional states (Greenspan & Wieder, 2006). It also signifies the ability to divest emotional resources in multiple and simultaneous experiences and options. This milestone denotes the ability to link emotions and thoughts with intentions and recognize the multidimensional nature of experience (Feder, 2010). It reflects the aptitude to recognize aspects of other people, particularly family members, in terms of psychological and relational factors rather than centered on personal need satisfaction. Although not explicitly stated, Milestone Seven denotes the ability to acknowledge the influence of mental states on behavior, an essential aspect of mentalization. For example, a child at this level grasps that his father's anger is due to being overloaded at work. He considers other possibilities because he recognizes that circumstances, thoughts, feelings, and motives influence behavior. Without the acquisition of Milestone Seven, an individual has a tendency towards rigidity in his thoughts and emotions, as evident in a child under the age of 5.

Milestone eight: Gray-area, emotionally differentiated thinking. According to Greenspan and Wieder (2006), Milestone Eight, "Gray-Area, Emotionally Differentiated Thinking" represents the ability to "understand varying degrees or relative influence of feeling, events, or phenomena" (p. 51). Typically mastered by age eight, a person evaluates feelings and ideas using relativity principles as well as make nuanced comparisons. Necessary to acknowledge the mental states of self and others, the child recognizes the intensity and strength of his feelings. Additionally, Milestone Eight marks a deeper shift towards a reality-orientation because it characterizes the ability to reflect on thoughts, feelings and experiences using nuanced psychologically informed comparisons, an essential aspect of mentalization. Feder (2010)

claims that ambivalence represents a signature aspect of this capacity, because "subtlety is everything" (p. 39). Furthermore, this milestone enables a child to have greater proficiency in navigating social circumstances, as well as have a deeper understanding of the role emotions play in psychological life. Without Milestone Eight, an individual must rely on dichotomous or black and white thinking, which inhibits the ability to participate in meaningful and loving relationships.

Milestone nine: A growing sense of self and reflection on an internal standard. Lastly, Milestone Nine, "A Growing Sense of Self and Reflection on an Internal Standard," symbolizes the ability to think and reflect in "more than one frame of reference at a time" as well as the "ability to evaluate one's own thoughts and biases" (Greenspan & Wieder, p. 52, 119). The child, expanding his sense of self, forms and appraises thoughts, feelings, and behaviors based on an internal standard. He formulates new concepts based on existing ideas and references the past, present, and future in his thinking process. This milestone denotes a person's ability to simultaneously think in multiple and comparative frames. Using an internal standard to understand others, the person evaluates experience as a product of mental states and has a deeper empathic sense. He also recognizes that thoughts, feelings, desires, and memories, etc. define self-understanding. By forming new ideas and orienting to mental states in the past, present, and future, an individual at this milestone has an enhances capacity for creativity. Feder (2010) states, "Level IX' is our life blood" (p. 52) because an individual skillfully stretches the capacities of his mind to make meaning and connect deeply with other people.

Summary of milestones. As stated throughout this subsection, Greenspan and Wieder (1998, 2006) conceptualized development as influenced by multiple modes of experience. They posited that the interaction between environmental and genetic/biological factors impact on an

individual's developmental trajectory. Even though there have been several critiques of stage models of development⁸, Greenspan and Wieder's model enables a practitioner to evaluate the multitude of factors that shape a client's functioning within a structured framework. This explanation of DIR/Floortime helps to broaden the depth and breadth of the model so that it is not mistaken as simply a treatment for ASD.

Floortime. The final component of Greenspan and Wieder's (2006) theory is Floortime, the comprehensive relationship-based, time-intensive, and interdisciplinary intervention program used to mobilize core developmental processes to build the necessary foundations of "relating, thinking and communicating" (p. 9). They state that Floortime is "not a single therapy or intervention program; [it is] a way of understanding how each child is unique and [sic] designing and orchestrating a comprehensive treatment program" (p. 9). Rather than simply replacing a child's symptoms with socially appropriate behaviors, this approach identifies and treats the functional areas underlying the problematic behavior and galvanizes the core social-emotional processes necessary for healthy development (Interdisciplinary Council of Developmental and Learning Disorders, 2005). Regardless of the diagnosis or age of the individual, Floortime helps form adaptive strategies to organize an individual's experiences in addition to intra-and-interpersonal health by facilitating emotionally meaningful learning interactions based on the client's specific developmental needs (Greenspan, 1997)

According to Greenspan (1997) and Greenspan and Wieder (1998, 2006), the main principles of relationship-based developmental psychotherapy, Floortime included, are the

⁸ Although not in the scope of this dissertation, several theorists point out underlying problems with stage theories like DIR/Floortime. See Gopnik (1988, 1996) and Gopnik and Meltzoff (1997) for a critique of stage theories and an alternative developmental perspective. Additionally, see Benjamin (1990) for a relational-feminist critique of "infantocentric" (p. 186) developmental models.

following. 1) Follow and build upon a child's lead, motivations, interests, and intentions, which will reveal a child's functional developmental capacities and how to respond to his level to mobilize growth. 2) Bring the child into a shared experience, the entry point into providing scaffolding to accelerate the acquisition of more complex milestones (i.e. greater communication, interactive, imagination, and representational skills). The relationship is the change agent and change is tracked through the expansion of relational and representational capacities. 3) Modify learning interactions to accommodate individual differences and strengthen regulatory capacities.

Greenspan and Wieder (2006) assert that a parent and clinician can best enter a child's cognitive and emotional world by following his lead and attending to his interests, motivations, desires, and individual differences. The most effective way to do this is to attend the child's affect, the entry point into intersubjectivity and shared experience. A clinician or parent succeeds when she "become[s] the plaything in the child's life" and share an experience with the child (Greenspan & Wieder, 2006, p. 77). Additionally, by observing the child under natural circumstances, a parent and practitioner can directly assess his functional emotional developmental capacities and individual differences. Having this knowledge will further equip an individual to know at what level and domain to challenge the child. By following the child's lead, a clinician and parent can concurrently activate the foundational developmental areas of joint attention, connection, reciprocity, problem solving, using ideas, bridging thoughts, feelings, and behavior. The mobilization of core developmental processes is the central goal of

⁹ According to Stern (2005), "Intersubjectivity is the capacity to share, know, understand, empathize with, feel, participate in, resonate with, and enter into the lived subjective experience of another. It is a form of nonmagical mindreading via interpreting overt behaviors such as posture, tone of voice, speech rhythm, and facial expression, as well as verbal content" (p. 78).

DIR/Floortime treatment.

Furthermore, Greenspan and Wieder (1998, 2006) highlight the importance of learning about the child's individual differences and physiological requirements. By addressing variances in sensory and neuropsychological domains, a parent and clinician can bring the child into shared experience, the foundation for growth. In addition to following a child's lead, they should modify interactions to the child's specific neurobiological needs. This may mean adding proprioceptive input into the playtime, reducing the volume of speech, or using visual cues to help the child stay engaged. Additionally, it is important to highlight the child's strengths and use them to expand the thematic range of the play.

Greenspan and Wieder (2006) state "drawing a child into a shared world involves creatively figuring out a maneuver that captures the child's attention, learning what makes her tick, and then challenging her to make a small step into the shared world" (p. 72). When a therapist or parent gains access to the child's mental states and physiological functioning, the adults can construct "opportunities and challenges to help move the child to higher levels of relating, communicating, and thinking" (Greenspan & Wieder, 2006, p. 180). For this reason, Greenspan (1997) asserts that the clinician (or parent) is "not simply a commentator or insight giver, but a *collaborator in the construction of experience*. ... He does not limit himself to explore the more representational levels. He is also aware of the importance of interactive experience, guided by the patient's natural inclinations" (p. 15). They help open, expand, and close circles of communication and broaden relational capacities at both the implicit (i.e. state regulation, gesture, attachment) and explicit (i.e. words, problem solving, representation, imagination, and expression of affect) level. Lastly, a practitioner or caregiver should strive to meet the child at his developmental capacity or at the levels with functional deficits, regardless

of the chronological age, and should provide scaffolding to challenge the child at the highest edge of his capacities (Greenspan, 1997; Greenspan & Wieder, 1998, 2006). This will accelerate the acquisition of more complex milestones.

By working in this way, a parent and clinician can help strengthen the milestone the child is currently working to achieve, as well as propel him up the developmental ladder. They can also meet the child's changing developmental needs. For example, following a child's lead may indicate that the child needs more state regulation (Milestone One). It may also reflect the need to focus on reciprocal communication, through affect, gestures, and words so that the child can express his desires, goals, and needs (Milestone Three or Four: Intentionality and Two Way Communication and Social Problem Solving, Mood Regulation, and a Formation of a Sense of Self). Furthermore, it may be critical to support and enter into his dramatic and imaginative play, in addition to promoting more precision in his communication of needs, desires, thoughts and feelings, eventually using spoken words. In this case, the interventionist should focus on building the child's symbolic world in both pretend play and in the real world by "associating new words and concepts with meaning through real-life experiences that are invested with the child's emotions, *and* through present play (which is also emotional) that gives symbolic meaning to the child's inner world" (p. 99).

For the reasons stated above, Floortime can be practiced "all the time everywhere" (Greenspan & Wieder, 2006, p. 187). In fact, a parent and clinician can promote lasting growth by carefully utilizing everyday and real-life learning. Greenspan and Wieder assert that every interaction is laden with the possibility of expanding a child's cognitive, emotional, and social capacities. Additionally, they stress both the promotion of and capitalization on affectively and creatively rich moments. These are instances when the child is in the optimal range to learn.

Conclusion. The careful examination of Greenspan and Wieder's (1998, 2006) foundational principals broadens the breadth and depth of practitioners using DIR/Floortime because it: 1) outlines how to assess and conceptualize client functioning from a developmental approach for individuals not limited to ASD; 2) asserts the necessity of understanding a client at his developmental level so that practitioners can intervene in appropriate and effective ways; and 3) demonstrates how DIR/Floortime is much more than an ASD treatment model.

Mentalization and the Construction of Optimal Learning Environments

Discussed in both psychoanalytic (Fonagy, 1989, 1991) and cognitive psychology (Morton & Frith, 1995) research, Fonagy et al.'s (2002) mentalization refers to an individual's general awareness of mental states, particularly to the thoughts, feelings, intentions and desires of self and others, and how they influence behavior (Fonagy, Steele, & Steele, 1991; Fonagy et al., 1998). It is "the process by which we realize that having a mind mediates our experience of the world" and that the mind, not the brain or behavior, shapes experience (Fonagy et al., 2002, p. 3). Fonagy (2008) contends that mentalization is "arguably the evolutionary pinnacle of human intellectual achievement" (p. 55). It commands the synthesis of advanced cognitive and affective skills to creatively represent and selectively galvanize mental states in order to envision what is in the other's mind. Essentially, "mentalization integrates ways of knowing that are at once cognitive and affective; it is, in effect, the capacity to think about feeling and to feel about thinking" (as cited in Slade, 2005, p. 271). It also denotes the creative process of objectively introspecting the contents of one's own mind and subjectively understanding the mind of the other.

Fonagy et al. (1998) highlight that reflective function, the operationalization of mentalization, adds a critical dimension to understanding self, other, and world. It enables an

individual to think about and even predict experience as well as allows him to ascribe meaning to behavior because he recognizes that thoughts and feelings guide action. Closely tied to the representation of self, the capacity to mentalize signifies the aptitude for self-understanding and empathy, in addition to a growing sense of self-agency and autonomy (Fonagy & Target, 1995; 1996; Target & Fonagy, 1996; Wallin, 2007). "This allows both the child and caregiver to attain increasing mental and physical independence, needing to refer far less to each other in order to allow the child to borrow the mother's understanding" (Fonagy et al., 2002, p. 264). Typically developed by latency, this stance permits a more fulfilling relational experience where one has a "higher level of intersubjectivity, in terms of deeper experiences with others and ultimately a life experienced as more meaningful" (p. 265).

Mentalization also enables an individual to acknowledge the continuity or stability of one's self throughout experience (Fonagy, Moran, & Target, 1993). For example, the individual no longer has to alter his thoughts, or more importantly, his identity to match the outside world. Additionally, mentalization enables an individual to discern appearance from reality and to link inner experience with the perception of outer world.

The caregiver mentalizing the behavior of the child and representing it in terms of mental states promotes the healthy growth of the child's mind (Fonagy et al., 2002). From Fonagy et al.'s perspective, this is the critical ingredient that ensures Secure attachment and an essential mutative agent in psychotherapy. Without being the object of mentalization, the mind of self and other is terrifying and unimaginable, thoughts and feelings equate directly to reality, and affect regulation is poor.

This section addresses three important components of the mentalization theory, namely:

1) the role attachment relationships have in constructing self-agency, intersubjectivity, reality

orientation, and the mentalizing capacity; 2) the developmental milestones necessary to utilize a reflective stance; 3) and utilizing this approach to assert the primacy of parent work in child psychotherapy. The first subsection outlines how the primary attachment relationship shapes the child's awareness of self-states. Fonagy et al. (2002) emphasize that the formation of mentalization rests upon a caregiver's capacity to contingently respond to and accurately represent the child's mental states. The second subsection describes mentalization as a developmental milestone that follows an evidence-based trajectory akin to Greenspan and Wieder's (1998, 2006) advanced cognitive-affective capacities (Fonagy, 2008). Fonagy et al. (2002) divide these milestones into three specific modes of denoting an individual's capacity to discriminate internal versus external reality; psychic equivalent, pretend, and reflective/mentalization mode (Fonagy, 2008, p. 5; Fonagy et al., 2002). In the psychic equivalent mode, or default for a child typically under the age of 3, an individual experiences ideas as a replication of reality. In the pretend mode, an individual forms ideas that represent phenomena but do not examine his relationship to reality. A preschool-aged child engaged in imaginative play exemplifies this mode. These two modes capture some of the profound cognitive, emotional, and perspectival shifts a child typically experiences prior to entering elementary school. The mentalizing aptitude forms out of the integration of psychic equivalence and pretense. Lastly, the third subsection outlines one of the many clinical applications of the mentalization research. Because healthy development is contingent upon the attachment figure providing the child with specific types of experiences in order to learn about his mind, Slade (2006), Slade, Sadler, and Mayes, 2007, Grienenberger (2007), and Reynolds (2003a) developed a range of early childhood interventions and experiential parenting group modalities to target parental reflective function, or the parent's capacity to mentalize her child's mind.

Development of the mentalization capacity. Caregivers play an essential role in the development of the child's capacity to mentalize. Fonagy et al. (2002) rejects both the assumption that an individual has an inborn and prewired awareness of mental states, as well as the hypothesis that the acquisition of theory of mind is influenced, but not dictated, by environmental conditions (Baron-Cohen, 1995; Leslie, 1994). Mentalization is a learned skill. According to Fonagy et al. (2002), the infant utilizes the attachment relationship to construct critical information, namely the "self as mental agent" (p. 126). Beyond the secure base phenomena, the attachment figure enables the child to comprehend both his own as well as other's behavior as a product of thoughts, feelings, desires and intentions. In essence, the child experiences the caregiver "as an organizer of self-state" (p. 127).

Fonagy et al. (1991) demonstrates that the development of Secure attachment rests on the parent's capacity to mentalize. To highlight this point, Meins (1997) found that Secure attachment promotes the development of theory of mind in as early as infancy. Fonagy et al. suggested that the correlation between RF and attachment classification is due to the parent's level of sensitivity, comprehension, and contingency to the child's mental states. A parent capable of mentalization must have had some attachment figure mentalize her experience. Needing to be less reliant on defensive processes, the mentalized child will become the mentalizing parent.

Dominated by her own concerns and emotional needs, a parent with low levels of RF creates suboptimal environments characterized by an inaccurate reading of the child's emotional and physical needs. In essence, Insecure attachment arouses the infant's system in such a way as to prevent the robust formation and maintenance of the mentalization skill. Even though the Insecure infant with respect to attachment may be forced to predict mental states underlying

behavior earlier and more frequently, the excessive arousal of the attachment system creates a "fear of minds all adding up to what may become a terror of exploring the mental world" (Fonagy, 2008, p. 16).

Fonagy (2008) states that childhood trauma, Insecure attachment included, thwarts a person's ability to develop higher levels of RF because there is:

a decoupling of mentalization and re-emergence of nonmentalizing modes [i.e. psychic equivalence or pretense] of representing internal reality. This is pernicious because the immediacy of memory experience in the nonmentalizing mode of psychic equivalence has the capacity to re- traumatize again and again. This further inhibits and makes the experience ever more real. Trauma in the attachment context is most pernicious because the biological basis of attachment assumes trust. Part of this is the safety of not having to mentalize, of knowing that others are thinking for us, that we need not monitor our own or others' thinking. Trauma inevitably activated the attachment system. This activation (probably for evolutionary reasons) temporarily inhibits areas of the brain concerned with both remembering and mentalization. This is why mentalization comes to be so readily abandoned in the face of trauma, particularly attachment trauma. (pp. 42-43)

These adverse environmental contexts produce conditions that impede imagining what others think and feel and promoting developmentally appropriate interactions whereby a child learns to interpret others' behavior (Dunn, Davies, O'Connor, & Sturgess, 2000).

Additionally, these circumstances restrict the representation and regulation of affect, which causes incoherence in the structuring of the self (Arntz, Appels, & Sieswerda, 2000). The child has to rely on protective strategies to cope with experiencing his caregiver as unsafe and malicious (Fonagy, 1991). This child will likely have deficits in his capacity to mentalize

because his mind was not the object of his caregiver's mentalization. Fonagy, Stein, Allen, and Fultz (2003a) also hypothesized that this type of interferes with mentalization resources later in life, particularly in loving relationships.

Social biofeedback theory. In order to further explain the formation of mentalization, Fonagy et al. (2002) utilized Gergely and Watson's (1996) Social Biofeedback Theory to describe the certain interactions that facilitate the child's entry into the reflective mode. The theory states that parental affect mirroring, a term akin to Stern's (1985) affect attunement, develops an infant's capacity to regulate emotions and perceive him self as a separate entity. Through social biofeedback or "psycho-feedback" (Gergely & Watson, 1996, p. 126), the parent teaches the infant about primary affective skills through marking, digesting, and representing an infant's mental state.

Fonagy et al (2002) state:

The repetitive presentation of an external reflection of the infant's affect- expressive displays serves as a vital "teaching" function that results in gradual sensitization to the relevant internal-state cues as well as to the identification of the correct set of internal stimuli that correspond to the distinctive emotion category that the baby is in (Fonagy et al., 2002, p. 161).

Basically, the infant/child recognizes his state in the other's mind, appropriates it, and utilizes it to gain access to his own thoughts or feelings. Terms like affect mirroring and "psychofeedback" (Gergely & Watson, 1996, p. 126), and the mechanistic descriptions of this exchange, do not accurately represent or highlight the intimate experience shared between the caregiver and infant. These types of interactions represent the primary vehicle through which an infant feels safe, protected, and secure.

To further specify, Gergely and Watson (1996) hypothesize that there is something embedded within the caregiver's mirroring, or markedness, of the infant's affect that enables him to recognize that it is his emotion rather than the adult's. Despite the actual difference between the infant's display and caregiver's response, the baby reads the caregiver's marking (i.e. facial expressions and verbal cues) as a "reflection of [his] own state" (Fonagy et al., 2002, p. 176). Gergely (2000) suggests that mothers are biologically programmed to mark the affect-mirroring display as "a different, yet appropriate re-presentation" that diverges from the way she would actually or realistically express the emotion (Fonagy et al., 2002, p. 289). Stern's (2002) research highlights these phenomena by demonstrating the ways that mothers tend to exaggerate both verbal and non-verbal behavior (i.e. intensity, timing, shape) to promote homeostatic state regulation and affect attunement.

In fact, under ideal circumstances, this organic way of re-presenting mental states prevents the infant from mistaking them as someone else's, as well as enables him to discriminate internal and external reality (Fonagy et al., 2002; Gergely &Watson, 1996). Fonagy et al. calls this phenomenon "referential decoupling," because the infant dis-associates the affective presentation from the referent and recognizes it as his own (p. 178). As Fonagy (2008) asserts:

It is through providing such a state-reflective scaffolding environment that a congenial and secure attachment relationship can vitally contribute to emergence of early mentalization capacities, allowing the infant to discover or find his or her psychological self in the social world. (p. 18)

Consequently, the infant: 1) distinguishes, clusters, and categorizes internal state cues; 2) forms secondary representations connected to implicit level affective experience (when reaches the

appropriate cognitive developmental stage); and 3) forms a general language associated with the caregiver's affect mirroring (Fonagy et al., 2002).

Fonagy (2008) states that a caregiver must meet two essential requirements in order for a child to develop the capacity for effective affect regulation: "(a) reasonable congruency of mirroring whereby the caregiver accurately matches the infant's mental state and (b) *markedness* of the mirroring, whereby the caregiver is able to express an affect while indicating that she is not expressing her own feelings" (p. 19). Learning becomes coopted when the response is too real or if it lacks contingency with the infant's cue. In both cases, the infant will misattribute the mark and experience it as the adult's emotion. Fonagy hypothesizes that externalizing behaviors and borderline tendencies can arise under these conditions. In general, problems embedded within the caregiver-child exchange can stifle the development of affect regulation and mentalization.

Contingency detection mechanism. Gergely and Watson (1996) assert that, unlike mentalization, an infant has an inborn ability to detect the accuracy of caregiver's responsivity to his needs and to maximize contingency, without knowing about his own state. They also suggest that an infant possesses a prewired aptitude to "detect aspects of the world that react contingently to its own actions" (Fonagy, 2008, p. 17). The infant uses this "contingency-detection algorithm backward in time" to connect mentalized thoughts, feelings, intentions and desires to behaviors (p. 170). Additionally, he uses this mechanism forward in time to predict responses. When the infant begins to evaluate the level of contingency between his predictions and representations, both forwards and backwards in time, he can modify action to elicit more accuracy from the adult's responses. This denotes the bidirectional influence in the parent-child bond.

Mentalization as a bidirectional process. Mentalization is a co-constructed phenomenon contingent upon the active participation of the caregiver and infant, learning about each other's minds (Slade, 2009). For example, the pleasure a parent derives from the infant's reciprocity (e.g. smiles, coos, gestures) catalyzes the caregiver's impulse to hold the child in mind and comprehend her child's behaviors as a reflection of underlying mental states (Slade, 2002; Slade, 2009). Slade (2009) emphasizes:

The child's implicit recognition of her mind, and indeed the mutual recognition of each other's minds, is a crucial piece of her feeling sustained and rewarded by their relationship. In this way, mentalization is not simply unidirectional but also rather an inherently reciprocal, dynamic, and mutually rewarding process. (p. 11)

The process of mentalization is contingent on the shared joy of back-and-forth interaction.

