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By

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ABSTRACT

FAMILY-BASED MUSIC THERAPY: FOSTERING CHILD RESILIENCE AND PROMOTING PARENTAL SELF-EFFICACY THROUGH SHARED MUSICAL EXPERIENCES
By

Varvara Pasiali

This study was designed to investigate family-based music therapy as a prevention strategy, targeting parental self-efficacy and competence while promoting adaptive child outcomes. Resilience describes the capacity to thrive in the face of stressors to adaptation. Self-efficacy refers to mental schemas parents hold about their parenting skills. The basic premise for the effectiveness of music therapy intervention for families in this study was that, by supporting and enhancing positive mutual interactions between parent and child, families could rehearse adaptive ways of relating and connecting with each other.

A *Collective Case Study* informed by *Grounded Theory* approach, was the methodological framework for the study. The participants in the study were members of four families facing multiple stressors to adaptation. The overarching common risk factor was self-reported history of maternal depression. Child participants targeted in this study, ranging from 3 to 5 years of age, did not have a diagnosed mental, emotional or behavioral disorder. Sessions took place over an 8-week period, once per week for 30 to 60 minutes. Three participating families received music therapy in their home environment. Due to scheduling difficulties, one family received music therapy at a university-affiliated clinic. All music therapy sessions were digitally recorded and

reviewed to create field notes and analytic memos. Additional data sources included parent interviews and weekly parent journals.

The analysis and interpretation of the sessions involved an inductive analysis leading to identifying emerging clinical themes for each participating family. It revealed varying needs among the four participating families and documented actions and interactions that occurred during the sessions. The analysis also elucidated how music therapy may fit family needs, strengths, or capacities. A deductive cross-case analysis, using *Mutually Responsive Orientation [MRO]* theory as a conceptualizing framework indicated that therapeutic applications of music therapy created a context in which bidirectional responsiveness could be fostered. This study demonstrated the possible pathways through which music therapy may assist development of MRO within parent-child dyads.

Based on the findings of the study, several suggestions are made for music therapists working with families in treatment and prevention. These suggestions describe supporting and encouraging the parent to be playful and creative in a child-like manner, identifying the importance of being explicit about the therapeutic viability of presented music therapy tasks, and documenting the 'slippery-slope' challenges of therapeutic discourse with families.

DEDICATION

This dissertation is dedicated to my grandmothers, Ermioni Zackheou and Varvara Pasiali, in gratitude for their prayers, support, and faith in me. Having faced multiple adversities, including poverty, loss, and war, you managed to raise resilient families. You have been my inspiration. Grandma Varvara, may your memory be eternal. Grandma Ermioni, thank you for rejoicing for my achievements.

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PROLOGUE

My interest in working with families emerged while conducting research for my Master's degree in music therapy. I interacted directly with young children and their families in their homes to develop and implement a music therapy protocol targeting modification of challenging behaviors of their children diagnosed with autism. By delivering a home-based intervention, I understood early on both the challenges and merits of involving parents in their child's treatment. As an entry-level professional, I worked at a child development center providing services for young children and their families through the Head Start Program, which focused on early intervention and prevention. Those families experienced multiple risks to healthy adaptation. My journey to expand my knowledge and understanding of the impact of aversive childhood experiences and socio-emotional trauma on developmental trajectories had begun.

Subsequently, I accepted a music therapy research position at a residential treatment facility for children who had emotional disturbances as a result of experiencing abuse or neglect. That experience solidified my theoretical premise of involving parents in their child's treatment and the importance of using proactive rather than reactive treatment approaches. Moreover, it highlighted the need for early intervention and prevention using creative art therapies. Rather than focusing on treatment, I envisioned music therapy as an intervention that promotes well-being by fostering resilience and nurturing human adaptation. These ideas paved the road leading to this dissertation.

CHAPTER I

INTRODUCTION

The topic of this dissertation is family-based music therapy. Shifting from treatment planning targeting an individual child to interventions that encompass the family unit can be an intriguing challenge for music therapists. Family-based music therapy focuses on interaction patterns within the family. Thus, clinicians have to balance addressing family dynamics, personalities, and individual needs during sessions.

Tracing the history of how music therapists have embarked on conducting sessions with families is problematic because only two books (Oldfield, 2006; Oldfield & Flower, 2008) and one essay article (Decuir, 1991) in the published literature address the topic. Articles published in peer-reviewed journals provide anecdotal information derived from case studies and clinical observations (i.e., Hibben, 1992; Miller, 1994). Research reports using a rigorous qualitative (i.e., Loveszy, 2005) or quantitative design (i.e., Walworth, 2009) are scant.

Elements such as the treatment setting, the funding agency, as well as the session delivery format (working with one family at a time vs. working with multiple families in a group) often determine clinical aspects, such as client-therapist alliance and the type of therapeutic applications used during a session. Moreover, the characteristics and the needs of the families as well as a therapist's training serve to determine viable ethical options of who to include and who to focus on during therapy.6 The above elements also affect the structure and content of therapy sessions. Therapists

working with younger children seem to use both structured and unstructured activities aiming to have some predictability, but also allowing enough flexibility for spontaneous responses and active music making. Some therapists use a looser structure (i.e., Bull, 2008), others may follow a specific session format (i.e. Abad & Williams, 2007), or use specific techniques such as narrative stories (i.e. Salkeld, 2008).

A vast majority of the literature in family music therapy presents treatment in parent child dyads. Howden (2008) comments that because of the timing of the sessions, occurring during the school day, most of the time only one parent is available to attend the sessions; that person is often the mother. Examples do exist in the literature, however, of father-child dyads (i.e. Davies, 2008) or extended family members and siblings being involved in sessions (i.e. Abad & Edwards, 2007).

In the first part of this chapter, I discuss music therapy as a therapeutic intervention. Then, I define resilience and discuss prevention of mental, emotional and behavioral disorders. I continue with discussing the role of families and the importance of parenting competence leading to healthy socio-emotional adaptation. Last, I conclude this chapter with a discussion concerning the focus of this dissertation: examining music therapy as a preventive intervention with families who have young children.

Music Therapy as a Therapeutic Intervention for Families

Oldfield (1999), a music therapist in the United Kingdom who has worked extensively with children and families, described her methodology as "an interactive approach that involves live music making which is mostly improvisation... Progress occurs through the children's involvement in music making. The relationship with a

child (and the family) grows out of this musical interaction, and the style of approach is influenced by the nature of this relationship" (pp. 189-190). Moreover, Oldfield stated that in family-based music therapy parents and children learn to listen to the musical interactions of one another. By increasing the ability to listen, the parent-child relationship grows. Indeed, using music to facilitate interactions and communications between family members is a common trend in family music therapy (Decuir, 1991). A central goal is to help nurture relationships "as parent and child connect with each other in a playful musical relationship" (Drake, 2008; p. 51).

Drake (2008), a music therapist involved in community-based music therapy for children at risk and their parents, conducted individual and family based music therapy sessions with families who live in an underprivileged area of London, England. She argued that the drop-in music therapy group sessions for families focused on:

> interactive music-making involving lap songs, sharing instruments, movement and dance. Many of the parents attend sessions believing that they are fun for their child. This is the case, of course, but in addition to this it is enormously beneficial for the attachment relationships and development of social interaction skills. Basic parenting skills can be nurtured in this environment, including mother-baby play and communication, boundary setting, managing behaviours and feeling states. These can be subtly developed through creative and interactive music, movement and play (pp. 38-39).

Music therapists are beginning to recognize that problems experienced by one family member may be a manifestation of problems in other members, which in turn affect relationships and overall functioning of all constituent family members. For example, Howden (2008), who provided one-to-one music therapy sessions for children in a mainstream elementary school, decided to invite parents to attend sessions when she realized that "some children's difficulties lie within family relationships"(p. 105) and that she could not address their needs holistically by engaging them in

individual sessions.

Therapeutic outcomes and treatment goals of family-based music therapy have included: (a) facilitating interactions and communications between family members (Nicholson, Berthelsen, Abad, Williams & Bradley, 2008; Oldfield, 1999), (b) enhancing attachment relationships between parent and child (Abad & Edwards, 2004; Drake, 2008; Warwick, 1995), (c) supporting relationships among family members (Abad & Williams, 2006; 2007; Oldfield, 1999; Loth, 2008), and (d) promoting parenting skills (Abad & Edwards, 2004; Abad & Williams, 2007; Drake, 2008). Davies (2008) is the only therapist in the literature who has discussed strengthening relationships and bringing forth positive changes in treatment of father-child dyads. When music therapists who work with children and their families provide group therapy, they also focus on: (a) increasing social interaction among families who attend groups (Drake, 2008), (b) fostering parent-to parent relationships for emotional support (Loth, 2008), (c) providing support for mothers while addressing needs of children (Bull, 2008), and (d) reducing feelings of isolation associated with having a child with disability (Loth, 2008; Bull, 2008).

Music Therapy as a Viable Therapeutic Modality

Several components make music therapy a viable modality for achieving the above therapeutic outcomes. Monti (1985) discussed music as creating an affordance of play – a vehicle to teach children how to play. Because active music making is creative and interactive, it may also provide a context suitable for modeling how the parents can interact with their children (Drake, 2008). Drawing attention to children's natural inclinations to respond to music, Oldfield (1999) asserted that those child responses

increase parental motivation to engage in reciprocal interactions with their child. Those bidirectional interactions, over time, support the development of a mutual relationship.

Lovesky (2005) purported that the non-verbal aspects of music make it compatible for supporting mutuality between mother-infant dyads and concluded that music therapy provides "freedom, playfulness, expression, relating within the music and a host of other attributes that contribute to healthy human development" (p. 169). Loth (2008), a music therapist who provided group family music therapy for parents who have a young child with a disability, also stated that the non-verbal aspects of music therapy may facilitate interactions between children with disabilities and their parents. Because children with disabilities are capable of active engagement in music making, parents can witness what their child is capable of doing and learning, which in turn motivates them to interact more with their children She stressed that group dynamics are vital in increasing therapeutic outcomes. The group participants form a social support network. Families meet before or after the group and attend social activities together. By observing other parents, participants learn to imitate successful ways of evoking responses from their children or dealing with challenging behaviors. Last, the group provides multiple opportunities to experiment with musical ways of interacting with children such as imitating vocal sounds, imitating rhythmic patterns or other responses to music.

Using a psychotherapeutic counseling lens, Hibben (1992) proposed that "music playing helps a family regress to a symbolic, nonverbal level and thus may circumvent the family's resistance that would habitually appear in the form of entrenched language and communication patterns" (p. 34). Similarly, Howden (2008) suggested that music

therapy may decrease resistance, because in making music, individuals may find a playful way of venting feelings. Moreover, music affords opportunities for self expression while maintaining individual identities. Last, when referring to clinical music improvisation techniques and interactive music making, Warwick (1995) described them as providing opportunities for parent-child dyads to relate, listen, share empathy, and communicate with each other.

Addressing Issues of Therapeutic Alliance

Music therapists who engage the family and its constituents in therapy may face ethical dilemmas, such as how to balance addressing needs, or how to handle conflicting needs of individual members. The literature contains references on how music therapists have dealt with such issues. In describing her music therapy work with young children and their families, Oldfield (2008) emphasized how parents become working partners with the therapist in facilitating a session. During family therapy, the music therapist has to focus both on the child's and the parents' needs at the same time. She considers parents as working partners for facilitating treatment. Warwick (1995) adopted a similar position by stating that music therapists must develop the musical parent-child relationship until parents can initiate, engage, and sustain musical interactions with their children independently. Warwick primarily worked with parents who have children with autism. Increasing a parent's ability and skills to function as a co-therapist may be appropriate for that population.

Drake (2008) identified three stages in music therapy with parents who have young children. Initially the therapist may function as a role model for positive adult-child interactions. Gradually families learn to consistently interact with each other using

more positive and nurturing interactions and the therapist's role shifts to support and facilitate those interactions. Drake believed that therapy may reach the termination stage once the role of the therapist in supporting those interactions becomes obsolete. Termination is indicated when a family develops patterns of positive interactions which occur spontaneously and consistently.

Loth (2008), who also derived her conclusions based on her experience in facilitating group family music therapy for children with disabilities, identified five different roles that caregivers who participate in music therapy with their child may fulfill: (a) a secure base, (b) a facilitator and model, (c) a 'therapist', (d) an observer, and (e) a musical partner. A caregiver who functions as a secure base will allow a child to sit on her lap to initially explore instruments until the child gains confidence to move away from their caregiver. As a facilitator and model, the caregiver may help position different instruments in front of the child and model how to play and use different instruments or props. A caregiver as 'therapist' plays an active role in ensuring his or her child's needs are met in the group. Loth (2008) discussed how a mother brought a picture exchange communication board and used it during the session to allow her child, who was non-verbal, to make instrument choices during the session.

When the music therapist structures activities which require the child to engage in reciprocal musical interactions with the therapist or other children, the caregivers have an opportunity to function as observers. Thus, caregivers have the opportunity to observe their child's capacity to learn and interact in musical ways with others. For Loth (2008), although an initial referral to music therapy may be for a child with a disability, the focus of family-based music therapy is to support fostering parental

relationships with their child and among all family members.

Therapists who work at private clinics or are employed by school districts may have to adopt a different policy. For example, therapists at the Nordoff-Robbins Music Therapy Center in London (Horvat & O'Neil, 2008) believed that directly involving a parent/caregiver in music therapy sessions is indicated when a child needs emotional support and encouragement. The focus on treatment, however, should remain centered on the child's needs. A therapist may conduct dyadic parent-child sessions when the need to address difficulties of the relationship exists. In such cases, the dyad and how it functions together is the main focus of treatment. Howden (2008), who worked in a school-based setting, considered the child as the primary focus of the treatment and advised parents to seek additional individual help when needed. Bull (2008), who also worked at a school, adopted a different approach. Following group family based music therapy, the students returned to their class and the parents participated in a 45-minute verbal discussion support group. Having the support group afforded them opportunities to address the individual needs of parents, as well as address the needs of the family as a whole using both media (verbal and musical).

The issue of control seems to be a recurrent theme and a therapeutic concern. Davies (2008) discussed how clinical music improvisations offer opportunities to explore issues of control with older children and their families. When improvising, family members may attempt to control each other's musical play, such as depicting problems in the relationship in a non-verbal manner. Various musical games, such as taking turns leading an improvisation and following different rhythmic patterns have predictability and structure that gives a sense of control while allowing for creative and

spontaneous responses. Games such as 'musical conversations', which involve pretending to talk to each other using musical instruments, allow an indirect way to express thoughts and feelings. The goal is to gradually foster and strengthen the parent-child bond, because parents whose children are struggling may experience a lower sense of parental self-efficacy. Frequent use of encouragement and positive praise may help boost both parents and child's self-esteem. The sense of accomplishment that results from active music making also provides parent and child a sense of confidence. Davies (2008) suggested that when therapists are able to create a CD or DVD of music improvisations in the sessions, the recording becomes an artifact parents and children can share with other family members.

In his article exploring musical interventions in family therapy, Miller (1994) discussed techniques that a therapist may use during a session. He stated that during clinical music therapy group improvisations, family members can express themselves while simultaneously hearing and reciprocating rhythmic tonal patterns produced by other family members. The therapist may direct a family member to 'perform' a solo improvisation for the family. Modeling encouragement and positive praise to the individual who has finished the solo improvisation indicates acceptance of the person and acknowledges that the person was heard by other family members. Dyadic music improvisations may re-enact how communication between two family members breaks. The therapist can encourage them to find ways of playing together. In playing musical echo games, they can imitate rhythmic and tonal patterns modeled by a family member, and practice listening and responding to each other. The therapist may assign one or more family members to make decisions and plan the music improvisation activity. This

may involve assigning instruments, specific music parts, or instructing when to play and when to stop, playing loud vs. soft, and so on. Such activity explores issues of boundaries and control as individuals have to make decisions and other members have to abide by those decisions during the improvisation.

Family-based Music Therapy as Conceptualized for this Study

For the purposes of this study, I defined family-based music therapy as a therapeutic approach that encompasses the child in terms of the family system of which they are a part. The focus will not be on the health or impairment of the individual child, but on the process involved in brining changes towards more optimal directions in family relationships while taking into consideration the socio-cultural context and values of the family. The target population will involve families that have children ages 3 to 5 who are facing cumulative risks to adaptation. The intervention will focus on prevention by supporting parental self-efficacy skills and promoting child resilience. I discuss and further define resilience, prevention, family, and parenting in the remainder of this introductory chapter.

Resilience

Resilience is the "process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten, Best & Garmezy, 1990; p. 426). Early descriptions of resilience viewed ability to adapt in the face of adversity as the result of stable internal characteristics or protective factors in the environment (Vanderbilt-Adriance & Shaw, 2008). Currently, researchers have recognized that resilience is a multifaceted construct that centers on how genetic, personal, and

contextual factors interact to create affordances or impose constrains on developmental trajectories (Luthar, Cicchetti & Becker, 2000; Masten, 2007; Vanderbilt-Adriance & Shaw, 2008). Moreover, they use multidisciplinary approaches to better understand pathways that lead to adaptation (Luthar & Brown, 2007).

Successful adaption, which involves achieving salient developmental tasks at various developmental stages (Masten, 2001; Masten, Burt & Coatsworth, 1995) does not necessarily equate with overall positive adjustment that overarches across multiple domains. An individual may do well in one domain (i.e., academic achievement) and function poorly in another (i.e., peer relationships) (Luthar et al, 2000; NRC/IOM, 2009). Indentifying biopsychosocial variables that aid or hinder developmental outcomes is central to understanding resilience. I discuss factors promoting adaptation in the next section.

Resilience Affordances and Constrains: The Pathway to Adaptation

Resilience affordances and constrains may occur at multiple levels including child, parent, family, community, and culture. Some may be variable and change overtime (i.e., socioeconomic status) or as a result of intervention (i.e., parenting skills); other factors such as gender or race, may be fixed (NRC/IOM, 2009). Resilience researchers aim to identify the pathways through which different variables lessen or worsen life stressors with the primary goal of informing intervention planning and social policies (Luthar & Brown, 2007).

Noteworthy is that both qualitative and quantitative components determine how those factors change the level of adversity experienced by children, thus affecting their capacity for resilience. Quantitatively, children who live in chronic poverty may be

exposed to a higher number of cumulative risks in comparison to children who live in middle-class neighborhoods. Qualitatively, however, exposure to risks will be different for a child growing up poor in a city such as New York than for a child growing up poor in a rural area. Quantitatively an adversity such as parental psychopathology may increase the likelihood that a child is exposed to other risk factors. A child of a single parent with psychopathology, however, will have a qualitative different experience than a child whose mother has support and has another parent to care for them (Vanderbilt-Adriance & Shaw, 2008).

Prior to continuing the discussion about pathways leading to resilient outcomes, it is important to note that for the purposes of this dissertation I adopted Masten and Gewirtz's (2005) definitions for risk factors, stressors, adversity, stress, assets or promotive factors, coping, and protective factors. Luthar et al. (2000) pointed that researchers often use such terminology inconsistently or may confuse resilience with coping skills. I used the above terms throughout the chapters of this dissertation. Adopting Masten and Gewirtz's (2005) definitions allows me to convey to the reader succinctly what each term entails:

> **Risk factors**: Measurable attributes of people, their relationships, or contexts associated with risk.
> **Stressor**: An experience or event expected or observed to have significant negative or disruptive effects on the adaptation of individuals or other systems (families, organizations).
> **Adversity**: Lasting or repeated experiences expected or observed to have significant negative effects or disruptive effects on adaptation; multiple stressors usually involved.
> **Stress**: The state of disturbance in adaptation within an organism (or system) resulting from a stressor, often characterized by disequilibrium in functioning and efforts to restore adaptive functioning.
> **Coping**: Efforts to adapt to stress or other disturbances created by a stressor or adversity.

Assets or promotive factors: Measurable attributes of people, their relationships, or contexts generally associated with positive outcomes or development (regardless of adversity or risk level).
Protective factors: Measurable attributes of individuals, their relationships, or contexts particularly associated with positive outcomes or development in the context of risk or adversity (Retrieved 29 November 2009 from http://www.blackwellreference.com/subscriber/tocnode?id=g9781405120739_chunk_g97814051207394)

Researchers have pinpointed several risk and protective factors that may potentially affect a child's mental well-being, leading to resilience or maladaptive outcomes. Individual risk factors are probabilistic, however, and not deterministic. It is the interplay between multiple factors that will determine adaptive or maladaptive outcomes in different domains across time (IOM/NRC, 2009; Luthar et al., 2000; Masten & Obradovic, 2006). Developmental researchers acknowledge the concepts of equifinality (different beginnings and different pathways may lead to the same outcomes or individuals manifesting similar problems) and multifinality (similar beginnings and exposure to same risk factors may lead to different outcomes) (Cicchetti & Sroufe, 2000; Schaffer, 2006). More research is needed to unveil the pathways through which biopsychosocial variables interact, moderate, or mediate outcomes leading to equifinality and multifinality phenomena in adaptation.

Since risks and protective factors exist in multiple contexts (NRC/IOM, 2009) and risks seldom exist in isolation (Vanderbilt-Adriance & Show, 2008) often researchers consider the cumulative effects of risks on individual outcomes by creating risk indices (Gutman, Sameroff & Cole, 2003). The 'cumulative risk hypothesis' (p. 235) purports that the number of risks and the prevalence of psychopathology are related (Appleyard, Egeland, van Dulmen, & Sroufe, 2000). Studies have documented the deleterious effects of cumulative risks. For example, Appleyard et al. (2000) drew

data from a longitudinal study sample of at risk urban youth who were recruited at age 12 months. The number of risks experienced in early childhood correlated with externalized and internalized behavioral problems in adolescence.

Studies of cumulative risk have shown that as risks increase, the potential for positive adaptation decreases as protective factors may cease to have an effect. In a longitudinal study, Gutman, Sameroff and Cole (2003) examined the effect of cumulative risk on academic grades. Their findings indicated that factors such as higher IQ and better mental health, typically considered as protective, functioned differentially in the contexts of high vs. low risk. Students experiencing high risk had high number of school absences and exhibited lower academic achievement regardless of their mental health status or IQ level.

The importance of cumulative risk studies, such as the two mentioned above, is that they make a strong argument that interventions that reduce risks at child level, family level, or contextual level may matter over time. As Appleyard et al. (2000) pointed out, "there does not appear to be a 'point of no return' beyond which services for children are hopeless" (p. 242). Moreover, studies examining main effects of cumulative risks over time exemplify the need for early intervention. Such interventions, according to Masten (2001), are asset-building interventions that focus on bringing assets and protective resources to a child's life, aiming to counterbalance the effect of risks and thus increasing capacity for resilience.

Different variables may interact and influence each other in complex ways across time, leading to adaptive or maladaptive trajectories. Thus, studying indirect effects of various variables using moderational and mediational models is critical to

resilience research (NRC/IOM, 2009). Masten (2001) explained that intervention strategies that focus on changing the effect of a particular variable on a child's life are based on indirect mediational models of resilience and cites examples of interventions aiming to strengthen parenting skills of parents who have divorced or providing universal prenatal care to prevent premature birth. Certain variables (personal, biological, or contextual) may interact with stressors and adverse situations either increasing or decreasing maladaptive outcomes (Masten, 2001; Luthar & Brown, 2007). According to Masten (2001), interventions may aim to add risk-activated protections, such as coping skills interventions, and social services crisis units.

To sum up, many possible pathways may create affordances or constrains for resilient outcomes. Conceptualizing resilience involves understanding how biopsychosocial factors interact across multiple levels of functioning, affecting an individual, the family, and the contextual environment in which that individual is embedded. Complex interactions across time may determine adaptive functioning in one domain without excluding the development of maladaptive outcomes in another. Behavioral variations across different children who may experience adversity, is the result of the interplay of multiple factors that may influence a human individual system, leading to deviant or normative trajectories. The more we learn through interdisciplinary research about factors that nurture or hinder adaptation and contribute to variability among different individuals, the more adept we become in designing effective prevention interventions.

Prevention of Mental, Emotional, and Behavioral Disorders

In their report on preventing mental, emotional, and behavioral disorders among young people, the authors of the National Research Council [NRC] and Institute of Medicine [IOM] (2009) pointed out that psychological disorders result in increased financial and psychosocial costs for families and communities. They are critical of the "disproportionate emphasis on treatment of existing conditions" (p. xvi) and noted the scarcity of efforts on making prevention and promotion of mental health a priority. As far as they are concerned, true prevention involves mental health promotion, as well as intervention prior to the emergence of a disorder. They stated: "Prevention emphasizes the avoidance of risk factors; promotion strives to promote supportive family, school, and community environments and to identify and imbue in young people protective factors, which are traits that enhance well-being and provide the tools to avoid adverse emotions and behaviors" (p. xv). According to the authors, a traditional disease model provides treatment following onset of a mental disorder. Prevention interventions, on the other hand, signify a "paradigm shift" (p. 17). Rather than providing evidence-based treatment following the onset of a disorder, prevention interventionists proactively mobilize resources to build assets within individuals, families and communities increasing the likelihood of healthy development in the future.

Regarding definitions of preventions, the 2009 NRC/IOM committee reaffirmed the definitions stated in a previous report published in 1994, proposing the following typology: (a) Universal, (b) Selective, and (c) Indicated. Universal prevention targets needs of the general population without identifying any specific risks (i.e. prenatal care, well-child check-ups, or school-based competence enhancement programs). Greenberg,

Domitrovich, and Bumbarger (2000) noted that universal prevention program may be more readily accepted, since participation is not equated with the stigma of having a mental health disorder diagnosis or individual risk.

Selective intervention gears efforts towards individuals or subgroups who are at risk of developing psychopathology (i.e. home visitation, preschool programs for children from disadvantaged neighborhoods, support groups). Risks may include biological, psychological, or social factors correlated with developing a disorder. The risk may be imminent or cumulative over time and occur at the individual level, family level, or community/neighborhood level. Indicated interventions target individuals who exhibit mild symptoms associated with a psychosocial disorder, but have not yet been diagnosed at the time of intervention (i.e. parenting skills groups for children with behavioral problems, social skills training programs) (Greenberg et al., 2000; NRC/IOM, 2009).

The Role of Family and Parenting Competence in Prevention

Traditional definitions consider a family unit as those individuals related to each other by blood, marriage, birth, or adoption. Nowadays, families may not abide by such definition; the number of alternative families which may include same-sex couples or single parents is increasing. For the purposes of this study, I adopted a broader definition, considering 'family' whomever participants in this study will include in their definition of family.

Families play an influential role on the well-being and psychosocial adaptation of children. Families may be an asset, a risk, or compensatory element in a child's life.

As adaptive systems for human development, families have the task of socializing children to understand and function within the cultural norms and constrains of society. Parents, caregivers, or mentors play a key role early in development, when children spend more time with the family and depend on adults for meeting their needs. Attachment relationships and bonds formed within the context of the family shape behaviors relevant to adaptation and competence. It is within their families that children gradually learn to regulate their behaviors and move towards internalization and self-regulation. Through exposing their children in rituals and family traditions, parents establish their child's identity in the world, providing a context for development. Families also provide resources and opportunities to their children (Masten & Shaffer, 2006).

When families directly promote positive child outcomes, they function as an asset. They function as risk, however, if they have genes or do certain behaviors which have been associated with negative outcomes. A family becomes a source of risks and threats to adaptation in multiple ways. As certain disorders have genetic predispositions, parents may pass their genes that contain specific risks for their offspring. Also, if a parent has a disorder and minimal resources for help, a child may be more at risk for neglect and exposure to negative contextual influences. They may also be at risk for maltreatment and/or inconsistent parenting. Negative effects experienced by parents (i.e. unemployment, work-related stress) may affect a person's parenting skills. Lastly, interparental conflict and violence affect children in multiple ways which may lead to internalized or externalized problems (Masten & Shaffer, 2006).

If families counterbalance contextual factors that may lead to problematic

functioning, then they play a compensatory role. Compensatory effects, however, are not necessarily linear and causal and may influence each domain of adaptive functioning over the course of development in complex ways. In turn, families become mediators and moderators of developmental change through multiple pathways (Masten & Shaffer, 2006).

Family influences on an individual child are not top down and unidirectional. Rather, they evolve over time through a series of ongoing mutual interactions. A child functions within the family as a member of a natural social system with hierarchical power structure, explicit and implicit communication patterns, and set rules and expectations representing relationships between each member and the type of behaviors that are acceptable. Changes in the family and stressors affect each member of the system triggering a cycle of responses, interaction patterns, and chains of influence as the system struggles to achieve homeostasis (Brazelton, 2000; Goldberg & Goldberg, 1996).

Lollis and Kuczynski (1997) stated:

> Parents and children develop mutual expectations for how each will act in the relationship based on the accumulation of their past interactions. When parents and children interact with each other over successive occasions, each builds up a set of expectations concerning how they interact together. Each knows generally what to expect from the other in that relationship and makes appropriate behavioural and cognitive adjustments Thus, during social interactions the parent has expectations about how the child will behave in a particular situation and the child has expectations about how the parent will behave. By means of such expectancies, relationships built in the past will influence interactions occurring in the present (p. 444-445).

Brazelton (2000) noted that clinicians who plan to work with families should learn to understand their value system and focus on their strengths as the pathway for planning therapeutic interventions. An interventionist may target parents and parenting

skills in an effort to mediate between risks and child outcomes (Masten & Shaffer, 2006). Alternatively, interventionists may focus on improving the quality of relationships within the family; those relationships may decline when families face challenges and adversities. Assessment of family interactions should include contextual and cultural influences, as well as focus on family strengths, assets, and constrains that may affect adaptive functioning (Walsh, 2003).

Whereas in adolescence mentorship, school or neighborhood opportunities are critical, in early childhood close relationships with caregivers are more important (NRC/IOM, 2009). Parents and children co-construct their relationship by mutually influencing each other. Choice of rearing practices and the strategies parents employ in efforts to socialize their children in combination with individual child characteristics determine developmental outcomes (Schaffer, 2006). Even though individual children are not passive moulds that parents shape and influence in unidirectional ways, parenting competence plays in central role in determining child outcomes.

Dix and Meunier (2009) describe the characteristics of low parenting competence as maternal lack of interest and involvement with their children, intrusiveness and lack of patience, neutral or negative emotionality, adopting discipline that is harsh, unpredictable, manipulative or lax. Low parenting competence affects a parent-child relationship potentially attenuating adaptive child responses. Cognitions regarding ability, effectiveness, and satisfaction of being a parent are pertinent to family functioning and can influence parent-child interactions. High satisfaction and perceived parenting competence is negatively correlated to reported child behavioral problems or attachment difficulties (Ohan, Leung, & Johnston, 2000). Competence relates to

perceived parental self-efficacy, or in other words certain cognitions or beliefs a parent has regarding their child rearing ability (de Montigny & Lacharite, 2004). Those beliefs may in turn function as a protective factor, mediating risks such as maternal depression, challenging child behaviors, or stressors such as poverty (Gilmore & Cuskelly, 2008).

Interventionists, who focus on prevention and work with families who have young children, should understand the interdependent nature family actions and interactions. Each family member acts in the relationship in accordance with their shared history of past interactions. A therapist may aim to alter negative interaction patterns, cognitions or beliefs of family members in an effort to reshape expectancies about their shared future.

An Ounce of Prevention is a Pound of Cure: Reasons for Study and Research Questions

The focus of this dissertation is to understand and describe how shared musical experiences during family-based music therapy provide a context that may influence parent-child relationships, by supporting mutually responsive interaction patterns. Based on Masten's (2001) recommendations for resilience interventions, music therapy may function as an 'asset-building' intervention, becoming a resource into the family's life, aiming to alleviate negative effects of stressors. Music therapy may also function as a 'mediating intervention', defined by Masten (2001) as a type of intervention that directly targets potential risks and attempts to reduce them or prevent them.

Shonkoff and Phillips (2000) noted that "The basic objective underlying all interventions in the early childhood years is to increase the probability of a more favorable developmental trajectory for each child" (p. 32). They added that

interventions should be individualized based on each child's and family's strengths and needs. As such, the goal of interventions is to alter developmental trajectories increasing the likelihood that children will follow a pathway leading them to achieving developmental tasks relevant to expectations within a given social context (NRC/IOM, 2009). The type of observational research in the natural environment home employed for this study did not allow me to draw causal inference statements the effect of music therapy in changing trajectories, increasing or reducing certain behaviors.

The outcomes of this qualitative study were different. The applied qualitative research methodology allowed me to document how the participating families perceive and respond to music therapy interventions. Moreover, it allowed me to draw meaningful hypotheses on how the processes of developing resilience in relationships, bonds, and interactions among family members are supported by music therapy. In fact, resilience researchers foresee a need for qualitative research for drawing insights into processes leading to adaptation and understanding parent-child relationships (see Lollis & Kuczynski, 1997; Luthar et al, 2000; Luthar & Brown, 2007; Rutter, 2006).

Masten and Shaffer (2006) proposed that an interventionist working with families should have a specific theory in mind on how their intervention may affect the family system which in turn is going to specifically change the child. They called this 'a theory of intervention' and a 'theory of family influence', respectively. A theory of intervention and a theory of family influence do not exist in the current literature relevant to family-based music therapy. Grounded in the observations and the qualitative data collected for this study, I plan to develop a theory about the phenomenon of family-based music therapy.

Using a dynamic systems approach, Masten and Shaffer (2006) also stated that in systemic system, changing any part of the system may theoretically lead to change, because it will affect interactions between constituent members of the family. With the family functioning as a system unit, change in any one domain may gradually become amplified and have system-wide reverberations. Thus, creating a context through shared musical experiences that can directly affect the relationship between different family members may have wide reverberations that may support new forms of interpersonal interactions among members.

The generative questions prompting this study were:

1. How did the relationship between parent-child develop over the course of the intervention?
2. What were the parent-reported changes of their child's adaptive functioning and resilient behaviors over the course of the intervention?
3. In what ways do family members exhibit mutually responsive orientation behaviors during music therapy?

Chapter II is a review of the relevant literature in developmental psychology and music therapy. The methodological framework of the study is included in Chapter III. Chapter III also contains descriptions of the music therapy intervention and concludes with a description of how data were analyzed and presented in this study. The subsequent four chapters (IV-VII) contain detailed descriptions and the therapeutic outcomes for each participating family. The cross-case analysis is presented in Chapter VIII. Chapter IX focuses on a discussion of the findings and Chapter X includes conclusions and implications for clinical practice.

CHAPTER II

REVIEW OF RELATED LITERATURE

In this chapter I first conceptualize the parent-child relationship as a dynamic process which develops through mutual interactions over time. Next, I discuss depression and lack of parenting competence as a risk factor to child adaption. Thereafter, I include a systematic review of clinical and research literature exploring music therapy in prevention and music therapy with families and children.

The Parent-Child Relationship: A Dynamic Process

Skills that children need to attain in early childhood in order to reach effectiveness in interactions include knowing how to: (a) initiate and sustain relationships with others, (b) communicate thoughts, feelings, and needs, (c) engage in cooperative and imaginative play, and (d) adjust their responses based on the demands of the social situation (Fabes, Gaertner & Popp, 2005). Young children begin to develop the above skills as a result of family socialization influences within multiple contexts of the parent-child relationship, involving attachment, play, teaching, and care giving interactions. The quality of the parent-child relationship over time influences a child's psychosocial adjustment and contributes to attaining socioemotional milestones.

The quality of the parent-child relationship(s) constantly change and evolve as a result of their daily experiences and interactions with each other. Both the child's and the parent's interactive styles contribute to the quality of their relationship; the influences are dynamic and bidirectional (Lollis & Kuczynski, 1997). Kochanska and

Aksan (2004) found that early in development, responsiveness is parent-driven: only parental responsiveness to child cues at 7 months predicted both child and parental responsiveness at 15 months. Early in development, a sensitive, sociable and warm parent will make increased bids to elicit responses from an infant; the infant, by virtue of sharing a prosocial parent's genetic make-up, is likely to respond increasingly to parental bids, creating a feedback loop of ongoing interactions gradually creating bidirectionality in the relationship. As the child ages, their ability to initiate, cease, or alter behaviors to elicit specific parental responses increases.

The skills that children learn and develop within the context of the parent-child interactions increase their ability to respond to situational demands. Arend, Gove, and Sroufe (1979) found continuity on how children respond to situational demands. In their longitudinal study, children, who were securely attached at 18 months, exhibited better problem solving skills at 24 months, leading to increased competence in peer interactions and interpersonal relationships at age five. Indeed, if parents, through a history of ongoing mutuality, develop a secure relationship with their child, they create a social capital that allows them, within the context of the relationship, to influence a child's ability to regulate behavior. For example, parents can influence conscience (Kochanska, Aksan, Knaack, & Rhines, 2004), committed compliance defined as the child's willing submission to parental demands in control contexts (Kochanska, Coy, & Murray, 2001), and receptive cooperation defined as the child's responsiveness and eager cooperation with the parent in multiple settings (Kochanska, Aksan, & Carlson, 2005).

Low use of maternal power, in situations requiring refraining from an attractive and desired behavior (i.e. touching appealing toys) when prohibited by an adult, increases committed compliance over time. Subsequently, children who are more compliant with their mothers are also more likely to be compliant with another adult figure (Kochanska, et al., 2001). Children, however, are also active partners in the socialization process and not simply passive receptors of parental influences. If a child resists cooperation, he or she is more likely to promote negative parental responses, including punitive acts, launching the dyad into a maladaptive pattern of interactions (Fabes et al, 2005; Kochanska et al, 2005).

According to Kochanska et al. (2005) two factors, the child's temperament, the quality of the parent-child relationship and their interaction account for differences in child cooperation with parental demands in broad contexts such as play interactions, routines, personal care, or discipline settings. Their research indicated that parental receptiveness in infancy and a secure relationship at 15 months predicted receptive cooperation at 24 months. They also found a direct maternal influence effect for difficult infants highly prone to angry responses: Those who had highly responsive mothers became highly cooperative, in contrast to those with low responsive mothers who became oppositional. Insecure children were uncooperative with their mothers regardless of their temperament. In contrast, insecure children were cooperative with their fathers if they had an easy, non angry prone temperament. Because many of the children in their sample who were insecure with their father were secure with their mothers, the researchers speculated that a secure relationship with the mother may buffer the effect of insecure relationship-incompliance with the fathers.

Issues of child compliance and parental power assertion, within the context of attachment relationships, were also explored in another recent study by Kochanska and her colleagues (Kochanska, Barry, Stellern, & O'Bleness, 2009). They found that security in parent child-dyads seems to act as a protective factor in reducing the likelihood that children who have parents that use harsh, punitive power assertion will embark on a trajectory that leads them to antisocial behavior. Insecure infants displayed higher opposition as toddlers igniting a cycle of coercive parent-child interactions and harsh parenting. The significance of this study is that it elucidates that harsh punishment may not play a role in developing antisocial tendencies and conduct problems when a child is securely-attached.

The findings in the studies reviewed corroborate: (a) bidirectionality of the parent-child relationship and socialization processes, and (b) attachment security as a positive socialization influence. The above observations and study outcomes also highlight the importance of maintaining secure relationships or supporting development of positive parent-child interaction patterns through intervention and prevention. As Kochanska et al. (2009) pointed out, their findings indicate a pathway through which parenting interventions that foster acquirement of parental sensitivity and responsiveness towards their offspring avert the possibility of the child following a maladaptive trajectory.

In studying the processes of parental socialization of young children, Kochanska and her colleagues at the University of Iowa emphasized the importance of responsiveness. They developed the construct of Mutually Responsive Orientation (MRO) which conceptualizes a system of mutual parent-child reciprocity (Aksan,

Kochanska, & Ortmann, 2006; Kochanska, 1997). MRO denotes "a positive, mutually binding, and cooperative relationship between the parent and the child." (Aksan et al;, 2006; p. 833). Focusing on the interdependent and dynamic nature of parent-child actions and interactions beyond behavioral descriptions of the parent or the child as individuals Aksan et al. (2006) proposed four components of MRO: "coordinated routines, harmonious communication, mutual cooperation, and emotional ambiance" (p. 834).

Specifically, Aksan et al. (2006) stated that dyads high in MRO develop daily routines and rituals. Those routines are executed smoothly because each party is aware of the mutually-agreed upon procedures and implicit expectations. On the contrary, low MRO dyads either fail to establish routines or their routines and rituals are inconsistent. Harmonious communication of dyads high in MRO entails finding enjoyment and feeling interconnected when engaging in reciprocal communication interactions. Those dyads can interpret and respond to each other's verbal and non-verbal signals. Dyads low in MRO may misinterpret each other's cues and fail to connect with each other. Mutual cooperation in high MRO dyads describes their shared eagerness and willingness to meet each other's needs and cooperate. Those dyads handle and diffuse conflict easily. Compliance and cooperation with each other is challenging for low MRO dyads. Those dyads may engage in power struggles and coercion in an effort to influence each other and achieve compliance. Lastly, emotional ambiance refers to the dyads shared positive experiences including joyful moments, reciprocal affection, humor, and quick negative affect modulation. Low MRO dyads struggle with negative emotionality and may find each other's company as not enjoyable. Coordinate routines,

harmonious communication, mutual cooperation, and emotional ambiance, according to Aksan et al. (2006) develop as a result of characteristics of each of the two individuals as well as the dyad.

My premise in this dissertation was that therapeutic applications of music therapy may affect individual characteristics, such as parental efficacy and resilient child behaviors as well as the dyadic parent-child interactions. In my synthesis and interpretation of qualitative data, I relied on the MRO definitions developed by Aksan et al. (2006) to evaluate changes in the parent-child relationship over the course of the intervention. Moreover, I did cross-case analysis to determine in ways in which therapeutic applications of music therapy support mutually responsive orientation behaviors within parent-child dyads that face family circumstances which may have impaired their relationship. The overarching common stressor for all participating families was history of maternal depression. In the next section, I discuss maternal depression as a risk factor to child adaptation.

Maternal Depression as a Risk Factor to Child Adaptation

The research literature documented the negative effects of parental depression on child adjustment (i.e. Downey & Coyne, 1990; Gelfand & Teti, 1990). Chazan-Cohen, Ayoub, Roggman, Raikes, McKelvey, Whiteside-Mansell, and Hart (2007) pointed out that the majority of the existing literature examined unidirectional parent

effects[1] criticizing mothers. Most of the literature on child effects focused on negative aspects of the personality and challenging behaviors. However, the current trend is to examine bidirectional effects between parents and children, identifying pathways through which both agents mutually influence each other contributing to psychopathology (Chazan-Cohen, et al., 2007; Pettit & Arsiwalla, 2008).

Maternal depression elevates risk for attachment difficulties, socioemotional problems, cognitive and affective difficulties in offspring. Children who have parents with depression have elevated risk of developing clinical depression and other adjustment problems (Downey & Coyne, 1990). Researchers demonstrated a direct link between maternal depression and difficult child mood at 24 months (Hanington, Ramchandani, & Stein, 2010) and found that early maternal depression contributed to attachment difficulties (Martins & Gaffan, 2000). Long-term effects of maternal depression on cognitive development are possible when symptoms are chronic and the family faces additional risks (Kurstjens & Wolke, 2001).

In comparison to children who have mothers without depression, children of chronically depressed mothers had increased externalizing behavior difficulties and decreased social competence. Children with mothers who had mild or decreasing depression exhibited increased hyperactivity and attention difficulties. Higher contextual risk increased both levels of maternal depression and problematic child outcomes. Moreover, measures of vagus nerve activity or vagal tone (that is how

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[1] Schaffer (2006) defines child effects as "the influence children exert on their caretakers by virtue of their particular characteristics" (p. 180) and parent effects as "all the various ways in which parents influence the behaviour and development of their children" (p. 184).

quickly heart rate elevates) indicated higher reactivity in children who had chronically depressed mothers, indicating susceptibility to emotional regulation difficulties (Ashman, Dawnson, & Panagiotides, 2008).

The pathways linking maternal depression to maladaptive child outcomes are direct genetic transmission risk, biological regulatory difficulties, exposure to negative parenting behaviors, cognition and affect, increased risk for family disruption or other contextual stressors (Goodman & Gotlib, 1999). Within a family system, extra-familial factors (i.e. race, socioeconomic status) combine with family influences (i.e. parent and child characteristics, parent-child relations, marital discord) to determine whether maternal depression may or may not lead to negative child outcomes (Cummings & Davies, 1994). Because younger children may rely more on their parents as socialization agents who steer their development, problematic parenting skills as a result of maternal depression may pose an increased risk.

Dix and Meunier (2009) proposed that maternal depression directly affects internal guiding processes that govern human daily action and interaction, leading to low parenting competence. They explained that parents who have depression may focus more on themselves, feel fatigued and tired, lack motivation, or be unable to set realistic short and long-term goals. Depression may affect a parent's capacity for paying attention to and decoding a child's verbal and non-verbal communicative bid, hindering their ability to match their parenting based on their child's immediate experiences. Parents with depression may use negative appraisals of their children or blame them for being difficult and uncooperative, engaging in frequent negative bouts. They may not feel as having any control over their children's behaviors and develop feelings of low

parental efficacy. Moreover, parents who are depressed may show fewer positive emotions in interactions with their children.

In a meta-analytic review of maternal depression Lovejoy, Graczyk, O'Hare, and Neuman (2000) found that depression mostly affected negative and coercive parenting behaviors. They cautioned that depression did not seem to affect positive parenting behaviors (i.e. interactive play time, affection) unless the woman was also dealing with financial stress. They also suggested that negative affectivity and general psychological distress may contribute to problematic parenting strategies. Their findings highlighted the need for interventionists to address and provide supports for a family in a holistic manner and not simply focus on reducing maternal symptoms.

Even though effective treatment medication for maternal depression may decrease rates of child psychopathology (Weissmen, Pilowsky, Wickramaratne, Talati et al., 2006) it does not address nor prevent the core behavioral mechanism leading to child psychosocial problems: the impaired interactive processes between parent-child dyads. Kochanska (1991) observed that as an affective illness, depression disrupts interactive processes between a mother and her child. She noted that mothers who have depression may make fewer attempts to engage in their child's active play and be less responsive to their child's distress or inhibition of play. Even though variability in mother-child interactions may exist, in general, mothers who have depression tend to be less responsive and have difficulty sustaining interactions (Cox, Puckering, Pound, & Mills, 1987).

Interventionists must view depression within the social context in which it occurs. When working the families, addressing the needs of all the constituents that

depression may affect may be critical to successful outcomes. For example, home visiting programs for at risk families, who have children zero to three, which focus on modeling and engaging parents in quality interactions with their child, may prevent emergence of parental depression symptoms at 36 months (Raikes, Green, Atwater, Kisker, Constantine, & Chazan-Cohen, 2006). Cognitive behavioral intervention that focuses on strategies to help parents cope with depression as well as increase their parenting skills may concurrently reduce disruptive child behaviors and parent symptomatology (Sanders & McFarland, 2000). Interventions that focus on the family may enhance mood stability, increase parenting competence, and facilitate adaptive child outcomes.

Lack of Parenting Competence as a Risk Factor to Child Adaptation

Parents who have increased sense of competence may feel better equipped to address situational parental demands. Thus, they may be more likely to display parental sensitivity. Bugental (2000) defined as 'parental sensitivity' the "adaptive flexibility of caregivers to the needs of the young at different times and within differing contexts" (p. 187). In addition, with parental sensitivity, competent parents may also display other features in their parent-child relationship such as mutually responsive behaviors (Aksan et al., 2006; Aksan & Kochanska, 2004).