Affect mirroring across the lifespan. Affect mirroring remains important throughout a lifespan. Taking the child's developmental age into account, the caregiver cannot simply replicate the child's mental state. She has to provide scaffolding "to move beyond it and go a step further, offering a different, yet appropriate re-presentation" (Fonagy et al., 2002, p. 288-289). During the first few months, the baby learns about his physical and social agency as well as his surrounding environment through the ways in which his caregiver responds to his physiological needs (Leslie, 1994; Niesser, 1988). Fonagy suggests the infant's prewired ability to detect contingency, in the most rudimentary way, leads to identifying the causal links between his actions and stimulus events. This enables him to discern his separateness from the surrounding environment, create basic corporeal representations, and recognize self-agency (Watson, 1994).

At 3-to-4 months, the child begins to require less precision in the caregiver's mirroring of the infant's physiological and emotional needs, which facilitates the eventual recognition of the "representational or psychological self" fully capable of mentalizing (Fonagy, 2008, p. 18). The infant connects the physical and affective state improvement with influence over the caregiver's mirroring and recognizes him self as a controlling agent.

Over time, the parent's actual words become more significant as a teaching tool in the mirroring exchange. The toddler forms second-order representations, which enhances his overall capacity for emotion regulation and impulse control because feelings are capable of being identified, changed and expressed. When the child reaches 3 or 4, the caregiver's mirroring has an integral role in helping him accept internal and external reality, and distinguish fantasy from reality. The caregiver must accurately represent the child's mental states in such a way that does not derail the imaginative play. During this period, the play "breaks away from psychic equivalence while retaining contact with reality. In other words, the child, using the parent's mind, is able to play with reality" (Fonagy et al., 2002, p. 267). Eventually, the child functions in the mentalizing mode.

These benefits are not limited to the early developmental stages where one develops a prototypical understanding of his mind. Rather they serve as an important aspect of information processing across the lifespan and may be considered an essential mutative agent in the therapeutic relationship (Fonagy et al., 2002). There is a striking overlap between the ingredients Fonagy et al. (2002) identified are necessary to mobilize growth at each developmental stage and Greenspan's and Wieder's (1998, 2006) developmentally-based Floortime interventions (see previous section).

Developmental milestones in the formation of mentalizing capacity. Similar to Greenspan and Wieder (1998, 2006), Fonagy (2008) posits an evidence-based trajectory for the formation of the mentalizing stance. Fonagy asserts that an individual must acquire foundational social skills prior to developing advanced cognitive and affective capacities (i.e. mentalization). Contingent upon the caregiver's ability to mentalize the child's behavior in a developmentally appropriate manner, children typically master these foundational capacities by age 4 or 5. The following subsections detail the critical developmental stages in this arch and elaborate on the differences between psychic equivalence and pretense. This subsection provides a practitioner with a useful framework for understanding the predominant modes that a client uses to comprehend and engage with the reality. It also highlights certain ways that mentalization theory overlaps with DIR/Floortime, particularly around the foundational milestones and developmental trajectory of each model, as well as the pinnacle of social-emotional experience.

Psychic equivalence. In concert with Greenspan and Wieder's (1998, 2006) second and third milestones, Fonagy (2008) claims that at around 6 months of age, a child begins to recognize causality by linking actions with a doer, as well as to the external world. An infant identifies the difference between animate and inanimate objects and that animate objects, like people, can move and function on their own (Spelke, Philips, & Woodward, 1995; Woodward, 1998). Reflected in Greenspan and Wieder's Milestone One, "joint attention and social referencing develop," which serve as a foundation for interpersonal life (Fonagy, 2008, p. 26; Greenspan & Wieder, 1998; 2006; Tomasello, 1999; Moses, Baldwin, Rosicky & Tidball, 2001). Skilled mentalizers recognize the child's developmental capacities and tailor the representation to his functional level. This principle is central to both theories.

Around 9 months of age, an infant understands, in a physical way, that behavior has underlying intentions (Baldwin, Baird, Saylor, & Clark, 1999). Unlike later periods of development, the infant links intentionality, or means to end action, with its physical properties (Csibra & Gergely, 1998). Fonagy (2008) highlights that the infant cannot recognize the underlying mental agency guiding behavior. Gergely and Csibra (2003) hypothesize that an infant expects others' behavior to follow a logical sequence, as long as the action has a clear physical aim. Similarly, Greenspan's (1979, 1987) early work referred to this stage as "Somatopsychologic Differentiation" and "Somatic intelligence: Phase II" to denote that the infant understands behavior in physical terms (p. 384, p. 301). This period reflects Milestone Three (Intentionality and Two Way Communication) on the FEDC.

In typical circumstances, beginning between the age of one and two "children develop a mentalistic understanding of agency" and realize, in a limited way, that mental states guide purposeful behavior (Fonagy, 2008, p. 26; Wellman, Phillips, & Rodriguez, 2000). As Greenspan and Wieder (1998, 2006) note in Milestones Three and Four, a toddler recognizes that his behavior can alter the environment (Corkum & Moore, 1995). For example, through gestures like pointing the finger, a young child knows that he can get others to do things for him, as well as participate in purposeful behavior with someone else (Dunn, 1998).

By 15 months, a toddler typically can discern between the intention driving the behavior and what happens (Meltzoff, 1995). He also begins to derive pleasure from shared pretend play, which Brown, Deonelan-McCall and Dunn (1996) suggest may be the beginnings of working together and getting along.

Typically by the second year, the child has a shallow understanding that hopes, desires, and wishes may not be always be gratified (Astington & Gopnik, 1991). He also has a

rudimentary system for thinking about cognitive and affective states, but still remains unable to represent thoughts, feelings, and desires separate from "physical reality" (Fonagy, 2008, p. 27; Calkins & Johnson, 1998; Repacholi & Gopnik, 1997). For this reason, he cannot fully discern between internal and external experience and between perception and reality (Flavell & Miller, 1998). Therefore, he attends primarily on one or the other. The toddler relies on both past encodings and current interactions with the attachment figure to regulate his emotions.

When a child centers excessive amounts of attention on internal reality, Fonagy et al. (2002) state that he is operating under psychic equivalence, the dominant mode of this period of life, where the inner world replicates external experience. Flavell, Green, and Flavell (1986) exemplify this mode in a false belief study¹⁰. They gave 3-year-old children a sponge painted to look like a rock and asked them to state what the sponge looks like. Most children this age answered a rock. The researchers then asked the children to touch and label the rock-like sponge. The majority of children responded by saying it was a sponge. For very young children, appearance and reality are interchangeable, and thoughts stand for what exists in the world.

Furthermore, a child in psychic equivalence may reject any reality outside of what is in his mind. For example, a client with ASD named Rebecca, 8 years of age, refused to acknowledge that she was found in a hide-and-seek game, despite the concrete evidence by several eyewitnesses. When the group gathered, she paraded around claiming that she won. Frustrating the other children, they challenged her perspective. She replied, "my brain tells me that I won. So, I won." For Rebecca, despite being at a chronological age that would indicate higher social-emotional capacities, she was unable to differentiate between the inside and outside

¹⁰ There have been multiple false belief tasks that capture the psychic equivalent phenomenon and demonstrate that toddlers of this age cannot recognize the inherent subjectivity of their own minds (Moses & Flavell, 1990; Perner et al., 1987; Wellman, 1990).

world and was embedded in her thoughts and feelings. From a DIR/Floortime perspective, psychic equivalence denotes the first four milestones on the FEDC.

Pretend mode. A noteworthy developmental shift usually occurs around 3 years of age when a child realizes that his thoughts and feelings do not always represent reality (Flavell, Flavell, Green, and Moses, 1990; Wellman & Banerjee, 1991). A 3-year-old is initially incapable of recognizing that thoughts and feelings have a representational function. However, through pretend or imaginative play, he quickly learns how to represent ideas and recognize the influence mental activity has on behavior (Fonagy et al., 2002). From a DIR/Floortime perspective, this denotes Milestone Five, or the ability to use symbols and language (Greenspan & Wieder, 2006).

Still unable to mentalize, a child at this developmental age functions in the pretend mode, where ideas dictate experience without any reference to reality (Fonagy et al., 2002). Wallin (2007) states "experience can be what you want it to be" (p. 142). During this phase, the child identifies the influence his thoughts and feelings have on his self-image and self-understanding (Flavell, 1999; Flavell & Miller, 1998; Wellman, 1990). Additionally, peer relationships improve and a child demonstrates empathy towards others (Dunn & Cutting, 1999; Zahn-Waxler, Radke-Warrow, Wagner, & Chapman, 1992).

As Greenspan and Wieder (1998, 2006) suggest, imaginative play is the critical ingredient during this period because the child explores the line "between the subjective and that which is objectively perceived" (pp. 58-59). Fonagy (2008) states, "mentalizating abilities take a quantum leap forward at around age four" (p. 27). For example, Wellman, Cross and Watson (2001) conducted a meta-analysis on false belief tasks and discovered that age plays a critical role in passing the exercises. In fact, children under the age of 3 generally fail false belief tasks.

The older children who pass most often have a greater mastery over language, as well as elaborate peer relationships (Dunn, 1994; Lalonde & Chandler, 1995; Slomkowski & Dunn, 1996; Taylor & Carlson, 1997). Children at this age spend significant amounts of time in imaginative play, which likely enables them to build close and connected bond. Greenspan and Wieder (1998, 2006) refer to this as Milestone Six (Building Bridges, Emotional Thinking, logic, and a Sense of Reality) because the child starts to link ideas with affect, bringing him one step closer to reality (Greenspan & Wieder, 2006). A child also decreases his reliance on the adult's ability to mentalize because he now can "enhance the capacity to understand self and others in mental state terms through linking with individual's who share one's interest and humor" (Fonagy, 2008, p. 28). Fonagy et al. (2002) refers to this as the beginnings of the integration of psychic equivalent and pretend modes, also known as the mentalizing or reflective mode. For both Fonagy (2008) and Greenspan and Wieder (1998, 2006) the fourth year typically marks the acquisition of the core skills necessary to engage skillfully in the social world.

Similar to Greenspan and Wieder's (1998, 2006) Milestone Seven (Multicausal and Triangular Thinking), Fonagy (2008) highlights that a child, at this phase of development, can typically categorize memories into logical and causal-temporal structures (Povinelli & Eddy, 1995). Additionally:

Further theory of mind skills become part of the child's repertoire at this stage include second order theory of mind (the capacity to understand mistaken beliefs about beliefs), mixed emotions (e.g., understanding being in conflict), the ways expectations or biases might influence the interpretation of ambiguous events, and the capacity for subtle forms of social deception (e.g., white lies). (Fonagy, 2008, p. 28)

Greenspan's and Wieder's capacities Eight and Nine, Gray-Area, Emotionally Differentiated Thinking and A Growing Sense of Self and Reflection on an Internal Standard respectively, emphasize similar developmental acquisitions necessary for higher forms of social-emotional relatedness. Essentially, the integration of Greenspan and Wieder's (2006) advanced cognitive and affective skills (i.e. Milestones Seven, Eight and Nine: Multicausal and Triangular Thinking, Gray-Area, Emotionally Differentiated Thinking, A Growing Sense of Self and Reflection on an Internal Standard) represent mentalization and the pinnacle capacity of social-emotional functioning. Furthermore, both theories agree that a child typically acquires the foundation for these aptitudes during the first 4 years of life.

This framework provides a clinician with a way of assessing the modes that clients use to engage with psychic reality. For example, Borderline Personality Disorder is characterized by the excessive operation in psychic equivalence (Bateman & Fonagy, 2004). It also helps a therapist mobilize processes to help a client acquire a mentalizing capacity. During periods of intense negative affect and stress, a child will likely regress into psychic equivalence or pretense. Emotionally mature adults also cycle through all the modes depending on their affect states.

Mentalization in DIR/Floortime. Based on Fonagy et al.'s (2002) assertion that mentalization is a fundamental mobilizer of developmental processes and the means through which young a child learns about minds and psychic reality, the current author believes mentalization must be a central component of DIR/Floortime intervention at each of the foundational milestones. To facilitate the mastery of the FEDCs, a parent and clinician uses affect mirroring, attuned reciprocity, empathy, and modeling to follow the child's lead and help him climb the ladder. Greenspan and Wieder exemplify this point by highlighting the ways in

which caregivers influence the child's ability to discern fantasy from reality, and internal experience from the outside world. They state:

When children begin to pretend-play with another person—perhaps they have the little piggy go, "Oink, oink," and then Mommy says, "Oh, are you hungry, my little piggy—what do you want to eat?"—there is an external voice, an imagination other than their own, interacting with them. (p. 113)

This demonstrates how a parent responds directly to the child's mental states, through piggy, in pretend play. Examples could also easily be derived from each of the milestones because a central component of mentalization is that it meets the developmental tasks at hand (Fonagy et al., 1998).

Cultivation of parental reflective function. Over the past decade, the cultivation of mentalization has become a central aspect of multiple psychodynamic treatment modalities. Fonagy and Bateman (2006), building on nearly two decades of research, manualized a time-limited mentalization-based treatment protocol for an individual with Borderline Personality Disorder called Mentalization Based Therapy (MBT). MBT focuses on growing the client's capacities to recognize the influence of mental states, of self and other, on behavior. Explaining this model, Bateman and Fonagy (2010) claim:

The primary aim of any intervention has to be to reinstate mentalizing when it is lost or to help to maintain it in circumstances when it might be lost or is being lost. ... [clinicians] undertake to develop a particular therapeutic stance and implement a series of steps to try to engage the patient in a process of mentalizing, firstly using some generic psychotherapy techniques such as empathy, support and clarification, and then moving on to other interventions specifically designed to "stress" the attachment relationship within

controlled conditions, which includes a focus on the patient-therapist relationship through "mentalizing the transference." (p. 13)

In addition to MBT, Mentalization-Based Treatment for Adolescents (MBT-A) (Rossouw & Fonagy, 2012), Short-Term Mentalization and Relational Therapy (SMART): An Integrative Family Therapy for Children and Adolescents (Fearon et al., 2006), Minding the Baby: A Mentalization Based Parenting Program (Sadler, Slade, & Mayes, 2006), as well as many other similar models represent some of the mentalization-based treatments currently practiced today (Björgvinsson & Hart, 2006; Söderström & Skårderud, 2009). Of all of these approaches, parenting models like Slade, Sadler, and Mayes's (2007) Minding the Baby program, Grienenberger's (2007), Reflective Parenting Program, Reynold's (2003) Mindful Parenting Groups (discussed in section 4) are most relevant and useful to child psychotherapy and particularly DIR/Floortime. These programs are referred to throughout the dissertation as reflective parenting models.

Expanding on Fonagy et al. (2002), these reflective parenting models emphasize: 1) the quality of the attachment bond constructs an individual's developmental trajectory, mental health, and interpersonal skills; and 2) a parent's aptitude for reflective functioning or the ability to "hold a *representation* of her child as having feelings, desires, and intentions" (Slade, 2005, p. 271) enables the individual to represent the inner world of self and other and also develop self-regulatory skills. Additionally, Slade (2005) asserts that clinical intervention must focus on the expansion of parental reflective capacities. Even for caregivers with Secure attachment, the growth of a parent's mentalization skills serves as a primary mutative agent in child psychotherapy (Slade, 2008). She declares "that changes in a relationship are often the result of

changes in a parent's capacity to make sense of her child as a separate, differentiated person with thoughts, feelings, and a mind; that is, to think more reflectively" (Slade, 2006, p. 642).

To exemplify the clinical application of these theories, Slade (2002) and Slade, Sadler, Dios-Kenn, Webb, Currier-Ezepchick, and Mayes (2005) piloted two programs, Parents First and Minding the Baby, both designed to enhance an at-risk mother's reflective function capacities as a means of promoting healthy infant development for her newborn. Slade et al.'s (2005) Minding the Baby utilized an interdisciplinary team of psychiatric social workers and nurse practitioners to implement a relationship-and-home-based program designed to assist "young, at-risk new mothers keep their babies (and themselves) 'in mind'" (p. 74). It helped mothers grow their mentalizing capacities and attune to, empathically engage, and affectively contain their infant. These skills are known to facilitate healthy emotional and physical growth.

Around this time, Grienenberger (2007) developed the Reflective Parenting Program, an experiential parenting group model focused on helping a parent enhance parental reflective function. Grienenberger emphasizes how group leaders "provide an experience for the parent that the parent is struggling to provide for the child" (p. 670) by attending to and containing their thoughts, feelings, intentions, and desires of the parent. Because an individual acquires the mentalization capacity relationally, this process-oriented approach empowers a caregiver to develop these skills and meet her child's needs. This model eventually became the foundation of The Center for Reflective Parenting in Los Angeles.

Reynold's (2003) Mindful Parenting Group is a psychotherapeutic parent-infant/toddler group that focuses on growing reflective capacities in parents. As Reynold's describes, this approach "enhances mindful contacts between parent and infant" (p. 371). Through infant/toddler observation and similar types of reflection as the abovementioned models,

practitioners help parents "to restore, cultivate, and sustain the most basic, verbal and nonverbal, affective contacts between parent and child" (p. 357).

Core components of a reflective/mentalization-based parenting approach. Given that a parent's reflective function capacity shapes child development and attachment security, mentalization-based parenting programs focus on growing reflective skills in a parent so that she can understand and contingently respond to the mental states that underlie her child's behavior (Slade et al., 2005). These models help a parent "read intentions and mental states, helps mothers think about behavior rather than change behavior" (Slade et al., 2005, p. 296). Slade (2006) claims that the central feature of this approach "was offered by child psychoanalyst Sally Provence in her concise directive to parents: 'Don't just do something. Stand there and pay attention. Your child is trying to tell you something'" (Slade, 2006, p. 644).

Slade (2002) highlights that in order to meet a child's needs, caregivers must understand what is inside the child's mind. She hypothesizes that the mutative thread in parent-child intervention is helping the mother or father recognize how the internal world of the child manifests as behavior. These theorists agree that the expansion and refinement of reflective capacities change behavior, for both child and caregiver (Grienenberger et al., 2005; Slade et al., 2005; Slade, Sadler, & Mayes, 2007).

To sum up this intervention perspective, Slade (2002) emphasizes that reflective models aim to help caregivers: 1) "reflect upon the emotional, internal life of her baby" (p. 15); 2) think about her own thoughts, feelings, desires, intentions, especially as they relate to caregiving; and 3) understand the relationship between the caregiver and baby's/child's feeling states in order to develop a framework for learning and responding to the child's internal world.

From this perspective, the parent-therapist relationship is the primary vehicle through which caregivers develop reflective capacities and one of the central mutative agents in child treatment. Like the parent who helps a child move from psychic equivalence to a reflective stance, the therapist's construct interactions to stimulate a parent's development and utilization of mentalization. The final portion of this subsection explains two central interventions used to achieve this goal: modeling and containing caregiver affect.

Holding the child in mind. A therapist demonstrates a reflective stance by modeling unceasing focus on the mental states that motivate both the child's and parent's behavior (Slade, 2006). Slade describes:

We penetrate the opacity and complexity of the child's experience, and we try to symbolize it. We play with it, we wonder about it, we search for the right metaphors to make the child 'sensible' to the parent. And we iterate—again and again—the essential aspects of reflective awareness. We talk about feelings, we link them to behavior, again and again, continuously underscoring the links between behavior and mental states (Maybe he's up in the middle of the night because he was so afraid when you were away.) We note relationship between a parent's mental state and those of her child. (You've been pretty angry... maybe that's made her feel worried.) We try to be accurate in our descriptions of mental states. We understand what we don't know about another's internal experience. (p. 645-646)

By modeling a mentalizing stance, a practitioner shows a mother and father how to playfully grapple with and wonder about the child's mind. This intervention underscores the inseparable relationship between the child's and caregiver's thoughts, feelings, and behaviors. It also asserts that all action is meaningful. For example: "'He keeps looking around, I'll bet he's wanting to

know where you are' or 'She watches you use the remote control every day—she's wants to be like you—that's why she is playing with it!'" (Slade, Sadler, & Mayes, 2007, p. 160). In this example, the therapist represents what is in the child's inner world by utilizing the "speaking for the baby" technique (Carter, Osofsky, & Hann, 1991).

A practitioner also provides non-didactic developmental guidance by highlighting, translating, and reframing the child's cognitive, affective, and social development, often elucidating this from the child's viewpoint (Slade, Sadler, & Mayes, 2007). This "makes the babies more comprehensible, and hence less disruptive to mothers" (p. 164). When a parent wonders about her child, she starts to help him regulate his affective states and promote growth. Furthermore, a parent who can imagine what drives her child's behavior expands his emotional openness and can better meet his needs and respond in contingent and nurturing ways (Slade, 2002). For example, "Oh, you want to do just what Mom does... oh, that is so interesting with all the buttons, you just want to see how this works" (Slade, 2006, p. 645). Or, "Gee, I wonder why he did that? Oh, so maybe *that's* how she was feeling" (Slade, 2006, p. 646). This statement reminds a parent of the child's physical and affective states, while simultaneously encouraging her to attend to the child's psychological needs. As evident by the description of this approach, a "living process," this model that helps a parent create new and lasting strength-based representations of her child (Grienenberger, 2007, p. 674).

"Holding the parent in mind" (Slade, 2006, p. 222). The parent's ability to regulate her own affective states influences her ability to hold and represent the child's mind. Therefore a reflective practice creates a therapeutic environment centered on "holding the parent in mind' so that they will be able to this for their child" (p. 222). Slade (2006) describes a parallel process between the therapist-parent and parent-child by equating the parent's ability to what "hear her

baby's cry" (p. 647) with the level at which the therapist can contain and represent the "the mother's cry" (as cited in Slade, 2006, p. 647)¹¹. In Grienenberger's (2007) words a clinician should engage "with parents as we would like them to engage with their children" (p. 674).

From this perspective, a practitioner actively listens to and attempts, to understand a caregiver's inner world, "however painful, inaccurate, or unbearable" (Slade, 2008, p. 223) and give "voice to [the mother's] intolerable feelings and making sense of her impulses" (Slade, - Sadler, & Mayes, 2007, p. 160). This helps regulate his affective states as well as reminds him that the mind influences behavior. Moreover, it mobilizes a parent to reflect upon her childhood experiences as a formative influence on her parenting approach. Slade (2006) highlights that this is "is not the same as making the 'unconscious conscious,' rather it is making the unknowable knowable" because it mobilizes processes that help a parent regulate her own and the child's thoughts, feelings, intentions, desires, and wishes (p. 648). Over time, this wears down a parent's need to rely on defensive patterns and expands her attentional and representational patterns to include a wider range of stimuli, most importantly the child's mind. This equips with parental reflective skills.

Parents with a history of deprivation and trauma may not have learned/acquired the mentalization skill (Fonagy et al., 2002). In a reflective model, a therapist meets a parent at her developmental/emotional level. When a parent exhibits severe deficits in this area and is unable to "hold onto an idea, let alone link it to other mental or objective phenomena" (p. 171), a therapist adopts goals to meet the parent's functional developmental capacities. This may mean that the therapeutic task focuses on the basic acknowledgment of physical or mental states.

¹¹ See Fraiberg (1980) to better understand this aspect of the approach.