Parental sensitivity is a key concept of attachment theory (see Ainsworth, Blehar, Waters, & Wall, 1978). Within families who are not experiencing stressors and adversities, parenting sensitivity is important, but not an exclusive causal condition of parent-child attachment. The quality of parent-child interactions also predicts

attachment (de Wolff & van Ijzendoorn, 1997). Beyond the infancy, sustaining parental sensitivity as well as learning skills to diffuse conflict, achieve cooperation, and maintain warm interaction is critical, fostering securely attached parent-child behaviors as a child matures or experiences transitional periods (i.e. entering preschool, birth of a new sibling) (Thompson, 2000). Transitions and other contextual stressors may moderate or mediate the relationship between parental sensitivity, overburden parent-child interactions and thus, affect attachment (de Wolff & van Ijzendoorn, 1997; O'Connor & Croft, 2001).

In a study conducted by Raikes and Thompson (2005), the type of contextual risks affected the relationship between maternal behavior and attachment security. Maternal behavior that was sensitive and responsive may mediate the link between low socioeconomic status and attachment security problems. However, in the presence of high emotional risks (such as substance use, anger management issues, domestic violence, or incarceration), the protective value of sensitive and responsive maternal behavior decreased. The results further highlight the importance for interventionists to consider the social context of parenting behaviors and parent-child interactions.

Parent training programs aiming to prevent child problems and increase parental well-being were more effective for parents of younger children (Farington & Welsh, 2003; Nowak & Henrichs, 2008). Effectiveness of such programs, however, varied according to the intensity of the intervention and the level of initial distress experienced by families (Nowak & Henrichs, 2008). Lundahl, Risser and Lovejoy (2006) emphasized that as family needs change, individualized parenting training may need to

be repeated yearly, especially for parents in high-risk groups, in order to maintain positive child- outcomes.

Prevention interventionists who work with families should use proactive approaches to avert potential risk factors, such as lack of parenting competence. Their approaches should involve meaningful experiences for children and their families that target responsive relationships. Interventionists, however, must keep in mind not only how parent, child, and family influence each other on a micro level. On a macro level culture and social processes also play a transactional role in shaping that relationship, providing a social foundation that may lead to adjustment or maladjustment over time. In the next section, I review how music therapy clinicians and researchers have documented music therapy as a family-based intervention.

Review of Music Therapy Literature

Several authors have discussed theoretical issues and various models of providing individual, group, and family music therapy services in naturalistic, educational or clinical settings (Adamek & Darrow, 2005; Humpal & Colwell, 2006; Oldfield & Flower, 2008; Wilson, 2001). In the United States, music therapists provide services to children age 0 to 3 years under part C of Individuals with Disabilities Education Act (IDEA), a public law pertinent to services for children with disabilities. Children qualify for services if they are 'at-risk' of developmental delay or if they have a diagnosed disability. Part C requires the therapist to work closely with parents when providing services. Music therapists also provide services through Part B of IDEA serving children ages 3 to 5, functioning as members of the interdisciplinary team

(Snell, 2006). Music therapy, however, is not currently an approved related service under the Early Intervention section of IDEA. Funding for music therapy is often up to the discretion of states and local agencies. In early intervention, music therapists provide services in natural environments, such as the child's home or a daycare center (Schwartz, 2006).

Music therapists provide regularly scheduled sessions in early childhood centers or schools. They may also directly consult with families or offer direct services on individual basis. Service delivery is determined by the Individualized Educational Plan (IEP), the IDEA mandated assessment document for a child with disabilities, and the Individualized Family Service Plan (IFSP), the IDEA mandated family needs assessment (Furman & Humpal, 2006; Humpal & Tweedle, 2006). Often, the focus of the music therapy intervention is on academic and/or social skill development. The specific role of music therapy intervention for parental support and prevention has not been documented even though music therapists report working in tandem with families.

Music therapists have focused on treatment designed to promote socio-emotional functioning of children and adolescents. Layman, Hussey, and Laing (2002) conducted a review of literature pertaining to the use of music interventions with children who have emotional disturbance. They summarized benefits across the domains of affective, social, cognitive, and communication functioning. In the studies reviewed, however, participants already exhibited problematic behaviors - the focus is on treatment rather than prevention. Even though their review highlighted music therapy as an effective treatment modality, it also suggested a need for researchers to examine music therapy as a proactive intervention, preparing children and their families

for the future.

Few studies in the music therapy literature focus on preventive interventions. On the contrary, the literature is rich in documenting music therapy as a treatment for known disorders or disabilities or music therapy as an intervention for maintenance and rehabilitation. Anecdotal observations or discussions of clinical vignettes provide information about the role of music therapy interventions in the form of a non-scientific case study. Smeijsters (1997) defined non-scientific case study as one that lacks a "system of checks and balances involving either the therapist or his or her colleagues" for conceptualizing, describing, or interpreting (p. 27). Studies employing quantitative, qualitative, or mixed method research paradigms provide additional evidence and documentation of music therapy interventions.

I have structured this synthesis of anecdotal case studies and research reports pertaining to the topic of family-based music therapy by documenting family-based music therapy interventions first as treatment and then as prevention. The rationale for reviewing family-based literature in both treatment and prevention centers on the scarcity of available literature; it also reflects an effort of this author to depict what has thus far been accomplished in the knowledge body pertaining to family based music therapy.

Family-Based Music Therapy in Treatment

Several music therapists have described case studies and have given examples of families involved in music therapy. In most of the case studies, therapy was delivered at community mental health agencies or community-based music therapy clinics. Some music therapists invited parents to participate in music therapy at their child's school.

The treatment delivery format involved families or parent-child dyads either receiving individual therapy or group therapy.

Both Howden (2008) and Woodward (2004) provided family-based music therapy in public schools in the United Kingdom. Woodward (2004) discussed three case studies of children diagnosed with autism receiving music therapy sessions with their parents. The first case study explored group music therapy for children and their parents in a mainstream primary school. The second case study involved a mother-child dyad and the third case study a mother and her two sons. Those sessions occurred at a childcare setting. The emphasis of the intervention was to support parent-child interactions; the parents reported improved behaviors at home.

In a case-study with a six-year old girl who exhibited physical and verbal aggression at school, Howden (2008) transitioned from individual one-to one sessions to mother-child dyadic treatment. All the sessions took place at the music therapy clinic located at a mainstream public elementary school. The girl had experienced two traumatic effects: a series of invasive surgeries to correct a dislocated hip problem and her father had been murdered during a robbery. In treatment, the music therapist addressed issues of grief and loss. She avoided criticizing the parent-child interaction during the session and focused on modeling different ways of relating to the child or setting boundaries. The therapist also collaborated with the classroom teacher to identify possible triggers and find means to prevent aggressive incidents. Using an eclectic approach, the therapist used music psychotherapy techniques in the session and consulted with the parent to develop routines and behavioral contingencies for use at home. Involving the parent allowed the therapist to address the problematic mother-

child relationships leading to a reduction of challenging behaviors both at school and at home.

Two case studies (Hasler, 2008; Hussey & Layman, 2003) described involvement of foster parents in treatment sessions, and one case study (Salkeld, 2008) documented the treatment process with a family and their adopted five-year old son. Hussey and Layman (2003) described a case vignette of using music therapy with a nine-year old African American female who was sexually abused. Therapy goals addressed self-regulation and positive social skills. In collaboration with the therapist, the girl's foster mother used a token economy system in the home to reinforce behaviors. Hasler (2008) documented a more involved role of foster families in therapy. Focusing on developing a relationship of mutual respect and trust between teenagers placed in foster care and their carers, Hasler (2008) used clinical music improvisation to help foster parents become attuned to the young person's feelings, explore and find resolutions to disagreements. Rather than modifying behaviors, the focus is to gain an in-depth understanding of the root causes of dysfunctional behaviors. In two case studies, she described the active role of foster parents in therapy and the gradual transformation of the relationship.

Salkeld (2008) provided individual family sessions to a 5-year old, who displayed aggressive and controlling behaviors at home and his adoptive parents. During the therapy sessions, the therapist engaged the child in playing music and narrating stories, in structured and non-structured music therapy improvisations. The goal of the treatment was to help the child gradually trust his adoptive parents. By responding to the musical improvisations, the family learned to play with each other and

explored difficult feelings such as fear of abandonment and ambivalence about parenting skills.

There is only one reference in the literature (Davies, 2008) describing two case studies of dyadic father-child music therapy. The sessions took place at the Croft Children's Unit, a residential mental health facility that assesses and treats children and families who have socioemotional behavioral problems. In the first case study, a ten-year old boy, Jamie, experienced emotional regulation and social problems. His parents had divorced and the mother expressed negativity and discouraged the child from having frequent contact with his father. The treatment team, in consultation with both parents, supported father-child dyadic music therapy sessions. The referral came after treatment team members noticed that the boy exhibited positive behaviors and active engagement in group music therapy sessions during his residential treatment stay at Croft. Even though initially the child requested that he receives music therapy alone, after a few months of individual therapy he requested that his father joins the second half of each session. During the dyadic music therapy sessions, the therapist engaged them in clinical music improvisation which prompted them to explore musical ways to listen and interact with each other. As music therapy continued, Jamie began receiving drum lessons at school. Gradually, Jamie parents' interpersonal relationship improved and the intensity of his problems reduced. As father and child gained skills and confidence to make music together, and met at regular intervals outside of music therapy, treatment was terminated.

In the second case study, Katie, a 13-year old girl with anxiety and depression, refused to attend school. Her father was strict and critical of his daughter. During 6-

months of music therapy, the therapist used clinical improvisation primarily targeting the father's rigidity. The father-daughter mutual resentment reflected in the musical improvisations. Her father, who was a classically trained pianist, brought his music books to the session and insisted on playing familiar tunes. Katie, on the other hand, avoided any form of melodic or rhythmic structure in her playing. During the course of treatment, the therapist attempted to mediate between them by engaging them in several structured music therapy improvisations. Gradually, father and child where able to listen more to each other's musical improvisations as indicated by the increased sensitivity to the use of musical material in each other's improvisations.

Miller (1994), a music therapist in the United States, described seven months of family therapy with a 12-year old boy who had depression, his mother and siblings. The family experienced multiple dysfunctions: the biological father had problems with alcohol abuse and had divorced the mother. The mother had mood swings and was unable to discipline her children. The boy did not get along with his step-father. Even though the therapist used music therapy only twice during the course of treatment, the musical interventions affected the family by disrupting patterns of engaging in long arguments during verbal sessions. The therapist observed that, active participation of the entire family in music improvisations may have helped the boy feel less isolated from other family members.

Horvat and O'Neil (2008), two music therapists working at the Nordoff-Robbins Music Therapy Center in London, discussed two case studies in which the caregiver attended the sessions with the child. The child in the first case study, named Pedro, had aggressive, self-harming behavior problems as well as learning and communication

delays. Treatment focused on teaching his mother different ways of relating to and interacting with him. The child in the second case study, named Anna, was a toddler who attended music therapy with her grandmother. Anna had developmental delays and hearing loss resulting from contracting meningitis. She began music therapy a week after receiving a cochlear implant operation. For Anna, treatment focused on supporting the bond between Anna and her grandmother while attending to Anna's emotional and developmental needs. By age 4, Anna was able to sing spontaneous songs, create musical stories, sing, dance and move freely to music. When music therapy treatment terminated, Anna was five and able to freely improvise a two piano duet with the therapist, as a farewell. The music therapists stated that Anna's grandmother was instrumental in supporting Anna's creative play, encouraging her to play and explore different sounds while providing emotional support.

Anecdotal information from additional case studies in the literature indicate that music therapy provided a mother of a child with autism opportunities for sharing enjoyable interactions with her child (Jones & Oldfield, 1999) and created a positive and supportive environment for two mothers and their preschooler with disabilities (Oldfield, 2008). Levinge (1993) observed that having the mother of a three year old boy with emotional disturbance attend the treatment sessions unveiled the mother's inability to set boundaries in their relationship. The musical relationship that develops during the sessions allows therapists to directly target and potentially transform mother-child relationships. For example, participation in music therapy sessions helped a parent learn how to be playful with her children and also taught a parent how to convey feelings to her son (Oldfield, 1993).

Bull (2008) described a treatment delivery model with therapy sessions conducted at a primary school in London for children with severe learning difficulties. She discussed the structure and treatment delivery of three mother-child dyads. The mothers came to the school and received group music therapy with their children for two consecutive years. After each session finished, the students returned to their class and the mothers had a 45-minute discussion time with the therapists facilitating. Those discussion sessions provided means of supporting the parent and provided opportunities for the parents to share their thoughts, feelings, struggles and frustrations with each other.

Music therapists who work in private clinics or mental health centers may only be able to provide a limited number of sessions to clients. Hibben (1992) presented a case study discussing eight family music therapy sessions at a private practice clinic setting. The goal of treatment was to aid the parents in forming a better relationship with their son as well as set limits, boundaries, and routines. By the end of the sessions, even though parenting issues were not resolved, the parents reported a decrease of the child's temper tantrums. Molyneux (2005), a music therapist in the United Kingdom working at a mental health center, advocated for short term treatment involving families. She documented short-term treatment outcomes by discussing three case examples of working with families addressing attention difficulties, attachment, and negative patterns of interactions. In her conclusions she stated: "music therapy may be the treatment of choice when the individual or family have difficulty engaging in verbal work and when the presenting pathology indicates that working non-verbally will be useful" (p. 65). One of the parents in the case study, however, reported dissatisfaction

with the treatment. Nevertheless, she reported changes in her relationship with her son as a result of attending music therapy.

Parent satisfaction with treatment is likely a factor for predicting adherence to treatment and consistent attendance of sessions. Allgood (2005) used a qualitative methodology to examine parental perceptions of a seven-week music therapy intervention for children with autism and their families. The researcher conducted all the sessions at a private school. She collected data by interviewing parents, individually first, prior to the intervention and in a focus group, post intervention. The parents in the study reported that music therapy helped them understand their child's strengths, and different ways they could support their learning. They also noticed improvement in their relationship with their children.

Similarly, Archer (2004) investigated parental perceptions about changes in parent-child relationships as a result of participation in music therapy. Data were (was?) also collected using parent interviews. The parents attended a multi-disciplinary early intervention program and reported an improvement in parental sense of well-being by decreasing anxiety related to having a child with a disability. Music therapy also allowed parents to find alternative methods to engage their children, maintain interactions, teach new skills, or manage problematic behaviors.

Using a structured open question questionnaire, Loth (2008) collected feedback from parents and caregivers attending group music therapy. The group sessions took place at a university-based clinic and were provided free of charge to families that had a young child diagnosed with a learning disability or developmental delay. Parents felt "their child benefited from attending the group in terms of developing communication

and social skills, learning to be with other children, waiting for their turn, taking initiative and improving their listening skills and self-expression" (p. 61). What they perceived, however, as the most important benefit was the fact that their child found group music therapy enjoyable. Families reported using some of the music activities at home. According to Loth (2008), providing multiple family-based music therapy enabled to support interactions and relationships within families and between families.

Shoemark (1996) discussed providing music therapy at an early intervention playgroup program. The program focused on supporting families (including extended family members) who had a child diagnosed with a disability. Many of the families spoke English as a second language. The therapist used a survey to evaluate the program. The families who responded indicated that they enjoyed the intervention and were using the activities at the home. Other researchers have corroborated that parents are likely to use the music intervention modeled by the therapist and provided activities in the home setting (Loth, 2008; Pasiali, 2008; Swedberg, Standley, Walworth, Hillmer, 2008).

The anecdotal case study literature contains only one example of providing family-based music therapy in the family's home. A case study by Warwick (1995) summarized two years of therapy at a home-based setting. The therapist engaged a mother-child dyad in improvisational music therapy aiming to help the child, who was diagnosed with high-functioning autism, relate to his mother. The spontaneous, improvisatory and interactive music making allowed the dyad to communicate with each other. When the parent-child dyad developed their musical skills allowing them to independently interact with each other, the therapist terminated the treatment.

Research of family-based music therapy in treatment is scant. The literature contains one study using single-subjects quasi experimental design (Pasiali, 2004), one study using quantitative design (Muller & Warwick, 1993), and one study using qualitative design (Sorel, 2005) documenting family-based music therapy treatment. As a way for addressing challenging behaviors at home, Pasiali (2004) collaborated with parents to introduce songs targeting challenging behaviors in home-based settings. She followed the guidelines for writing social stories, a technique developed in special education (see Gray, 2000) to create the text for the songs, and then used the piggybacking technique to fit the lyrics to the music of songs familiar to the participants. Introducing the songs was successful in reducing challenging behaviors of all three participants. Two parents continued to use the intervention after the conclusion of the study.

Aiming to identify whether active involvement of mothers in music therapy sessions enhances outcomes, Muller and Warwick (1993) conducted a research study involving nine children, ages three to fourteen, diagnosed with autism. Each child received a series of ten music therapy sessions with direct parental involvement in therapy and a series of ten music therapy sessions with just the child and the therapist. They matched the children based on factors such as prior experience in music therapy, intellectual ability, receptive speech and expressive language. The order of treatment was counterbalanced. They assessed mother and child behaviors during a 15 minute play session that occurred prior to and after receiving music therapy. They also assessed child-therapist, as well as child-parent interactions during sessions. Many measured behaviors in the above study did not show evidence of significant changes (across the

study) — the researchers discuss in detail how three parents exhibited intrusive behaviors during music therapy which may have affected the outcomes. Children in this study showed fewer stereotypic behaviors during music therapy sessions and their ability to take turns increased regardless of whether their mother participated in the treatment or not. Noteworthy, is that the findings of Muller and Warwick (1993) should be interpreted with caution. This author identified several problems with the methodological design, such as the small sample number and the lack of clear operational definitions of observed behaviors.

Lastly, one qualitative study (Sorel, 2005) examined music therapy with a parent-child dyad. Conducted after the therapy had been concluded, ensured that the therapy process was not altered as a result of a research design superimposed over it. The parent-child dyad received a total of 24 music therapy sessions at the Nordoff-Robins Center for Music Therapy in New York over a period of 13 months. The child was an 11-year old boy with autism; his mother was an active participant during the sessions. Even though the researcher was an employee of the center, she was not a research-participant in the study – she was not the therapist conducting the parent-child dyadic sessions. Data sources included videotapes of the sessions, logs of sessions where the therapists included transcriptions of musical ideas, comments, and summary of session events, conference meeting reports, and individual interviews with the two therapists leading the sessions and the parent. In order to triangulate the data, the researcher viewed each videotape and construed analytic memos about each session prior to reviewing the paperwork compiled by the therapists leading the sessions.

Sorel's (2005) findings indicated how participation in music therapy enabled the

parent to understand the need to take care of her needs by allocating personal time in her schedule. Even though the therapists and the parents envisioned different goals resulting from participation in music therapy, the flexibility of using musical improvisation including spontaneous song-making allowed for each constituent's needs to be met. Spontaneous song creation as well as the use of pre-composed songs provided means of expression of both pleasant and unpleasant emotions and the role of active music making became central to the mother-son relationship. The parent-child sessions ended abruptly when the parent decided to withdraw her son from therapy. Premature termination was explored by the researcher during the interview with the parent. The interview revealed that "both family commitments and personal issues that were being brought to the surface as a direct result of the music therapy work" (p. 239) led to withdrawal from treatment. Moreover, the parent seemed unaware of the skill of the therapists to address adult issues in music therapy. An emerging conclusion was that therapists working with parent-child dyads need to make explicit through meetings and discussions with the parent what might be implicit about therapeutic roles and expectations.

Family-Based Music Therapy in Prevention

The examples of music therapy interventions described in the previous sections, even though they had direct parental involvement, would classify as treatment based on the NRC/IOM (2009) report's definitions. Music therapists do work in prevention; for example Ronna Kaplan, at the Cleveland Music School Settlement, OH (personal communication at AMTA national conference; November 21, 2008) described leading music therapy groups with teenage mothers and their babies, during which she taught

mothers lullabies to help them learn how to engage in nurturing and soothing interactions with their infants. Only a few therapists, however, have documented their efforts by publishing in a peer-reviewed journal or writing a chapter in a book.

Efforts to document family-based music therapy in prevention exist in the literature. Mackenzie and Hamlett (2005) discussed an early intervention, community-based music therapy program for families and children age 0-4. The program had a sliding fee schedule making it possible for families with wide range income to attend. They evaluated the program by distributing 223 questionnaires to the parents. Parent responses indicated that music enhanced interactions at home and that they have used musical activities at home as a parenting strategy. Interestingly, families reported that they were meeting outside the music program, indicating that they were able to form a social network of support beyond participation in the program. Demographics indicated that the program attracted primarily non-disadvantaged families. Other early intervention programs providing music therapy have specifically targeted families at risk.

The parenting project, a prevention music therapy group at the Croft Children's Unit, targeted families who experienced a combination of risk factors, such as low socioeconomic status, depression, as well as teenage parents, or parents who experienced abuse as a child (Oldfield, 1999). Mothers and/or fathers who were either expecting a baby or had a child age two and younger participated in six-twelve weeks of therapy. Participation in those sessions helped a mother understand her daughter's need for control as a developmentally appropriate behavior, and helped a teenage girl engage in playful and enjoyable interactions with her infant (Oldfield, 1999). Similarly in

Germany, Stumptner and Thomsen (2005) developed the concept of Music Play Therapy (MPT) to provide babies and toddlers means of musical expression and non-verbal communication with their parents. Parent counseling sessions accompanied MPT sessions. This intervention provided a form of parent-child psychotherapy aiming to support healthy attachment and development of parenting skills.

'Sing and Grow,' a family-based music therapy intervention for children age 0-3 years and their families, is an early intervention program funded by the government of Australia. Therapists recruited families by conducting in-services in various community organizations serving families at risk. The goal of the treatment sessions was to "strengthen parent-child relationships through increasing interactions and assisting parents to bond with their children" (p. 8). The music therapists of 'Sing and Grow' provided services to more than 832 children and their parents. The families were offered 10-week programs at various community agencies. Anecdotal observations indicated increased and positive changes in parent-child interactions and relationships as well as improvement of parents' mood. Parents also reported that "they were more aware of how music could be used to increase parent-child interactions and encourage child development" (Abad & Edwards, 2004; p. 9). The 'Sing and Grow' researchers presented several non-scientific case study examples in which: (a) the sessions provided a venue for a mother to visit her young baby; she continued to attend the groups after she regained custody of her child; (b) women reported to have learned ways to interact with their children and share play experiences, (c) the sessions improved a mother's ability to soothe her infant (Abad & Edwards, 2004; Abad & Williams 2006; 2007).

Abad and Williams (2004) also described the outcomes of 'Sing and Grow'

groups with teen and young parents (N=183). They obtained parent feedback by distributing questionnaires. Responses indicated that they enjoyed participation and they learned how to use music at home to feel closer to their child. Three vignettes described how parents used music time to hold and cuddle with their children. The therapists facilitated positive play interactions which encouraged parents to develop their own play and nurturing skills. Continual funding enabled expansion of the program to provide services to "indigenous families, mothers in prison, multicultural families, families referred for child protection concerns and parents with drug and alcohol problems" (Nicholson et al., 2008; p. 236).

Drake (2008) was involved in providing community-based music therapy at a center providing music therapy for ethnic minority groups, isolated and impoverished families in London, England. A music therapist conducted drop-in music groups for families; those music groups were similar to the 'Sing and Grow' program described above. Even though the children who attended had no formal diagnosis, if the therapist who led the sessions or staff members of the center had noticed patterns of unusual behaviors or responses they made a referral for additional music therapy services. Some children received services by attending small music therapy groups that targeted development of communication and socials skills. Children who needed more specialized support attended individual music therapy sessions with their parents. Drake (2008) described two case studies of dyadic mother-child music therapy in which the goal was to encourage, support, and facilitate interactions. She stated: "Capturing a child's motivation for musical expression to elicit spontaneous shared musical interaction can be the key to engaging the parent at the child's level" (p. 43-44).

A few researchers have employed quantitative, qualitative, or mixed-methods research designs to evaluate the effectiveness or allow for an in-depth documentation of the processes involved in family based music therapy. The literature contains only seven studies in which both parents and children were the target of the therapeutic intervention (Loveszy, 2006; Nicholson et al., 2008; Oldfield & Bunce, 2001; Oldfield, Bunce, & Adams, 2003; Smeijsters & Storm, 1996; Trolldalen, 1997; Walworth, 2009). Only one study by Smeijsters & Storm (1996) examined therapy delivered during family sessions conducted at a music therapy clinic. They used a qualitative methodology approach to report 24 family-based therapy sessions with a seven-year old girl with enuresis. The child attended therapy sessions with her mother, who also brought along a younger sibling. For triangulation, the researcher conducted a literature review for finding different theoretical perspectives to interpret what was happening in therapy. Therefore, he looked into family-based literature with music therapy and also family therapy. Vignettes derived from the session indicated how musical improvisations reflected the problematic relationship between mother-daughter. Useful to clinicians, the therapist/researcher identified methods in which a clinician may use music improvisations to assess family dynamics. The remainder of the studies delivered music therapy using a group-format.

Loveszy (2006) engaged three mother-infant dyads in individual music therapy sessions and focused on documenting how the music therapy process evolved over time and how it influenced the mother-child relationship. The research site was a facility providing rehabilitation services and parenting classes to the Latin American Community. All the mothers had a documented history of substance abuse; one of the

mothers was an adolescent. Two mothers were mandated to attend the music therapy sessions or lose custody of their children; one mother self-referred herself after finding out that music therapy sessions were going to be offered at the facility. Each dyad received a series of 12 music therapy sessions delivered in a group format. Data included a partial review of the social/medical history of each participant, a pre-session phone interview with the parent, clinical notes of each session, as well as a transcription of the music and dialogue that occurred during each session. Interestingly, the two mothers who were mandated to attend music therapy indicated more difficulty in benefiting from the treatment, resulting from resistance and lack of trust. By the end of the therapy sessions, clinical observations indicated improvement in parent-child relationships of all three dyads.

Follow-ups after treatment termination indicated that two mothers relapsed into substance abuse and returned to a path that eventually lead to incarceration. Only the parent who self-referred to music therapy seemed to have been able to sustain an adaptive and substance-free lifestyle. The follow-up results, however, do not necessarily negate the observed benefits of participation in music therapy as reported by the researcher. They indicate, however, that music-therapy intervention needs to function within a system of continual support for families who face cumulative threats and obstacles for positive outcomes to sustain and generalize outside the music therapy treatment room. Loveszy's (2006) study is significant as it is the only study in the literature documenting treatment with parents who have substance abuse and their infants, aiming to support parent child interactions, increase parental responsiveness, and prevent future attachment problems.

Despite the emerging findings indicating positive outcomes of family-based music therapy interventions, the specific mechanisms through which the musical experience promotes change remain unknown. In an attempt to discuss such pathways, Trolldalen (1997) used qualitative research to describe how the need for a mother and child to share mutual experiences is addressed in music therapy. She videotaped ten group music therapy sessions with mothers and children age 2-4, ran in a facility for single parents with children who faced adverse situations. Three mother-child dyads attended the sessions consistently. For qualitative data collection, she reviewed the first, fifth and tenth session's videotape, focusing on how the mother-child relationship unfolded and how interactions evolved over time. Moreover, she maintained session notes and a personal journal about the therapeutic process. The researcher discussed specific ways in which the therapist can support reciprocal musical and non-musical interactions between the mother-child dyad. In addition, the researcher proposed the music therapist could create the context in which the quality of parent-child interactions might improve over time.

Some research literature has emerged, documenting preventative and health-based approaches with families and young children. At the Croft Children's Unit, a mental health treatment facility, music therapists provided music therapy for caregivers and their toddlers in two programs: (a) Mother/toddler group – a 12-week program for families experiencing global difficulties, but not having specific diagnosis, and (b) Parenting Project --a 6-week program for parents who experienced difficult childhoods. The goal of the sessions was to support the caregivers and break cycles of repeated bad parenting habits. In order to assess the intervention, the therapists videotaped the music

therapy sessions during the two programs above. They also videotaped music therapy sessions with parents at mainstream daycare. The researchers analyzed the videotapes using a time-sampling method to collect quantitative data. Questionnaires completed by parents yielded information about their perceptions of the program and their children's participation.

Part of the therapeutic work of Oldfield and her colleagues included meeting with individual parents, viewing a videotape of the session together and reflecting about the session. The researchers transcribed and analyzed the audio of the parent-therapist discussion about the session for emerging themes. The researchers did not conduct any inferential statistical comparisons. Observational data indicated high level of parent-child engagement in all three settings/groups during music therapy. The parents and children in the two treatment groups, however, displayed more negative behaviors (such as not joining in, or not encouraging their children) than those in the comparison group. The parents in the treatment groups also tended to view their children's behaviors less positively than did the parents of the control group. The authors concluded that there might be a possible connection between parent's mood and diagnosis with how they view and interpret their children's behaviors (Oldfield & Bunce, 2001; Oldfield, Adams, & Bunce, 2003).

The above study indicates a need for music therapists providing family treatment to help parents understand and interpret their child's behaviors in a positive light. In fact, Fearn and O'Connor (2003) piloted a project in which the parents of children with autism who brought their children to a therapy group, had the opportunity to participate in a support group while the children received music therapy and stated:

"In order for children to change and grow emotionally, it is vital that their parents are open to hearing about this change and are able to support it"... (p. 72).

Last, two studies describe interventions delivered as a community outreach intervention. Participants in Walworth (2009) were 56 parent-child dyads. Children 7-24 months were experiencing developmental difficulties but did not have a current diagnosis. Using a quasi-experimental matched subjects design with posttest only, she matched participants by developmental age, socioeconomic status and maternal depression. Using *t*-tests she determined that there were no differences between experimental and control groups for the above measures. Experimental parents (n=28) completed registration upon beginning of sessions and then after attendance in three groups within at 8-week period they completed the post-test. Control dyads (n=28) completed only the post-test developmental assessment without attending any of the music groups. Post-test involved 10 minutes of parent-child toy-play, which was videotaped and coded by observers blind to the purpose of the study, focusing on responsiveness and engagement. Children in the experimental group exhibited more social behaviors during the play assessment; there was tendency for parents in the experimental group to engage in more positive interactions with their children. Because developmental groups continued for five months, 20 parent-child dyads continued to attend the music therapy groups post data collection.

In order to provide further evidence supporting the effectiveness of music therapy for early intervention through the 'Sing and Grow' program, Nicholson et al. (2008) implemented an evaluation protocol that went beyond anecdotal data to document changes in parenting skills and interactions. The participants were 358

parents and children from families categorized into three groups: (a) social disadvantage, (b) young parents, or (c) parents of a child with a disability. The researchers measured changes in self-reported parenting behaviors, parent-child interactions, parenting self-efficacy, and parent mental health over time. In addition, they measured changes in parent-reported children's social, communication and behavioral skills. The researchers collected all parent self-reported data using pre and post session questionnaires. Furthermore, they collected family demographic details. The parent-reported measures were combined with therapist observations of parent and child behaviors.

The therapists leading the groups also observed parent-child interactions and collected additional data during the first two and last two sessions using observation checklists. Post intervention, they obtained information about parental satisfaction, perceived benefits and generalization to home. Demographics indicated that the program attracted families at risk; the parents reported high rate of satisfaction and frequent use of the intervention at home. The researchers conducted a repeated measures analysis of variance to compare pre and post scores. Time (pre, post) was the within-subjects factor and group type (general disadvantage, young parents, child with a disability) was the between-subjects factor. They found significant improvements over time for parental irritability, parent mental health, child communication skills, and child social play skills for all families belonging in either one of the three groups (social disadvantage, young parents, or parents of a child with a disability). Parent-reported parenting warmth and child behavior problems did not show significant changes over time. Parenting self-efficacy improved over time for parents belonging in the social

disadvantage and young parents groups, but showed a slight (non-significant) decline for parents in the disability group. Across all groups, clinician observations showed significant improvement of parent-child behaviors. The results of the Nicholson et al (2008) study indicated that experiences in music therapy short-term group intervention affect different aspects of child and parent functioning. Parents who have a child with a disability, however, may need additional supports to improve their sense of self-efficacy.

The last study reviewed in this section documents an effort by Jacobsen and Wigram (2007) to develop an assessment instrument of parenting competence. Their assessment contained a specific protocol which specifies improvisational exercises that can be used to evaluate the parent-child relationship in music therapy. Those exercises entailed beginning a music therapy session by asking the parent and the child to first look around the music therapy clinic. Next, the therapist instructed the dyad to choose an instrument and take turns playing that instrument as a 'soloist'. The third exercise involved asking the dyad to take turns imitating each other in music and the final exercise entailed playing instruments freely together. The authors of the assessment instrument described a clinical case example of using the above assessment method. This assessment may provide a useful tool for clinicians.[2] A limitation however, is that interpreting the observed parent-child responses in the session entails subjectivity, as the interpretive assessment of those behaviors may vary based on the theoretical training and clinical experience of the therapist who also functions as the assessor. The

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[2] In fact, as a researcher-therapist, I have used similar improvisational exercises with the participating families in this study.

authors of the assessment instrument have acknowledged the above subjectivity as a limitation.

Summary and Conclusions

Family socialization influences over time affect a child's psychosocial adjustment. Parents and children co-regulate their interactions based on situational demands. Both temperament and quality of interactions contribute to differences in cooperation. Risk factors such as maternal depression, lack of parenting competence or both, in addition to other contextual influences and stressors may ignite a cycle of problematic behaviors and responses increasing the likelihood that a child develops psychopathology symptoms in the future.

Music therapy literature of family-based music therapy interventions in treatment of diagnosed disorders contained a large number of anecdotal clinical case studies. I reviewed a total of 17 anecdotal case studies documenting family-based music therapy with a treatment focus. In only four studies the treatment was provided in a naturalistic setting: school (Bull, 2008; Howden, 2008; Woodward, 2004) and home (Warwick, 2008). For the remainder studies, family-based sessions occurred in a music therapy clinic. The diagnoses of the children receiving music therapy treatment included: autism, externalized behavior problems/conduct problems, aggression, learning difficulties, developmental delays, regulation and social skills problems, depression, anxiety, and hearing delay. Treatment focused on: (a) supporting, increasing, or altering maladaptive/intrusive patterns of interactions between parent-child, (b) teaching the parent play skills, (c) encouraging interpersonal communication

skills, (d) using music improvisation as means for conveying feelings and (e) using creativity, musicality, as means for self-actualization.

Six studies of family-based music therapy interventions in treatment used a qualitative or quantitative method of gathering data. Two studies used a non-rigorous qualitative paradigm of parent interviews (Allgood, 2005; Archer, 2004) and one used a survey (Shoemark, 1996) with the primary focus on documenting parental perceptions regarding the benefits of music therapy. The findings indicated that parents found music therapy enjoyable and beneficial to their child. Sorel's (2005) study elucidated potential problems and factors leading to premature withdrawal from treatment. Pasiali's (2004) study indicated that therapists can consult with parents and implement home-based individualized protocols, targeting challenging behaviors of children with autism. Muller and Warwick's (1993) findings are inconclusive.

I reviewed a total of eight published sources containing anecdotal information regarding family-based music therapy. In two studies, therapy was delivered at a music therapy clinic (Oldfield, 1999; Stumptner and Thomsen, 2005). The remainder sources documented delivering music therapy sessions at community-based outreach centers (Abad & Edwards, 2004; Abad & Williams 2006; 2007; Drake, 2008; Mackenzie & Hamlett, 2005). Therapeutic outcomes documented in the anecdotal case studies included: (a) helping families establish a social-network of support, (b) helping parents become more engaging, interactive and share play experiences with their children, (c) learning how to soothe a child, and (d) altering negative patterns of interactions.

In the seven studies using a quantitative or qualitative methodology to gather data, therapeutic outcomes focused on improving parenting responses, addressing

problematic relationships, increasing affect attunement, and supporting parent child interactions. One study was conducted in a music therapy clinic (Smeijsters & Storm, 1996), and others in a substance abuse treatment facility (Loveszy, 2006), a family-based treatment center (Oldfield & Bunce, 2001; Oldfield, et al., 2003), and a community setting (Walworth, 2009). In one study, data collection expanded over multiple community settings (Nicholson et al., 2008). Lastly, one study discussed the development and administration of an assessment tool that can be used to evaluate parent-child interactions in music therapy (Jacobsen & Wigram, 2007).

Music therapy as a family-based intervention holds promise as it may provide a context to support parent-child relationship and interactions. Few studies in the literature, however, focus on prevention. Research literature using a rigorous qualitative or quantitative design is limited indicating a need for further studies. Music therapy can be adapted to meet the unique needs of families. This may lead to ownership and support from family members. Because it is more relevant to ethnic, social and moral characteristics of the family it may achieve impact. The purpose of this dissertation was to use a rigorous qualitative design to document the meaningfulness and therapeutic impact of family-based music therapy provided during home-based visits to four unique families.

CHAPTER III

METHOD

According to Creswell (2003), a researcher's strategy of inquiry "is based on the research problem, personal experiences, and the audiences for whom one seeks to write" (p. 23). The purpose of research is to gain knowledge. The type of knowledge gained from conducting research using a qualitative approach is different from that gained employing a quantitative paradigm. Using a positivist approach, quantitative methodology seeks to identify what variables affect change upon behaviors using measuring instruments and drawing statistical inferences, generalizing from participant samples to general population. Qualitative methodology, on the other hand, uses a constructivist approach to knowledge by seeking to understand phenomena and gain insights into each participant's subjective experience (Creswell, 2003; Smeijsters, 1997).

The literature review has indicated a need to investigate further the nature, quality, and extent of responses to family-based music therapy interventions. A qualitative research paradigm allowed for an in-depth analysis, capturing possible ways in which shared musical experiences can support rich, complex, and meaningful parent-child interactions. My goal was to establish a foundation for developing a theoretical framework on how music therapy processes address children's socioemotional needs and promote resilience by supporting the dyadic parent-child relationship in a broader context of influences at multiple levels.

Methodological Framework

This is a grounded theory study (Corbin & Strauss, 2007; Glaser & Strauss, 2009) using a multiple instrumental case design (Stake, 1995) to explore the dynamics of child-family relationships throughout a therapeutic intervention, in order to develop a theory on how music therapy fosters resilience by supporting mutually responsive parent-child interactions. According to Yin (2003), case studies "are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (p. 1). Stake (1995) defined instrumental case studies as an inquiry to seek answers and draw insights to specific questions focusing on a specific case. Implementation and replication of therapeutic procedures across four case studies will aid in the formation of insights into the phenomenon of family-based music therapy in prevention and aid the development of theoretical framework derived directly from the data.

The qualitative research methodology proposed by the researcher is a paradigm that allows in-depth exploration and documentation of the processes involved when working with young children and families. Rigorous documentation of the participant responses to the music therapy intervention, as it unfolded during the implementation phase of this study, provided a vehicle for understanding the processes involved in facilitating family-based music therapy sessions. Studying the process of delivering music therapy services at an in-home setting allowed for examining both individual and family dynamics as variables that affect the course of therapy delivery.

The Researcher's Lens

My personal experiences have played a pivotal role in selecting the topic of my dissertation and its methodological framework. I first became interested in resilience while working as a music therapist in a home-based Head Start program in the United States. In addition to living in poverty, children in the program often faced additional stressors such as parent incarceration, family conflict, parent substance abuse, or parent mental illness. There, I first noticed children who seemed to maintain healthy socioemotional functioning despite adversity or families who maintained a positive and supportive attitude, thus, positively affecting their offspring. Since the purpose of Head Start is prevention within the context of a family-child-environment, I became interested in identifying ways that music therapy could bolster both capacity for adaptation and act as a catalyst in the process of adaptation.

In this study I assumed a dual role of researcher and participant. I hope that, by working in this capacity, I was able to establish rapport and develop a trustful therapeutic relationship with the families recruited for the study. Such a dual role, however, demanded being aware of values, assumptions and prejudices that may interfere with treatment planning, data collection or interpretation. I come from a close-knit large family that maintains strong affiliate bonds. As such, my relatives have acted as sources of emotional support (and, on some occasions, as a nemesis). My experience with my family has affected both how I think and how I talk about families. I realize that others, based on their experiences and viewpoints, may not share similar assumptions.

Becoming a parent has also changed the way in which I perceive parent-child relationships as well as my perception of the role of professionals who interact with a family. When my son was born prematurely, I had to interact with several professionals who became involved with our family as a result of his needs. Those professionals who adopted gentle guidance and supportive styles motivated me to implement their suggestions. When professionals adopted authoritarian styles, despite their well-meaning intentions, I tended to become overwhelmed or resentful. And when I received unsolicited advice, I did not always welcome it or follow it.

I tend to have an assertive, energetic, and authoritative style when working with children. Such a style, however, may not be conducive to delivering psychoeducational information to families. I understand that, in the process of engaging families in therapy I must carefully choose my discourse and determine not only what I say and how I say it, but also what I will not say to the families with whom I work with. As a participant-researcher, I collected the data and also provided the music therapy interventions. Because of my assumption that music therapy becomes a source of external support for families in order to foster resilience, this stance may have affected my interpretations of the data and the phenomenon under investigation.

Participants

Four children and their families participated in this study. Allgood (2005), who used a similar paradigm, also selected four families as the number of participants (Allgood, 2005). Participating families faced cumulative threats/risks in a broad context such as at child level (e.g., genetic risk, temperament), at parent level (e.g., parental use of addictive substances, marital discord or divorce), and family level (e.g., poverty,

isolation, race, culture). Children who are not typically developing – or have a diagnosed developmental or cognitive disability- were excluded from the study. The age of the child participants ranged from approximately 3 to 5 years. All participating families shared one common risk to adaptation at parent level: the mother in each family had a history of depression.

Participants were solicited using purposive sampling to meet the above criteria. To recruit participants, I submitted an announcement to an e-mail distribution list that targeted parents who were also students at Michigan State University. Moreover, I sought recommendations from the following therapists or healthcare/educational providers: (a) a social worker who works at a community mental health agency distributed recruitment materials to her colleagues working with families and young children, and (b) two educational providers who work in early intervention for at risk families committed to informing families that met the recruitment criteria set in this study.

Procedure

Following recruitment, I first met each child's parent(s) for an initial screening interview. I obtained informed consent and then administered two psychometric scales to aid in clinical assessment and provide a child and family profile. I gave the parents instructions on how to complete the forms, as needed. The two psychometric scales were the Devereux Early Childhood Assessment scale (DECA; LeBuffe & Naglieri, 1999a) and the Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989). Once the parent completed DECA and PSOC, I analyzed the results. Then, I scheduled a second meeting with the parent(s). During the second meeting I shared the results of

the psychometric scales and conducted a semi-structured parent interview. Both the initial screening interview and the semi-structured interviews took place either at the parent's home or at Michigan State's Student Music Therapy Clinic.

Following the semi-structured interview, I designed and implemented an eight-week music therapy intervention based on each child's/family preferences, strengths, and areas of need. The music therapy intervention involved: (a) administering the two psychometric measurement scales (DECA & PSOC) in lieu of formal assessment, (b) providing eight individual music therapy sessions conducted at the family's home, and (c) maintaining ongoing weekly parent consultations. In this chapter, I have included a section titled 'The Music Therapy Intervention' describing the different components of the intervention in detail. Since the two psychometric assessments used in this study were integral to the design of the music therapy intervention, I have also included a detailed description of each in that section.

The two psychometric scales served as artifacts in order to establish a resilience profile for each child-participant and a parental profile of self-reported sense of competence, which informed and shaped the development and design of music therapy intervention strategies. DECA results, in combination with the parental input received during the initial interviews, served in lieu of a formal child-centered assessment prior to beginning the music therapy sessions. Other qualitative researchers used assessment profiles prior to conducting data analysis for individual children (Rainey Perry, 2003). Moreover, I used the PSOC parental profile as an avenue of possible areas of growth that could be targeted during music therapy sessions and family consultations. To summarize, DECA, PSOC, and the interview feedback helped guide the focus of the

intervention, according to the needs of each participating family member. Hence, I attempted to avert potential risks by supporting parenting skills and within-the-child factors relevant to resilience.

The implementation phase of the intervention spanned an eight-week period and varied for each family based on preferences, strengths, and areas of need. During those eight weeks, I asked each parent to maintain a journal reflecting upon their participation in music therapy. The reader will find more information about the journals in the section titled 'Data Gathering Tools.'

Two undergraduate music therapy students accompanied me to the music therapy sessions (each student was assigned two families). Both had signed a confidentiality agreement with Michigan State Music Therapy Student Clinic and had completed an online training tutorial required by the Institutional Review Board. All participating families consented to having the students attend and assist during the music therapy sessions.

Upon completion of the intervention, I wrote a developmental assessment report summarizing each target child's response to music therapy and observed progress. Two to three weeks following the conclusion of the intervention, I met with each parent to discuss the developmental assessment report and conducted another semi-structured interview.

The implementation timeline included below summarizes the procedural steps involved in conducting this study:

Week 1: Met with parents/caregivers for initial screening interview; obtained informed consent; parent completed DECA and PSOC.

Week 2. Researcher analyzed DECA & PSOC results; met with parents to share DECA & PSOC results; conducted first semi-structured interview.

Week 3. First individual music therapy session; parent consultation as needed; parent journal began.

Week 4. Second home-based music therapy session; parent consultation as needed; parent journal continued.

Week 5. Third home-based session; parent consultation as needed; parent journal continued.

Week 6. Fourth home-based session; parent consultation as needed; parent journal continued.

Week 7. Fifth home-based session; parent consultation as needed; parent journal continued.

Week 8. Sixth home-based session; parent consultation as needed; parent journal continued.

Week 9. Seventh home-based session; parent consultation as needed; parent journal continued.

Week 10. Eighth home-based session; parent consultation as needed; parent journal continued (final week).

Weeks 11-12. Wrote developmental assessment report.

Weeks 13-14. Met with parents; shared results of developmental assessment report; conducted 'exit' semi-structured interview.

The Music Therapy Intervention

My intent as a researcher/therapist was to provide a short-term intervention with a specific focus (targeting parental self-efficacy and child resilience) while modifying the therapeutic applications used during each session to suit each family's needs. The intervention consisted of: (a) administering two psychometric measurement scales (DECA & PSOC) in lieu of formal assessment, (b) providing eight individual music therapy sessions conducted at the family's home, and (c) maintaining ongoing weekly parent consultations. In this study, I used the DECA and the PSOC as artifacts in order to establish participant profiles that were used to inform the development and design of music therapy intervention strategies.

Devereux Early Childhood Assessment (DECA)

The Devereux Early Childhood Assessment (DECA) is a standardized norm-referenced assessment that measures protective strength-based behaviors and behavioral concerns in children ages 2-5. Researchers, clinicians, or educators may use DECA as a screening tool to assess and remediate socioemotional problems prior to developing into disorders.

The DECA contains 37 items and has two composite scales: Total Protective Factors and Behavioral Concerns. The Total Protective Factors scale contains three dimensions (initiative, self-control, attachment). Initiative measures "the child's ability to use independent thought and action to meet his/her own needs" and contains 11 items. Self-control measures "the child's ability to experience a range of feelings and experience them using words and actions that society considers appropriate" and contains 8 items. Attachment measures "the mutual, strong and long-lasting

relationships between a child and significant adults such as parents, family members and teachers" and contains 8 items (Devereux Early Childhood Initiative, 2003). Added together, they yield a total composite score called Total Protective Factors (TPF). DECA also measures and gives a separate composite score of Behavioral Concerns (BC).