Even though a therapist may explore a caregiver's attachment history, the reflective model does not replace individual therapy for the parent. The purpose of this work is always to get to know the child in a multidimensional way and to build a deeper and more accurate representation of his experience (Slade, 2008). Additionally, this approach does not focus principally on a parent's challenges with the child and provide a range of remediation strategies to promote positive behavior. For these reasons, this type of parent work "falls somewhere between psychotherapy and parent education" (Grienenberger, 2007, p. 670). Discussed at length in the next two sections, this dissertation asserts that the main principals of a reflective parenting approach must be incorporated in a DIR/Floortime treatment so that a parent can better mobilize her child's growth.

Conclusion. By making infant research more accessible to clinicians working in the consultation room, Fonagy et al.'s (2002) theory on mentalization has undeniably changed the field of psychotherapy. Fonagy et al. affirm many of the basic principals and practices in DIR/Floortime, while also creating a lens through which to carefully scrutinize the model (see sections four and five). For example, Fonagy et al. and Fonagy (2008) supports DIR/Floortime's emphasis on: 1) using development to guide intervention; 2) the mobilization of core developmental processes, rather than on symptom reduction; 3) the evidence-based trajectory of healthy social-emotional developmental; 4) the caregiver centrality in constructing an individual's capacity for advanced social-emotional skills, such as intentionality, self-agency, intersubjectivity, and most notably mentalization; and lastly 5) the goal of psychotherapy being an integration of advanced social, emotional, and cognitive skills. The following sections use mentalization theory to evaluate aspects of the parent-child with ASD dyad that undermine mentalization and therefore impede on the efficacy and practice of DIR/Floortime (Slade, 2009).

It also makes suggestions on how to better address these issues. Furthermore, the next sections make evident the necessity of a mentalization approach to parent work in DIR/Floortime.

Mentalization in the Parent-Child with ASD Dyad

When a baby is born, before the parents rejoice, they carefully look at their newborn, count 10 fingers and 10 toes, perhaps make a noise to see if the baby will startle, and gaze lovingly into the infant's eyes. Once the baby passes the initial inspection, joy can take over the room. Some babies have all of their toes and fingers but something intangible awaits in the shadows of development, only becoming palpable by perplexing the parents when unconscious expectations about the quality of the connection with their infant begins to feel like unrequited love. (Kalamason, 2009, p. 40)

According Shahmoon-Shanok (2000), developmental disorders like ASD are "relationship disorders" (p. 367) that profoundly affect the whole family system, most notably a parent. While functioning as the central mutative agent in her child's life, a parent of a child with ASD faces a multitude of stressors that drain emotional resources, lower self-esteem, alter identity, and can impact the trajectory of DIR/Floortime treatment (Abbeduto et al., 2004; Baker-Ericzen, Brookman-Frazee, & Stahmer, 2005; Brobst, Clopton, & Hendrick, 2009; Shahmoon-Shanok, 2000). Given the striking connection between Greenspan and Wieder's (1998, 2006) DIR/Floortime and Fonagy et al.'s (2002) mentalization-based model, Fonagy et al. provide a unique vantage point through which to examine how these unavoidable stressors impede upon and sometimes break down a parent's reflective capacities and limit the effectiveness of DIR/Floortime. Furthermore, by integrating some of the core reflective parenting principles into DIR/Floortime parent work, practitioners can establish a foundation for developing an "openness to the state of mind of the child" (Lyons-Ruth, 1999, p. 583), the basis for Secure attachment,

and the gateway into offsetting the impact of some of the stressors (Grienenberger, 2007; Reynolds, 2003a, 2003b; Slade, 2009).

As Greenspan and Wieder (2006) assert:

A child's progress with a DIR/Floortime program requires parents who are emotionally very available. If their emotions are drained by marital strife, by anger, disappointment, or depression, or by exhaustion from their workload, it's very hard for them to provide their child with what he needs. The heart of Floortime is warmth and nurturance that you're conveying to your child so he will want to play with you rather than retreat into his own world. (p. 172)

Contrary to this requirement, parents of children with ASD report higher levels of stress than parents of neurotypically developing children, as well as other developmental or health-related disorders, as well as unbearable intense negative affect (Abbeduto et al., 2004; Baker-Ericzen, Brookman-Frazee, & Stahmer, 2005; Brobst, Clopton, & Hendrick, 2009; Slade, 2009). For example, Dabrowska and Pisula (2010) found that parents of preschoolers with ASD had higher levels of stress than both parents of typically developing and Down syndrome children. Estes et al. (2009) also demonstrated that these individuals had more parenting stress and psychological distress. In another survey, Sharpley, Bitsika, and Efremidis (1997) discovered that more than 80%, particularly mothers, endorsed feeling "stretched beyond their limits" (p. 10). Many of the studies linked parental stress to the child's problematic behaviors, and the greater perceived problems the more stress the parents felt (Estes, Munson, Dawson, Koehler, Zhou, Abbott, 2009; Estes, Olson, Sullivan, Greenson, Winter, Dawson, & Munson, 2013; Lecavalier, Leone, & Wiltz, 2006; Osborne & Reed, 2009; Schieve, Blumberg, Rice, Visser, & Boyle, 2007).

families and couples divorce at twice the rate as the general population, even during adolescents when percentages usually decrease (Hartley et al., 2010; Higgins, Bailey, & Pearce, 2005).

Regardless of a parent's level of RF, these levels of stress function as barriers to mentalization and therefore the implementation of DIR/Floortime (Slade, 2009).

Despite the obvious needs of this population, as well as the requirements to effectively intervene in DIR/Floortime, most ASD intervention models do not include explicit parental support in treatment (Boyd, 2002; Slade, 2009; Solomon & Chung, 2012). In fact, the absence of support predicted psychological problems like anxiety and depression in parents, which would function a further barrier to the effective implementation of DIR/Floortime. Slade observes that "services for parents are add-ons that are organized and implemented by parents themselves, usually outside the child's treatment program" (p. 13). To further emphasize this point, Slade states, "the fact that parental needs are not incorporated in a meaningful way into the treatments themselves implies that such struggles are ... pathological" (p. 16). In reality, "they reflect a normal response to the fact that their natural and human desire to develop a relationship with their child has been profoundly derailed" (p. 16).

In order to integrate DIR/Floortime and mentalization models in theory and practice, this subsection makes four foundational assumptions: 1) a Secure attachment relationship facilitates the developmental processes for robust functioning in both typical and neurotypical individuals (Oppenheim, Koren-Karie, Dolev, & Yirmiya, 2008; Schore, 2001); 2) parents with higher levels of RF respond in more healthy and adaptive ways to their child's distress, which in turn produces secure bonds (Grienenberger et al., 2005); 3) mentalization is already an integral part of DIR/Floortime treatment and the mobilization of the FEDCs; and 4) effective child treatment

must include the development of parental mentalization skills (Slade, 2009, p. 214; Slade et al., 2005).

This subsection describes the multiple ways in which the stress tied to parenting a child with ASD can undermine or weaken a parent's capacity to mentalize as well as her effective implementation of DIR/Floortime. The first portion explains how this population experiences intense negative affect related to their child's behavioral presentation and lack of reciprocity. Because mentalization requires a relatively open and unencumbered emotional stance to imagine the mental states driving behavior, these affective states restrict a parent's capacity to mentalize (Fonagy, 2008). The second portion outlines the multiple ways in which a parent of a child with ASD, as the child's primary mobilizer, organizer, planner, driver, and advocate, can lose their sense of autonomy and experience strife in their adult partnerships/relationships. The third part explores Slade's (2009) hypothesis that the lack of reciprocity and confusing and impenetrable mental states of a child with ASD makes him "unmentalizable" (p. 7) to the parent. With very limited abilities to provide clear behavioral cues and contingent responsiveness, the child can undermine the parent's attempt to connect his behavior to his mental states. Lastly, the final portion asserts that a mentalization approach to parent work is a necessary way to address these issues and prepare a parent to harness a child's core developmental processes in DIR/Floortime treatment. Given these suboptimal conditions for both the parent, as "the center of a child's emotional, social and learning world" (Shahmoon-Shanok, 2000, p. 333) and principal "organizer" (p. 334) of the child's experience as well as the child's grave need for support, the current writer asserts that a mentalization approach to parent work will successfully address these issues and prepare parent's to harness her child's core developmental processes in DIR/Floortime treatment (Grienenberger, 2007; Reynolds, 2003a, 2003b; Slade, 2009). As

Shahmoon-Shanok (2000) states, "what is good for the parent is good for their children. What is good for their children is good for parents. Aiming for both stimulates good outcomes" (p. 333).

Moreover, given that a caregiver's inner world plays such an integral role in the construction of the child's mind, this dissertation proclaims that the parent's representation of her child's inner world, not the child's symptoms or the mobilization of core developmental processes, must function "as [a] central—rather than peripheral—agent of change in successful child treatment" (Slade, 2008 p. 214). Creating an atmosphere whereby a parent feels understood, nurtured, and supported is critical for parents of children with special needs, who struggle to engage and connect with their child (Shahmoon-Shanok, 2000). Practitioners must also persistently work to enable parents to become "central rehabilitative agents" and "life-long teachers" in their child's life (Shahmoon-Shanok, 2000, p. 335) because "no professional, no matter how deeply committed or involved, can substitute for the profound impact parents have on their child" (p. 335).

Despite the persistent obstacles for parent of a child with ASD, Slade (2009) observes: This mentalizing paradox is complex and multifaceted. Yet there are few parents of children on the spectrum who do not hope to and indeed succeed in embracing this challenge. Indeed, the more I have tried to think through and imagine the many complexities of parenting a child on the spectrum, the more I have come to appreciate the depth, breadth, and enormous complexity of this paradox, and the more I have come to appreciate the extraordinary courage of the legions of parents for whom this paradox is a central fact of their daily life. Indeed, it speaks to the wonders of the human spirit and the resiliency of our evolutionarily selected drive to protect and nurture our young that so

many parents of children on the spectrum do so much, and with such creativity, determination, and passion. (pp. 7-8)

Stress and the break down of mentalization. The following portion of this subsection outlines the ways in which unique characteristics of a parent-child with ASD dyad obstruct a parent's capacity to mentalize her child's behavior. The first part identifies the intense negative affect states experienced by a parent of a child with ASD, as a byproduct of the child's lack of reciprocity and perseverative behavior, as well as her squelched hopes and dreams for her child and parenthood in general. The second subsection outlines the impact severe delays in a child's development have on a parent's identity development. The third portion explores the multiple and prolonged ways in which a parent loses her autonomy. The final part explains how the constellation of these abovementioned factors perpetuate stress, which in effect break down mentalization processes, a skill necessary for the promotion of growth in DIR/Floortime.

Intense negative affect. Stern (2004) explains that an individual with ASD "live[s] outside of our familiar intersubjective matrix" and "violates so much of what we expect of humans" (p. 91). His lack of eye contact, social responsiveness, and reciprocity, as well as his indifference to communicate either gesturally or verbally, undermines the thrust of parenthood: the sharing of experience. Furthermore, his behavior is obscure, demanding, rejecting and/or incomprehensible. He "is not easily soothed, comforted, or understood; he can be enormously rejecting and obtuse; and he can be very demanding. His developmental course is unknown and likely bleak" (Slade, 2009, p. 12). Given the lack of basic reciprocity and primary intersubjectivity, the primary mediators of parental stress in the early childhood period, she "must cope with more and more prolonged and intense anger, sadness, grief, shame, fear, and dread than the parents of typically developing children" (Slade, 2009). Additionally, a parent of

a child with ASD feels a loss of competence, squandered expectations, hopes and dreams, and the unknowable future. When a parent does not experience basic reciprocity and primary intersubjectivity with her child, she has painful and terrifying feelings that no parent would be "comfortable feeling toward her child. ... [even] hate..." (Slade, 2009, p. 12). Already traumatized, her parenting responsibilities are outside the scope and competence of the average parent (Shahmoon-Shanok, 2000). Even though these feelings may wax and wane, they will not disappear (Crown, 2009).

Parenthood and identity development. Additionally, parenthood is intimately tied to identity development and "profoundly affects the experience of, and structures for, identity" (p. 337). Competence and parental efficacy shape this developmental shift (Shahmoon-Shanok, 2000). When parents witness serious delays in their child's development and no effective way to reverse this course, a parent experiences herself as incompetent. As Shahmoon-Shanok asserts, "there is likely no greater wound to a parent's fledgling sense of competence as a parent, and of relatedness as this child's parent, than to see and feel the losing development ground and turning away from their relationship, all the while not knowing how to help him" (p. 337). The helplessness, ineffectiveness, and confusion will become hallmarks of her emerging identity as a parent, weakening his self-esteem, and making it more likely that her negative affective experience will shape the moment-to-moment parent-child exchange.

Parents also report that the diagnostic experience, the unclear treatment trajectory, and a lack of support and clear information from medical professionals reinforce the feelings of helplessness, confusion, and unknown future and "disbelief, loss, grief, confusion, isolation, helplessness, fear for the future, and 'why me' anger," Shahmoon-Shanok, 2000, p. 334), already present in the parent-child relationship (Gray, 1995; Schall, 2000; Solomon & Chung, 2012).

Slade (2009) points out that therapists can also be insensitive to the ways in which a parent experiences the slow pace and arduous nature of treatment, further exacerbating many of these feelings.

Loss of autonomy. Due to the pervasive deficits of a child with ASD and the necessary time-intensive and long-term nature of treatment to make the most elementary gains, parents feel a loss of independence and autonomy. In reality, these feelings may last well into the child's adulthood. With little or no built-in support for themselves, parents manage and advocate for different types of services, communicate with therapists and doctors, as well as function as the child's "in vivo" around the clock therapist (Slade, 2009. p. 13; Shahmoon-Shanok, 2000). Exemplifying this point, Greenspan and Wieder (2006) state "the motto for working with children with ASD and other developmental challenges is 'Floortime all the time everywhere'" (p. 186). These authors literally recommended that "Floortime should be done often—eight or more times a day for twenty minutes—and in many settings" (p. 186).

For example, the participants in Wieder and Greenspan's (2006) study on the development of higher emotional capacities using DIR/Floortime received an average of eight (range 5 to 13) different types of interventions between 2 to 8 years of age. This lasted anywhere between 2 and 5 years. These services included multiple DIR/Floortime modalities, speech and language therapy, occupational therapy, visual spatial therapy, etc. Despite the abundant services for the children documented in the study and the parent's adoption of a vast amount of responsibilities—as organizer, manager, participant, and around the clock therapist—in these treatments, as well as coping with typical life stressors (i.e. employment, marriage, move, birth of baby, etc.), there were no listed/explicit parental supports.

Suppo and Floyd (2012) note that ASD treatment schedules leave limited time for some of the defining childhood activities and family bonding experiences (i.e. sports, music, dance). Mothers and fathers also report that challenges making sufficient time for each other, which perpetuates stress and conflict within the family system. Furthermore, despite significant gains in relationship equality over the past 50 years, Solomon and Chung (2012) highlight that the majority of the caretaking for children with ASD falls on the mothers, who report greater levels of stress. Gray's (2002) study found that half of the mothers report that their child "prevented them from either working at all or restricted their hours and/or type of employment" (p. 218). These factors must contribute to the high levels of divorce and marital strife. Families may not be able to participate in recreational and community-based activities due to the child's behavioral presentation (Dillenburger, Keenan, Gallagher, & McElhinney, 2004). For example, a simple act of eating out at a restaurant may prove too arduous of a task. Furthermore, a child behaving inappropriately at a social event may activate feelings of shame and embarrassment and later on, "feeling ashamed of the shame, parents may shut those feelings off by avoiding the whole experience" (Solomon & Chung, 2012, p. 260). These parents report feeling that other parents scrutinize their caregiving and the child's behavior, causing outside reinforcement to these feelings (Hogsteen & Woodgate, 2013).

Break down of mentalization. Taken as a whole, these abovementioned factors intensify and perpetuate the parent's level of stress and negative affect states. Bateman and Fonagy (2004) explain that unlike positive emotion, intense negative affect impedes upon an individual's aptitude for RF because "it makes it especially difficult to attend to or even be curious about what is in another's or one's own mind" (Slade, 2009, p. 11). Mentalization requires a degree of affect regulation and dysregulated (i.e. hyper- or hypo-arousal) states break down these

processes. As Greenspan and Wieder (2006) highlight, regulation is the foundation of every core developmental process. Without being regulated, an individual cannot function robustly at any capacity. Mentalization requires the integration of both cognitive and affective processes to wonder, imagine, and represent the other's mind.

For many parents, the intensity, gravity, and proximity to these abovementioned feelings "are too alive, too dangerous, and potentially destructive to be reflected upon. ... [and] what is so often presented to the child (rather than re-presented) are the parent's own often unmetabolized or unmodulated feelings" (Slade, 2009, p. 12). The projection of this affective material may define aspects of the parent-child relationship from the beginning stages of life and perpetuate the child's avoidance of "already frightening and disorienting" experience of minds (p. 12).

Because mentalization plays a central role in the mobilization of core developmental processes in DIR/Floortime, these intense affect states would inevitably impact a parent's capacity to: 1) follow the child's lead; 2) respond to his individual differences; 3) function as a co-regulator; and 4) expand back and forth communication as well as dramatic play themes. This list represents many of the ways in which a parent is taught to facilitate growth in DIR/Floortime.

Mentalization without reciprocity. Thus far, this subsection has outlined the multiple ways that dysregulated affect states in the parent can undermine her capacity to mentalize as well as impede upon her ability to construct learning environments that promote the acquisition of foundational social-emotional milestones. However, regardless of the parent's capacities and readiness, the child's individual differences create gravely suboptimal conditions for growth because they reinforce his social avoidance, weak relational capacitates, and dysregulation.

They also undermine a parent's ability to create a social-emotional growth-promoting

environment. This dynamic makes the acquisition of primary social-emotional developmental processes a monumental task.

Most intense during the pretreatment phase, the child with ASD's lack of reciprocity and shared experience, coupled with high intensity, uncontrollable, unusual, opaque, and/or counterintuitive affective markers thwart a parent's reflective capacities. A parent, regardless of her aptitudes and readiness, cannot mentalize if the necessary mentalizable cues are absent. Mentalization is a bidirectional process contingent upon affective reciprocity within the dyad (Slade, 2009). The infant cannot recognize his own mind, or others for that matter, without providing cues for his caregiver to represent.

Slade (2009) describes:

The parent is left with the task of locating the child's mental states in the sea of a confusing and chaotic communications, communications that seem, at least in the beginning, so utterly *not* communicative. She must mentalize what seems at first, second, and even tenth glance unmentalizable. ... In other words, to connect with their child and help develop the relational mentalizing capacities that are crucial for his adaptations, parents must *mentalize the unmentalizable*. (Slade, 2009, p. 7)

Like a negative feedback loop, the remoteness and distance from each other's mind perpetuate the child's reliance on perseverative and self-stimulatory behavior to manage the anxiety, as well as the parent's withdrawal at the implicit and/or explicit level.

As evident by the duration and intensity of DIR/Floortime treatment, this dilemma in the parent-child dyad requires a parent to contain, mirror, and represent the child's affective experience more often and for longer periods so that he can meet basic milestones. Greenspan and Wieder's (2006) DIR/Floortime prescription to follow the child's lead in affectively driven

parent-child play, "eight or more times a day for twenty minutes" (p. 186) reflects the attention it takes to overcome this challenge and insure the acquisition of foundational developmental capacities. Moreover, this dynamic demonstrates one reason why DIR/Floortime focuses on cultivating the FEDCs through shared experience and sensory-affective interactions and does not teach behavior modification. It also highlights the monumentality of children with ASD becoming "related, empathic, creative, and reflective thinkers" through DIR/Floortime treatment (described in section one) (Wieder & Greenspan, 2006, p. 40). Lastly, there is no doubt that an effective DIR/Floortime treatment aids the child to become more mentalizable and the parent to become more skilled at understanding the child's emotional and physical needs.

Mentalization-based parent work. Given the unique constellation of factors that plague a parent of a child with ASD's psychological resources and mentalizing capacities, clinicians that utilize a mentalization-based approach can increase a parent's RF, offset certain defining challenges of the dyad, and better prepare her to promote her child's growth through DIR/Floortime intervention. The reason for this is that reflective parenting practices target: 1) the containment of a parent's intense negative affect and the strengthening of her emotion regulation (Slade, 2008); 2) the representation of mental states underlying behavior; 3) the promotion of autonomy through the acknowledgment of the separateness of minds (Fonagy & Target, 1995; 1996; Target & Fonagy, 1996; Slade, 2008); 4) the connection between a parent's mental states and the child's behavior; 5) the parent's role as "quite literally, the center of the child's emotional, social, and learning world" and as the central mutative agent in treatment (Shahmoon-Shanok, 2000, p. 334). Furthermore, Slade et al. (2005) highlight that because mentalization is a critical component of the child's overall growth, it is imperative that practitioners facilitate the development of parental RF.

By establishing a treatment framework built around a parent's strengths, her vast knowledge about her child, and her motivation to overcome the overpowering feelings of incompetence and helplessness that her child's behavior elicits, therapists can "create the context for the emergence of healthy, sustaining attachment relationships" (Slade, 2008, p. 220). From the outset of mentalization-based parent work, clinicians resist the tendency to function as the as the expert advice giver "who is going to either tell them [parents] what to do or point out their abject failures in parenting" (p. 221) by demonstrating that "the parent and therapist are collaborators in discovering who the child is and what he thinks and feels" (p. 221). In fact,

The [reflective parenting] work is far more *in vivo* than laid back, patient-does-most-of-the-talking-in-office type work for which most mental health professionals were prepared. ... It is more like life-space (Redl, 1966), community-based work (Shahmoon-Shanok, 2000), or kitchen-table psychotherapy (Fraiberg, Adelson, & Shapiro, 1975) in that it is not all talk and may, in fact, occur on-the-spot or in places of the parents' choosing. A lot of this work is preverbal, gestural, behavioral, interactive, and play-based, tailored to draw the person into relationship and communication. (Shahmoon-Shanok, 2000, p. 363)

Additionally, a parent benefits from consistent one-on-one time with the therapist so that she can regulate and feel recharged to function as the main mutative agent and "life-long teacher" (Shahmoon-Shanok, 2000, p. 335; Slade, 2008). Kalamanson (2009) suggests that ASD treatment should include a combination of child therapy, family/dyadic work, and individual collateral work. "No professional, no matter how deeply committed or involved, can substitute for the profound impact parents have on their child" (Shahmoon-Shanok, 2000, p. 335).

By constructing a holding environment whereby a therapist nonjudgmentally mirrors and represents a parent's mental states, the parent will develop greater affect regulation and a curiosity, wonder, and sensitivity towards her own and the child's mental states (Slade, 2008). In fact, creating an atmosphere whereby a parent feels understood, nurtured, and supported is more critical for a parent of a child with special needs, who struggles to engage and connect with her child. "It is the parent's capacity to tolerate and regulate her own internal, affective experience that allows her to tolerate and regulate these experiences in her child" (Shahmoon-Shanok, 2000; Slade, 2006, p. 641). The goal is to interact "with parents as we would like them to engage with their children" (Grienenberger, 2007, p. 674). In addition to becoming more open to the child's mental states, the practitioner's mentalization of the parent helps her cope with her intense negative affect states, her feelings of incompetence and inadequacy, and a loss of autonomy. In this way, the therapist's relationship with the parent functions in parallel with the parent's relationship to the child (Shahmoon-Shanok, 2000).

In a mentalization-based parenting model, practitioners also demonstrate an all-encompassing and relentless focus on the child's mental states (Slade, 2005). Slade (2008) states:

When I work with a parent, I am trying to create a context in which he or she can slowly shift from a physical to a reflective or mentalizing stance. That is, *I hold the child in mind for the parent as a mentalizing being*, as a person whose feelings and behaviors are inextricably interrelated, and whose feelings and behaviors are intextricably intertwined with theirs as a parent. Most importantly, I see the child's behavior as *meaningful*. ...

We talk about feelings, we link them to behavior, again and again, continuously underscoring the links between behavior and mental states ... We note the relations

between a parent's mental states and those of her child. ... We try to be accurate in our description of mental states. ... We understand what we don't know about another's internal experience. And we model curiosity and openness to discovering it—there are no easy answers, there is only a process of discovery. (pp. 202, 223-224)

Clinicians can also pace the course of the session so that the parent has time to watch, listen, and reflect on the littlest details of the child's behavior (Reynolds, 2003a, 2003b). Particularly important for parents of children with ASD whose behavior seems incomprehensible, obscure, and nonsensical, this approach helps a parent "penetrate the opacity and complexity of the child's experience" (Slade, 2006, p. 645). A parent who can imagine what drives his behavior and brings awareness to the ways in which she forecloses on his experience can better meet his needs. Careful observation begets wonder and curiosity, which begets open, flexible, and contingent responsiveness. Lastly, parents will feel competent and skilled when they attune to, understand, and skillfully interact with their child (Shahmoon-Shanok, 2000).

Taken together, the reflective parenting approaches modeling and observation strategies can fine-tune a parent's capacity to mentalize by making her more adept at reading the obscure and faint signals characteristic of a child on the spectrum. In fact, "reflective abilities are inherently linked to affect regulation. A mother's recognition of a link between her infant's mental states and behavior will make it possible for her to develop a mental model of his experience, and thus aid in his developing capacities for self regulation" (Slade, 2002). Inevitably, this will make the child more mentalizable for the parent because she will be capable of recognizing a wider range of his cues. Additionally, by being the subject of mentalization, the child will begin to recognize his own self-states and become capable of reading the mental states of others. Furthermore, rather than using directives or coercion, these techniques can strength a

parent's ability to implement a DIR/Floortime intervention program by following the child's lead, evaluating his FEDCs, and constructing appropriate scaffolding.

Conclusion. By demonstrating the complexity and bidirectionality of relationships, Slade's (2009) work on mentalization helps to contextualize many of the unique challenges of parenting a child with ASD that compromise her aptitude to promote growth, regardless of her reflective capacities. A therapist who understands these issues can better address them in the parent-child and practitioner-parent dyad and help a parent assert her central and mutative role. Additionally, the development of a parent's mentalization capacities enhances a practitioner's effectiveness in DIR/Floortime treatment because a parent will: 1) better understand the praxis of DIR/Floortime; 2) become a more effective interventionist; 3) be more skilled at containing her emotional experience and be able to use her own emotional experience to construct learning environments for her child; and 4) more likely enable the child's acquisition of advanced social emotional skills like mentalization and DIR/Floortime Milestone Seven, Eight, and Nine: Multicausal and Triangular Thinking, Gray-Area, Emotionally Differentiated Thinking, A Growing Sense of Self and Reflection on an Internal Standard.

States of Mind with Respect to Attachment, Mentalization and DIR/Floortime treatment for children with ASD

"Parents are not equally prepared to meet the psychological burdens of parenthood. As a result, there is a great range in the degree to which parent-child interactions become dominated by the emotional needs of the parents versus those of the child" (Grienenberger et al., 2005, p. 309). Parents enter treatment with various "degrees of relational and communicative capacities themselves and with very different internal and contextual resources" (Shahmoon-Shanok, 2000, p. 352). For example, in low-risk and nonclinical populations, Bakermans-Kranenburg and Van

IJzendoorn (2009) found that about 40% of parents are classified as Insecure with respect to attachment on the AAI. Parental stressors aside, a parent who is Insecure often has lower levels of RF and will therefore struggle to meet the physical, emotional, and psychological needs of their child (Fonagy et al., 1991; Grienenberger et al., 2005; Slade et al., 2005). She will also likely transmit maladaptive attachment patterns to her child

Given that the DIR/Floortime model centers on the activation of the attachment system to promote growth in children, clinicians must consider the ways in which the attachment experience shapes the dominant modes through which a parent parents (Fonagy et al., 1991; Main, 1991; Main et al., 1985; Slade et al, 2005). Individuals with tendencies towards Insecure states of mind with respect to attachment will struggle, without carefully constructed relationship-based support, to implement DIR/Floortime. From the outset of treatment, clinicians must assess the ways in which a parent mediates closeness, regulates affect, and manages stress in the face of arousal, and use this information to guide intervention and structure treatment. It is clear that practitioners cannot assume that parents are capable of effectively implementing DIR/Floortime.

By using mentalization and attachment theory to describe the dominant states of mind with respect to attachment through which a parent navigates relationships, this section outlines ways to assess a parent's relational capacities and to equip her with the necessary skills to become the primary mutative agent in her child's life. The first subsection explains how attachment trauma in early childhood weakens or even prevents the development of a mentalizing stance. Parents with these types of experiences will struggle to see behavior as meaningful as well as to remain open to her child's mental states. For this reason, she will likely be more ineffective at intervening in a DIR/Floortime treatment. The second subsection

describes the parenting characteristics of each of the various states of mind with respect to attachment and how they might function as an obstacle to the child's success in DIR/Floortime. Moreover, this subsection formulates methods to strengthen a parent's mentalization capacities and help her become an effective DIR/Floortime practitioner and the central growth-promoting agent in her child's life.

Insecure attachment, trauma, and mentalization. Fonagy (2008) explains that parents who have experienced childhood adversity and attachment trauma "often seem unable to understand how others think or feel" (p. 36). In fact, Insecure attachment significantly affects the development of imaginative and representational thinking (Dunn, Davies, O'Connor, & Sturgess, 2000) and affect regulation (Arntz, Appels, & Sieswerda, 2000). It also forces an individual to rely on the use of defense mechanisms to protect herself from the mind of self and other (Fonagy, 1991, 2008). Fonagy (2008) "observed an apparent lack of imagination about the mental world of others [in individuals categorized as having Insecure attachment], a naiveté or cluelessness about what others think or feel that can verge on confusion, and corresponding absence of insight into the way the traumatized person's own mind works" (p. 36). Even through adulthood, attachment trauma thwarts the formation of the ability to interpret behavior of self and other, as well as to mentalize.

Children living in Insecure or nonreflective¹² attachment contexts learn from a very early age to protectively constrain mentalization about her caregiver's threatening and/or unpredictable behavior as a defense against the dangerous environment (Fonagy, 2008). The processes that inhibit mentalization eventually generalize to "all subsequent intimate relationships" (p. 36), most notably the capacity to parent. As a parent, this individual struggles to empathize,

¹² This dissertation uses Insecure and nonreflective synonymously because a lack of parental reflectiveness characterizes the Insecure attachment context.

understand, and attune to her child because the intensity and centrality of her own thoughts, feelings, intentions, and desires consume her states of mind. As Main et al. (1985) stated, Insecure states restrict or even "distort the types of information that may be made available" (p. 94) in the attachment context. In fact, "the immediacy of memory experience in the nonmentalizing mode of psychic equivalence has the capacity to re-traumatize again and again. This further inhibits and makes the experience ever more real" (Fonagy, 2008, pp. 36-37).

This brief description of how an Insecure attachment environment constructs barriers to the development and utilization of mentalization demonstrates the multiple ways that this type of parent may struggle to harness foundational developmental processes in her child. In a DIR/Floortime program, these parents will probably struggle with each of the central intervention components of DIR/Floortime for a child with ASD: 1) the regulation of affect; 2) "openness to the state of mind of the child" (Lyons-Ruth, 1999, p. 583), his explicit and implicit communication, and individual differences; 3) engagement and expansion of imaginative and symbolic play; 4) following the child's lead; and lastly 5) meeting the child at his developmental level.

A child with ASD living under these circumstances is disadvantaged well beyond the scope of his diagnosis. On the one hand, the parent's attachment trauma impedes on the development of robust functioning of core social-emotional processes (FEDCs) already compromised by the child's neurobiology. On the other hand, the parent will likely have a closed and/or rigid representation of her child, which makes treatment more challenging.

States of mind with respect to attachment. As a means of addressing this dilemma, the following subsection outlines the different states of mind with respect to attachment (i.e. Secure-Autonomous, Insecure-Dismissing, Insecure-Preoccupied, Insecure-Unresolved). These specific

categories denote the spectrum from reflective (high RF) to nonreflective (low RF) states of mind by representing the dominant modes through which an individual regulates affect and manages stress in the face of arousal (Grienenberger, 2007). Furthermore, this subsection also identifies the specific ways each of these states of mind may effect DIR/Floortime treatment. Given these limitations, the current author suggests methods to mobilize reflective capacities for each state of mind so that a parent can develop an "openness to the state of mind of the child" (Lyons-Ruth, 1999, p. 583), and respond contingently to her child's behavior (Grienenberger, 2007; Reynolds, 2003a, 2003b; Slade, 2009).

Secure-Autonomous state of mind with respect to attachment. Parents who predominantly exhibit a Secure-Autonomous state of mind have the highest levels of RF. They have greatest capacity to construct a safe environment built on contingency and a balanced awareness of the child's need to seek closeness and nurturance as well as explore independently (Fonagy et al., 1991; Grienenberger et al., 2005; Main et al., 1985). As skilled mentalizers, these parents can make meaning out of their child's behavior by reading the underlying thoughts, feelings, and intentions. Essentially, security denotes the capacity to flexibly attend and explicitly represent a wide range of stimuli, with "little to restrict the deployment of their attention" (Wallin, 2007, p. 3; Main et al. 1985). Grienenberger et al. (2005) discovered that these parents effectively regulate their own distress and had fewer disruptions in their attempt to modulate their child's affect than the Insecure subtypes (see Figures 4 and 5).

Primed to construct a Secure attachment context, the parent operating in the Secure-Autonomous state of mind will have the greatest potential to effectively implement DIR/Floortime (Main et al., 1985). As a participant-observer open to her child's state of mind, she can follow his lead, bring him into shared experience, and provide developmentally and

sensory/biologically appropriate scaffolding. Because she can read his underlying mental states, she can contingently respond to multiple aspects of the child's experience (i.e. implicit and explicit). Moreover, even with her readiness and skill, Slade et al. (2005) remind practitioners that, "the most reflective mothers are not reflective all of the time, and that disequilibrium and dysregulation are normal occurrences even in individuals who are high in reflective functioning" (p. 293). During these times, a parent will likely exhibit traits of one of the Insecure/nonreflective states of mind. The following portion of this subsection will help clinicians recognize the emergence of unconscious relational patterns during times of dysregulation, even for Secure-Autonomous parents, as well as specific techniques to enable the parent to function in more optimal growth-promoting states of arousal.

Insecure/nonreflective states of mind with respect to attachment. In general, a parent functioning in a nonreflective state of mind has a limited capacity to attune, connect, and respond to her infant (Fonagy et al., 1991; Grienenberger et al., 2005; Slade et al., 2005). These unconscious, defensive, and self-preserving states denote limitations in an individual's ability to attend to and represent non-threatening stimuli, and therefore low levels of mentalization (Main et al., 1987; Wallin, 2007). These parents tend to easily lose psychological equilibrium, especially around her child's distress because "any and all challenges to such states of mind—including aspects of their own infants' behaviors—constituted threats from which these parents protected themselves through rules that dictated selective attention or misattuned responsiveness" (Wallin, 2007, p. 38). These states have the potential to terrify and/or traumatize a child.

Fearon et al. (2006) claim that nonreflective interactions have a cyclical and iterative nature. For example, when an intense negative emotion arises in a child, a parent with low levels

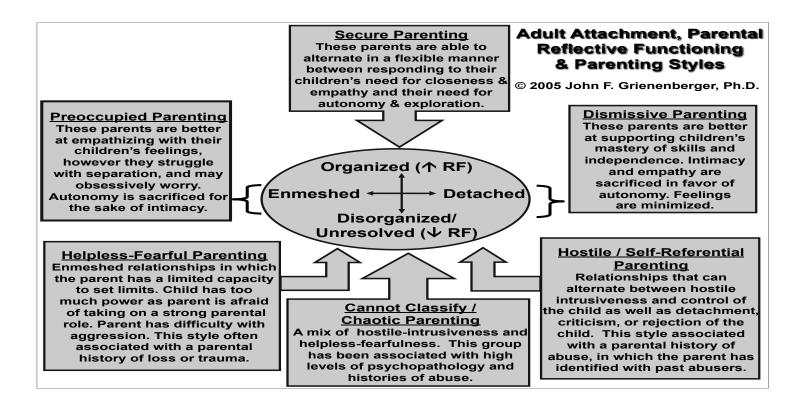


Figure 5. Adult attachment, parental reflective functioning & parenting styles. This figure describes attachment related parenting patterns and their relationship to RF and is used for training purposes at the Center for Reflective Parenting. Adapted from "Adult Attachment, Parental Reflective Functioning & Parenting Styles," J. Grienenberger, personal communication, 2015.

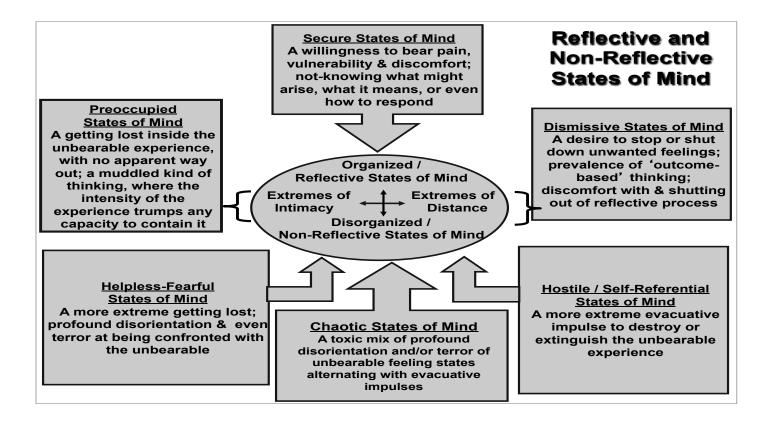


Figure 6. Reflective and non-reflective states of mind. This figure describes the states of mind with respect to attachment and is used for training purposes at the Center for Reflective Parenting. Adapted from "Reflective and Non-Reflective States of Mind," J. Grienenberger, personal communication, 2015.

of RF will struggle to comprehend, attune, and/or contingently respond to the child's mentalstate. Lacking an adequate range of parenting tools, she will be forced to either control or succumb to her child's behavior. This not only further perpetuates the original affect state, as well as imprints the child's mind with a "frightening, undermining, frustrating, distressing or coercive" representation of the parent and minds in general (D. Reynolds, personal communication, November 6, 2014).

For the Insecure/nonreflective state of mind, practitioners must strive to "turn cycles of non-mentalizing interactions into cycles of reflective interaction" (D. Reynolds, personal communication, November 6, 2014). In a reflective parenting model, the parent-clinician bond functions as the primary vehicle through which a parent feels safe, held, and contained as well as develops greater reflective capacities. The parent-clinician relationship experientially teaches a parent to relate and connect with the unique needs of her child and assume the role as the central change agent in the child's emotional, relational, and educative life. Furthermore, a mentalizing therapeutic relationship will engender wonder and openness about what thoughts, feelings, intentions, and desires motivate behavior. These parenting skills will also develop a child's aptitude for mentalization and the identification and regulation of affect.

The remaining portion of this subsection describes the three Insecure/nonreflective states of mind: Dismissing, Preoccupied, and Unresolved. It explains specific characteristics of each type and methods to support parents who predominantly operate in this mode. Lastly, this part of the subsection elaborates on the specific ways that each nonreflective state may exacerbate ASD symptoms and impede on the implementation of DIR/Floortime treatment.

Parent work from a reflective parenting perspective is about helping her "come to know the child *through the therapist's eyes, and his or her particular vision of the child*" (Slade, 2008,

p. 228). This approach engages and enhances parental RF. Even though reflective parenting approach addresses emotionally rich topics and has the capacity to alter habituated interactional patterns, it is not individual or family therapy for the parent. It also does not replace individual therapy, which may be a necessary requirement for some parents to effectively implement DIR/Floortime.

Dismissing state of mind with respect to attachment. The Dismissing state of mind prevents emotional closeness and preserves distance from others (Wallin, 2007). These parents tend to reduce the importance of feelings and the impact of attachment bonds by preferring cognition, rationalization, and intellectualization (Main et al., 1985; Main, 1991, 1995, 2000; Siegel, 2012). As means of foreclosing undesired feeling states, this parent typically functions in an authoritarian and controlling manner, marked by a disapproval of distress and negative affect (Grienenberger, 2007, p. 219). Disinclined to recognize feelings of self and other, particularly of her child, she assumes a task orientation and prematurely expects him to operate autonomously.

Additionally, this Dismissing state represents a hyper-self-reliance and distrust of and hostility towards others (Grienenberger et al., 2005; Wallin, 2007). While operating in this mode, a parent tends to believe that no one can help her. Despite contrary evidence, this parent adopts an "all is well" mentality (Wallin, 2007, p. 211). The overreliance on thinking and rationalization, coupled with the exaggerated self-worth, preserves her distance from others.

For parents functioning in the Dismissing state of mind, "mentalization is often more limited ... around issues of dependency, intimacy, and the experience of distress, depression, shame, or uncertainty" (Grienenberger, 2007, p. 673). By blocking out affect, this state categorically overlooks the underlying meaning of behavior and restricts the implementation and

reception of empathy. A caregiver who continually evades reflection in treatment by demanding didactic behavioral parenting strategies is likely functioning in this state of mind

Dismissing state of mind in DIR/Floortime. The clinical presentation of a parent in a Dismissing state of mind poses several obvious challenges to a DIR/Floortime treatment. The first obstacle for working with this type of parent is that she structures experience to prevent closeness. This undermines the central goal of DIR/Floortime: the facilitation of emotional connectedness and shared experience for a child with ASD. Primarily attentive to the preservation of her own state of mind, a Dismissing parent will really struggle to both recognize the importance of closeness as a mutative agent as well as to bring the child into shared experience.

The beginning of a DIR/Floortime treatment may be particularly challenging for this parent because the interventions tend to focus on the development of emotional dependency and the co-regulation of sensory and affective experience. A parent may believe that this is counterintuitive to her experience and attempt to terminate treatment. Regardless, practitioners must work tirelessly to aid her to overcome this dilemma because shared experience, connection, and reciprocity with an attachment figure promote robust functioning of the foundational milestones. Clinicians can start by assessing, monitoring, and working with the ways that a parent manages emotional proximity.

Second, as a means of preventing dysregulation, the Dismissing state of mind disavows feeling states, which according to Greenspan and Wieder (2006) is the time when a child is most motivated and ready to learn. By deemphasizing affect, a parent will struggle to follow the child's lead and meet him at his developmental level. A parent may push a therapist to prescribe behavior modification techniques and/or show dissatisfaction in the slow pace of treatment. She

may even show hostility towards the practitioner. Acting as though she wants the clinician to "fix" her child, she may resist partnership and collaboration. At face value, this parent may appear better suited for a behavioral approach. However, a mentalization-based approach to DIR/Floortime will build the emotional structures needed for a parent to participate in meaningful and intimate relationships, as well as help her child acquire the foundational social-emotional capacities.

Thirdly, the child with ASD's incomprehensible, aggravating, and dysregulated behavior will likely challenge and destabilize the parent with a Dismissing state of mind's hyper-self-reliant and self-aggrandizing mode of operating. On the one hand, unable to control the child's behavior by authoritarian means, the parent may become hostile towards both the child and therapist (Grienenberger et al., 2005; Wallin, 2007). This not only delays or prevents social-emotional growth but also puts the child at risk of trauma. On the other hand, choosing to adhere to her "all is well" (Wallin, 2007, p. 211) perspective, a parent may inaccurately report or minimize the child's symptomology and underutilize services and support. With a pervasive distrust of others, this parent may be unwilling to face that she requires professional help. Her inflated self-worth and self-reliance, coupled with her minimizing tendency, is a double-edged sword that will likely be a central feature in treatment with this type of parent.

Intervening with a parent with a dismissing state of mind. From a reflective parenting perspective, the central goal for this type of parent is to increase her capacity to contingently respond to her child's emotional needs and bring consciousness to the feelings and meaning underpinning behavior (D. Reynolds, personal communication, November 6, 2014). By continually bringing attention to and representing the connection between behavior and mental

states, modeling a reflective stance, the clinician can impact a parent's aptitude to create a Secure attachment environment and effectively participate in DIR/Floortime treatment (Slade, 2006).

Furthermore, the Dismissing parent needs a strength-based practitioner who can demonstrate empathy, understanding, and an interest in her inner world (Shahmoon-Shanok, 2000). For this reason, Shahmoon-Shanok (2000) asserts, "avoidant parents should be offered regular contacts in their home, office, coffee shop, or on the phone—anything that works for them" (p. 352). Carving out time for this type of parent is key.

According to Wallin (2007), this type of parent may benefit from "an authentic experession of the therapist's subjectivity... to communicate our experience in a form the patient can make use of" (i.e. at their developmental/emotional level) (p. 215). An active and non-neutral therapeutic style can combat her unconscious limitation of thoughts, feelings, and memories and help stimulate feelings in the parent. As Wallin states, "since the defensive strategy of Dismissing patients compromises their ability to empathize and, in turn, blocks their awareness of their impact on others, our subjective experience can be exceptionally vital resource when it is divulged to them" (p. 213). Over time, a clinician can identify and explicate a parent's vulnerability underlying her self-aggrandizing and hyper-self-reliance.

As the parent begins to make room for the affective dimension of her own as well as her child's experience, her task-and-action-oriented style will serve as valuable assets to treatment. Successful interactions with her child will likely increase her motivation to function as the primary mutative agent in her child's life.

Preoccupied state of mind with respect to attachment. Although more attentive to the emotional life of the child, a parent with a tendency towards a Preoccupied state of mind will exhibit an overabundance of attention to emotional experience in addition to attachment

relationships in general (Grienenberger, 2007). Masking a parent's capacity to acknowledge the independence and separateness of her child's mental states, this type of parent will tend to participate in enmeshed relationships where she is overly dependent on others, particularly her partner, parents, and children. She too has low levels of RF.

Lacking psychological stability and effective affect regulation skills, past experiences encroach on the present, causing a parent with a Preoccupied state of mind to feel overwhelmed and flooded (Main et al., 1985; Main, 1991, 1995, 2000; Siegel, 2012; Wallin, 2007). This disrupts thinking processes. For this reason Fosha (2003) stated, "those who are preoccupied can *feel* ..., but can't deal" (as cited in Wallin, 2007, p. 224).