Parents and/or teachers of individual children can complete the DECA based on their direct observations in order to create an individual child profile or a classroom profile. Directions on scoring, administration, and interpretation are included in the User's Guide (LeBuffe and Naglieri, 1999b). LeBuffe & Naglieri (1999a) constructed different norms based on rater (Parent or Teacher) because children may behave differently in each environment. Their norms were based on combined scores for both genders.

LeBuffe and Naglieri (1999a) conducted multiple psychometric studies, which they published in the scale's technical manual. In addition, I identified four independent studies that contained pertinent psychometric information about the DECA (Brinkman, Wigent, Tomac, Pham, & Carlson, 2007; Jaberg, Dixon, & Weis, 2009; Lien, 2006; Rosas, Chaiken, & Case, 2007).

The authors of the scale computed internal reliability for each dimension using Chronbach's alpha. For the total protective factors score, alpha for parent raters was 0.91 and for teachers was 0.94. For the remainder of the dimensions, alpha ranged from .71 to .90. The standard error of measurement was computed using the theoretical standard deviation of the *T*-score (10) and the internal reliability coefficient; it ranged from 2.39 to 5.40 (LeBuffe & Naglieri, 1999a). For test-retest reliability, LeBuffe &

Naglieri (1999a) asked 26 parents and 82 teachers to rate the same child on two occasions separated by 24-72 hours. For the Total Protective Factor score, test-retest reliability was .74 for parents and .94 for teachers. The Behavioral Concerns dimension had the lowest and the initiative factor had the highest reliabilities for both parents and teachers. LeBuffe & Naglieri (1999a) also conducted an inter-rater reliability study with ratings provided by two teachers or two family members. Overall inter-rater reliabilities were moderate. The researchers pointed out that teacher-assistant teacher dyads tended to have higher inter-rater reliability because they observed the child at the same environment and time of day. Internal consistencies on the DECA for Lien's (2006) sample and Jaberg et al.'s (2009) sample resembled those from the DECA standardization sample.

LeBuffe and Naglieri (1999a) used a comparison group method for conducting three validity studies. For these studies they used two samples: 95 children identified as having socioemotional and behavioral problems, and a community sample of 300 typically developing children, referred to as the problem-identified sample and community sample, respectively. The first study ruled out minority discrimination biases. To identify racial discrimination bias, they used the community sample (n=300) to compare mean score differences between Black vs. White and Hispanic vs. Non-Hispanic children with the *d*-statistic. The results indicated that the mean score differences in the three scale factors, the Total Protective Factors, and the Behavioral Concerns were either small or negligible indicating that race is irrelevant when scoring the DECA. Thus, the DECA does not discriminate against minorities (LeBuffe & Naglieri, 1999a; LeBuffe & Shapiro, 2004).

The second study, for contrasted groups criterion validity, had a matched-subjects control design. The researchers selected 86 children from the community sample who they matched to the 95 children of the problem-identified sample for age, gender, race, and Hispanic ethnicity. They hypothesized that children who obtained high scores on the DECA Protective Factors will also have higher socioemotional health in comparison to children who scored low. Multivariate analysis of variance (MANOVA) of all five scales/dimension of DECA T-scores identified significant differences between the two groups. The effect sizes d-ratios were large for the Self-control, Total Protective Factors, and Behavioral Concerns, medium for Initiative and small for attachment. They also compared the Total Protective Factors and Behavioral Concerns Scale scores for the two groups using independent *t*-tests, also finding statistical significance. All the statistical analyses indicated significant differences between the two groups. Therefore, this study provided evidence that the DECA can screen and discriminate between children who have socioemotional problems and those who do not.

In the third study, for individual prediction criterion validity, the researchers sought to identify if the Total Protective Factors scores and the Behavioral Concerns scores predict membership in the community sample or the sample with identified socioemotional problems using chi-square analysis. The scores on the Total Protective Factors and the Behavioral Concerns predicted group membership 69% and 71% of the time, respectively (LeBuffe & Naglieri, 1999a; LeBuffe & Shapiro, 2004).

The approach they used for construct validity was to identify whether children who experienced similar levels of stress or risk were likely to display more behavioral

concerns, in case they scored low on the Total Protective Factors of DECA. Parents and family members of 181 children completed three checklists adapted from published measurements of major life events, sources of stress, and daily hassles. They converted the raw scores from the risk assessment instruments to *T*-scores and used the total sum to divide participants into a low/average and a high risk group. They also used the *T*-scores of the DECA to assign participants into a Low vs. Average/High Total Protective Factors group. A two-way analysis of variance indicated main effects of Total Risk and Total Protective Factors. There were no significant interactions. Therefore, these findings indicated that children with high risk and high Total Protective Factors scores have lower problem behavior scores in comparison to children with high risk and low protective factors. Stated differently, children with low risk and low protective factors have more behavioral problems than children with low risk and high protective factors. Thus, protective factors, as measured by DECA moderate the effects of risk (LeBuffe & Naglieri, 1999a; LeBuffe & Shapiro, 2004).

Applications for Use of the Measurement

Kaplan Press offers companion pieces for the DECA that are geared towards early childhood educators. The DECA program involves a classroom observation manual, parent and teacher strategies guidelines, and various other educational materials. The program is designed to help teachers implement effective teaching strategies. Three studies evaluated the use/effectiveness of the DECA program (Jaeger-Sash, 2006; Layburn, 2005; Lowther, 2004). Two studies used the DECA scores as a dependent measure assessing treatment intervention effectiveness: math intervention (Dobbs, Doctoroff, Fisher, & Arnold, 2006) and peace curriculum intervention (Perel,

2006). One study explored relationships between medical and familial risks and DECA scores (Baldo, 2001), and another how behavioral problems may affect learning outcomes (Escalon & Greenfield, 2009). Lastly, the second study focused on parent-child dyads and how the presence or absence of protective factors affects the relationship (Fiore, 2008). The reader may refer to the literature review chapter for a more detailed discussion of this study.

Parenting Sense of Competence Scale (PSOC)

Gibaud-Wallston and Wandersman (1978) initially developed the PSOC as a 17-item questionnaire assessing two dimensions: (a) satisfaction, "an affective dimension of parenting, reflecting the degree to which the parent feels frustrated, anxious, and poorly motivated in the parenting role" (p.173), and (b) efficacy, "an instrumental dimension of parenting, reflecting the degree to which the parent feels competent, capable of problem solving, and familiar with parenting" (p.173) (as cited in Johnston & Mash, 1989). Overall, it measures parenting self-esteem, defined by Ohan, Leung and Johnston (2000) as "a person's contentment (the liking or satisfaction component) and perceived effectiveness (the efficacy component) as a parent" (p.252).

Even though researchers have proposed the two factor dimension of the scale (Johnston & Mash, 1989; Ohan Leung & Johnston, 2000), there is evidence of a three factor structure (Gilmore & Cuskelly, 2009; Rogers & Matthews, 2004). In Johnston and Mash's (1989) study, item 17 of the rating scale failed to load on a factor solution. Subsequently, Roger and Matthews (2004) omitted it from the PSOC scale administered in their sample. In Gilmore and Cuskelly (2009), item 17 loaded and contributed

significantly to a third factor they labeled 'Interest' in parenting. For the purposes of this study, I have used the 17-item version of PSOC.

Parents can answer each item on the PSOC using a 6-point scale ranging from strongly disagree to strongly agree. Scoring of some items is reversed. Total score ranges from 17 to 102 with higher scores indicating higher sense of parenting interest, satisfaction, and efficacy. Johnston and Mash (1989) reported the average scores for parents who had younger children as follows: (a) mothers of boys (Total score 63, Satisfaction 37.40, Efficacy 25.52), (b) mothers of girls (Total score 63.83, Satisfaction 37.69, Efficacy 24.79), (c) fathers of boys (Total score 64.72, Satisfaction 39.77, Efficacy 24.95), and (d) fathers of girls (Total score 65.19, Satisfaction 39.42, Efficacy 25.77). Rogers and Matthews (2004) also reported means of a large sample including 849 mothers and 329 fathers. Their participants, however, as Gilmore and Cuskelly (2008) pointed out, did not represent a normative community sample because they were participating in a parent training course, indicating possible concerns about their child or their parenting skills. Gilmore and Cuskelly (2008) collected normative data using a large Australian sample (mothers n=586 and fathers n=615). The average total scale scores were 60.92 and 60.62 for mothers and fathers, respectively.

The original authors of the scale reported alpha coefficients of .82 for the satisfaction and .70 for the efficacy scales. Six week test-retest correlations ranged from .46 to .70 (Gibaud-Wallston & Wandersman, 1978; as cited in Johnston & Mash, 1989). Subsequently, Johnston and Mash (1989) reported internal consistencies of .75 for the Satisfaction scale and .76 for the Efficacy scale. The alpha coefficient for the total score was .79. Ngai, Chan, and Holroyd (2007) reported Cronbach's a = .85 and a test-retest

correlation coefficient of .87. Other researchers have reported similar coefficients in their samples (i.e., Ohan, Leung & Johston, 2000).

Johnston and Mash (1989) conducted the first psychometric study using the PSOC scale. Their sample (n = 297 mothers; n = 215 fathers) was selected using a random door-to door survey in a large Canadian city and included parents of children age 4 to 9. They correlated PSOC scores and parent reported child behavioral problems. Moreover, they investigated possible interactions between child diagnosis, gender (of parent and child), and age of child. Their results indicated low to moderate relationships between child behavior problems and PSOC scores. Fathers scored higher than mothers on the total PSOC scores, especially on the satisfaction dimension. There were no differences between mothers and fathers on the efficacy scores reported in their sample. Also, there were no child age or gender effects.

Ohan, et al. (2000) correlated the scores of PSOC with scores obtained by a child behavior checklist and a child-rearing practices reports, an index indicating the level of agreement in co-parenting and a marital adjustment scale. Providing further evidence for construct validity, Ngai, Chan, and Holroyd (2007) administered a Chinese version of the PSOC to a convenience sample of 170 mothers in a regional hospital in Hong Kong. The participants also completed a self-esteem scale and a postnatal depression scale. The researchers found that PSOC scores were positively correlated with self-esteem and negatively correlated with postpartum depression. Lastly, Lovejoy, Verda and Hays (1997), using a sample of 91 mothers recruited at childcare centers, found that the PSOC efficacy dimension scores correlated with another measure of self-efficacy, indicating convergent validity.

Applications for Use of the Measurement

Researchers often used the PSOC as part of a battery of instruments assessing the effectiveness of parenting training programs or therapeutic interventions targeting children who have diagnoses such as ADHD (Anastopoulos, Shelton, DuPaul, & Guevremont, 1993; Hechtman, Abikoff, & Klein, 2004; Sonuga-Barke, Daley, Thompson, Laver-Bardbuty, & Weeks, 2001), externalized, disruptive, oppositional behavior or conduct disorder (Bor, Sanders, & Markie-Dadds, 2002; Connell, Sanders, & Markie-Dadds, 1997; Feinfield, & Baker, 2004; Gardner, Burton, & Klimes, 2006; Nixon, Sweeney, Erickson, & Touyz, 2003), autism (Keen, Rodger, Doussin, & Braithwaite, 2007) and separation anxiety disorder (Eisen, Raleigh, & Neuhoff, 2008). In prevention, researchers used PSOC as a psychometric tool in programs targeting children at risk for developing behavioral problems (Cunningham, Bremner, & Boyle, 1995; Markie-Dadds, & Sanders, 2006; Johnston, Huebner, & Tyll, 2004), a community-based universal prevention program to prevent socioemotional problems (Peters, Petrunka, & Arnold, 2003), and an intervention to promote attachment for parents of teens at risk for aggressive behavior (Moretti & Obsuth, 2009).

Specifically targeting parents, researchers used PSOC in studies of intervention aiming to reduce parental stress (Pisterman, Firestone, McGrath, Goodman, Webster, Mallory, & Goffin, 1992) and for preventing postnatal depression among first time mothers (Ngai, Chan, & Ip, 2009). Researchers working with families who had infants used PSOC to collect information relevant to evaluating pre and postnatal prevention services to families (Johnston, Huebner, Anderson, Tyll, & Thompson, 2006), psychotherapeutic interventions for mother-infants (Cohen, Lojkasek, Muir, Muir, &

Parker, 2002; Cohen, Muir, Parker, Brown, Lojkasek, Muir, & Barwick, 1999) and mother-infant skin-to-skin conduct to family interaction (Feldman, Weller, Sirota, & Eidelman, 2003).

In correlation studies, researchers examined the relationship between PSOC scores and child behavioral problems (Black, Dubowitz, & Starr, 1999), toddler's behavior and development (Coleman & Karraker, 2003), risk for ADHD or ODD disorder in preschoolers (Cunningham & Boyle, 2002), level of school-adjustment of at risk youth (Jimenez, Dekovic, & Hidalgo, 2009), and response of children who had ADHD to treatment (Hoza, Owens, Pelham, Swanson, Conners, Hinshaw, Arnold & Kraemer, 2000). Researchers working with families examined correlations between PSOC scores and parental reaction to child misbehavior (Bondy & Mash, 1999), coercive parenting patterns (Bor & Sanders, 2004), family conflict (Erdwins, Buffardi, Casper, & O'Brien, 2001), parenting stress for mothers who had children with developmental disability (Hassall, Rose, & McDonald, 2005), maternal parenting attitudes of African American adolescent mothers (Hess, Papas, & Black, 2002), father parenting stress (McBride, 1989), parenting adjustment (Mazur, 2006), and mother-child touch patterns in infants with feeding disorders (Feldman, Keren, & Gross-Rozval, 2004).

Moreover, researchers used PSOC to assess parental beliefs, attitudes, and cognitions relevant to caring for children with disorders such as diabetes (Rodrigue, Geffken, Clark, & Hunt, 1994), seizure disorders or asthma (Chiou, 2008), developmental delays (Rodrigue, Morgan, & Geffken, 1992) cerebral palsy (Wanamaker & Glenwick, 1998), liver disease (Hoffman, Rodrigue, Andres, & Novak,

1995), ADHD (Banks, Ninowski, Mash, & Semple, 2008), and behavioral problems (Baker & Heller, 1996; Johnston & Patenaude, 1994). Using PSOC as a screening tool, researchers identified adolescent parents with high prenatal and parenting stress (Holub, Kershaw, Ethier, Lewis, Milan, & Ickovics, 2007). Furthermore, they explored the relationship between perceived social support and teen-parent's belief regarding parenting efficacy (Krishnakumar & Black, 2003; Oberlander, Black, & Starr, 2007). Last, the research literature includes using PSOC in construct validation studies of related psychometric (Marrinez, Black, & Starr, 2002; Karazsia van Dulmen & Wildman, 2008).

The Music Therapy Sessions

I used music therapy literature recommendations to determine and limit the number of home-based music therapy sessions to eight. Nicholson et al. (2008) found that families who attended a minimum of six out of ten group music therapy sessions exhibited more positive outcomes in comparison to families with lower attendance patterns. Thus, they proposed six multiple family group music therapy sessions as the ideal minimum 'therapeutic dosage.' In a recent meta-analysis examining the number of sessions and response to therapy for individuals who have mental health disorders, Gold, Solli, Kruger, and Lie (2009) found small effect sizes for 3-10 sessions and large effects after 16-51 sessions.

I met with each family weekly, at their home, to implement the music therapy sessions with each child-participant and his/her family. I obtained child-assent prior to conducting each session. Since I view the family as a cohesive unit determined by close interpersonal interactions, I invited other family members to join the sessions; who

could join the sessions was left up to the discretion of the primary caregiver(s)/parent(s). Moreover, I provided the parents/caregivers with instructions and materials to enable them to continue implementing some of the structured music therapy activities at home throughout the week.

The length of the session ranged from 30 to 60 minutes, according to family needs. The child participant and one parent participated in the home-based session. Based on parental discretion and a joint decision between the parent and the researcher, additional family members and siblings also participated. I used parent interview feedback, DECA and PSOC to design therapeutic applications based on family profile. My goal was to create a rich and stimulating music environment while supporting parent-child-family interactions. For that purpose, I used both structured, pre-planned, therapeutic activities and clinical improvisation musical experiences during the sessions.

Age appropriate songs, chants, games, and movement activities enabled both the children and parents to freely respond. I used an informal structure to provide multiple opportunities for successful engagement, encouraging parent-child mutually responsive interaction. Thus, during the sessions I flexibly adapted pre-planned activities or improvised new material based on the response of the participating family members. Researchers of family-based music therapy interventions described using a structured session format (Abad & Edwards, 2004; Allgood, 2005). I strived for structure and predictability, as well as maintaining flexibility to adapt and improvise activities based on adult and child spontaneous responses. Clinical improvisation musical experiences

during the sessions provided a context in which I could further observe and interpret parent-child interactions.

As active participants, the parents had opportunities to learn creative and expressive means of using music to interact with their children. A main therapeutic focus was to model and support playful, encouraging, and warm interactions. As a therapist, I also modeled how to use assertive strategies and problem solving to manage children behaviors.

Parent Consultations

I encouraged open and regular communication with parents either by conducting phone or e-mail consultations or arranging face-to-face meetings as needed. Short consultations often occurred prior to the beginning of each weekly music therapy session. During those consultations I discussed anecdotal observations, delivered psychoeducational materials (i.e., information and resources on how to address specific concerns or behavioral challenges), or both. Moreover, I provided materials on how to continue to implement some pre-planned music therapy activities. Those materials included recordings of songs and/or music selections used in the session, lyrics or music handouts, suggestions on further ways to use the activities at home, as well as some supplemental materials with additional ways to use the provided activities. Other researchers also reported providing a CD or a tape to the families for use at home (Shoemark, 1996; Abad & Edwards, 2004). Based on parent input resulting from the pilot study preceding this project, during consultations I pointed out how each activity may foster adaptive response related to the child's DECA profile.

Data Gathering Tools

Semi-Structured Interviews

As discussed in the Methodological Framework section of this chapter, I conducted two semi-structured interviews with each parent-participant. The first interview occurred prior to beginning the eight-week, home-based music therapy sessions and the second interview occurred 2 to 3 weeks following the conclusion of those sessions. I recorded each interview using a Pocket PC 2003 Hewlett-Packard iPAQ handheld computer and transcribed it verbatim on my computer. I then e-mailed it to each parent-participant to allow each participant to conduct a member check. I asked them to make corrections or include additional reflections. Using the transcripts, I constructed a description of each family's strengths and areas of growth. I also coded the data and conducted qualitative analyses to derive salient points relevant to the research questions of this study. Appendix A includes sample questions for both of these interviews. My questions were similar to those used by other researchers of family-based music therapy (Allgood, 2005; Abad & Edwards, 2004).

Parent Consultations

In order to maintain a record of parent consultations, I retained the text of e-mails sent to parents or received from parents and kept notes after each music therapy session regarding information I exchanged with the parents. Whenever I met in person with a parent I maintained notes of our conversation. I included all the gathered information in the data analyses.

Weekly Parent Journal

I asked each parent to complete a journal and submit it to me via e-mail on a weekly basis. In the journal, I asked them to comment on how and when they were using the provided home program and materials. In addition, I asked them to include a subjective narrative about their thoughts, feelings, and insights about the process of participating in the music experiences with their children. Because parents participating in a pilot study preceding this dissertation (Pasiali, 2008) requested more information on what to write in their journals, I created a journal template. I included the template in Appendix B. Each parent submitted the journal weekly by e-mail.

Session Field Notes & Analytic Memos

I videotaped each music therapy session using a Canon Elura 65 MiniDV Camcorder mounted on a tripod. Following each session, I kept notes regarding important aspects of the session and information shared with the parent. Within one to two weeks following each session, I reviewed each videotape and created field notes about each session. This is a procedure followed by other researchers: Abad and Edwards (2004) reported keeping weekly notes based on their session observations and Trolldalen (1997) maintained session notes and a personal journal.

In the session field notes, I focused on describing behaviors, actions, and interactions to the intervention in an objective manner. Moreover, I included an outline of provided music therapy applications and wrote brief analysis statements relevant to the observed responses and modifications for future sessions. During this stage, I avoided interpretive analysis of the field notes. Half-way through data collection, I began to review the field notes of each session to create analytic memos. In those

memos, I noted pertinent responses and conducted interpretive analysis assessing behaviors, drawing inferences and conclusions upon the observations. Appendix C contains a sample session field note and its analytic memo. I relied on both the field notes and the analytic memos to create the brief overview of the participant's general responses in the session and derive themes relevant to clinical assessment and interpretation of observed behaviors, which I included in Chapters IV to VII.

Developmental Assessment Report

Once I completed all the music therapy sessions, I used my field notes and analytic memos to create a developmental assessment report for each child participant. The report was a narrative summary of the emerging themes, resulting from coding my field notes and analytic memos, that included future recommendations. Writing this report became the final step analyzing data derived from conducting the music therapy sessions and reviewing the videotapes. It also allowed me to review and solicit parental feedback relevant to the emerging themes and categories of the data analysis.

Ensuring Trustworthiness

For data triangulation, I asked parents to maintain a journal about their thoughts concerning the sessions and document how they were using the provided home program. The parent journal was a data triangulation source used in the pilot-project preceding this study (Pasiali, 2008). I had periodic phone, in-person, or e-mail consultation meetings with the parents to discuss the session objective observations, subjective evaluations, and interpretive analyses. I used their feedback to adapt conclusions or draw further inferences as needed.

I used peer review with two experts in the field who were not directly involved in the project. An academic supervisor who is an expert in qualitative analysis reviewed the research processes as a whole and often engaged me in think-aloud discussions aiming to clarify or revise data analyses. I also consulted with a music therapist clinician, who had over five years of clinical experience, including working with grieving families, and was at the time of this study completing her Master's degree while working full time. My clinician peer reviewer corroborated or challenged data analyses, viewed and discussed session videotapes, and aided me in forming alternative interpretations of participant responses to music therapy interventions.

The three-step process (taking brief notes after each session, creating a field note narrative summary after viewing the videotapes at a later time and subsequently creating an analytic memo after some more time lapsed) became a form of "constant comparison" of my interpretation of the data against previous interpretations. Smeijsters (1997) described this approach of reviewing videotapes of sessions as 'repeated observation by the same researcher' increasing trustworthiness. A constant comparison procedure allows the therapist to cross reference intuitive thoughts and reflections she/he may have experienced during the session with those generated when reviewing the videotape; hence it provides an avenue for using multiple emotional perspectives to interpret the music therapy session (Smeijsters, 1997).

Data Analysis & Presentation

I used the program MAXQDAPlus 2010 for computer-assisted qualitative data analysis. VERBI Software, a company registered in Berlin, Germany is the online

distributor. The company's website (www.maxqda.com) includes further information regarding the program development history. MAXQDA allows researchers to import text data, apply codes, retrieve code texts, write memos, create hierarchical categories, and code trees. The program also has additional analysis features.

My initial coding involved examining the data collected by transcribing the initial parent-semi structured interview. I used that information to construct a detailed case-study profile for each participating family. Thereafter, I used both the field notes and the derived analytic memos to create an overview of each family's responses and therapeutic progresses over the course of the eight week intervention. For data triangulation, I combined the information with parental input collected from their completed weekly journals.

The process of data coding involved several steps and was ongoing while I conducted the music therapy sessions and was writing this manuscript. Following Charmaz's (2006) recommendations, I created codes by assigning a name to each line of text data (i.e., parent journal) or to each therapeutic incident of observational data (i.e., field notes & analytic memos). Those codes entailed using gerunds to describe the meanings and actions occurring as a result of the music therapy intervention. Such method increased the likelihood that I was directly describing the therapeutic experience.