Wallin (2007) highlights that a parent in the Preoccupied state of mind prevents feeling detached, separate, and isolated by over-focusing on being close to others. When threatened (overwhelmed) she loses her capacity mentalize. In order protect herself, she pursues closeness through ineffective and problematic feeling expression (Wallin, 2007). This is best understood as a hyperactivating strategy. In extreme cases, she may act helpless and/or overly fearful to bring others closer. Her solution is, in fact, her greatest problem.

Preoccupied state of mind in DIR/Floortime. Even though she aptitude to recognize the value of affect and the efficacy of relationship-based intervention (e.g. facilitation of connection and shared experience, use of affect), like the Dismissing state of mind, the Preoccupied state functions as a barrier to DIR/Floortime treatment with a child with ASD. A parent's hyper-focus on closeness and proximity coupled with her uncontained affect will overwhelm and dysregulate a child with ASD who already struggles to participate in relationships in the most basic ways. On the one hand, if left unaddressed, this dynamic will maintain the child's reliance on using self-stimulatory, avoidant, and distancing patterns as a means of modulating his self-states. On

the other hand, this parent may feel particularly insulted by the child's social avoidance, distance, and object-oriented attention, which in effect intensify her uncontained affect states and ineffective methods of fostering closeness. Furthermore, this dynamic perpetuates the problem for both individuals.

In DIR/Floortime treatment, if a parent cannot regulate her own affect states, she will be unable to do this for her child who desperately needs an adult to help offset the dysregulation caused by his neurobiology. In this type of treatment, co-regulation functions as a bedrock for intervention because dysregulation disrupts shared experience, the primary mobilizer of growth at each of the foundational milestones. If the caregiver cannot facilitate regulation in the child, he will not develop this capacity for him self, further impeding on his acquisition of essential developmental milestones.

Defending against perceived threats to closeness, a parent in a Preoccupied state of mind will also struggle to cope with the child's growing need for independence and autonomy. As children progress past Milestones One and Two (Shared Attention and Regulation, and Engagement and Relating), interventions focus on the development of self-agency, autonomy, and generation of ideas (i.e. Milestones Three, Four, Five, Six: Purposeful Emotional Interactions, Long Chains of Back-and-Forth Emotional Signaling and Shared Problem-Solving, Creating Ideas, and Building Bridges Between Ideas). A parent may not recognize the importance of developing these skills and may squelch them as they emerge.

As practitioners create a safe container for the parent's affective experience, a parent with a tendency towards the Preoccupied state may serve as a great asset to treatment. She will easily recognize the validity and power of relationship-based intervention and identify her own feeling states to mobilize core affective developmental processes in her child. As her child grows, she

may be well equipped to enter into pretend play and help the child expand on symbolic and representational thinking.

Intervening with a parent with a preoccupied state of mind. When working with parents operating with a Preoccupied state of mind, clinicians can help them recognize and create space for the child's independence, autonomy, separateness, and task mastery. According to Grienenberger (2007), therapists must first regulate, "contain and organize [parent's] affect" (p. 674), a necessary precondition for reflective functioning and the ability to co-regulate. While holding a parent's mind in slow-paced reflection, practitioners can parse through, digest, and organize her feelings. This will bring coherence to a parent's experience so that she can develop appropriate ways to express feeling states to her child with ASD. It will also create a distinction between her mind and the child's mind.

Along these lines, Wallin (2007) states:

Largely lacking a reflective or mentalizing self, these patients live in a subjective world whose character is defined by physical rather than psychological realities, actions rather than words or thoughts, bodies rather than minds. Consequently, we need to demonstrate that we are on the patient's side, that we understand, and that we can cope. With such patients, in a variety of ways, it is initially more what we *do* than what we say, more what we *show* them than what we tell them, that has impact. (p. 239)

For this reason, meaningful and direct emotional contact is a central change agent in the parenttherapist bond.

Wallin (2007) warns "not to confuse the surface with the reality that lies beneath it, not to mistake the patient's defensive strategy for the difficulties it was designed to deal with" (Wallin, 2007, p. 227). For example, the helplessness pattern present in a parent with a Preoccupied state

of mind functions as a hyperactivating strategy for closeness and does not reflect the desire for advice, input, or coaching. By intervening in nondidactic, reflective and experiential ways, clinicians can identify the meaning of the parent's behaviors and better facilitate emotional contact. A word of caution, a directive practitioner must monitor her instructions/advice to prevent collusion.

Unresolved state of mind with respect to attachment. Typically a product of early abuse and trauma, a parent functioning with an Unresolved state of mind has the lowest levels of RF and operates in a disoriented and terrifying manner (Grienenberger, 2007; Grienenberger et al., 2005). She has a tendency to discharge unbearable affect states and impulses onto others, exhibiting highly intrusive and/or helpless-terrified patterns. For this reason, her child often experiences her as terrified, terrifying, or a combination of both (Wallin, 2007).

Because attachment trauma momentarily suspends the hippocampus, decontextualizes the information, and impacts memory storage, the actual experience remains inaccessible to conscious retrieval or verbal reflection. For this reason, this parent re-experiences trauma without a conscious awareness of the event. In effect, dissociation, unpredictable hostility, fear, splitting, and dichotomous and disorganized thinking characterize her parenting behavior. Clinicians often diagnose this parent with disorders like Borderline Personality Disorder, Post Traumatic Stress Disorder, and Dissociative Identity Disorder (Dozier, Stovall, & Albus 1999; Hesse, 1999; Solomon & George, 1999; Liotti, 1995; Van Ijzendoorn, Schuengel, & Bakerman-Kranenburg, 1999; Wallin, 2007).

Unresolved state of mind in DIR/Floortime. From a treatment perspective, a parent operating with an Unresolved state of mind is likely the most challenging parent with whom to work. Her dysregulated affect states perpetuate the child with ASD's dysregulation and make

him more inclined to rely on the perseverative, self-stimulatory sensory seeking or avoidant behaviors to manage the overwhelming biological and environmental stimuli. Furthermore, her discharge of unbearable affect states may traumatize the child, complicate his symptom presentation and make him more enigmatic and hard to mentalize.

More than the other groups of caregivers, a parent with an Unresolved state of mind will focus on protecting her own fragile state of mind (Wallin, 2007. Clinicians may also find that it is difficult to build therapeutic rapport with her, which is a necessary precondition for treatment efficacy. These parents may target intense and unwarranted anger at the practitioner, which may cause the therapist to feel that the situation is hopeless and psychically withdraw.

Given that this population has the lowest levels of RF, the therapist will likely struggle to help the parent recognize the child's basic needs, let alone mental states. The parent's relational inadequacies will undermine the therapeutic work.

Intervening with a parent with an unresolved state of mind. When working with parents with an Unresolved state of mind, practitioners must first center their interventions on altering inaccurate perceptions and problematic responses to her child's behaviors, which have the potential of (re)traumatizing the child (D. Reynolds, personal communication, November 6, 2014). Wallin (2007) emphasizes that therapists can help a parent "who [is] thoroughly embedded in experience—and thus inclined to simply equate their every feeling and belief with reality—to catch glimpses of a world that may be at odds with those feelings and beliefs" (Wallin, 2007, p. 246). Paramount for the growth of the parent-child bond, the therapist must establish a safe, attuned, strong, and reparable parent-clinician relationship. This will also counter inevitable ruptures. By co-regulating a parent's affect states, through pacing the intensity, speed, and rhythm of the parent-child and parent-clinician interactions, practitioners

can foster self-regulation, which will promote co-regulation of the parent-child bond and alter a parent's reactive and habitual responses.

Moreover, when a parent's unprocessed feelings arise, clinicians can ask reflective questions to pull for mentalization capacities (D. Reynolds, personal communication, November 6, 2014). If possible, therapists can help connect these feelings to past traumatic experience (Wallin, 2007). Over time, this will help her to recognize her role in relationships, loosen her relational expectations, recognize multiple perspectives, and think reflectively.

Lastly, more than with any other group of parents with Insecure/nonreflective states of mind, therapists must set clear and defined therapeutic limits and boundaries, especially around the structure of the session and the frame of the treatment. This will serve as a safe container for everyone. Clinicians must also attend to their countertransference and seek supervision.

Conclusion

Because the attachment bond has a pervasive impact across the lifespan, the clinical application of attachment theory has a primary role in the treatment of children with ASD. The attachment categories are one of the most effective ways to evaluate a parent's readiness to meet the social, emotional, and cognitive needs of the developing child. A practitioner who attends to a parent's states of mind with respect to attachment as carefully as the practitioner creates experiences for the child that mobilize development will magnify the effect of DIR/Floortime treatment. Furthermore, by enhancing a parent's mentalization skills, a caregiver will be capable of more accurately deriving meaning from and responding contingently to the child's behavior. This will generally increase the quality and quantity of learning interactions for the child with ASD so that DIR/Floortime can, in fact, happen "all the time everywhere" (Greenspan & Wieder, 2006, p. 186). The parent will also more gracefully function as the central organizing

figure and mutative agent in her child's life. "No professional, no matter how deeply committed or involved, can substitute for the profound impact parents have on their child" (Shahmoon-Shanok, 2000, p. 335).

Conclusion of Comprehensive Review of the Literature

Greenspan and Wieder's (1998, 2006) DIR/Floortime and Fonagy et al.'s (2002) work on mentalization represent two of the most influential theoretical approaches to infant and child psychodynamic psychotherapy today. Although used to treat different target populations (Fonagy & Bateman, 2006; Greenspan & Wieder, 1998, 2006) and emphasizing different aspects of treatment (i.e. children in DIR/Floortime and parents in mentalization-based therapy) (Grienenberger, 2007; Reynolds, 2003a, 2003b; Slade, 2005), these models: 1) share a foundation in attachment theory; 2) see relationships as the primary mutative agent in therapy (Fonagy et al., 2002; Shahmoon-Shanok, 2000); 3) emphasize the profound impact the attachment bond has on constructing both foundational and advanced social-emotional capacities, most notably mentalization (Fonagy, 2008; Greenspan & Wieder, 1998, 2006; and lastly, 4) conceptualize development along a similar evidence-based trajectory, while highlighting the similar critical milestones necessary for mentalization.

These overlapping points dispel the myth that DIR/Floortime is simply a treatment for children with developmental disorders. Rather, they affirm the wider applicability of DIR/Floortime to a range of clients struggling with a variety of conditions, as well as the innovative and comprehensive nature of the model. Additionally, this comparison supports the ways in which DIR/Floortime mobilizes the developmental processes necessary for a meaningful relational experience.

Furthermore, Fonagy et al.'s (2002) work on mentalization exposes several critical issues

in the parent-child with ASD relationship, which denote potential obstacles to the parent's use of mentalization in addition to the implementation of DIR/Floortime. For example, parents of children with ASD report: 1) high levels of stress; 2) prolonged intense negative affect; and 3) feeling a lack of competence and a loss of autonomy (Abbeduto et al., 2004; Baker-Ericzen, Brookman-Frazee, & Stahmer, 2005; Brobst, Clopton, & Hendrick, 2009; Slade, 20009). Furthermore, especially prior to treatment, the child's lack of reciprocity and profound social avoidance actually disrupt a parent's ability to mentalize her child's experience and provide the key ingredients for social-emotional development.

Moreover, regardless of these above-mentioned factors, mentalization and attachment research demonstrates that, based on a parent's attachment experience, parents vary significantly in their capacity to meet the social-emotional needs of her child (Grienenberger et al., 2005; Main et al., 1985). Parents with Insecure attachment, and therefore low levels of RF, will struggle to effectively promote her child's growth in DIR/Floortime (Fonagy, 2008; Grienenberger et al., 2005; Slade et al., 2005). Furthermore, given the abundant psychological resources it takes to effectively implement DIR/Floortime for a child with ASD, therapists cannot assume that parents will understand the value of the model or be capable of mobilizing a child with ASD's core developmental processes.

For these reasons, this dissertation asserts that the core components of mentalization-based parent work must represent a significant aspect of DIR/Floortime treatment. While also holding the child in mind, practitioners must carefully attend to both the parent's states mind with respect to attachment, as well as her mentalizing capacities, so that she can better function as the primary mutative agent in her child's life (Slade, 2006). By working in this way, clinicians cannot only expand a parent's openness to the mental states of the child, but also

enable her to cope with many of the unique and grave burdens of parenting a child with ASD. There is no doubt that one of the most effective ways to support a child is to help a parent (Shahmoon-Shanok, 2000; Slade, Sadler, & Mayes, 2007).

Taken as a whole, clinicians who adopt these principles into their DIR/Floortime practice will: 1) become more effective practitioners; 2) be capable of using DIR/Floortime with a wider range of children and families; 3) better utilize a parent's role as a central mutative agent in her child with ASD's life; and 4) more likely help a child with ASD overcome neurodevelopmental obstacles.

CHAPTER III

Methodology

Introduction

This dissertation represents some of the author's ideas that emerged from two years worth of research and clinical practice in DIR/Floortime and attachment-based psychotherapy. The following chapter outlines the author's research procedures, target audience, and field consultant interviews/procedures for this comprehensive literature review.

Procedures

The author of this comprehensive literature review conducted his research mainly through books and articles relevant to the topics of DIR/Floortime, mentalization, early childhood intervention, child development, ASD, and stress in parents of children with ASD. The author used PsychInfo, suggested reading lists on relevant websites, and reference sections of foundational books and articles to find the necessary references and material for the project.

The author started his research by reading four foundational books that served as the springboard for many of the ideas for this dissertation. These books were Greenspan and Wieder's (1998, 2006) *The Child with Special Needs: Encouraging Intellectual and Emotional Growth* and *Engaging Autism: Using the Floortime Approach to Help Children Relate,*Communicate and Think, Fonagy et al.'s (2002) Affect Regulation, Mentalization, and the Development of the Self, and Wallin's (2007) Attachment in Psychotherapy.

Building on these readings, the author utilized Alliant International University's library database to find DIR/Floortime, mentalization, and attachment theory books and articles, in order to broaden his perspective and collect more information about the history of DIR/Floortime, the clinical practice of mentalization, and foundational ideas in attachment theory. For example,

Greenspan (1987), Greenspan, DeGangi, and Wieder, (2001), Fonagy (2008), Slade (2008), and Main (1991, 1995) represent some of the important books/chapters culled from these searches.

Additionally, the author conducted PsychoInfo searches through Alliant International University's library website about research studies on mentalization, the cultivation of parental reflective function, attachment classification, infant development, and on stress in parenting a child with ASD. For example, Slade (2005), Slade (2009), Slade, Sadler, and Mayes, (2007), Grienenberger et al. (2005), and Grienenberger (2007) represent a few of the critical articles found in these searches.

Furthermore, the author utilized suggested reading lists from the websites like the Center for Reflective Parenting and the Interdisciplinary Council on Development and Learning to find important articles and resources on each of the respective theories. The author discovered valuable statistics on ASD on the Center for Disease Control's website.

Alongside this academic research, the author also simultaneously participated in a yearlong advanced clinical practicum with Andrea Davis, PhD, an Expert Training Leader through Interdisciplinary Council on Development and Learning (highest level of DIR/Floortime training) at the Greenhouse Therapy Center in Pasadena, California. During this practicum, the author conducted intensive (two-to-three times per week) home-based DIR/Floortime treatment as well as co-facilitated groups for children with ASD and other developmental disorders. He participated in weekly group supervision and DIR/Floortime-focused didactic training, led by Michelle Harwell, LMFT, who is also an Expert Training Leader through Interdisciplinary Council on Development and Learning. The author presented cases monthly, reviewed video recorded sessions, learned to assess clients' individual differences, as well as FEDCs. This experience provided a necessary framework to understand the practice of DIR/Floortime, as well

as the central components of the model: development, individual differences, relationships, following a child's lead, etc.

In addition to the DIR/Floortime emphasis, the author received individual supervision and didactic training in the clinical application of attachment theory from Andrea Davis, PhD. To deepen this approach, the author also sought clinical training in mentalization and reflective parenting by participating in Reynold's Mindful Parenting Group training (level 1), a model focused on enhancing parental reflective function through attachment-and-mentalization-based interventions. Moreover, the author participated in monthly Reflective Care Practices strategizing workgroup at the Center for Reflective Parenting.

Target Audience

The target audience of this dissertation is practitioners working with families with a child with ASD, most specifically in DIR/Floortime. The reason for this is that the content focuses on DIR/Floortime theory, the unique features of the parent-child with ASD relationship, and common experiences of parents of children with ASD. Additionally, clinicians working from a mentalization perspective may also benefit from this work because it addresses a population about whom little has been written from this orientation. Lastly, clinicians working with children may find that this dissertation deepens their understanding of child developmental theory, the importance of the parent-child bond, and how to utilize attachment relationships to mobilize core developmental processes.

Field Consultants

The author conducted five nine-question interviews with experts (field consultants) in the area of DIR/Floortime and Mentalization-based theory who place a specific emphasis on parent work in child psychotherapy. The purpose of these interviews is to:

(a) facilitate students developing connections with professionals and experts, particularly those in applied clinical and community settings, who are actively working in the student respective areas of interest; (b) provide a mechanism by which students can supplement the available published literature with current and cutting edge clinical insights and perspectives that may not yet be in print so as to fill in the gaps in the existing literature; (c) have students' work evaluated by experts in the area; (d) further students' skills in initiating and developing professional relationships with colleagues and mentors; and (e) facilitate the students' formation of professional networks that may benefit their career development. (Alliant International University-Los Angeles, personal communication, September, 2013)

Prior to the interviews, the author sent out a lengthy email asking each of the field consultants to participate in an hour-long interview about the defining characteristics of their approach to parent work, as well as observations about the parent-child with ASD relationship. Additionally, the author stated that these interviews were a part of his dissertation requirement, and briefly described his project. Upon the field consultant agreeing to participate, the author emailed the list of the questions, as well as the informed consent form for each of the field consultants to sign and return. The field consultants interviewed were: 1) John Grienenberger, PhD; 2) Debra Brause, PsyD; 3) Ester Hess, PhD; 4) Michelle Harwell, LMFT; and 5) Diane Reynolds, LMFT.

Michelle Harwell has the highest level of DIR/Floortime certification as an Expert

Training Leader through the Interdisciplinary Council on Development and Learning and
becoming a psychoanalyst with an emphasis on an attachment and a neurorelational framework.

Harwell was a DIR/Floortime supervisor of the current author and has greatly influenced his

thinking about parent work in this model. Ester Hess is the director of the Center for the Developing Mind and also has the highest level of DIR/Floortime certification as an Expert Training Leader through the Interdisciplinary Council on Development and Learning. The author of this dissertation met with her two times before interviewing her and was inspired by her unique way of working with children and parents. John Grienenberger is the founder of the Reflective Parenting Program, which is based on a mentalization-based parenting model. Grienenberger's research on parental reflective function and his creation of the Reflective Parenting Program has been integral to the development of this dissertation. The author also met with him a few times prior to the interview. Diane Reynolds is the founder of Mindful Parenting Groups and Executive Director of the Center for Reflective Parenting. The current author took Diane Reynolds's introductory course in Mindful Parenting at the Center for Reflective Parenting in Los Angeles. Additionally, the author worked with her in a monthly strategy group of Reflective Care Practices at the Center for Reflective Parenting. Lastly, Debra Brause leads mentalization-based parent support groups for parents of children with ASD and is also a mother of a child with ASD who has participated in a comprehensive DIR/Floortime treatment. These practitioners represent some of the foremost experts in DIR/Floortime and mentalization-based parenting in Los Angeles.

Rather than taking a more representational sample of clinicians practicing DIR/Floortime, the author carefully chose individuals who emphasize parent work as a central component of their practice. The reason for this was to broaden the author's perspective about ways to work with parents of children with ASD. Even though the mentalization-based practitioners did not have expertise in ASD treatment, their broad range of experiences offered unique insight into this population.

CHAPTER IV

Professional Input and Feedback

Field Consultant Interview Results

This chapter summarizes the responses to the field consultant interviews introduced in Chapter III. The author organizes this chapter by interview question. It is important to note that either due to time constraints or a lack of expertise in the area, certain questions were omitted from the specific interviews and thus not included in these summaries.

Question 1

In your clinical practice, what are the defining characteristics of your approach to parent work? What do you emphasize?

In general, all of the field consultants accentuated parent work as a central feature of their clinical practice with children (J. Grienenberger, personal communication, February 6, 2015; D. Brause, personal communication, February 9, 2015; E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015; D. Reynolds, personal communication, March 2, 2015). M. Harwell sums up the group's responses with the statement, "I emphasize that this treatment is as much about the parents as it is for the child." Even though the responses centered on helping parents recognize the multidimensionality of the child's experience, there were certain distinct differences between the DIR/Floortime and mentalization-based practitioners.

In parent work, the DIR/Floortime clinicians attempted to make evident the child's unique profile by highlighting the child's individual differences, level of development, and how these components shape his relational capacities (E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015). E. Hess explained:

My job is to help parents understand that when you approach a child you are not really focusing so much on the chronological age but on the developmental age. ... [as well as] the underlying individual neurological differences that are perhaps contributing the developmental lag.

She also reported teaching parents how use their relationship with their child "clinically ... to create the potential for a social and emotional bond that ultimately supports those differences and moves the child and family up developmentally."

Elaborating on the individual differences component of DIR/Floortime, M. Harwell asserted, "What I try to do is really help parents to contextualize their child ... the influence of DIR being the individual differences." She attempts to accentuate the uniqueness of the child in order to "move things out of the one-dimensional space of concrete interpretation of behaviors to a more textured and three dimensional space." These descriptions represent some of the foundational principles of DIR/Floortime explored in depth in Chapter II.

The practitioners trained in mentalization centered their attention on tailoring interventions to the parent's mentalization capacities and attachment style (J. Grienenberger, personal communication, February 6, 2015; D. Brause, personal communication, February 9, 2015). They attempted to make meaning of the child's behavior by aiding parents to recognize the child's underlying mental states and history. J. Grienenberger explained that he tries to identify the gaps in a parent's mentalizing capacities (i.e. implicit versus explicit, self versus other, and thinking versus feeling), so that he can experientially develop this aptitude more fully. Likewise, he pinpoints the parent's state of mind with respect to attachment. For example, a parent with a Preoccupied states of mind may be skilled at accessing a child's emotions but

struggle to set limits, and/or promote autonomy. He explained that the task for this parent is to help her move beyond helping a child access his emotions (See chapter II).

Similarly, D. Reynolds focused on engendering a reflective process for the parent, meaning that she helps a parent rethink the child's behavior and/or her representations of the child (personal communication, March 2, 2015). She emphasized data collection and open child observation, as well as parental support and strengths identification. She said that this enables parents to see their child's behavior as a reflection of mental states.

Question 2

How do you incorporate parent work into child/adolescent psychotherapy (i.e. collateral appointments, dyadic treatment, etc.)?

As a group, these field consultants equated the value of parent work to direct intervention with the child (J. Grienenberger, personal communication, February 6, 2015; D. Brause, personal communication, February 9, 2015; E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015; D. Reynolds, personal communication, March 2, 2015). From the beginning of treatment, these DIR/Floortime clinicians depicted working closely with parents and have each developed ways to assess the child's and parent's relational capacities through observation of parent-child dyads, in-depth parent interviews, and a careful analysis of the child's and parent's individual differences (E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015). By understanding the parent's developmental, attachment, and trauma history, as well as the quality of the parent subsystem, they find greater treatment efficacy because they are able to intervene at multiple levels and prepare parents to better meet the child's needs. During treatment, both E. Hess and M. Harwell have weekly parent collateral sessions, where they

review video footage of parent-child interaction in session, reflect on the parent's attachment history as it relates to parenting in the present, and explore life and marital issues, and educational questions. They both provide a space for parents to learn about themselves. Additionally, when in parent-child sessions, they provide live parent coaching, help parents identify ways to support a child's individual differences as well as meet him at his developmental level. E. Hess stated that she tries to make DIR/Floortime a lifestyle for the families with whom she works.

In addition to the reflective component of the Mindful Parenting Groups, discussed in Chapter II, D. Reynolds has cultivated a very unique way of doing short-term working with parents and families by incorporating many of the above-mentioned ideas from Question 1 (personal communication, March 2, 2015). She described using a consultation model, where she meets with families 3-5 times. During these office-and-home-based meetings, she encourages "data collection" and helps parents identify their strengths and weaknesses by "rethinking, reframing, and making meaning of" the child's behaviors and the parent's representations of the child. Contrary to her training in long-term psychodynamic psychotherapy, she has found this model to be direct, effective, and useful given her responsibilities as a teacher, trainer, and director of the Center for Reflective Parenting. Lastly, she "leaves the ball in their [parents'] court" to continue to observe and reflect on their child's behavior, and seek her services down the road when necessary.

Question 3

What aspects of parent work are most effective in DIR/Floortime or Mentalization-based treatment?

The group responded in two distinct ways: philosophical and practical. Both J.

Grienenberger and E. Hess and took a more philosophical stance to answer this question

(personal communication February 6, 2015; personal communication February 9, 2015). E. Hess summed up this perspective by explaining the importance of the parent-child bond in promoting the child's growth. From her perspective, DIR/Floortime's deep understanding of this phenomenon is the most effective aspect of parent work. From a reflective parenting perspective, J. Grienenberger stated that the:

philosophical stance of a mentalization approach is one that is very different from a more didactic model, which seems to be so prevalent in parent work... The philosophical stance is that we all are genetically and probably from an evolutionary basis imbued with a capacity to be a caregiver to be able to help protect and birth a human mind in a child. And so, what you are trying to do is find that in a parent and clear away all the blocks and lived impediments that come from trauma, misguided ideas, and rather than teach someone how to become a more effective parent, you are trying to free that capacity and help them through the process of discovery and emotional growth to do something that we have within our genetic code. People find this stance towards the parent really empowering. It helps to undermine shame and guilt, which is an impediment to being more actualized in the parenting role. It's liberating and inherently non-judgmental. You are approaching the parent as the expert. ... with their relationship with their child. I think this stance helps parents work through that stuff. ... [Additionally, the therapist's] relationship with the parent's mind and the ways that you hold their mind in mind is a parallel process that facilitated something that can happen between the parent and child. (personal communication, February 6, 2015)

From each of their perspectives, deepening the parent-child bond is the most central and critical aspect of treatment.

Both M. Harwell and D. Brause take a more practical approach to answering this question (personal communication, February 12, 2015; personal communication, February 9, 2015). D. Brause suggested that when the practice becomes too theoretical it becomes very hard to implement. These practitioners identified the value of parent coaching, modeling, and direct intervention as central to DIR/Floortime treatment. Additionally, by creating a more specific understanding of the child through looking and thinking about the child's development and individual differences in the moment, therapists can better enable parents to celebrate gains and pinpoint growing edges. Lastly, D. Brause highlighted that the support, recognition, and positive praise built into DIR/Floortime have a profound impact.

Question 4

As a DIR/Floortime or Mentalization-based practitioner, what are the defining techniques you use in your practice? What modalities do you integrate (if any) to make your practice more complete?

The field consultants have integrated various theoretical approaches in order to provide more effective DIR/Floortime or mentalization-based services. The DIR/Floortime practitioners have both found ways to deepen their understanding of the neurobiological component of DIR/Floortime. For example, in addition to pursuing psychoanalytic training to better understand how early childhood shapes development, M. Harwell draws heavily from Lillas and Turnbull's (2009) neurorelational framework (M. Harwell, personal communication, February 12, 2015). She claimed that this approach has helped her better recognize a child's individual

differences and create more specificity in her interventions so that she can work at the client's growing edges.

E. Hess established an all-in-one service center with occupational, speech and language, educational, and physical therapists, as well as mental health clinicians to meet the social, emotional, sensory, physical and educational needs of families with a child with ASD with whom she works (personal communication, February 9, 2015). She reported working very closely with her interdisciplinary team to gain a more comprehensive picture of her clients.

Also, many of the services at her center are outside the scope of training as a psychologist.

J. Grienenberger reflected that he integrates traditional play therapy techniques into his clinical practice with children because pretend play is a critical developmental experience for all children (personal communication, February 6, 2015). J. Grienenberger utilizes Fonagy et al.'s (2002) mentalization theory (i.e. psychic equivalence, pretense, and mentalizing mode) to meet the children at their developmental level so that he can help elaborate on relevant themes and link them to the client's intrapsychic and interpsychic life (see Chapter II for an in-depth description of Fonagy et al.'s developmental framework). He also uses a mentalization approach in his parent work (i.e. collateral, observation and reflection on play therapy sessions, dyadic work). Lastly, J. Grienenberger disclosed implementing some of John Gottman's couples therapy techniques as a way of helping parents better understand their child.

Question 5

What are some of the gaps in DIR/Floortime or mentalization theory in clinical practice?

Each of the field consultants acknowledged gaps within their respective models.

The DIR/Floortime clinicians did not agree on the gaps within the approach. M. Harwell and D.

Brause focused their discussion on the intrapsychic and interpersonal experiences of the parents

(personal communication, February 12, 2015; personal communication, February 9, 2015). M. Harwell claimed the overall lack of attention to family legacy, parent's early life experience, and attachment, trauma history, as well as her individual neurobiological differences, places limitations on mobilizing a parent's capacity to function as the central change agent in the child's life. She asserted that clinicians need to pay more attention to the tender and vulnerable spots of a parent's process.

D. Brause reflected that DIR/Floortime theory does not pay close enough attention to the actual lived experiences of parenting a child with ASD (personal communication, February 9, 2015). Although she recognized the grave necessity of intensive child-centered intervention, she sees problems in making DIR/Floortime a lifestyle that can be practiced all the time. By making every moment for the child clinically relevant (i.e. an opportunity for social-emotional growth), parents feel overwhelmed and stressed. In a relationship already fraught with strain, this can increase the challenge of interacting with a child in a spontaneous and natural way.

Additionally, D. Brause highlighted that DIR/Floortime does not adequately address ways to reduce behaviors that impact a parent's capacity to relate to her child. She reflected on the bidirectional nature of relationships and that a parent cannot provide her child with what they need if she is frequently being pushed to her edges. In this way, DIR/Floortime does not adequately address the notions of mutual influence and co-creation in the parent-child relationship.

E. Hess mentioned that the early DIR/Floortime theory did not adequately make evident ways to work with individual differences in a comprehensive and effective manner (personal communication, February 9, 2015). She declared this was one of the reasons she formed her own interdisciplinary treatment center.

J. Grienenberger and D. Reynolds recognized that the mentalization theory and reflective parenting models, in general, could place more emphasis on how the body (i.e. sensory experience, neurobiological differences) influences relational capacities (personal communication, February 6, 2015; personal communication, March 2, 2015). However, D. Reynolds stated that this is a gap within the mental health field and not limited to a mentalization approach. J. Grienenberger refuted the critique of mentalization theory that it is too intellectual/cerebral and claimed that this belief was a misinterpretation of the model. Lastly, he reflected that the lack of clear behavioral interventions for parents with a combination of low levels of RF and a hostile parenting style is an area that needs more development.

Similarly, D. Reynolds explained that reflective models are a "slow drip process" that "offers lasting transformation that goes beyond immediate behavior change (personal communication March 2, 2015)". She reflected that parents with severe intergenerational trauma often "do not know how to be in a relationship" and require both the reflective work as well as more concrete interventions that teach strategies. However, the mentalization models do not provide this type of parent training. She said that in order to make lasting intergenerational change, a mentalization-based approach is necessary.

Question 6

Are there populations for whom you think a DIR/Floortime or Mentalization-based approach is not appropriate?

Although there was a general consensus in the wide applicability of their respective models, the field consultants raised several important and variant issues. M. Harwell suggested that SES can mediate the appropriateness of DIR/Floortime for a family (personal communication, February 12, 2015). She stated that the model is predicated on abundant parent

involvement and not all parents are capable of providing this, especially if they have little job flexibility and need to work for the basic survival of the family. Both M. Harwell and D. Brause agreed that parents will particularly struggle in DIR/Floortime if they: 1) have higher levels of anxiety about the child's performance; 2) are rigid and concrete thinkers, 3) are narcissists, and/or 4) have not had much experience with spontaneous and free play (i.e. due to cultural or familial reasons) (personal communication, February 12, 2015; personal communication, February 9, 2015).

E. Hess asserted that the efficacy of treatment is contingent on the therapist's level of skill. She reflected that DIR/Floortime's emphasis on following the child's lead and meeting him at his developmental level is universal and applicable (E. Hess, personal communication, February 9, 2015). Furthermore, she rejected the notion that DIR/Floortime is best suited for high-functioning children with ASD.

From a mentalization perspective, J. Grienenberger dismissed the idea that a reflective parenting approach may be inappropriate for certain populations (J. Grienenberger, personal communication, February, 6 2015). Rather, he suggested that individual parents may not be ready to participate in the model because the Reflective Parenting Program does not recommend specific behavioral practices. He stated that parents with very low levels of RF and a hostile/abusive parenting style will benefit from treatment focused on altering terrifying caregiving behaviors prior to starting a reflective approach.

Question 7

Are there are cultural considerations when working from a DIR/Floortime or Mentalization perspective?

There were various responses, and little consensus, to the question of cultural considerations in DIR/Floortime and mentalization theory. As a consumer of DIR/Floortime services, D. Brause explained that there is a certain "jargon" used to describe the treatment, which she finds inaccessible and lacking user friendliness (personal communication, February 9, 2015). She recounted that it obstructs some of the basic principles of DIR/Floortime (following a child's lead, meeting the child at his developmental level, and expanding relational capacities, etc.). D. Brause also described that even with her training as a psychologist, Greenspan and Wieder's (2006) *Engaging Autism* was a roadblock for her and she imagined that other parents may have a similar experience, especially those parents who are less comfortable with the child's diagnosis.

Both M. Harwell and E. Hess suggested that parents with whom spontaneity and playfulness were not a part of the cultural fabric might particularly struggle with DIR/Floortime (personal communication, February 9, 2015; personal communication, February 13, 2015; personal communication, February 9, 2015). M. Harwell explained that parents looking for a structured or explanatory approach or insisting on targeting problematic behaviors may struggle with DIR/Floortime's lack of didactic training and/or view that behavior modification is not necessarily the central focus of treatment. She also highlights that DIR/Floortime requires heavy parent involvement, which may not be possible for parents with low SES due to a variety of practical reasons.

J. Grienenberger emphasized the success of his Reflective Parenting Program with a variety of cultures and contexts (personal communication, February 6, 2015). For example, he stated that the model has been used with individuals with both low and high socioeconomic status, multiple ethnicities and sexual orientations, substance abusing and teen parents, as well as

in the foster care system, community mental health centers, and a psychoanalytic center for a middle-to-upper middle class clientele. He believes the program is adaptable because it does not recommend culture-specific parenting techniques. J. Grienenberger stressed that his approach helps parents become more understanding of their child's mind and feel strong, effective and competent within their value system. That said, he reflected that culture is one of the main factors that influences the way in which parents integrate the model.

Elaborating on these points, D. Reynolds described how culture can mediate both a clinician's and parent's state of mind (personal communication, March 2, 2015). By culture she means everything from the culture of a family or institution to broader notions mediated by SES, race, and ethnicity. For this reason, she emphasized "data collection" and "sitting in uncertainty." She noted that clinicians can adopt certain states of mind that reflect the clients with whom they work. She said that it is critical for her to identify these institutional, culturally based beliefs when she prepares mentalization-based trainings for organizations. Lastly, D. Reynolds believes that a mentalization approach helps practitioners remain open to the complexities of culture and how these issues manifest in the institutions and families with whom they work.

Question 8

What are the unique characteristics of the parent-child with Autism Spectrum Disorder relationship that you keep in mind when working with these children and families?

As a group, the field consultants recognized that having a child with ASD profoundly impacts a parent's experience of parenthood (J. Grienenberger, personal communication, February 6, 2015; D. Brause, personal communication, February 9, 2015; E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015; D. Reynolds, personal communication, March 3, 2015). Referring to of Rebecca Shahmoon-

Shanok's work, Harwell stated, "a parent needs a child, as much as a child needs a parent." A child with ASD's lack of reciprocity and eye contact makes it very difficult for a parent to relate to her child. Essentially, these "parents experience a lot less relational feedback." D. Reynolds reminded that these children think a lot less about other's experiences. Echoing these points, D. Brause described that these children can be mysterious and very hard to understand.

E. Hess asserted that these parents of a child with ASD are "always on" (personal communication, February 9, 2015). She elaborated that this child's immense social, emotional, physical, and medical needs force a parent to be aware of her child "at all moments." D. Reynolds states that these children require a therapeutic level of parenting because the child's neurobiological profile has "less tolerance for error" (personal communication, March 2, 2015). Building on this point, she said that a "good enough" parent is not enough for the child. A parent, most often the mother, functions in multiple roles simultaneously (i.e. parent, therapist, advocate, etc.). Depleted of emotional resources, she struggles to attend the other children in her family in the ways that she would like. For this reason, they often report high levels of parental stress, elevated agitation, anxiety, and depression. Moreover, D. Brause reflected that the excessive attention to clinically relevant material (i.e. DIR/Floortime all the time and anywhere) can take the naturalness and spontaneity out of the parent-child interaction.

Question 9

What are the primary challenges parents of children with Autism Spectrum Disorder face?

In addition to the challenges due to the low levels of "relational feedback" (M. Harwell, personal communication, February 12, 2015) in the parent-child dyad and the all-encompassing nature of parenting a child with ASD, the field consultants identified several additional issues.

The interviewees agreed with Shahmoon-Shanok's (2000) idea that ASD is a relationship

disorder that alters the entire family system (J. Grienenberger, personal communication, February 6, 2015; D. Brause, personal communication, February 9, 2015; E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015). Most notably, these parents struggle to form a community and often experience social isolation. D. Brause explained that children with ASD participate in such time intensive therapy programs that there is really no time for play dates with other children or families. When asked if she does play dates, she says:

No, because every day we have three therapies after school and at six o'clock, we can't have a play date. ... You can't win with the amount of stuff that needs to be done. There are a lot of challenges with overtaxing them [the children]... knowing how important therapies are but not treating your child like a machine. They need to be a kid. (D.

Brause, personal communication, February 9, 2015)

She asserted that when/if there is time to have a play date or a social event, parents of children with ASD cannot just bring their child to anyone's home because these children are rigid and often do not relate well to other children. Neurotypical children also do not always know how to engage with them, which just ends up perpetuating the child's social isolation. For these reasons, she mentioned that she envies neurotypical families' social flexibility.

Parents are also overtaxed and drained of physical and emotional resources (D. Brause, personal communication, February 9, 2015). Parents are taught to function as around the clock therapists, who must "always be on," in order to meet the child's abundant social, emotional, physical, and medical needs. D. Reynolds has noticed that these parents often experience depression, anxiety, and isolation (personal communication, March 2, 2015). She described a

few parents that had become "frozen with worry" about the how the child will function in the future.

Both M. Harwell and E. Hess identified these parents on-going and unprocessed grief as a central feature of parenting a child with ASD (E. Hess, personal communication, February 9, 2015; M. Harwell, personal communication, February 13, 2015). In addition to grief, many parents worry about their child's future, and whether they will they remain dependent the rest of their lives and who will care for them when the parents die (D. Brause, personal communication, February 9, 2015).

Furthermore, D. Brause also mentioned a heated debate within the ASD community around issues of neurodiversity. Some parents take the stand that their child needs to be accepted for who he is and not based on what is expected of neurotypical children. Other parents focus on integration into more mainstream environment. She believed that the position a parent takes on this issue might influence the type of stress they experience.

Summary of Field Consultant Interviews

The author of this dissertation asked five field consultants nine questions about their work as DIR/Floortime or mentalization-based practitioners. As a group, there was unanimous agreement that parent work functions as a central mutative agent in child psychotherapy and ASD treatment. In fact, the field consultants suggested that parent work is as important as direct intervention with children. However, their theoretical orientations seemed to define what they emphasized in the parent work. The DIR/Floortime practitioners predominantly focused on the child's individual neurobiological differences and developmental age to enhance specificity and promote a multidimensional perspective about the child. The mentalization-based field

consultants centered on expanding a parent's capacity to understand the child's mental states and challenges (i.e. trauma, misguided beliefs, stress, etc.) that obstruct this capacity.

Chapter V

Discussion and Recommendations

Introduction

The following chapter consists of: 1) contributions and implications; 2) limitations and constraints; 3) suggestions for future research; and lastly 4) personal reflections.

Contributions and Implications

To review the contributions discussed in Chapter II, this dissertation utilizes Fonagy et al.'s (2002) mentalization theory to better understand the parent-child with ASD relationship in DIR/Floortime. The author identified that: 1) DIR/Floortime theory and treatment is useful for a wide range of individuals not limited to children with ASD; 2) the integration of Greenspan and Wieder's (2006) advanced milestones are similar to Fonagy et al.'s mentalization concept; 3) both models emphasize the mutative qualities of the parent-child relationship, as well as highlight foundational milestones necessary for robust social-emotional functioning; 4) ASD's symptomology creates obstacles to a parent's ability to mentalize her child's experience and construct optimal learning environments (i.e. lack of reciprocity, intense negative affect, stress, etc.); 5) states of mind with respect to attachment influence a parent's capacity to implement DIR/Floortime, especially if the parent has a history of trauma; 6) parent work must be a central component of DIR/Floortime treatment because parents are the primary mutative agents in their child's life; and lastly 7) the cultivation of parental RF must be a foundational aspect of DIR/Floortime. See Chapter II for an explanation of these points.

Limitations and Constraints

The author recognizes three noteworthy limitations. Given the symptomology and behavior problems associated with children with ASD and how these increase parental stress

(Estes et al., 2009; Estes et al., 2013; Lecavalier et al., 2006; Osborne & Reed, 2009; Schieve et al., 2007), this dissertation does not focus on reducing a child's ASD symptomology and/or behavioral problems directly. For this reason, certain practitioners may not initially find this project as helpful as a more directive and behaviorally oriented approach to working with this population. In fact, unlike other ASD and early childhood treatment models (Lovaas, 1987), both DIR/Floortime and mentalization theory deemphasize the role of behavior modification, preferring to focus attention on the mobilization of core developmental processes (Greenspan & Wieder, 2006; Slade, 2005). Clinicians who recognize the value of this theoretical perspective may be more inclined to implement the suggestions made in this dissertation.

The second limitation is that the author's treatment recommendations place a heavy burden on the therapist to facilitate growth across the whole system and not just with the child. By blurring the line between parent work and individual psychotherapy, the author encourages clinicians to participate in these family relationships in a more nuanced way. Even DIR/Floortime practitioners trained in mental health may struggle to do this type of work. In cases where there is intergenerational trauma, clinicians may also be more likely to experience vicarious trauma.

The third limitation is that the author does not address ways to work parents that exhibit neurobiological individual differences or ASD symptomology. Parent work for this population would be an essential component for the child with ASD's treatment. The author believes that many of the same strategies addressed throughout the dissertation could be used with these parents with a greater emphasis placed on sensory regulation.

Suggestions for Future Research

This dissertation used existing research to make links between DIR/Floortime and mentalization theory, in order to emphasize the role of parent work in ASD treatment. The next step for this current research would be to measure these theoretical concepts in qualitative studies. By using the Parent Development Interview (Aber, Slade, Berger, Bregsi, & Kaplan, 1985; Slade, Aber, Bregsi, Berger, & Kaplan, 2004) and the Adult Attachment Interview (George, Kaplan & Main, 1984), researchers could identify the impact a parent's RF capacity, as well as her predominant state of mind with respect to attachment, has on DIR/Floortime treatment.

The PDI (Aber, Slade, Berger, Bregsi, & Kaplan, 1985; Slade, Aber, Bregsi, Berger, & Kaplan, 2004) could be used to better understand the role parental mentalization has on DIR/Floortime treatment for children with ASD. For example, the PDI could be administered pre-and-post treatment, along with specific parental mentalization interventions for the parents, to see whether the increase in a parent's RF impacts the child's acquisition of FEDCs. The PDI could also be used to find out whether DIR/Floortime, in itself, actually increases parental RF and whether there is a correlation between a child with ASD's acquisition of FEDCs and a parent's RF. Based on Slade et al.'s (2005) and Grienenberger et al.'s (2005) research, the author predicts that the increase in a parent's capacity to mentalize will correlate with significant social-emotional developmental gains in DIR/Floortime treatment for the child. The author also hypothesizes that DIR/Floortime, as it is currently practiced, increases a parent's RF.

The AAI (George, Kaplan & Main, 1984) could be utilized to measure a parent's state of mind with respect to attachment to find out whether DIR/Floortime treatment outcome varies between parental attachment classifications. The AAI could also be used help to measure

whether parent work from an attachment/mentalization perspective (as mentioned in Chapter II) can mediate the impact of a parent's Insecure/Nonreflective state of mind on the child's social-emotional growth (FEDCs). Additionally, DIR/Floortime practitioners could implement a version of this measure so that clinicians can create more specificity in their interventions with parents. For example, by identifying that a parent predominantly operates in a Preoccupied state of mind, therapists can better activate the parent's thinking mind, and promote the child's autonomy and independence (see Chapter II). The author predicts that a parent's attachment significantly impacts the child with ASD's potential for growth in DIR/Floortime.

Personal Reflections

From the outset of this project, the author sought clinical training in the areas of DIR/Floortime and mentalization. By learning to apply these theories into practice, the author gained a deeper understanding of each of these approaches, as well as the experiences of families with a child with ASD. The author found that mentalization theory contextualized aspects of these parents' experiences (i.e. stress, difficulty connecting with their child, and bidirectionality of the parent-child relationship), especially in DIR/Floortime treatment. In particular, it elucidated the complexity and bidirectional influence of the parent-child with ASD relationship and how the child's neurobiology can create barriers to the parent's implementation of growth-promoting interactions.