Subsequently, I condensed those codes by grouping them together in similar categories or renaming. I then recoded the data using focused coding defined by Charmaz (2006) as "using the most-significant and/or frequent earlier codes to sift through large amounts of data" (p. 57). In addition to condensing the data, focused-

coding enabled me to compare experiences and therapeutic processes across participants. The final step of the analysis involved conducting Axial Coding as an organizing scheme for my data. Following Charmaz's (2006) description, axial coding involved answering: (a) "why, where, how come, and when questions" to describe the "*conditions*", the circumstances or situations that form the structure of the studied phenomena", (b) "by whom and how questions" to determine the specific actions and interactions across case studies, and (c) "what happens because of these actions/interactions" to describe the *"consequences"* (p.61). The axial coding involved cross case analysis that I discuss further in Chapter VIII.

I present the outcomes of the therapeutic intervention in separate chapters for each participating family. Chapters IV to VII contain the results for each case. Each chapter begins with introductory information, family history, describing expectations and our mutually agreed upon therapeutic goals. This is followed by an overview of the music therapy intervention, including the results of the psychometric assessments, the family's general responses in the sessions, and a documentation of information exchanged during parental consultations. I continue with a discussion and interpretive assessment of the emerging clinical themes. Next, I triangulate my interpretive assessment with data from the parent journals and the exit interview to answer the research questions "How did the relationship between parent-child develop over the course of the intervention?", and "What were the parent-reported changes of their child's adaptive functioning and resilient behaviors over the course of the intervention?"

An interesting finding is that parent participants tended to describe changes in their child's adaptive functioning and resilient behaviors over the course of the intervention by referring to actions and interactions occurring in the context of their relationship. Thus, reporting findings to the above two questions became impractical. I merged relevant findings and present them in section titled "Development of the Parent-Child Relationship." This section, describing changes in the relationship and adaptive functioning functions as the conclusion each case-study chapter.

Chapter VIII contains the results of axial coding and cross-case analysis focusing on describing the phenomenon of mutually responsive orientation behaviors between family members, answering the research question, "In what ways do family members exhibit mutually responsive orientation behaviors during music therapy?"

CHAPTER IV

CASE STUDY I – FAMILY S

Susan, Sebastian, Sam, & Sunnaya

Susan was a 31-year old Caucasian woman. Her ex-husband was African American. She had two boys, Sebastian who was 15, and Sam who was 8. Her daughter Sunnaya who was the target child participant for the music therapy intervention had just turned five at the beginning of this study. The family lived in a house in an urban area of a mid-sized Midwestern town. Her eldest son stayed with his maternal grandparents during schooldays in a rural area approximately 30 minutes away. Staying with his maternal grandparents allowed Sebastian to attend a high school in another school district; (Susan felt the school district in which she resided did not offer a good enough opportunity for her son). Sam was in second grade at the local elementary school and Sunnaya attended Head Start.

Susan worked part-time as a physical therapy assistant for home services provided through a large regional hospital. Finances were a stressor because Susan received no financial support from her husband. She worked part-time and had been unable to increase her hours, as a result of a hiring freeze at the hospital.

Growing up, Susan had a difficult adolescence. She had spent time in a locked down school facility for troubled adolescents and had struggled with depression. She had experienced marital discord leading to a divorce. Her ex-husband had a history of drug and alcohol abuse and has had one arrest and incarceration. Both children had witnessed domestic violence. She had legal custody of her three children; at the time of

this study, she was fighting for sole physical custody. She stated that she was afraid for the safety of Sunnaya when she visited her father. Moreover, she reported friction in the father-child relationships as the father would often not show up for scheduled parent visitations.

Susan's ex-husband had fathered children with two other women; Susan allowed her children to maintain contact with their half-brothers and sisters. At the time of this study, Susan reported continuously trying to manage symptoms to prevent a re-occurrence of severe depression. Even though her depressive symptoms appeared to be situational, she admitted a family history of depression, indicating a possible genetic risk.

Describing her family, Susan stated "We stick together, we all love each other, um, we are trying to build upon all working together, dealing with each other's personalities. Strong extended family makes [a] big difference" (Parent S Interview, 1/8/2010). She reported having an extended supportive network of family members, including seven maternal aunts and uncles who lived within a driving distance. She had one brother, who lived in Chicago, whom she visited often. When I asked Susan about specific values or beliefs that were important to her she stated that she did not have anything specific in mind. She said that her household was strong in faith and belief in God but they did not practice any formal religion.

Susan emphasized that each one of her children had a different personality, and that learning how to best communicate with each other was problematic. She described her first child as 'ideal' and easy-going, but reported having communication difficulties with her other two children. She stated: "as far as communication goes, we all (pause) I

am a yeller so, now they are all yellers, too" (Parent S Interview, 1/8/2010). She acknowledged she disliked yelling and that being under constant stress caused her to be less patient.

Susan wanted to be actively involved in each child's life. While she believed that each child needed to be independent in expressing who they were, she maintained that as the adult, she was the authority figure:

> "I want them to go out, but I don't want them going out and doing stupid things and me not knowing about it. That's one of the things my parents did. I was going out and they did not know what I was doing, and I did not feel obligated to tell them either, like it was any of their business to know what it was. I just want to be involved... And I don't believe in whooping them or spanking them, or anything like that" (Parent S Interview, 1/8/2010).

She used the word 'loving' to describe herself, especially towards her children. She was proud of accomplishing many goals she has set for herself, including quitting smoking. She was disappointed that she had gained weight and stated that being overweight negatively affected her self-image. When discussing personal areas of growth, she stated: "I need to learn how to relax, I need to learn, I do not want to say put myself first, but in a way I do. By not relaxing I am yelling more and I am stressing myself more. Relaxing is probably the biggest issue. Being able to let things that aren't important go" (Parent S Interview, 1/8/2010).

When describing Sunnaya, Susan used the terms "strong-minded", "beautiful" and "intelligent." Susan viewed a positive trait, such as intelligence, as negative because Sunnaya would talk back and it was harder to set limits and boundaries. Nevertheless, Susan still emanated love for her daughter. In her words:

> I love having a little girl. I kind of relive my childhood through her. She makes me laugh. And sometimes after the boys go to sleep, her and I just hung out. You know, we do hair and nails...um, she makes me laugh (chuckles) even with all the chaos, she still makes me smile. I enjoy everything about her, everything! (Parent S Interview, 1/8/2010).

Susan believed that Sunnaya was very protective of her dad and did not want anybody to say negative things about him. She was afraid that Sunnaya believed that she might be able to change her dad's choices and behaviors. Susan felt Sunnaya had developed low self-esteem and had trust issues, because her dad would often demean Sunnaya or act in inconsistent ways. Susan stated that Sunnaya saw a counselor on a regular basis to be able to address issues resulting from her relationship with her dad. She also stated that Sunnaya might feel uncomfortable talking about her dad during music therapy.

Even though Susan stated that nobody in her family played musical instruments or had formal music lessons, she shared that Sunnaya had taken dance lessons. The family loved to listen to the radio, CDs or watch music videos. Their favorite singers included Michael Jackson and Alicia Keys.

By participating in this study, Susan hoped to learn how to reduce her stress. She stated: "I hope to calm everybody down, so that there is not so much friction and yelling and anger. That everybody is just laid back and can say what they want to say without being a chaos." She also wanted to increase self-esteem for both herself and her daughter: "I want both of us to feel good about who we are and what we are doing. And I don't want her to feel bad about everything or feel responsible about anything. She has too much burden for a four year old. And I want her to be able to get that off her chest (sobs)" (Parent S Interview, 1/8/2010). Moreover, she stated that she would welcome any new ideas I could share with her. The mutually agreed upon goals included: "To

improve self-esteem" for Susan and Sunnaya, "To reduce stress and learn ways to relax" for the family, and "To develop trust" for the child.

The Music Therapy Intervention

Results of Psychometric Assessments

Susan's total score on the PSOC scale was 55, which was below the average score reported by Johnston and Mash (1989) and Gilmore and Cuskelly (2008). Her answers indicated less satisfaction with how her child was doing at her present developmental age, feeling manipulated by her children, not knowing if she was doing a good job as a parent, and feeling she was not getting many things done, which left her feeling stressed. Her answers in the efficacy dimension indicated that she did not meet her expectations for addressing the needs of her children and that parenting problems were not easily solved.

Table 1. DECA Scores of Sunnaya

	IN*	SC	AT	TPF	BC
Raw Score	33	20	24	77	15
T-Score	52	50	38	46	68
Percentile	58%	50%	12%	34%	96%
Description	Typical	Typical	Concern	Typical	Concern

*IN=Initiative, SC=Self-Control, AT=Attachment, TPF= Total Protective Factors, BC=Behavioral Concerns.

The DECA assessment indicated that Sunnaya scored within the typical range for Initiative and Self-Control. However, she scored below the norm in the area of attachment. The Total Protective Factors score also fell within the normal range. Her Behavioral Concerns sub-scale score was high, indicating that Sunnaya was possibly

having significant behavioral problems. I have included the raw-scores, T-scores and percentiles of Sunnaya in Table 1.

Music Therapy Sessions

All music therapy sessions occurred at the family's home. We set up the instruments and conducted the sessions in the family room, located next to the dining room area. Josh, a male undergraduate student assisted me with all scheduled music therapy sessions. Susan participated in the all music therapy sessions with her daughter and her middle son. Below, I summarize the family responses to the therapeutic applications of music therapy[3].

A ritual for beginning and ending the sessions emerged by the fourth music therapy session. I began the sessions by singing the same call and response song, which was based on a pentatonic scale, while the family played various pitched and non-pitched instruments. Susan sang along and occasionally her children would sing portions of the song. Usually we ended the session by attempting a progressive muscle, music-assisted relaxation. The relaxation was challenging, as both children often engaged in off-task behaviors, attempting to provoke their mom or each other and needed frequent redirections and reminders to remain quiet. The exercise, however, seemed to reduce their arousal level, helping them transition to the next activity of their daily routine. While we packed the musical instruments, Sunnaya danced, interacted with her mom, or explored making different sounds on the keyboard I brought along for

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[3] In the literature, music therapists use various terms to describe the planned activities of a session. Those terms include: therapeutic experience, activity, intervention, application or musical experience. In the case studies, I sometimes use those terms interchangeably.

the sessions. Sam, on the other hand, interacted with Josh and helped him take the instruments in the car.

Both Sam and Sunnaya exhibited natural curiosity for playing all the instruments I brought in each session and commented on the different sounds they made. Therapeutic applications of music therapy using instruments entailed playing chimes or other instruments while singing familiar songs, playing short instrumental pieces without words, drumming while chanting, and playing instruments to accompany self while singing songs we wrote together fitting lyrics to familiar melodies. Playing instruments together created multiple opportunities for sharing positive affect and set up opportunities for the family to work together to create a musical product. Playing together indicated difficulties listening to each other in order to sustain a consistent tempo, lack of appropriate dynamics (playing too loud or soft), and impulsive tendencies to make off task verbal comments. Such difficulties mirrored the dynamics of their relationship, which I further discuss in the next section.

When playing familiar songs, I attempted brief interludes of improvising between song verses. I also attempted free improvisation during the second session and structured improvisation (aiming to shift Sunnaya's negative affect) during the sixth session. Those improvisations lacked cohesion and unity. The children sounded disconnected with each other, each randomly playing instruments and not listening to each other, their mom, my assistant or me. Also, they would make verbal off-task comments or aberrant sounds, likely seeking negative attention. Their mom would verbally redirect, also hindering the effort to make music together.

With lyric analysis and songwriting, I prompted discussions that focused on making positive self-worth comments or talking positively about the future. We also explored the theme of anger and violent responses. Resistance and negativity often characterized those interactions, a topic I also discuss in the next section. During the course of the eight music therapy sessions, the children shifted to making fewer negative comments during such discussions.

Especially for Sunnaya, dancing with mom while using scarves consistently elicited spontaneous displays of affection that both mom and daughter enjoyed. Sam sought Josh's attention or left the area during dancing. Whereas Sunnaya sought dyadic interactions while dancing, Sam primarily focused on showing-off how well he could imitate the dance moves of Michael Jackson. I did turn-taking activities involving imitating each other's movements using the stretch-rope or body percussion. Encouraging the two siblings to imitate each other was challenging during those therapeutic applications; they were more invested in provoking each other than mutually cooperating.

Susan considered music therapy an enjoyable experience for the family. On week 1, Susan wrote in her journal "The kids had a blast. They were really excited and hyped up after the session. I do not think they had a clue they we learning anything about feelings or relaxation-to them it was just having fun" (Parent S Journal, Week 1). She thought music therapy gave the family an enjoyable way to express themselves and feel better (Parent S Journal, Week 1) and distracted her from feeling stressed (Parent S Journal, Week 2).

Parent Consultations

Parent consultations occurred primarily during my home-visits. I provided Susan ideas about how to continue to implement activities by herself (e.g.., dancing with her children to favorite songs, using body percussion mimicking, and using music listening to modulate negative affect). I also gave the family small assignments (e.g.., think three positive adjectives to describe yourself that we can incorporate in our songwriting next week) and information to Susan on how to implement music-assisted relaxation exercises. In our e-mail communications, I provided Susan with links to websites containing audio files of songs that we used in our sessions.

We also discussed the issue of Sunnaya and Sam battling over attention in our sessions, as well as the bond Sam seemed to have developed with my research assistant. I explained to the Susan the concept of resistance in therapy and how it was manifested in her children's tendency to make negative comments. I made subtle comments about assigning a positive intent or explanation when redirecting her children. However, the presence of the children and their attention-seeking needs made it difficult to talk in detail about parenting ideas during the sessions. I was able to address parenting skills in more detail when I met with Susan individually and conducted the final 'exit' semi-structured interview.

At the end of this study, with parental permission, my research assistant initiated efforts to be matched as Sam's mentor through the volunteer program Big Brother/Big Sister. When Susan inquired about music lessons for the children, I referred her to a university-affiliated community music school. My clinical observations during the music therapy sessions indicated more frequent bouts of negative affect and conflict

escalation in the mother-son relationship than in the mother-daughter relationship. Even though Sunnaya was already seeing a child-therapist on a regular basis, her sessions were ending within a month following the conclusion of this study. Sam had been in counseling before, but Susan reported no benefit. I discussed with Susan the possibility of referring Sam to a boy's music therapy group, focusing on attention and social competence training that was scheduled to begin at a university affiliated music therapy clinic in the fall of 2010. Because the conflict arising from seeking parental attention seemed to have hindered therapeutic progress during our sessions, I also suggested possible sibling music therapy at a university affiliated music therapy clinic.

Clinical Assessment & Interpretation

Three events may have affected family responses, actions, and interactions observed in the session. During the third week of music therapy sessions, Susan experienced escalation of Sam's school difficulties leading to a second detention. Susan decided to have him evaluated for Attention Deficit Disorder. A two-week period lapsed between our fourth session and our fifth session; we cancelled the session as Susan was involved in a car accident, which did not cause her any physical harm, but her car needed extensive repairs. Last, during the week of the sixth session they stayed at Susan's parents' home, house sitting for them while the grandparents were on a week vacation to Florida. The emerging clinical themes included: Organizing & Problem Solving, Affection & Shared Joy, Scaffolding, Impulsivity, Jealousy & Sibling Rivalry, Cooperation & Compliance, Resistance, Negative Affect and Humor.

Organizing & Problem Solving

Sunnaya requested songs and instruments to play without hesitation during music therapy. Making choices and decisions during the sessions seemed to be a strength. During the session, I attempted to defuse or avert conflict and power struggles by implementing a problem-solving approach. Sunnaya showed capacity for actively engaging in problem solving and initiating her own solutions. For example, during the fifth session Sunnaya began pulling on a tear located on the head of the tubano drum. Susan redirected her by saying "Don't do that." I wanted to model how to assign a positive intent to a child's action; therefore I said: "The tag seems to bother you and you want to take it out. If you pull it, the drum may break. I wonder what you can do so that you are not tempted to pull." Sunnaya responded "I do not want to look at that" and turned the drum around. I responded "You found a good idea." Susan added "Alright!" and displayed positive affect.

The above example indicates that Sunnaya was likely to be amenable to accepting an adult's influence in resolving or settling a dispute or disagreement through discussion. When I simply observed what was going on and acknowledged her possible feelings, Sunnaya generated her own creative solution. Honing Sunnaya's conflict resolution and problem solving skills could potentially over time lead to a decrease of behavioral problems.

Affection & Shared Joy

Dyadic instances of affection and shared joy occurred during all music therapy sessions. Examples included Susan rubbing Sunnaya's back while they both sang our opening song (session three), singing a song and playing with scarves (session four),

mimicking each other modeling body percussion movements (session seven), and sharing a drum (session eight). A dyadic instance of shared affection and joy between Sam and Susan occurred during the sixth session when Sam played the Q-chord while his mom sang a song. It is interesting that the dyadic positive interaction occurred during the sixth session; Sunnaya was having a bout of negative affect and was not participatory during this session. Instances when the whole family shared joy occurred when playing together as an ensemble, using chimes and other pitched and non-pitched instruments.

Scaffolding

Susan was responsive to implicit communicative requests of her daughter. For example, during the second session when Sunnaya asked a question about an instrument her mom was playing, Susan handed her the instrument, thus supporting her daughter's interest and curiosity. During the third session, Susan comforted her daughter when she accidentally hit herself with the ocean drum, which resulted in Sunnaya quickly re-engaging in the activity.

Even though Sunnaya was younger, she had a longer attention span than Sam did. She also was more willing to allow her mom to coach and help her during activities. In response, Susan attempted to coach and support Sunnaya's participation more frequently than Sam's. Examples included providing hand-over-hand assistance when playing instruments, pointing at charts denoting chord names and showing her how they corresponded with letter names on the instrument. When Sam focused and participated in joint attention tasks, Susan seized the opportunity to help both children. For example, during the fourth session, while doing a movement activity with scarves,

Susan prompted both children to focus on the tempo of the music by saying "slow, slow" with a low tone matching her voice to the tempo of the music. In response, her children slowed down their movements.

Susan encouraged participation by being engaged in all the activities I presented in the sessions, using physical proximity to her children and making eye-contact. She used non-specific praise following successful participation in planned activities. Specific reinforcement and encouragement were absent when her children cooperated with her instructions. Given that both children craved attention and sought it by engaging in negative behaviors, increasing Susan's ability to notice and encourage positive behaviors and cooperation may over time improve the relationship. When I modeled giving specific positive reinforcement, Susan often imitated my responses.

Impulsivity

Both Sunnaya and Sam seemed to have limited capacity to inhibit impulsive tendencies. Their limited capacity may have contributed to decreased compliance with adult requests to wait or stay quiet. Both children struggled following the instruction to remain quiet during music assisted relaxation exercises. They would make silly noises, chuckle, make off-task comments, or fidget. Susan, being unable to ignore them, attempted to redirect them. Even though relaxation may have helped to orient the children that the session was ending, as it became a closure routine, I am unsure the family derived therapeutic benefits. Susan was pre-occupied with the children's behaviors and unable to relax. During the exit interview, Susan corroborated the above observation and added that she was planning to practice the relaxation exercises prior to bedtime.

Sam's and Sunnaya's interest and excitement in playing the musical instruments further increased their impulsivity. Their impulsive behaviors included playing instruments while adults talked or gave instructions. For example, during our greeting song, Sam and Sunnaya would often begin to play without waiting for instructions, despite Susan's reminders to wait. During the sixth session, I attempted to play a song with Sunnaya on the keyboard in which she followed a chart to play the chords. Even though she sat next to me for the duration of the song and followed my instructions of where and when to play consistently, she also reached out sporadically to play random buttons on the keyboard. During the eighth session, we sang the traditional spiritual *We Shall not be Moved,* and I instructed the children to play drums only when they heard the phrase "we shall not be moved." Both Susan and I used gestures and verbal reminders and practiced several verses prior to Sunnaya and Sam being able to inhibit the tendency to play at will.

Whereas most of Sunnaya's impulsive and off-task behaviors could be deemed developmentally appropriate given her age, Sam's impulsivity seemed excessive and interfered with his family member's experience in music therapy. My clinical observations indicated that engaging in externalized impulsive behaviors was a learned mechanism for gaining individualized attention. Sam made the effort to decrease his impulsivity during interactions that met his need for attention; those interactions provided an extrinsic payoff. During the seventh session, Sam successfully imitated a series of body percussion sounds without being off task. He was 'showing-off' to Josh, the research assistant, that he could do it, and during the eighth session he remained quiet in order to be able to show to the research assistant one of his favorite songs. The

dynamics of Sam's relationship with Josh were beneficial, as he could function as a positive male role model. At times, however, they also contributed to increased problematic behaviors, as Sunnaya also sought to interact with Josh, resulting in both children competing for his attention. Due to lack of clinical experience, Josh could not consistently address those behaviors.

The timing of the sessions also may have increased impulsivity. Sam arrived from school at 4:00 p.m., as we were setting up for the session. Physically he was tired and hungry. Rummaging in the kitchen for snacks was a frequent source of parent-child conflict disrupting the music therapy session. Emotionally he may have needed his mom's attention, which perhaps contributed to jealousy and sibling rivalry. During the exit interview, Susan corroborated that timing may have contributed to impulsivity.

Jealousy & Sibling Rivalry

Both children placed demands upon mom's attention and competed to secure it. In comparison with Sam, Sunnaya drifted easily into positive and warm interactions with her mother. Sam, on the other hand, engaged in more overt behaviors that could be attributed to sibling rivalry. Specifically, he showed lack of responsiveness to his sister's psychological state and attempted to sabotage dyadic positive mother-daughter interactions.

Negative affect seemed to be Sunnaya's strategy for gaining parental attention. Sam's indifference may have been a learned response pattern and not the result of lack of empathy. During the third session, Sunnaya accidentally pulled down the ocean drum on herself, resulting in an injury above her eyebrow. When Susan asked Sam, who was

sitting at the dining room table and eating, to go get some ice for first aid, he engaged in a power struggle resisting his mother's request.

Sam understood his sister's psychological state. For example, during the fifth session Sunnaya pouted after she changed her mind and wanted an instrument that Sam was playing. When I said, "I wonder what is making you upset," Sam responded, "She wanted this" and pointed to his instrument. These interactions may point to difficulties in cooperation between the two siblings: Sam did not seem open to his sister's influence and was not willing to give up his stakes on playing the instrument.

Sam did not appear to sabotage Sunnaya's and Susan's dyadic interactions in a deliberate or calculated manner. Rather, he acted impulsively in an effort to gain his mom's attention. Such disruptions occurred in five out of eight sessions. For instance, during the first session Sunnaya sat on her mom's lap and together they began playing instruments and singing the song *Will You Be There?*, by Michael Jackson, while I accompanied them on the keyboard. Sam approached his mother and began asking her questions. During the seventh session, Susan was helping Sunnaya understand the letters on the resonator bells in order to follow a chord chart that I was holding. As we were playing and singing the song, Sam turned around, looked at his mom and shook the chime he was holding several times. His mom responded, "You are not listening." By disrupting, Sam gained negative attention, as his mom redirected him, and he often responded by ignoring her or being unwilling to comply.

It is interesting to note that during the final two sessions I noticed overt attempts of both siblings to provoke each other. Sam was more participatory during these sessions and made fewer or no attempts to leave the music therapy area. Participating in

joint activities with his sister perhaps shifted the dynamics of the relationship to provoking her. Those attempts involved invading his sister's personal space (e.g., by touching her head or the instrument she was playing) and not reciprocating during turn-taking activities (e.g. he took a turn strumming the guitar and left the area during his sister's turn). Since Sunnaya did not exhibit strong reactions to her brother's provocation, conflict did not escalate.