Additionally, the careful exploration and integration of these two models helped the author focus on the parents' needs, so that the parents could be the primary mutative agent in the child's life. This both empowered the children, and created deepened the parents' experience of parenthood. There is no doubt that parents are in the best position to facilitate a child's development. In this way, the therapist's potential influence increases exponentially. To

conclude, conducting academic research while simultaneously implementing the theories in clinical practice made for a demanding and rigorous dissertation project.

References

- Abbeduto, L., Seltzer, M., Shattuck, P., Krauss, M., Orsmond, G., & Murphey, M. (2004). Stress and coping in mothers of youths with down syndrome, autism, and fragile x syndrome.

 *American Journal on Mental Retardation, 109, 237–254.
- Aber, J., Slade, A., Berger, B., Bresgi, I., & Kaplan, M. (1985). *The Parent development interview*. Unpublished manuscript. The City College and Graduate Center, The City University of New York, New York, NY.
- Achenbach, T. M. (1991). *Integrative guide to the 1991 cbcl/4-18, ysr, and trf profiles*. Burlington, VT: University of Vermont.
- Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Arntz, A., Appels, C., & Sieswerda, S. (2000). Hypervigilance in borderline disorder: A test with the emotional stroop paradigm. *Journal of Personality Disorders*, *14*(4), 366-373.
- Astington, J. W., & Gopnik, A. (1991). Theoretical explanations of children's understanding of the mind. *British Journal of Developmental Psychology*, 9 (1), 7-31. doi: 10.1111/j.2044-835X.1991.tb00859.x
- Baker-Ericzen M. J., Brookman-Frazee L., & Stahmer A. (2005) Stress levels and adaptability in parents of toddlers with and without autism spectrum disorders.

 *Research and Practice for Persons with Severe Disabilities, 30, 194-204.
- Bakermans-Kranenburg, M. J. & Van IJzendoorn, M.H. (2009). The first 10,000 adult attachment interviews: Distributions of adult attachment representations in non-clinical

- and clinical groups. *Attachment & Human Development*, *11*, 223-263. doi:10.1080/14616730902814762.
- Baldwin, D. A., Baird, J. A., Saylor, M. M., & Clark, M. A. (1999). *Infants detect structure in human action: A first step toward understanding others' intentions?* Unpublished manuscript, University of Oregon, Eugene, OR.
- Baron-Cohen, S. (1995). *Mindblindness: An essay on autism and theory of mind*. Boston, MA: MIT Press/Bradford Books.
- Baron-Cohen, S., Leslie, A.M., & Frith, U. (1985). Does the autistic child have a 'theory of mind'? *Cognition*, *21*, 37–46.
- Benjamin, J. (1990). Recognition and destruction: An outline of intersubjectivity. In S.

 Mitchel & L. Aron (Eds.), *Relational psychoanalysis: The emergence of a tradition*, (pp. 181-210). Hillsdale, NJ: The Analytic Press.
- Bateman, A. W., & Fonagy, P. (2004). *Psychotherapy for borderline personality disorders:*Mentalization based treatment. Oxford, UK: Oxford University Press.
- Bateman, A. W. & Fonagy, P. (2010). Mentalization based treatment for borderline personality disorder. *World Psychiatry*, *9*(1), 11-15.
- Bergman, P. & Escalona, S. (1949). Unusual sensitivities in very young children. *The Psychoanalytic Study of the Child*, 3/4, 333.
- Björgvinsson T., & Hart, J. (2006). Cognitive behavior therapy and mentalizing. In J. G. Allen & P. Fonagy (Eds.), *Handbook of mentalization-based treatment*, (pp.157-170). New York, NY: John Wiley.

- Boston Change Process Study Group, (2002). Explicating the implicit: The local level and the microprocess of change in the analytic situation. *International Journal of Psychoanalysis*, 83,1051–1062.
- Boston Change Process Study Group. (2005). The something more than interpretation revisited: Sloppiness and co-creativity in the psychoanalytic encounter. *Journal of the American Psychoanalytic Association*, *53*, 693–729.
- Bowlby, J. (1940). The influence of early environment in the development of neurosis and neurotic character. *International Journal of Psychoanalysis*, *21*, 154-78.
- Bowlby, J. (1951). Maternal care and mental health. Geneva, CH: World Health Organization.
- Bowlby, J. (1958). The nature of the child's tie to its mother. *International Journal of Psychoanalysis*. 39, 350-373.
- Bowlby, J. (1969). Attachment and loss: Attachment (Vol. 1). London, UK: Hogarth Press.
- Bowlby, J. (1973). Attachment and loss: Separation (Vol. 2). London, UK: Hogarth Press.
- Bowlby, J. (1980). *Attachment and loss: Sadness and depression* (Vol. 3). London, UK: Hogarth Press.
- Boyd, B. (2002). Examining the relationship between stress and lack of social support in mothers of children with autism. *Focus on Autism Other Developmental Disabilities*, *17*(4), 208-215. doi:10.1177/10883576020170040301
- Brazelton, T.B. (2006). *Touchpoints: Your child's emotional and behavioral development*. Reading, MA: Perseus Books.
- Brazelton, T. B., Koslowski, B., & Main, M. (1974). The origins of reciprocity: The early mother-infant interaction. In M. Lewis & L. Rosenblum (Eds.), *The effect of the infant on its caregiver*. New York: John Wiley & Sons.

- Brobst, J. B., Clopton, J. R., & Hendrick, S. S. (2009). Parenting children with autism spectrum disorders: The couple's relationship. *Focus on Autism and Other Developmental Disabilities*, *24*(1), 38-49.
- Burlingham, D. & Freud, A. (1942). Young children in wartime: A year's work in a residential war nursery. London, UK: Allen & Unwin.
- Brown, J. R., Deonelan-McCall, N., & Dunn, J (1996). Why talk about mental states? The significance of children's conversations with friends, siblings, and mothers. *Child Development*, 67(3), 836-49.
- Cameron, H. S. (1919). The nervous child. London, UK: Oxford Medical Publications.
- Calkins, S.D. & Johnson, M.C. (1998). Toddler regulation of distress to frustrating events:

 Temperamental and maternal correlates. *Infant Behavior and Development*, 21, 379-395.
- Carter, S. L., Osofsky, J. D., & Hann, D. M. (1991). Speaking for the baby: A therapeutic intervention with adolescent mothers and their infants. *Infant Mental Health Journal*, 12(4), 291–301.
- Center for Disease Control and Prevention (2007). Prevalence of autism spectrum disorders—autism and developmental disabilities monitoring network, 6 sites, United States, 2000.

 Morbidity and Weekly Report, 63(SS01), 1-11.
- Center for Disease Control and Prevention (2014). Prevalence of autism spectrum disorder among children aged 8 years: Autism and developmental disabilities monitoring network, 11 sites, United states, 2010. *Morbidity and Weekly Report, 63(SS02)*, 1-21.
- Choi-Kain, L. W., & Gunderson, J. G. (2008). Mentalization: Ontology, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry*, 169, 1127-1135.

- Corkum, V., & Moore, C. (1995). Development of joint visual attention in infants. In C. Moore & P. Dunham (Eds.), *Joint attention: Its origin and role in development* (pp. 61-83), Hillsdale, NJ: Erlbaum.
- Cravioto J. & Delicardie E. (1972). Environmental correlates of severe clinical malnutrition and language development in survivors from kwashiorkor or marasmus. In Pan American Health Organization (Ed.) *Nutrition, the nervous system and behavior* (pp. 73-94), Washington, DC: Pan American Health Organization.
- Csibra, G. & Gergely, G. (1998). The teleological origins of mentalistic action explanations: A developmental hypothesis. *Developmental Science*, *1*(2), 255-299. doi: 10.1111/1467-7687.00039
- Dabrowska, A. & Pisula, E. (2010). Parenting stress and coping styles in mothers and fathers of pre-school children with autism and down syndrome. *Journal of Intellectual Disability Research*, *54*(3), 266-280. doi: 10.1111/j.1365-2788.2010.01258.x.
- Dillenburger, K., Keenan, M., Gallagher, S., & McElhinney, M. (2004). Parent education and home-based behavior analytic intervention: An examination of parents' perceptions of outcome. *Journal of Intellectual & Developmental Disability*, 29(2), 119-130. doi:10.1080/13668250410001709476
- Dozier, M., Stovall, K. C., & Albus, K. (1999). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment theory and research* (pp. 497-519). New York, NY: Guilford.
- Dunn, J. (1998). *The beginnings of social understanding*. Cambridge, MA: Harvard University Press.

- Dunn, J. & Cutting, A. L. (1999). Understanding others, and individual differences in friendship interactions in young children. *Social Development*, 8(2), 201–219. doi: 10.1111/1467-9507.00091
- Dunn, J., Davies, L. C., O'Connor, T. G., & Sturgess, W. (2000). Family lives and friendships:

 The perspectives of children in step-, single-parent, and nonstep families. *Journal of Family Psychology*, 15(2), 272-287. http://dx.doi.org/10.1037/0893-3200.15.2.272
- Erikson, E. H. (1950). *Childhood and Society*. New York, NY: W. W. Norton & Company. Escalona, S. (1968). *The roots of individuality*. Chicago, IL: Aldine.
- Estes, A., Munson, J., Dawson, G., Koehler, E., Zhou X-H., Abbott, R. (2009). Parenting stress and psychological functioning among mothers of preschool children with autism and developmental delay. *Autism*, *13*(4), 375–387.
- Estes, A., Olson, E., Sullivan, K., Greenson, J., Winter, J., Dawson, G., & Munson, J. (2013).

 Parenting-related stress and psychological distress in mothers of toddlers with autism spectrum disorders. *Brain Development*, *35*(2), 133-138.
- Fearon, P., Target, M., Sargent, J., Williams, L., McGregor, J., Bleiberg, E., & Fonagy, P. (2006). Short-term mentalization and relational therapy (SMART): An integrative family therapy for children and adolescents. In J. Allen & P. Fonagy (Eds.), *The handbook of mentalization based treatment* (pp. 201–222). Chichester, UK: John Wiley & Sons.
- Feder, J. (2010). 7 ate 9: The upper FEDL levels [PowerPoint slides]. Retrieved from Circle Stretch website: http://circlestretch.com/dir-training-materials/icdl-socal talk-7-ate-9/
- Feldman, R., Greenbaum, C. & Yirmiya, N. (1999). Mother-infant affect synchrony as an antecedent of the emergence of self-control. *Developmental Psychology*, *35*(5), 223-231.

- Flavell, J. H. (1999). Development of intuitions about the controllability of different mental states. *Cognitive Development*, *14*, 133-146.
- Flavell, J. H., Flavell, E. R., Green, F. L., & Moses, L. J. (1990). Young children's understanding of fact beliefs versus value beliefs. *Child Development*, *61*, 915-928.
- Flavell, J. H., Green, F. L., & Flavell, E. R. (1986). Development of knowledge about the appearance-reality distinction. *Monographs of the Society for Research in Child Development*, 51(1), 1-71.
- Flavell, J. H. & Miller, P. H. (1998). Social cognition. In D. Kuhn & R. Siegler (Eds.). *Handbook of child psychology: Cognition, perception, and language development* (Vol. 2) (pp. 851-898). New York, NY: Wiley.
- Freud, A. (1965). Normality and pathology in childhood: Assessments of development. New York, NY: International University Press.
- Freud, S. (1905). *Theory essays on the theory of sexuality (*Standard ed). London, UK: Hogarth Press.
- Freud. S. (1911). Formulations of the two principals of mental functioning. London, UK: Hogarth Press.
- Freud, S. (1940). An outline of psychoanalysis. W.W. Norton & Co.
- Fonagy, P. (1989). On tolerating mental states: Theory of mind in borderline patients. *Bulletin of the Anna Freud Centre*, *12*, 91-115.
- Fonagy, P. (1991). Thinking about thinking: Some clinical and theoretical considerations in the treatment of a borderline patient. *International Journal of Psychoanalysis*, 72, 1-18.

- Fonagy, P. (2008). Mentalization-focused approach to social development. In F.N. Busch (Ed.), Mentalization: Theoretical considerations, research findings, and clinical implications (pp. 3-56). New York, NY: Analytic Press, Taylor & Francis Group.
- Fonagy, P. & Bateman, A. (2006). Mechanism of change in mentalisation based treatment of borderline personality disorder. *Journal of Clinical Psychology*, 62(4), 411-430.
- Fonagy, P., Gergely, G., Jurist, E., & Target, M. (2002). Affect regulation, mentalization, and the development of the self. New York, NY: Other Books.
- Fonagy, P. Moran, G. & Target, M. (1993). Aggression and the psychological self. *International Journal of Psychoanalysis*, 74, 741-485.
- Fonagy, P., Steele, H., Moran, G., Steele, M., & Higgitt, A. (1991a). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, *13*, 200–217.
- Fonagy, P., Steele, H., & Steele, M. (1991b). Maternal representations of attachment during pregnancy predict the organization of infant–mother attachment at one year of age. *Child Development*, 62, 891–905.
- Fonagy, P., Steele, M., Steele, H., Moran, G., & Higgit, A. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, 12(3), 201-218.
- Fonagy, P., Steele, M., Steele, H., Leigh, T., Kennedy, R., Mattoon, G., & Target, M (1995).

 Attachment, the reflective self, and borderline states: The predictive specificity of the adult attachment interview and pathological emotional development. In S. Goldberg, R. Muir & J. Kerr (Eds.), *Attachment theory: social, developmental, and clinical perspectives* (pp. 233-278). Hillsdale, NJ: The Analytic Press.

- Fonagy, P., Stein, H., Allen, J., & Fultz, J. (2003). The relationship of mentalization and childhood and adolescent adversity to adult functioning. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Tampa, FL.
- Fonagy, P., & Target, M. (1995). Understanding the violent patient: The use of the body and the role of the father. *International Journal of Psychoanalysis*, 76, 487–502.
- Fonagy, P., & Target, M. (1998). Mentalization and the changing aims of child psychoanalysis.

 *Psychoanalytic Dialogues, 8, 87-114.
- Fonagy, P., & Target, M. (1996). Playing with reality: I. Theory of mind and the normal development of psychic reality. *International Journal of Psychoanalysis*, 77, 217-234.
- Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). *Reflective functioning manual, version*5.0, for application to adult attachment interviews. London, UK: University College
 London.
- Fosha, D. (2003) Dyadic regulation and experiential work with emotion and relatedness in trauma and disorganized attachment. In M. F. Solomon & D. J. Siegel (Eds.). *Healing trauma: Attachment, trauma, brain, and mind* (pp. 221-281). New York, NY: Norton.
- Fraiberg, S. (1980). Clinical studies in infant mental health. New York, NY: Basic Books.
- Fraiberg S., Adelson E., & Shapiro, V. (1975). Ghosts in the nursery. A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child & Adolescent Psychiatry*, 14(3), 387–421.
- George, C., Kaplan, N., & Main, M. (1985). *Adult attachment interview*. Unpublished manuscript, Department of Psychology, University of California, Berkeley, CA.

- Gergely, G. (2000) Reapproaching Mahler: New perspectives on normal autism, normal symbiosis, splitting and libinal object constancy from cognitive developmental theory.

 **Journal of the American Psychoanalytic Association, 48(4), 1197-1228.
- Gergely, G., Csibra, G. (2003). Teleological reasoning about actions: The naive theory of rational action. *Trends in Cognitive Sciences*, 7, 287-292.
- Gergely, G. and Watson, J. (1996). The social biofeedback model of parental affect-mirroring. *International Journal of Psychoanalysis*, 77, 1181-1212.
- Gillberg, C. & Wing, L. (1999). Autism: not an extremely rare disorder. *Acta Psychiatrica Scandinavica*, *99*, 399-406.
- Gopnik, A. (1988). Conceptual and semantic development as theory change. *Mind and Language*, *3*, 197-217.
- Gopnik, A. (1996). The scientist as child. *Philosophy of Science*, 63, 485-514.
- Gopnik, A., & Meltzoff, A. (1997). Words, Thoughts, and Theories. Cambridge, MA: MIT Press.
- Gray D. (1995) Lay conceptions of autism: Parents' explanatory models. *Medical Anthropology*, *16(2)*, 99–118.
- Gray, D. (2002). 'Everybody just freezes. Everybody is just embarrassed': Felt and enacted stigma among parents of children with high functioning autism. *Sociology of Health & Illness*, *24*(6), 734-739.
- Grienenberger, J., (2007). Group process as holding environment facilitating the development of the parental reflective function: Commentary on the article by Arietta Slade.

 *Psychoanalytic Inquiry, 26(4), 668-675.
- Grienenberger, J., Kelly, K., Slade, A. (2005). Maternal reflective functioning, mother-infant affective communication, and infant attachment: Exploring the link between mental states

- and observed caregiving behavior in the intergenerational transmission of attachment.

 Attachment and Human Development, 7(3), 299-311.
- Greenspan, S. I. (1987). A model for comprehensive preventative intervention services for infants, young children, and their families. In S. I. Greenspan (Ed.), *Infants in multirisk families: Case studies in preventative intervention* (pp. 377-390). Madison, CT: International University Press, Inc.
- Greenspan, S. I. (1987). Conclusions: Theoretical perspectives on research regarding psychopathology and preventative intervention in infancy. In S. I. Greenspan (Ed.), *Infants in multirisk families: Case studies in preventative intervention* (pp. 499-536).
 Madison, CT: International University Press, Inc.
- Greenspan, S. I. (1987). *Infants in multirisk families: Case studies in preventative intervention*.

 Madison, CT: International University Press, Inc.
- Greenspan, S. I. (1987). Introduction. In S. I. Greenspan (Ed.), *Infants in multirisk families: Case studies in preventative intervention* (pp. 1-5). Madison, CT: International University Press, Inc.
- Greenspan, S. I. (1989). The development of the ego: Implications for personality theory, psychopathology, and the psychotherapeutic process. Madison, CT: International University Press.
- Greenspan, S. I. (1992). *Infancy and early childhood: The practice of clinical assessment and intervention with emotional and developmental challenges*. Madison, CT: International University Press.
- Greenspan, S. I. (1997). *Developmentally based psychotherapy*. Madison, CT: International University Press.

- Greenspan, S. I. (2000). Principals of clinical practice for assessment and intervention. In *Clinical practice guidelines: Redefining the standards of care for infants, children, and families with special needs* (pp. 55-82). Bethesda, MD: ICDL Press.
- Greenspan, S., & Benderly, B. (1997). The growth of the mind: And the endangered origins of intelligence. Reading, MA: Perseus Books.
- Greenspan, S., DeGangi, G., & Wieder, S., (2001). *The functional emotional assessment scale* (FEAS). Bethesda, MD: Interdisciplinary Council on Developmental and Learning Disorders.
- Greenspan, S. & Lieberman, A. (1988). A clinical approach to attachment. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 387-424). Hillsdale: Lawrence Erlbaum Associates.
- Greenspan, S. & Lourie, R. (1981). Developmental structuralist approach to the classification of adaptive and pathologic personality organization: Application to infancy and early childhood. *American Journal of Psychiatry*, *138*(6), 725-735.
- Greenspan, S. I., Nover, R. A., & Scheur, A. G. (1987). A developmental diagnostic approach f or infants, young children, and their families. In S. I. Greenspan (Ed.), *Infants in multirisk families: Case studies in preventative intervention* (pp. 431-498). Madison, CT: International University Press, Inc.
- Greenspan, S., & Soloman, J. (1995). *The challenging child*. Cambridge, MA: Perseus Books.
- Greenspan, S. I. & Wieder, S. (1987). Dimensions and levels of the therapeutic process. In S. I. Greenspan (Ed.), *Infants in multirisk families: Case studies in preventative intervention* (pp. 391-430). Madison, CT: International University Press, Inc.

- Greenspan, S. & Wieder, S. (1998). *The child with special needs: Encouraging intellectual and emotional growth*. Reading, MA: Perseus Books.
- Greenspan, S. & Wieder S. (2005). DIR model diagram. In Interdisciplinary Council on Developmental and Learning Disorders (Ed.), *DIR reader* (pp. 1-7). Bethesda, MD: Interdisciplinary Council on Developmental and Learning Disorders.
- Greenspan, S. & Wieder, S. (2006). Engaging autism: Using the Floortime approach to help children relate, communicate and think. Philadelphia: First Da Capo Press.
- Hartley, S. L., Barker, E.T., Seltzer, M.M., Floyd, F., Greenberg, J., Orsmond, G., & Bolt D. (2010). The relative risk and timing of divorce in families of children with an autism spectrum disorder. *Journal of Family Psychology*, *24*(4), 449-57. doi: 10.1037/a0019847.
- Hesse, E. (1999). The adult attachment interview: Historical and current perspectives. In J. Cassidy and P. Shavers (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 395-433). New York, NY: The Guilford Press.
- Higgins, D. J., Bailey, S. R., & Pearce, J. C. (2005). Factors associated with functioning style and coping strategies of families with a child with an autism spectrum disorder. *Autism*, 9(2), 125-37.
- Hogsteen, L. & Woodgate, R.L. (2013). Embracing autism in Canadian rural communities. *The Australian Journal of Rural Health*, 21(3), 178-182. doi: 10.1111/ajr.12030
- Interdisciplinary Counsel on Developmental and Learning Disorders (2005). *The diagnostic manual for infancy and early childhood (ICDL-DMIC)*. Bethesda, MD: Interdisciplinary Counsel on Developmental and Learning Disorders.
- Kalmanson, B. (2009). Echoes in the nursery: Insights for treatment and early signs of autism in a baby sibling. *Journal of Infant, Child, and Adolescent Psychotherapy*, 8, 40-48.

- Karen, R. (1994). *Becoming attached: First relationships and how they shape our capacity to love*. New York, NY: Oxford University Press.
- Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism*. New York, NY: Jason Aronson.
- Klein, M. (1945). The oedipus complex in the light of early anxieties. *International Journal of Psychoanalysis*, 26, 11-33.
- Kohut, H. (1971). The analysis of self: A systematic approach to psychoanalytic treatment of narcissistic personality disorder. New York, NY: International Universities Press.
- Koren-Karie, N., Oppenheim, D., & Goldsmith, D. (2007). Keeping the inner world of the child in mind: Using the insightfulness assessment with others in a therapeutic preschool. In D. Oppenheim, & D. Goldsmith (Eds.), *Attachment theory in clinical work with children:*Bridging the gap between research and practice (pp. 31-57). New York: Guilford Press.
- Lalonde, C. E., & Chandler, M. J. (1995). False belief understanding goes to school: On the social-emotional consequences of coming early or late to a first theory of mind.

 *Cognition and Emotion, 9(2/3), 167–185.
- Lecavalier, L., Leone, S., & Wiltz, J. (2006). The impact of behaviour problems on caregiver stress in young people with autism spectrum disorders. *Journal of Intellectual Disability Research*, *50*, 172-183.
- Leslie, A. M. 1994. ToMM, ToBY, and Agency: Core architecture and domain specificity. In L. A. Hirschfeld and S. Gelman, (Eds.), *Mapping the mind: Domain specificity in cognition and culture* (pp. 119–148). New York, NY: Cambridge University Press.