Cooperation & Compliance

Instances of power struggles and unwillingness to accept their mother's influence were frequent during our sessions. Only Sunnaya seemed responsive to subtle parental influences. For example, during our first session, when Sunnaya reached out of turn to play an instrument, Susan hugged her and rocked her side to side while moving the instrument out of reach. Sunnaya turned around, looked at her mom and smiled; she did not complain or make any attempts to reach the instrument. Nevertheless, incidences of willing cooperation with her mother were few; Susan had to sustain maternal power in order to control and achieve cooperation.

Susan's attempts to gain cooperation were power-assertive often revealing irritation or frustration. The following example of power-assertive parenting occurring during the second music therapy session exemplifies Susan's attempts to gain compliance. As I was transitioning to a songwriting therapeutic application of music therapy, both children ran to the kitchen to get food. Susan repeated several requests before they complied and returned back to the music therapy area. When they returned, Sunnaya had a flat, discontent affect, and Sam giggled. With an irritated tone, Susan said to Sunnaya, "You can finish it [the session] or you can drag this longer, but you

will not have dinner until we are finished" and to Sam, "You can cooperate or go upstairs." Sam and Sunnaya complained but then sat down to participate, although they displayed flat affect.

In the above example, both Sam and Sunnaya exhibited situational compliance, defined by Kochanska (2002) as "instances when the child although essentially cooperative, does not appear to embrace the mother's agenda wholeheartedly" (p. 339). Susan seemed to lack conflict resolution skills and effective strategies to prevent power struggles. She reacted to lack of cooperation by: (a) delivering "you-statements" (e.g., saying 'you need to listen' or 'you need to wait' when Sam and Sunnaya played instruments without waiting for the therapist's instructions), (b) not providing information about the expected behavior by being vague (e.g., saying turn your listening ears on), using questions (e.g., saying 'are you listening?'), and (c) telling them to stop a behavior without giving an explanation (e.g., saying 'don't unhook that' when Sunnaya attempted to remove the screw of an instrument). Susan often revealed irritation during instances of noncompliance by raising her tone of voice.

It would be unfair to portray Susan as the sole agent responsible for the negativity and lack of mutual cooperation in the relationship with her children. Both children sought opportunities to evoke conflict by ignoring and disobeying. Sam, in particular, was more resistive and struggled to accept his mom's role as an authoritative figure. The mother-son struggles with mutual cooperation made the sessions challenging and hindered therapeutic progress in our mutually agreed upon family goal of reducing stress and learning ways to relax.

Resistance

According to Lefevre (2004), "the term resistance generally refers to conscious and unconscious defence mechanisms used by the individual to avoid connecting with earlier, often traumatic, frightening or distressing experiences and oppose the process of change" (p. 341). Both children exhibited resistance when I used therapeutic applications of music therapy that involved verbal discussion, such as lyric analysis, songwriting, and saying positive statements or affirmations at the end of relaxation exercises. Resistance involved refusing to share positive thoughts, avoiding acknowledging their mother in a positive manner, making fallacious statements, using negative descriptions of self, cussing and using inappropriate language, or attempting to divert the discussion to a non-relevant/non-threatening topic. Even though it gradually decreased, resistance permeated all eight music therapy sessions, hindering communication.

During the first music therapy session, after singing Michael Jackson's song *Will You Be There?* I asked the family to describe different ways or situations they have been there for each other. Sam laughed and said: "She cleans my room for me" and Susan responded "Oh, please!" Sunnaya asked her brother to tease her (an off-task request during the discussion), and when he did not respond, she yelled: "I am stupid, I'm so stupid." Susan responded: "Don't say that!" Both the mother and I had to encourage them and ask leading questions to elicit a description of positive mutual interaction by Sam, who talked about wresting and roughhousing with his older brother. Even though the description focused on a positive interaction, it still indicated resistance, as it referred to a family member who was not participating in music therapy.

Using visual props to make discussions more concrete seemed to evoke more sincere responses from both siblings and reduced goofiness and inappropriate remarks. For example, presenting a poster with a volcano, singing a chant about feeling mad, and then discussing the concept of feeling mad inside like a volcano prompted a discussion about witnessed domestic violence, mom's cussing, and dad's substance use.

Throughout the sessions, Susan modeled active participation in discussions and often used humor to cope with her children's responses. Reflecting upon resistance, Susan noted in her journal "it is becoming apparent to me that Sunnaya is not aware of all that I do and does not see all the things around her she should be thankful for" (Parent S Journal, Week 3). She believed the therapeutic applications of music therapy could help both children become more grateful focusing on the positive choices that she has made as a mother.

A breakthrough seemed to occur during our final session. I had assigned each family member to think about three positive words (adjectives) that described themselves for us to incorporate in a song during the session. Despite acting silly and whispering asides, both Sam and Sunnaya used their positive words. When it was their mom's turn, after she said her three adjectives, both children spontaneously began saying positive adjectives to describe their mother, which we continued incorporating in the song. Later that session, in response to my question "what keeps your family together?" they talked about being silly together. When Sunnaya mentioned fighting, I was able to maintain a positive discussion promoting connection as we talked about each person's responsibility to say or do things that are not hurtful. When Sam lost focus in the discussion and began flying a paper plane, I ended the discussion.

However, as I was beginning to transition to the next therapeutic application he said: "I am not responsible for what my dad did." His comment extended our discussion, during which both children asserted that they were responsible for their own actions and could not change the decisions and choices their dad had made.

Negative Affect

The mother-daughter dyad engaged in bouts of negative affect when Sunnaya did not get her way. When redirecting or setting boundaries, Susan was not swayed by Sunnaya's negative affect. Incidences in which Sunnaya's negative affect persisted during the fifth and sixth sessions, which coincided with the two life events that I mentioned earlier (mom's car accident and staying at the grandparent's house). Sibling dynamics and attention seeking played a role in prolonging the duration of negative affect. When Sunnaya withdrew from the activity and had negative affect, Sam seemed more on task, more participatory and eager to interact with his mother. For example, during the sixth session, when Sunnaya refused an opportunity to play the Q-chord, Sam asked to try it. His mom sat next to him and sang while he played the Q-chord accompaniment and they both smiled at each other. Sunnaya, meanwhile, was negative and was not participatory. When Sunnaya understood that I was going to put the Q-chord away and that none of the adults were going to give her negative attention and plead with her to play, she requested a turn to play the instrument. Her mom sat next to her and sang; Sunnaya's affect shifted to positive. Her mood shifting was a result of a combination of gaining positive attention from mom as well as access to a desired instrument.

The mother-son dyad also experienced instances of negativity when Sam complained about participating in an activity or about mom's expectations and instructions. Sam also had a tendency to turn a potential opportunity for warm interaction into a source of conflict, irritating and eliciting his mom's negative affect. For example, during the fifth session, even though his mom asked him to finish eating first, he left the dining room area and while still chewing food, he began imitating us and throwing scarves in the air and on his mom. When Susan noticed he still had food in his mouth, she yelled at him to sit down.

Humor

Susan used humor as a coping strategy for dealing with the resistance and negative affect her children exhibited. During session three, we performed the Alicia Keys' song *Superwoman*. I attempted to engage the children in a discussion in identifying ways their mom was a 'superwoman.' When Sunnaya said "my mom is not a superwoman", Susan chuckled and showed her work name tag to Sunnaya and said (using portions of the lyrics of the song) "see I have an S on my chest." During session four, when Sam complained that he did not get to write down how many sessions are left, Susan teased him "toothless don't get to participate" (earlier Sam had made a big fuss and was showing off how he no longer had his two front teeth). She used humor more frequently during interactions with Sam than Sunnaya.

Development of the Parent-Child Relationship

During the exit interview Susan reported that participating in music therapy afforded her opportunities to learn to bond and communicate better with her children.

She felt that participation in music therapy had increased both her and Sunnaya's sense of self-esteem and confidence. As a result of participating in this study, Susan found ways to incorporate music listening as a coping and stress management strategy. In a journal entry she noted:

> I had forgotten how important music was to me in earlier life. I let/stopped playing music and kind of lost myself. I am playing more music and it is really, really, really helping. It helps set my mood... My kids and I listen to music and dance almost every morning now. Our days seem to be less stressful (Parent S Journal, Week 3)

The mother-daughter dyad exhibited capacity for engaging in smooth non-verbal and verbal interactions when they were engrossed in a joint attention task. Often, Susan attempted to scaffold Sunnaya's responses in music therapy (a theme discussed in the previous section). However, when Sunnaya was distracted or not invested in a particular task, she desisted from obeying parental requests or complied only when Susan exerted maternal control. Difficulties in mutual cooperation as well as sibling rivalry, shortened the duration of positive verbal and non-verbal interactions.

Situations during the sessions that required impulse restraint (such as waiting to play instruments, staying in the music therapy area, ignoring her brother's off task behaviors) exemplified Sunnaya's failure to adopt a willing stance to Susan's requests as well as Susan's difficulty in diffusing or avoiding conflict. Lack of impulse restraint was an inherent interpersonal dynamic feeding the pattern of uncooperativeness. At such times Susan raised her voice and commanded compliance, Sam acted goofy, provoking both Susan and Sunnaya, and Sunnaya displayed negative affect or acted silly herself. These responses, indicative of the children's failure to adopt a willing stance to Susan's influence, evoked additional power-assertive parenting strategies increasing relationship conflict.

During the exit interview, Susan talked about working to regain her children's trust and acknowledged that lack of willingness to cooperate was perhaps a coping mechanism that Sunnaya used to feel safe and in control. Susan's comments triggered a discussion that revealed that Susan was focusing on individual attributes of her children as a way of explaining incompliance, and not fully acknowledging her role in setting-up her children's behavior. Sharing the developmental assessment report I created for the family became a forum for discussing Susan's direct ways of attempting to influence her children as problematic (e.g., giving commands without explaining the reason, using threats or unrealistic consequences, not knowing conflict-resolution or conflict management strategies to avert conflict).

At the end of the exit interview Susan commented that she was beginning to understand her role in influencing and affecting the development of her children and that she needed to learn more about how to help them. Referring to conflict management and problem solving she stated, "I learned that Sunnaya can, I already known that she got extensive verbal and learned ways that I can turn them into positive reaction from her. I learned that I need to tune into Sam a little more" (Parent S Exit Interview, 4/12/2010). When I asked Susan what she hoped for the future she stated:

> I hope that they end well- adjusted and everything looks OK for them and all the negative stuff that they've seen can be turned around to positives, that they are well adjusted, happy kids, who want to be successful in society and life. And I'm heading that direction myself. I just need to get them in that direction (Parent S Exit Interview, 4/12/2010).

Actions and interactions occurring during music therapy, the process of developing mutual goals and sharing observations via the developmental assessment report seemed to have motivated Susan to seek additional resources to help her switch her parenting responses. Participating in eight weeks of music therapy was a brief

encounter in this family's life; predicting if it would alter the forces that govern parent-child actions and interactions leading to adaptive and resilient outcomes over time is impossible. Being in family-based music therapy may have: (a) supported and increased Susan's commitment that her children attain healthy socioemotional outcomes and (b) prompted her to seek additional opportunities and information to improve actions and interactions among family members.

CHAPTER V

CASE STUDY II – FAMILY R

Rachel, Ramon, Ramona, Ramon Jr. & Baby

Originally from a country in South America, Rachel, Ramon and their family had moved to the United States to study at a large Midwestern university. They lived in a three-bedroom apartment close to the university. They had one daughter age 3½, Ramona, who was the target child participant in this study. Ramona attended a preschool in the mornings five times per week. Rachel and Ramon also had one son age 12, Ramon Jr., who attended a local middle school. At the beginning of this study, Rachel was 7 months pregnant expecting another boy; this was an unplanned pregnancy.

Ramon was completing his doctoral degree; Rachel had also begun postgraduate coursework but she had to stop her studies and change her visa status when she found out that she was pregnant. She felt that she could not cope with having a newborn and attending graduate school. Quitting her studies had caused Rachel situational depression. At the time of the study she reported coping with the symptoms; she stated:

> Maybe a couple of months I feel sad. It's not easy stay here. When I knew that I am pregnant was more hard. But I was studying. So I need to change my visa because I can't study more. And that made me feel bad. But just a couple of months. But now, now it's OK. Now I feel good. Um. Yeah, I feel, I am so excited with the new baby. But the first month when I knew that I am pregnant was, uh, very hard. It was a surprise (Participant R Interview, 1/12/2010).

Rachel's first language was Spanish. She spoke conversational English and did not have difficulties communicating with the researcher. She reported that lack of

fluency in English may have prevented her from making friends in the United States. She missed her family; however, she considered the fact that the family remained together important. When her husband began his PhD studies, he first came alone to the United States while the rest of the family remained in their country. Rachel reported feeling happy after she and her two children came to the United States and the family reunited, despite the adjustments they had to make and the financial stressors the move had caused.

Since her husband was busy with coursework and research, Rachel had taken the primary role of addressing the needs of the family. She reported doing many of the household chores. Ramon Jr. had a health problem, and she ensured he exercised. When I asked Rachel to describe herself, she continued to talk about her children and her family. Her face lit up, and she said she was proud that she did many activities with them, even though she often felt tired. She said that she put her children first because they were an important part of who she was.

When discussing the family's areas of growth, Rachel mourned that the family did not spend a lot of time together because her husband was constantly busy. She felt that both her children craved their dad's companionship. She also reported social isolation, as it was difficult for her to get to know people or make friends. Spirituality was a source of strength for Rachel and her family. They were Catholic and practiced their faith by attending services and praying. Rachel felt that praying gave her strength to cope with being isolated in a foreign country.

Rachel shared that she considered both her children to be wonderful persons, and her goal was to teach them good manners and instill in them the ability to

differentiate between positive actions and negative actions. She considered herself a role model for them and described being stricter than her husband with both children. However, she reported that she treated Ramona less strict than Ramon. As Ramon was in middle school and growing older, she felt the window of opportunity to influence his behavior would soon be closing.

Intelligent and fun were the two words that Rachel used to describe her daughter. Rachel loved to teach her daughter how to write her name, read books to her, and play with her. Rachel said that sometimes when she felt sad, her mood changed when Ramona came home from preschool because she enjoyed spending time with her. Despite describing her as a happy child, Rachel expressed concerns about her sudden mood changes. In school, Ramona would play alone and had difficulty sharing toys. A teacher's progress report that Rachel shared with me indicated that Ramona avoided parallel play.

While temper tantrums were developmentally appropriate at Ramona's age, the frequency and intensity of Ramona's outbursts worried Rachel. After attending preschool for six months, her temper tantrums at school began to subside. At home, she continued to become easily upset, especially when she did not get her way. Her mom talked about Ramona wanting to be the most important person in the family: "Sometimes we are talking, all the family, and she wants to speak all the time. And I say no no no, you no. And she wants to speak, only her" (Participant R Interview, 1/12/2010).

Even though Rachel believed Ramona loved her brother, she described her relationship with him as problematic. At times, she would hug her brother and give him

kisses; then if she became upset, she pushed, kicked or hit him or took his glasses and threw them. From Rachel's descriptions, it appeared that Ramona wanted to influence/control what other family members were doing:

> When her father is coming, she wants to play with him. And to me says 'bye bye mommy, go go go'... Sometimes, my son want to play with his father and my daughter. But, she tells him, 'no you go back to your room.' But I think it is not so good. But, I don't know. I try to say her that she needs to play with her father and with her brother too, but she does not want to play with other person than her father (Participant R Interview, 1/12/2010).

Ramona was bilingual and loved to sing either in English or in Spanish. She liked listening to lullabies, and she often went to sleep while listening to them. She had a CD of lullabies that her mom had been using since she was a baby. One of Ramona's favorite activities was to listen to music and dance, pretending she was a ballerina. Rachel had Ramona in dance lessons at a local community center. Her musical listening preferences included: Mozart, Tchaikovsky, Argentinean and Peruvian music, and Rock and Roll. ABBA was one of her favorite groups. Rachel reported using music both to calm down Ramona or to excite her and engage her in active dance play.

Ramon found out about the study and asked his wife if she wanted to participate with Ramona. Rachel shared with me that she felt her daughter would benefit because music played an important role in their lives. Rachel hoped that we could work together to find ways to improve Ramona's behavior. The mutually agreed upon goal for the child was "To target development of self-control skills" and for the mother "To learn ways to prevent or reduce the intensity of emotional outbursts of the child."

Results of Psychometric Assessments

Rachel's total score on the PSOC scale was 78. Her score is higher than the total average score reported by Johnston and Mash (1989) and Gilmore and Cuskelly (2008). Her answers indicated less satisfaction with knowing if she was doing a good job as a parent, and maintaining her interest in being a parent, even though she found being parenthood rewarding. On the DECA assessment, although Ramona scored within the typical range for attachment, the remainder of the scores indicated concerns in the areas of Self-Control and Initiative. The score indicated the possibility that she had difficulties getting her needs met using age appropriate behaviors and handling anger and frustration. Her score on the Behavioral Concerns subscale was high, indicating the possibility of having significant problems. Table 2 includes the DECA scores of Ramona.

Table 2. DECA Scores of Ramona

	IN*	SC	AT	TPF	BC
Raw Score	26	9	25	60	15
T-Score	40	28	41	33	68
Percentile	16%	1%	18%	34%	96%
Description	Concern	Concern	Borderline	Concern	Concern

*IN=Initiative, SC=Self-Control, AT=Attachment, TPF= Total Protective Factors, BC=Behavioral Concerns.

Music Therapy Sessions

All music therapy sessions occurred at the family's apartment. We set up the instruments and conducted the sessions in the front room area. Josh, a male undergraduate psychology and music therapy equivalency student, came with me to the music therapy sessions. He was unable to attend the fourth session as a result of a

schedule conflict; he attended all the remainder of the sessions. Rachel participated in all the music therapy sessions with her daughter. Other family members joined the sessions periodically. Ramon Jr. participated during the sixth session. Rachel's sister-in-law participated during the sixth and seventh session. Ramon (Ramona's dad) attended the eighth session. Below is a summary of the family responses to the therapeutic applications of music therapy.

To establish a familiar session routine, I began the sessions with an action song greeting game and ended with a closure/goodbye song. Once the routine was established, I used the same greeting and goodbye song in all the sessions. In determining the session structure, I provided Ramona different choice options such as instruments, props, and/or songs she could select. When possible, I encouraged her input regarding the design of specific therapeutic activities.

During the sessions, I asked questions to elicit responses from Ramona, which I incorporated in creating spontaneous songs or filled-in the gaps to create new verses and lyrics for familiar songs. I also solicited ideas from other family members. Together we created a song describing things the family is thankful for, a song about being a big sister, and a song dedicated by Ramona to her younger brother, who was born during the course of the music therapy sessions. Creating those songs was a collaborative effort between the adults and the child.

During various therapeutic applications, I asked Ramona to select instruments for every adult in the room. Selecting instruments delighted Ramona. She was curious about different instruments I brought to the music therapy sessions and asked me to show how to play them. She did not hesitate to explore different instruments and would

often glance at her mom seeking approval and reinforcement for being successful in making various sounds. All family members, including Ramona, were responsive to musical nuances, such as changes in tempo or dynamics. They would match their beat to the tempo of songs I was singing or playing, recognizing changes in musical stimuli, and signaling when to stop or play instruments. Ramona and her mom would match pitch and direction of phrase while singing.

I observed Ramona and her mom sharing the keyboard and working together to follow song chord charts to play familiar children songs. They worked together following the sheets and playing different songs. They were both smiling and leaning on each other while attempting the songs. When sharing other instruments such as pitched percussion, they would make eye contact and smile. Improvising on instruments set up in pentatonic scale offered several opportunities for them to experience making music together, something they both seemed to enjoy, as the exchanged glances and smiles suggested. Such an activity offered an opportunity for Rachel (who was holding her newborn child), her husband, and Ramona to share such musical experience. Last, a therapeutic application that elicited multiple positive interactions between parent and child involved dancing with scarves. I used recorded background music or sung tunes/songs without words in different modes while family members danced. Family members would often imitate each other, giggling and displaying positive affect.

Parent Consultations

Rachel seemed eager to continue using music activities at home. Therefore, parental consultations at the beginning or the end of sessions included showing her how to improvise melodies using the white keys on the small synthesizer they had at home,

as well as how to use chord charts to play simple children songs. During the sessions, I modeled music-assisted relaxation exercises adapted for children and provided Rachel written instructions how to implement it herself.

Primarily via e-mail communication, I provided psychoeducational information, such as parenting and child-discipline suggestions and access to resources (i.e., websites with parenting information, handouts on how to help a child cope with the birth of a sibling, and suggestions of books she could obtain at the local library). To address the issue of social isolation and provide more immersion opportunities for Ramona, I gave Rachel information on how to enroll in free community-based playgroups for children age zero to three. Those playgroups would have provided Rachel with opportunities to interact with other parents. Last, I provided information on how to enroll in early childhood music classes offered at the university affiliated community music school. At the end of the intervention, I did not feel Ramona would benefit further from individual music therapy or family-based music therapy.

Clinical Assessment & Interpretation

An event expected to have an effect on the adaption of the family system was the birth of Ramona's brother, directly influencing her actions and interactions with others. Prior to our sixth music therapy session and a week prior to the scheduled c-section, Rachel's sister-in-law arrived to stay with the family for a month and help the family. Ramona did not attend her preschool classes for a week and received multiple new toys that her aunt had bought for her. When her mom had to stay in the hospital following giving birth, it was the first time that Ramona had to spend time away from

her mom. Rachel also noted the above stressors in her journal entries. These experiences directly affected the development of the parent-child relationship over the course of the music therapy sessions. The emerging clinical themes included: Need for Power and Control, Coercive Behaviors, Show Me the Payoff, Reciprocity, and Permissive Parenting.

Need for Power and Control

A need for power and control dominated Ramona's interactions with the adults. She would show discontent and engage in disruptive behaviors when she did not get her way. Her demands would escalate if her needs were not met. For example, during the sixth music therapy session, when Ramona refused to participate in a planned activity, she began to ask for her shoes. Whining and complaining escalated as her aunt was looking to find her shoes. Finally, Rachel stopped participating in the activity and helped locate her daughter's shoes. No appropriate limits were set (e.g., establishing that Ramona would participate in the session once her shoes were located or stating that it was not a good time to be looking for shoes during the music therapy session). When Ramona had her favorite shoes, she continued to refuse to participate in the therapeutic activity. Disruptive behaviors continued to escalate. She was hiding behind the sofa and whining, continually asking to have milk and finally carrying a doll, turning her back to everybody and playing with it.

Ramona seemed to select activities in which she participated based on preferences and perceived levels of interest. When she was interested in obtaining access to props (e.g., pictures of facial expressions, shaker eggs, ribbons) she followed adult instructions and participated. Even if Ramona exhibited flat affect, as well as

disruptive behaviors in a previous activity, presenting a preferred prop often resolved compliance issues. Placing specific demands on her (e.g., playing a specific instrument only on certain musical motifs) triggered incompliance. Ramona may have found the payoff of maintaining power and control over when to comply enjoyable. In one incidence of incompliance following a request to play an instrument, Ramona walked away from the area (Session Seven). The videotape of the session showed that as she walked away, she had positive affect (smiling) while her mom was watching her with a concerned facial expression.

When Ramona followed adult instructions during non-preferred activities, she showed discontent. Her affect was flat, or she would put forth minimal effort (e.g., make the least audible sound on her instrument, or move with a limited range of motion). Sometimes, Ramona would switch from compliance to noncompliance within an activity in an unpredictable manner. For example, in one of the sessions I was leading a music assisted relaxation exercise for Ramona and Rachel when Ramona suddenly refused to do one of the movements and turned her back to us as her affect changed to flat. Another example involved giving two possible responses to incorporate into songwriting and refusing to give a third response. Oscillating between refusing adult requests and being playful and interactive with mom and other adults was a typical pattern during our sessions. I hypothesized that Ramona's need for power and control interfered with her ability to relax and focus on participating.