- Liotti, G. (1995). Disorganized / disoriented attachment in the psychotherapy of the dissociative disorders. In S. Goldberg, R. Muir, J. Kerr (Eds.), *Attachment theory: Social, developmental and clinical perspectives* (pp. 343-363). Hillsdale, NJ: Analytic Press.
- Lillas, C. & Turnbull, J. (2009). *Infant/child mental health, early intervention, and relationship-based therapies: A neurorelational framework for interdisciplinary practice*. New York, NY: W.W. Norton.
- Lovass, I. O. (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology*, *55*(1), 3-9.
- Lyons-Ruth, K. (1999). The two-person unconscious: Intersubjective dialogue, enactive representation, and the emergence of new forms of relational organization.

 *Psychoanalytic Inquiry, 19(4), 576-617.
- Lyons-Ruth, K., Bronfman, E., & Atwood, G. (1999a). A relational diathesis model of hostilehelpless states of mind: Expressions in mother-infant interaction. In J. Solomon & C.
- George (Eds.), Attachment disorganization (pp. 33-70). New York, NY: Guilford Press.
- Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999b). Atypical Maternal behavior and disorganized infant attachment strategies: Frightened, frightening, and atypical maternal behavior and disorganized infant attachment strategies. In J. Vondra & D.
- Barnett (Eds.), Atypical patterns of infant attachment: Theory, research, and current directions.

 Monographs of the Society for Research in Child Development, 64(3), 67-96.
- Mahler, M. S., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant:*Symbiosis and individuation. New York, NY: Basic Books.
- Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) versus multiple (incoherent) models of attachment: Findings and directions for future

- research. In C. Parkes, J. Stevenson Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 127-159). New York: Routledge.
- Main, M. (1995). Recent studies in attachment: Overview, with selected implications for clinical work. In S. Goldberg, R. Muir & J Kerr (Eds.), *Attachment theory: Social, developmental and clinical perspectives* (pp. 407-470). Hillsdale, NJ: Analytic Press, Inc.
- Main, M. (2000). The organized categories of infant, child, and adult attachment: Flexible vs. inflexible attention under attachment-related stress. *Journal of the American Psychoanalytic Association*, 48(4), 1055-1096.
- Main, M., Kaplan, N. & Cassidy, J. (1985). Security in infancy, childhood and adulthood:
 A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points in attachment. Monograph of the Society for Research in Child Development*, 50(1-2), 66-104.
- Main, M. & Goldwyn, R. (1991). Adult Attachment Classification System, Version 5.
 Unpublished manuscript, Department of Psychology, University of California,
 Berkeley, CA.
- Main, M., & Goldwyn, R. (1994). Adult attachment rating and classification system,

 Manual in draft: Version 6.0. Unpublished manuscript, Department of Psychology,

 University of California, Berkeley, CA.
- Main, H. & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth strange situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121-160). Chicago, IL: University of Chicago Press.

- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework the psychological effects of working with victims. *Journal of Traumatic Stress*, *3*(1), 131-149.
- Meins, E. (1997). Security of attachment and the social development of cognition. Hove, UK: Psychology Press.
- Meltzoff, A. (1995). Understanding the intentions of others: Re-enactment of intended acts by 18-month-old children. *Developmental Psychology*, *31(5)*, 838-850.
- Mitchell, S. & Black, M. (1997). Freud and beyond: A history of modern psychoanalytic thought. New York, NY: Basic Books.
- Morton, J. & Frith, U. (1995). Casual modeling. A structural approach to developmental psychology. In D. Cicchetti and D. J. Cohen (Eds.), *Developmental psychopathology:*Theory and methods (Vol. 1) (pp. 357-390). New York, NY: John Wiley.
- Moses L. J., Baldwin, D. A., Rosicky, J. G., & Tidball, G. (2001). Evidence for referential understanding in the emotions domain at twelve and eighteen months. *Child Development*, 72(3), 718-735.
- Moses, L. J., & Flavell, J. H. (1990). Inferring false beliefs from actions and reactions. *Child Development*, *61*, 929-945.
- Murphy, L. B. (1974). Coping, vulnerability, and resilience in childhood. In G. V. Coelho, D.A. Hamburg, & J. E. Adams (Eds.). *Coping and adaptation* (pp. 47–68). New York, NY: Basic Books.
- Murphy, L. B. and Moriarty, A. (1976). *Vulnerability, coping, and growth*. New Haven, CT: Yale University Press.
- Niesser, U. (1988). Five kinds of self-knowledge. *Philosophical Psychology*, 1, 35-59.

- Osborne, L. & Reed, P. (2009). The relationship between parental stress and behavior problems of children with autistic spectrum disorders. *Exceptional Children*, 76, 54-73.
- Oppenheim, D., Koren-Karie, N., Dolev, S. & Yirmiya, N. (2008). Secure attachment in children with autism spectrum disorder: The role of maternal insightfulness. *ZERO TO THREE*, 28, 25-30.
- Perner, J., Leekam, S. R., & Wimmer, H. (1987). Tree year olds' difficulty with false belief.

 *British Journal of Developmental Psychology, 5, 125-137.
- Piaget, J. (1962). The stages of intellectual development of the child. In S. Harrison & J. McDermott (Eds.) *Childhood psychopathology* (pp. 157-166). New York, NY: International Universities Press.
- Povinelli, D. J. & Eddy, T. J. (1996). What young chimpanzees know about seeing. *Monographs* of the Society for Research on Child Development, 61(3, Serial No. 247), v-131.
- Rachford, B.K. (1905). *Neurotic disorders of childhood*. New York, NY: E.B. Treat & Company.
- Redl, F. (1966). When we deal with children. New York, NY: Free Press.
- Repacholi, B. M. & Gopnik, A. (1997). Early reasoning about desires: evidence from 14- and 18-month-olds. *Developmental Psychology*, *33*(1), 12-21.
- Reynolds, D. (2003a). Mindful parenting: a group approach to enhancing reflective capacity in parents and infants. *Journal of Child Psychotherapy*, 29(3), 357-374.
- Reynolds, D. (2003b). Mindful parenting: Enhancing reflective capacities of parents and infants in a therapeutic group. *The Signal: Newsletter of the World Association for Infant Mental Health*, 11(2), 1-6.

- Rossouw, T. I., Fonagy, P. (2012). Mentalization-based treatment for self-harm in adolescents: A randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, *51*(12), 1304–1313.
- Sander, L. (2002) Thinking differently: Principles of process in living systems and the specificity of being known. *Psychoanalytic Dialogues*, *12*(1), 11–42.
- Schall, C. (2000). Family perspectives on raising a child with autism. *Journal of Child and Family Studies*, 9(4), 409-423.
- Schieve, L. A., Blumberg, S. J., Rice, C., Visser, S. N., & Boyle, C. (2007). The relationship between autism and parenting stress. *Pediatrics*, *119*, 114-121.
- Schore, A. N. (2001). The effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22(1), 7–66.
- Shahmoon-Shanok, R. (2000). The action is in the interaction: Clinical practice guidelines for work with parents of children with developmental disorders. In *Clinical practice* guidelines: Redefining the standards of care for infants, children, and families with special needs (pp. 333-374). Bethesda, MD: ICDLPress.
- Sharpley, C. F., Bitsika, V., & Efremidis, B. (1997). Influence of gender, parental health, and perceived expertise of assistance upon stress, anxiety, and depression among parents of children with autism. *Journal of Intellectual and Developmental Disability*, 22, 19–28.
- Siegel, D. (2012). The developing mind: How relationships and the brain interact to shape who we are. New York: Guilford Press.
- Slade, A. (2004). Two therapies: Attachment organization and the clinical process. In L. Atkinson & S. Goldberg, (Eds.) *Attachment issues in psychopathology and intervention* (pp. 181-206). Hillsdale, NJ: Erlbaum Press, 181-206.

- Slade, A. (2002). Keeping the baby in mind: A critical factor in perinatal mental health. In A. Slade, L. Mayes, & N. Epperson (Eds.) Special Issue on Perinatal Mental Health, ZERO TO THREE, 10-16.
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment and Human Development*, 7(3), 269-281.
- Slade, A. (2006). Reflective parenting programs: Theory and development. *Psychoanalytic Inquiry*, 26, 640-657.
- Slade, A. (2007). Disorganized mother, disorganized child: The mentalization of affective dysregulation and therapeutic change. In D. Oppenheim, & D. Goldsmith (Eds.), *Attachment Theory in Clinical Work with Children: Bridging the Gap Between Research and Practice* (pp. 226-250). New York, NY: Guilford Press.
- Slade, A. (2008). Working with parents in child psychotherapy: Engaging reflective capacities.
 In F.N. Busch, (Ed.), *Mentalization: Theoretical considerations, research findings, and clinical implications* (pp. 207-235). New York, NY: Analytic Press, Taylor & Francis Group.
- Slade, A. (2009). Mentalizing the unmentalizable: Parenting children on the spectrum. *Journal of Infant, Child, and Adolescent Psychotherapy*, 8, 7-21.
- Slade, A., Aber, J. L., Bresgi, I., Berger, B., & Kaplan (2004). *The parent development interview: Revised*. Unpublished manuscript, The City College and Graduate Center, City University of New York, New York, NY.
- Slade, A., Aber, J. L., Fiorello, J., DeSear, P., Meyer, J., Cohen, L. J. (1994). *Parent development interview coding system*. New York, NY: City University of New York.

- Slade, A., Bernbach, E., Grienenberger, J., Wohlgemuth, Levy, D., & Locker, A. (2002).

 **Addendum to reflective functioning scoring manual: For use with the parent development interview. Unpublished manuscript, The City College and Graduate Center of the City University of New York, New York, NY.
- Slade, A., Grienenberger, J., Bernbach, E., Levy, D., & Locker, A. (2005). Maternal reflective functioning, attachment, and the transmission gap: A preliminary study. *Attachment and Human Development*, 7(3), 283-298.
- Slade, A., Sadler, L., Dios-Kenn, C., Webb, D., Currier-Ezepchick, J., & Mayes, L. (2005).

 Minding the Baby: A reflective parenting program. *Psychoanalytic Study of the Child*, 60, 74-100.
- Slade, A., Sadler, L., & Mayes, L. (2007). Minding the baby: Enhancing parental reflective functioning in a nursing/mental health home visiting program. In L. Berlin, Y. Ziv, L. Amaya-Jackson & M. Greenberg (Eds.), *Enhancing early attachments: Theory, research, intervention, and policy* (pp. 226-250). New York, NY: Guilford Press.
- Slomkowski, C. & Dunn, J. (1996). A young person's understanding of other people's beliefs and feelings and their connected communication with friends. *Developmental Psychology*, 32, 442-447.
- Söderström, K. & Skårderud, F. (2009). Mentalization-based treatment in families with parental substance use disorder: Theoretical framework. *Nordic Psychology*, *61*(3), 47-65.
- Solomon, A. H. & Chung, B. (2012). Understanding autism: How family therapists can support parents of children with autism spectrum disorders. *Family Process*, *51(2)*, 250-264. doi: 10.1111/j.1545-5300.2012.01399.x.

- Solomon, J., & George, C. (1999). The caregiving system in mothers of infants: A comparison of divorcing and married mothers. *Attachment and Human Development*, *1*, 171-190.
- Solomon, M & Siegel, D. J. (Eds.) (2003). *Healing trauma: Attachment, mind, body and brain*.

 New York: W.W. Norton
- Spelke, E. S., Phillips, A., & Woodward, A. L. (1995). Infants' knowledge of object motion and human action. In D. Sperber, D. Premack, & A. J. Premack (Eds.), *Causal cognition: A multidisciplinary debate* (pp. 44–78). New York, NY: Oxford University Press.
- Spitz, R.A. (1945). Hospitalism: An inquiry into the genesis of psychiatric conditions in early childhood. *Psychoanalytic Study of the Child*, 1, 53-74.
- Stern, D. N. (1974). Mother and infant at play: The dyadic interaction involving facial, vocal, and gaze behavior. In M. Lewis & L. Rosenblum (Eds.), *The effect of the infant on its caregiver* (pp. 187-213). New York, NY: John-Wiley & Sons.
- Stern, D. N. (1985). Affect attunement. In J. D. Call, E. Galenson, & R. L. Tyson (Eds.), Frontiers of infant psychiatry (Vol. 2) (pp. 3–14). New York, NY: Basic Books.
- Stern, D. N. (2002). *The First Relationship: Infant and Mother*. Cambridge, MA: Harvard University Press.
- Stern, D. N. (2004) *The present moment in psychotherapy and every day life*. New York, NY: Norton & Co.
- Stern, D. N. (2005). Intersubjectivity. In E. Person, A. M. Cooper, and G. Gabbard (Eds.), *The American psychiatric publishing textbook of psychoanalysis* (pp. 77-92). Washington, DC: American Psychiatric Publishers.
- Stern, D., Sander, L., Nahum, J., Harrison, A., Lyons-Ruth, K., Morgan, A., Bruschweiler-Stern, N. & Tronick, E. Z. (1998), Non-interpretive mechanisms in psychoanalytic therapy: The

- "something more" than interpretation. *International Journal of Psychoanalyisis*, 79, 903-921.
- Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early vears*. New York, NY: Cambridge University Press.
- Suppo, J. L., & Floyd, K. (2012). Parent training for families who have children with autism: A review of the literature. *Rural Special Education Quarterly*, *31*(2), 12-26.
- Taylor, M. & Carlson, S. (1997). The relation between individual differences in fantasy and theory of mind. *Child Development*, 68(3), 436–455.
- Thomas, A. & Chess, S. (1977). *Temperament and development*. New York, NY: Brunner/Mazel.
- Thomas, A., Chess, S., & Birch, H. G. (1968). *Temperament and behavior disorders in children*. New York, NY: New York Universities Press.
- Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge, MA: Harvard University Press.
- Tronick, E. (1989). Emotions and emotional communication in infants. *American Psychologist*, 44(2), 112-119.
- Tronick, E. Brushweller-Stern, N., Harrison, A. M., Lyons-Ruth, K., Morgan, A. C., Nahum, J.
 P., Sander, L., & Stern, D. N. (1998). Dyadically expanded states of consciousness and the process of normal and abnormal development. *Infant Mental Health Journal*, 19, 290-299.
- Van IJzendoorn, M.H., Schuengel, C., & Bakermans-Kranenburg, M.J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. Development and Psychopathology, 11, 225-249.

- Van IJzendoorn, M.H. (1995). Adult attachment representations, parental responsiveness, and infant attachment. A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, 117, 387-403.
- Wallin, D. (2007). Attachment in psychotherapy. New York, NY: The Guilford Press.
- Watson, J. S. (1994). Detection of self: The perfect algorithm. In S. Parker, R. Mitchel, & M. Boccia (Eds.), *Self-awareness in animals and humans: Developmental perspectives (pp.* 131-149). New York, NY: Cambridge University Press.
- Winnicott, D. W. (1931). *Clinical notes on the disorders of childhood*. London, UK: William Heinemann.
- Winnicott, D.W. (1960). The theory of the parent-infant relationship. *International Journal of Psychoanalysis*, 41, 585-595.
- Winnicott, D. W. (1962). The theory of the parent-infant relationship: Further remarks. *International Journal of Psychoanalysis*, 43, 238–239.
- Wieder, S. & Greenspan, S. I. (1987). Staffing, process, and structure of the clinical infant development program. In S. I. Greenspan (Ed.), *Infants in multirisk families: Case studies in preventative intervention* (pp. 9-22). Madison, CT: International University Press, Inc.
- Wieder, S. & Greenspan, S. (2005). Can children with autism master the core deficits and qbecome empathic, creative and reflective?: A ten year follow-up of a subgroup of children with autism spectrum disorders (asd) who received a comprehensive Developmental, Individual-Difference, Relationship-based (DIR) approach. *The Journal of Developmental and Learning Disorders*, *9*, 39-61.
- Wellman, H. M. (1990). The child's theory of mind. Cambridge, MA: MIT Press.

- Wellman, H. M. and Banerjee, M. (1991). Mind and emotion: Children's understanding of the emotional consequences of beliefs and desires. *British Journal of Developmental Psychology*, *9*, 191-224.
- Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory of mind development:

 The truth about false belief. *Child Development*, 72, 655-684
- Wellman, H. M., Phillips, A. T. & Rodriguez, T. (2000). Young children's understanding of perception, desire, and emotion. *Child Development*, *71*, 895-912.
- Woodward, A. (1998). Infants selectively encode the goal object of an actor's reach.

 *Cognition, 69, 1–34.
- Yirimiya, N. Erel, O. Shaked, M. & Solomonica-Levi, D. (1998). Meta-analyses comparing theory of mind abilities of individuals with autism, individuals with mental retardation, and normally developing individuals. *Psychological Bulletin*, *124*(3), 283-307.
- Zahn-Waxler, C., Radke-Warrow, M., Wagner, E. & Chapman, M. (1992). Development of concern for others. *Developmental Psychology*, 28(6), 1038-1047.
- ZERO TO THREE (2005). Diagnostic classification of mental health and developmental disorders of infancy and early childhood, revised (DC: 0-3R). Washington, DC: ZERO TO THREE Press.

APPENDIX A

INFORMED CONSENT FOR FIELD CONSULTANTS

INFORMED CONSENT FOR FIELD CONSULTANTS
I have been informed that this doctoral project interview will be conducted by, a graduate student at the California School of Professional Psychology at Alliant International University, Los Angeles. I understand that this project is designed to study challenges of student veterans pursuing postsecondary education, and that I have been contacted by the above student to offer input as a Field Consultant because I have some expertise and/or clinical/professional knowledge about the stated project topic. The purpose of the interview is to not only fill the informational "gaps" that exist in the professional literature about this topic, but to also examine if what is discussed in the research literature is actually being practiced/observed in the community by field professionals.
I am aware that my participation as one of the Field Consultants will involve answering some interview questions (face-to-face, if possible) designed to understand I am aware that the interview will be audiotaped or conducted via phone or email correspondence, if preferred. The amount of response to these interview questions can be as lengthy or brief as I see appropriate for myself, and I can choose to respond only to those questions that I feel qualified to answer, if needed. The interview process may take approximately 30 minutes of my time to complete, and the interview will be audiotaped (if face-to-face or via phone contact) to ensure its quality and accuracy.
I have been informed that my participation in this study is voluntary and I can withdraw at any time. I understand that this is a professional interview/contact where I will be asked to share my clinical/professional expertise on the stated project topic. Some of the interview contents may be used within the project report as personal communication citations, and my contribution to this study will be appropriately cited within this project.
I am aware that although I may not directly benefit from this study, my participation in this project will further increase knowledge and awareness in the field of psychology specifically, pertaining to student veterans pursuing postsecondary education. I understand that I may contact OR the Clinical dissertation Chair,, if I have any questions regarding this project or my participation in this interview as a Field Consultant. I understand that at the end of this study, I may request a summary of the results or additional information about the study from the above student.
I have read this form and understand what it says. I voluntarily agree to participate in this professional interview as a part of the student's doctoral project. I understand that I will be signing two copies of this form. I will keep one copy and the student, will keep the second copy for records. If I have received this Consent Form and the Interview Questions via email, by returning my answers via reply, I am agreeing to the above-stated conditions.
Participant's Signature Date
Student's Signature Date

APPENDIX B FIELD CONSULTANT QUESTIONS

FIELD CONSULTANT QUESTIONS

Question 1: In your clinical practice, what are the defining characteristics of your approach to parent work? What do you emphasize?

Question 2: How do you incorporate parent work into child/adolescent psychotherapy (i.e. collateral appointments, dyadic treatment, etc.)?

Question 3: What aspects of parent work are most effective in DIR/Floortime or Mentalization-based treatment?

Question 4: As a DIR/Floortime or Mentalization-based practitioner, what are the defining techniques you use in your practice? What modalities do you integrate (if any) to make your practice more complete?

Question 5: What are some of the gaps in DIR/Floortime or mentalization theory in clinical practice?

Question 6: Are there populations for whom you think a DIR/Floortime or Mentalization-based approach is not appropriate?

Question 7: Are there are cultural considerations when working from a DIR/Floortime or Mentalization perspective?

Question 8: What are the unique characteristics of the parent-child with Autism Spectrum

Disorder relationship that you keep in mind when working with these children and families?

Question 9: What are the primary challenges parents of children with Autism Spectrum Disorder face?

Curriculum Vitae

KEVIN GRUENBERG, MA

kgruenberg@alliant.edu

EDUCATION

6/2013 – Present PsyD Candidate in Clinical Psychology; Multi-Interest Option

California School of Professional Psychology at Alliant International University, Los Angeles

APA Accredited Psychology Program

8/2011 – 6/2013 Master's Degree in Clinical Psychology

California School of Professional Psychology at Alliant International University, Los Angeles

APA Accredited Psychology Program

9/2004 – 12/2006 Bachelors of Arts in Education

Evergreen State College

Olympia, WA

CLINICAL EXPERIENCE

9/2014 – Present **Predoctoral Internship I**

Julia Ann Singer at Vista Del Mar, Los Angeles, CA

• Provide individual, play, and family therapy to children, adolescents and families in a community mental health setting

9/2013 – 9/2014 Practicum III Student

Greenhouse Therapy Center, Pasadena, CA

- Provided weekly individual psychotherapy to adults, adolescents, and children in private practice setting
- Conducted weekly in-home DIR/Floortime therapy

9/2012 – 8/2013 **Practicum II Student**

San Fernando Mental Health Center (LACDMH),

Granada Hills, CA

 Provided individual and group therapy, psychodiagnostic testing, and targeted case management to children and adolescents in a community mental health setting

9/2011 – 6/2012 **Practicum I Student**

Children, Youth and Family Services Consortium,

Alhambra, CA

 Provided weekly individual therapy to children in a schoolbased setting.

RESEARCH PRESENTATIONS/PUBLICATION

Houskamp, B. M., O'Callaghan, E., Hanratty, A. M., Tanabe, M., Gruenberg, K., & Lieberman, D. (2013, January). Overview of learning and behavior challenges in twice exceptional children: Research and interventions. *The 2e Newsletter*.

Houskamp, B., Hanratty., A., Gruenberg, K. (2012, November). *Bright, talented and intense kids*. Paper presented at the Northshore Neurospychological Group, Peabody, MA

RELATED NON-CLINICAL WORK EXPERIENCE

8/2014 – Present	 Planning Team Member Center for Reflective Parenting, Los Angeles, CA Participates in monthly team meetings to develop mentalization-based programs
10/2012 – 9/2013	Research Assistant Beth Houskamp, PhD Research in neuropsychology of giftedness
8/2009 – 6/2011	 Primary Teacher (1st-2nd grade equivalent) Play Mountain Place Elementary School, Culver City, CA Fostered individualized learning focused on social-emotional development for eighteen children

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

- Los Angeles County Psychological Association (Student Member)
- California Psychological Association (Student Member)
- American Psychological Association Division 39 Psychoanalysis (Student Member)