Coercive Behaviors

Several coercive behavioral patterns emerged during the music therapy sessions. Ramona would ignore her mom's redirections, leave the music therapy area, and return

only after she successfully obtained a specific object she wanted to show to the adults or completing a task she had in mind. She would focus on different objects (toys or musical instruments), fidget with them, and not follow instructions or stop participating. Rarely did she respond to redirections. When redirected, she would often scream "No" or "No, I don't want to" or find a different toy or instrument on which to focus her attention rather than participating in the task on hand. She would not respond and pretend she did not listen to verbal redirections or non verbal requests (e.g., motioning to return to the area).

During free improvisations or structured activities involving playing different instruments, Ramona reached out and took instruments that her mom was playing without asking permission. Allowing others to have turns during activities was difficult for Ramona. She engaged in behaviors such as not doing movements that adults modeled. In action games or dances, when it was another person's turn to model a movement or do a 'solo' dance or instrument playing, Ramona interrupted beginning to do the activity with them or making off task comments.

Show Me the Payoff

Ramona showed capacity for self-control during preferred or desirable activities or when the adults did not place specific demands or expectations regarding her participation. For example, when Ramona was fidgeting with a ball rather than following my instructions, I switched to an action song that incorporated using the ball as a prop. Ramona followed instructions and remained engaged and participatory. In general, Ramona followed adult instructions when the therapeutic application involved using a preferred prop, when she was in charge of selecting instruments, songs or

modeling movements, and when she was curious about the task. She also showed pride, as indicated by positive affect and sustained eye contact, and showing her dad (when he attended the final session) different instruments and tasks she did in music therapy.

Reciprocity

Rachel was attuned to her daughter's non-verbal requests. For example, if Rachel was playing an instrument and Ramona turned around and looked at her instrument, Rachel would reach out and give it to her, completing the non-verbal communicative requests. When needing to redirect Ramona, Rachel did not raise her voice. As the sessions progressed, Rachel learned not to allow Ramona to take instruments from her hands without asking or Rachel offering. For example, during a free improvisation, when Ramona attempted to switch instruments with Rachel, the mother said: "I want to play this instrument now and do not want to switch." Rachel's voice was firm and Ramona responded by not persisting with her demands.

Music therapy therapeutic applications provided multiple opportunities for parent-child mutual interactions. Ramona would often use her mom as a social reference when trying different instruments, seeking her approval. When her mom would smile and verbally encourage her, Ramona would reciprocate the positive affect. Both parents were playful and not afraid to act silly during the sessions. Their responses included making funny faces, dancing and imitating their child, making funny noises and engaging in make-believe during action songs.

Permissive Parenting

Rachel seemed distressed when Ramona began whining and not participating. She was unable to ignore Ramona or resist making repeated requests/offers towards her

to participate. When I explained to Rachel that Ramona seemed to enjoy refusing her verbal requests to participate and suggested ignoring her, Rachel stopped her verbal requests. However, she continued to respond to Ramona using non-verbal language. She would tilt her body towards her, make eye contact or motion to Ramona to join us, or extend instruments to Ramona to play.

Throughout the sessions, when Rachel attempted to redirect Ramona, she either posed it in a question format (e.g., "do you want to play an instrument here?") or was vague about her expectations ("Ramona, come here"). Her tone of voice remained soft or sounded pleading. Ramona ignored her mom the majority of the time. Even though she refused to cater to some of Ramona's off task demands (e.g., getting her milk during the session) she catered to others (e.g., finding her shoes).

Development of the Parent-Child Relationship

During the exit interview Rachel reported that both she and her daughter enjoyed participating in music therapy, but felt she needed more sessions to continue making progress. She observed that temper tantrums seemed to decrease both in frequency and intensity. She stated that she was more aware of Ramona's emotions and how those triggered temper tantrums. This increased awareness was likely the outcome of Rachel's repeating many of the modeled activities focusing on feelings awareness that I modeled during the sessions. Her journal entries indicate repeating many of the activities during the week.

Perhaps the most problematic aspect of parent-child was the permissiveness exhibited by Rachel and power-assertion and coerciveness displayed by Ramona in

response. Rachel engaged in permissive parenting, which encouraged and promoted coercive parent-child interactions trampling her status as an authority adult figure. Coercive child behaviors hindered parent-child communication as Ramona's non-verbal behaviors were domineering (e.g., grabbing instrument's her mom was playing, refusing to take turns, refusing to participate when not in charge of making the decisions). Some reciprocity existed in the relationship, with Ramona using Rachel as a social reference when playing instruments or sharing mutual positive affect when doing movement-type activities together.

Mutual cooperation was an area the family struggled with. Subtle influences were rarely sufficient for Ramona to cooperate, and she was unwilling to follow adult directions. Conflicts arose when Ramona wanted her immediate needs met (e.g., access to toys or food) regardless of what was happening during music therapy or when requested by an adult to participate in a non-preferred task. Those conflicts escalated and remained unresolved by Ramona withdrawing and not engaging in a joint task activity. The power in their relationship was asymmetrically reversed. In their relationship habits that had developed through their history of past interactions, Ramona lacked the motivational resources to cooperate with her parents, despite her attachment and sharing positive affect.

Her mother lacked parenting strategies to be able to influence her daughter, or to set appropriate boundaries and expectations. Rachel noted the lack of participation and distractibility during the sessions in her completed weekly journals. She did not, however, seem to understand the role her parenting played in increasing lack of cooperation. In week 1 she stated, "I think my daughter was good; she participated in

the activities maybe not perfect," in week 2, "I expected more collaboration from Ramona," in week 5, "she was very distracted and could not participate" and week 7, "This was the worse session for Ramona, she didn't want to participate and was crying." Rachel seemed unable to understand the intentionality of Ramona's off task actions and was surprised when I was reviewing the developmental assessment report and noted that a videotape showed Ramona leaving the area while complaining but at the same time displaying positive affect.

During the sessions I made subtle statements aiming to teach Rachel alternative parenting strategies or responses. A journal entry indicates that Rachel may have perceived the need for change: "I had no idea that she would not let me choose the musical instruments because [she] wanted to control the situation, I thought she did to help me" (Parent R Journal, Week 2). Rachel began making slight attempts to change her parenting. During the exit interview she described that, when Ramona had a temper tantrum, she would either leave the area to avoid escalation or attempt to diffuse the conflict by singing a song or distracting Ramona with a dance activity. In her journal she noted learning a new parenting response to manage interactions between her children:

> I tried to play with my daughter 'turns', I mean it is your turn, you decide what are we going to do, and I decide what are we going to do in my turn. I tried to use the same "turns" all the day. For example, my two children want to speak at the same time, but now each one has a turn and the other have to wait. It is very difficult, because Ramona does not want to waiting for her turn, but I think is very important that she respect her brother's turn (Parent R Journal, Week 1).

Ramona's challenging behaviors were not simply the result of passive or non-agentic aspects of the relationship, such as her temperament. They were the result of her attempts to intentionally influence and resist her mother by being selective and

constructing her own ideas of when to comply. Rachel seemed to struggle with understanding that Ramona's challenging emotional outbursts and non-engaging behavior were not because Ramona had not yet learned how to manage her emotions.

During the exit interview, when I asked Rachel what she hoped for the future the following interaction ensued:

> Rachel: I hope Ramona control herself. Um, that she never do again fall on the floor. Or yell when she's upset. Or, I mean control herself is very difficult I think.
> Researcher: But you understand how you as a parent play a role in that, right?
> Rachel: Yeah, yeah.
> Researcher: We regulate our children, especially the young. We help them cope. They cope in response to us.
> Rachel: Mmhmm. Yeah. I felt that the eight music therapy sessions, I see the change in Ramona. So I mean, so I, maybe I can't say I know how to help her but I have an idea (Parent R Exit Interview, 3/18/2010).

Inability to comprehend bidirectionality and her role in supporting and maintaining problematic interactions made therapeutic progress difficult. This inability, however, should not be perceived as resistance in changing her parenting practices. Timing of the music therapy intervention was challenging both for Ramona and Rachel. During the course of participating in music therapy, Rachel was in her third trimester of pregnancy, had to cope with a C-section delivery, and was likely sleep-deprived from having a newborn. Being energy-depleted and stressed may have contributed to Rachel's permissiveness. Ramona on the other hand, had a lot of changes and transitions in her life (such as her aunt visiting and her new brother). Coping with change may have contributed to Ramona's power-control behaviors. Thus, contextual elements may have also reduced therapeutic effectiveness.

A positive aspect regarding the timing of the intervention was that it occurred during a time of transition in the family's life. Granic and Patternson (2006) discuss

how rigid patterns may emerge that can become constrained by contextual risks (such as maternal depression), resulting in those interaction patterns becoming fixed leading to a trajectory of antisocial behavior. Ideally, participating in the music therapy intervention helped Rachel become more aware of problems in her interaction with her daughter and may prompt her to become more actively engaged in seeking information on how to change her interactions and parenting skills in the future.

CHAPTER VI

CASE STUDY III – FAMILY L

Lalenia, Larna, & Lindy

Lalenia was a 35 year old Caucasian woman who had two children. Larna, age three, was the target child participant in this study. Lindy, her brother, was 18 months old at the beginning of this study. At the time of this study, Lalenia was separated from her husband. Lalenia was a first year doctoral student in a large Midwestern University. Both children attended full-time daycare five days a week. Prior to beginning her doctoral studies, Lalenia worked as a school teacher. Because her husband was unemployed, he stayed home with the children. She expressed guilt that her class schedule and teaching responsibilities had necessitated placing the children in full-time daycare.

She reported that their marital relationship, which lasted three years, was violent and abusive. She was residing in the basement of her parents' house; they were supporting her fight for physical and legal custody of her children. Larna and Lindy had not had any contact with their father for nine months. Lalenia informed me that her husband was disputing her claims and seeking visitation rights using the court system. Adding to the stress of leaving an abusive relationship and being enrolled in a doctoral program, Lalenia reported that the court appointed male social worker handling her case did not believe her claims; she felt he sided with her husband. According to Lalenia, he wrote a report stating that Lalenia had a personality disorder, which led her to falsified accusations.

Due to financial constrains and legal mandates, Lalenia had to reside in the county in which she filed court papers. Thus, she continued to live with her parents, who resided an hour away from the university and the daycare center her children attended. Their living arrangement added another stressor, as they had to spend two hours commuting each day. Some nights, as a result of inclement weather and dangerous driving conditions, they had to stay in a hotel.

Lalenia described her family as being committed to each other and having the ability to forgive, despite the emotional stressors they faced. She considered her family's strengths as not giving up upon each other and desiring honesty and truth. Spirituality and prayer were strong components in the family's life. Lalenia would often meet with her pastor to pray. She attended church with her children, would talk to them about God, and prayed with them.

A history of child molestation by her grandfather had led to symptoms of depression in high school. She had classical training in piano and reported coping with her emotions by playing the piano for hours. Because of the abusive marital relationship, at the time of this study Lalenia reported having symptoms of Post Traumatic Stress Disorder and depression. She was seeing a counselor but reported no benefit. She considered her biggest strength was being a person who did not give up easily, who was loyal, and tried not to hurt others. Being in an abusive relationship had caused her to consider herself as a failure and experience low self-worth. She stated:

> My threshold is very low. I'm a failure a lot of the time and I've evaluated my ability to see life in more of a continuous form rather than a hierarchical form: that if I succeed then I'm better; if I fail I'm worse. Um, and my conditions for failure. And I think that goes hand in hand with my, um, low feelings of self-worth: that I don't have anything to offer and that I deserve what I receive and that I am not that good anyways and, um, poor feelings about myself" (Parent Interview, 1/15/2010).

Larna's father began beating her when she was eight months. Lalenia reported that "he would spank her so hard that she would have welts and sometimes bruises. Um, and they would be for things that I wouldn't think she was doing wrong" (Parent L Interview, 1/15/2010). Initially Lalenia was not concerned about her husband spanking Larna, because her parents also had used physical discipline. However, she reported that her parents reserved physical punishment for when they were disobedient or disrespectful and would explain to them what they did wrong.

Her husband's physical lashings out towards Larna were unpredictable:

> My husband, he would just grab her. She would just be touching the blinds on the window, he would just grab her and start hitting her. And it was just this fear thing that around any corner there was going to be this. She became very hyper-vigilant... we would be playing, and he, she would accidentally kick him in the face or her arm would hit, he would start hitting her and like, he would do that to her when he was angry, and, again she was surprised, very confused like, "What did I do wrong? I couldn't have controlled the situation. He explained to me that if a child doesn't cry hard enough they weren't punished well enough (Parent L Interview, 1/15/2010).

While in the relationship, Lalenia felt that harsh punishment was not a situation she could control, as her husband would also lash-out towards her. Understanding the damaging outcomes of harsh punishment, Lalenia reported a different parenting style than her husband. She would remind the children that they were not bad people if they misbehaved and, when she needed to redirect them, she would explain why something

was dangerous or inappropriate. Her husband would threaten and hit Larna to achieve compliance during self-care routines such as brushing teeth or taking a bath.

At the time of this study, Larna experienced difficulty with performing self-care routines. Her mother used a sticker book as a motivating method to overcome her fear of performing those tasks. As a last resort (e.g., if Larna had not brushed her teeth for four days) her children lost access to privileges such as watching television or eating sweets. She avoided using time-out as a discipline strategy, as she believed it reinforced Larna's tendency to feel low self-worth. Regarding showing strong emotions in front of her children Lalenia reported: "I try to be very positive with the children. I do try not to cry around them. Because she feels very unsafe. Um, I try not to get angry about anything, which is so difficult when I get stressed out" (Parent L Interview, 1/15/2010).

Lalenia described Larna as a strong-willed girl who knew what she wanted or needed. She also gravitated towards things that were beautiful, especially music. She enjoyed reading, talking, playing, and having one-to-one interactions with her daughter. When talking about her daughter's areas of growth, Lalenia described Larna's difficulty in asking for help. If she was attempting a task, such as getting her gloves on, she would get angry if an adult tried to assist her and begin to throw objects escalating into a temper tantrum. She also disliked having water dripping on her clothes and, if she perceived her clothes were wet, she would take them off regardless of whether she was in public or private. Being touched by adults caused Larna to startle and was a tantrum trigger. Lalenia said:

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> She also can't be surprised by anything. If I touch her I have to say, "I am going to put your coat on, I'm going to touch your arm" or something like that. And if she wants something she grabs it. Unless it's dangerous I can't take it away from her, because if I take it from her, she can become hysterical, as well (Parent L Interview, 1/15/2010).

Feeling unsafe was a temper tantrum trigger for Larna and was her most frequent reason for exhibiting challenging behaviors. Lalenia would describe the daily routine to Larna and warn her about upcoming changes to mentally prepare her daughter and decrease the likelihood of responding in a negative way. Larna would bite and hit her mom if she felt she was unsafe. Loud noises would startle her and could potentially trigger challenging behaviors. Even though Lalenia breastfed Larna, she claimed her husband would prevent her from holding or cuddling her daughter. At the time of the study, Lalenia said she encouraged Larna to ask for a hug or cuddle when she was feeling unsafe, in an effort to rebuild their relationship. According to her mother, Larna had sleeping problems, was unable to fall asleep by herself, and woke up frequently at night.

In her relationship with her brother, Lalenia described Larna as bossy. She wanted to be in charge telling him what to do. Larna would often imitate what she saw her father doing to her. She would behave in a friendly way and then suddenly become violent towards him. Larna had a problematic relationship with other children as well. She would hit or bite other children if they did not include her in their game or if they took a toy away from her. Lalenia reported that violent behaviors against her brother or other children decreased gradually since leaving the abusive relationship. Larna's first language was not English. Her dad had immigrated to the United States from a European country. Because he was unemployed, he stayed home with the children while

Lalenia worked, and spoke to them only in his native language. Some of the aggressive behaviors towards other children may have resulted from Larna's inability to communicate with them. At the time of this study, Larna spoke English fluently.

Lalenia reported that, in the first eight months after they moved away from her dad, Larna was unable to look at a picture of her dad. Even though she heard her mom mentioning him, she did not acknowledge his existence and would call her grandfather dad. A play therapist who saw Larna on a weekly basis used puppets to help her understand what has happening with her. Lalenia pointed out that it was only recently that she acknowledged the existence of her father in puppet role play. At the time of this study, Larna was undergoing court mandated forensic interviewing conducted by the court-assigned social worker. Lalenia reported that he was asking Larna to talk about what happened with her dad in order to write a court mandated report.

Regarding musical preferences, Lalenia reported that the family listened to different types of music. Often her children would use home materials to pretend they were musical instruments. Lalenia resumed playing the piano. Larna would often imitate her, pretending she was playing, too. Lalenia was interested in feedback and information on how to further use music at home. She also valued music therapy as an opportunity for providing emotional support. She stated that music therapy would allow her to interact with her two children in different ways, and that Larna would learn that music therapy was a safe means of regaining trust towards adults. The mutually agreed therapeutic goal for the family was "To learn to trust each other." The therapeutic goals for the child were "To improve attachment and trust" and "Learn to play and explore."

Results of Psychometric Assessments

Lalenia's score on the PSOC was 88, which was higher that the average scores reported by Johnston and Mash (1989) and Gilmore and Cuskelly (2008). Her answers indicated less satisfaction with getting things done. Larna's scores on the DECA indicated that she scored within the typical range for Initiative. She scored within typical but borderline range for Attachment and below the norm for Self-Control, indicating the possibility that she had difficulties handling intense feelings and that her mutual relationships with significant adults needed to be strengthened. Her score in the Behavioral Concerns subscale was high, indicating the possibility of significant problems. Table 3 summarizes Larna's DECA scores.

Table 3. DECA Scores of Larna

	IN*	SC	AT	TPF	BC
Raw Score	30	15	25	70	17
T-Score	46	38	41	40	70
Percentile	34%	12%	18%	16%	98%
Description	Typical	Concern	Borderline	Concern	Concern

*IN=Initiative, SC=Self-Control, AT=Attachment, TPF= Total Protective Factors, BC=Behavioral Concerns.

Music Therapy Sessions

All music therapy sessions took place at a university-affiliated music therapy clinic. At the time of this study, both Lalenia's children attended a childcare program full-time. Logistically, it was more convenient to have the sessions at the clinic than in the home. The clinic room size was 6 x 9 feet and it included a piano, a bench, and a dry erase board. I brought additional instruments or props into the room, as needed for the sessions. The scheduled time for our sessions was 9:00 am on Fridays. Lalenia attended

the session with her two children. Her sister, who was visiting from out of state, attended the fourth music therapy session. Hannah, a female undergraduate research assistant attended and helped during all music therapy sessions. Below is a summary of the family responses to the music therapy therapeutic applications.

Determining a session format that would allow Larna to relax, select, and enjoy music therapy without exhibiting flight-fight-freeze reactions was a challenge. Initially, I presented different materials and props to Larna and attempted to follow her lead in organizing activities. However, I limited the number of available choices of instruments and materials/props to avoid overwhelming her. As the sessions progressed, a predictable routine developed. Each week I began the sessions by playing the same greeting song on the piano. Our greeting song was an original song that I had improvised and composed in response to my interactions with Larna in our first session.

Since our therapeutic goal was learning to play and explore, I introduced props and instruments and modeled how to use them in different ways while singing different tunes in different modalities, improvising on the piano, chanting, or singing age-appropriate songs. I noticed that both Larna and her mom memorized melodies and would join me and sing along. She also developed expectations regarding which tune/song matched a specific prompt. Examples included: (a) taking a large blue scarf and putting it on her head, pretending she was a princes while we sang, and then approaching her mom and singing while sitting on her lap and cuddling with her, (b) putting all the scarves in the parachute, sitting inside the parachute with her brother, hugging her brother and singing with us while we moved them in different directions, or (c) sitting on the parachute while playing a game that involved singing short-melodic

phrases, touching another person at the end of each phrase and pretending to 'buzz' them.

To encourage flexibility, each week I attempted improvisation, encouraging both Larna and Lalenia to move around the room and explore playing various pitched or non-pitched percussion instruments. Initially, Larna quickly would become non-participatory or lose interest during the improvisation, withdrawing into non-participatory behaviors. Sustaining the length of participation in free improvisation gradually increased. Lalenia learned to support her daughter's participation by playing steady rhythmic patterns or actively modeling how to play different instruments. Larna responded to changes in pitch and dynamics by matching my playing.

Parent Consultations

Parent consultations took place during music therapy sessions or by e-mail communications. We discussed how to adapt materials to create musical instruments and props (e.g., using a bed sheet to create a parachute), accessing age appropriate books and songs (e.g., Sandra Boynton's CDs), and playing songs on the piano for her children. In e-mails we exchanged on 1/22/2010, 1/24/2010, and 3/4/2010, we discussed how to improvise tunes and melodies using only the white keys on the piano. We also addressed child development topics, such as power-control issues, bedtime routines, transition to school, and difficulties pertaining to Larna's stress, such as her hair-pulling behavior.

Following a request by Lalenia, in an e-mail dated 2/7/2010, I discussed Larna's participation in music therapy, making observations regarding her engagement and providing a summary of clinical observations. In the same e-mail, I prompted Lalenia to

be more relaxed during the sessions and gave her ideas on how to use props to interact with her daughter in the sessions. During the sixth music therapy session, Lalenia confided that she was not feeling well due to extreme stress. She had received the result of the court-appointed therapist who stated he did not believe her claims about abuse. I offered Lalenia an opportunity to meet with me for a face-to-face consultation on how to use music-assisted relaxation.

We met at the music therapy clinic on campus for 90-minutes on 3/4/2010. During the consultation, I conducted a short music-assisted relaxation session and gave Lalenia instructions and materials to enable her to do the exercise by herself either at home or at her office. This face-to-face meeting gave me an opportunity to discuss developmental issues more in depth with Lalenia and give suggestions such as creating visual schedules, such as a wall calendar indicating therapy appointments or changes in the regular schedule. We also discussed Lalenia's tendency to explain rather than respond empathetically to Larna, and I suggested to Lalenia titles of books about discipline and child-development that she might be able to find at her local library.

Following a discussion about Larna's difficulty in separating from her mom when she drops her off at childcare, I composed a song with original lyrics using a piggybacking technique. According to Lalenia, separation anxiety was a behavior that had emerged in March and had not been a previous problematic behavior. The lyrics fit to the music of the song *Swinging* (Reynolds, Valerio, Bolton, Taggart & Gordon, 1998). I introduced the song during the final music therapy session. At the conclusion of the music therapy sessions, Lalenia completed a referral form for music therapy at the student music therapy clinic of the University. I also gave her information on a music

therapy camp and how to apply for financial aid at a local community music school to enroll her children in regular early childhood music classes or music therapy sessions.

Lalenia mentioned that she was seeing an individual counselor. She reported that her counselor had mentioned that Lalenia needed additional individual therapy. I discussed with Lalenia the possibility of referring her to another therapist to help her address and cope with the reported adversities she has faced. At the time of this study, another doctoral student in music therapy was recruiting female participants for a study using the Bonny Method Guided Imagery with Music[4] (BMGIM). I referred Lalenia to the student who was conducting the BMGIM study.

Clinical Assessment & Interpretation

An event that had an effect on the socioemotional adaption of the family system was the court mandated forensic interviews that Larna had to complete on February 23, March 2, and March 9, 2010. Lalenia reported that the assessment required that her mom was not in the room during the interview. Parental conflict, the experience of abuse, her dad filing divorce papers and seeking visitation rights were multiple stressors expected to be having negative effects on the mother-child relationship and adaptation. Two events may have affected participation and observed behaviors during the sessions.

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[4] I consulted with a different doctoral student who is also a BMGIM Fellow about this referral. She also believed that BMGIM would likely be a beneficial treatment modality for Lalenia for the following reasons: (a) Listening and imagery at an altered state of consciousness may encourage her to express repressed feelings, and (b) In-depth verbal discussions relevant to the issues she has faced may gradually help her become psychologically ready to re-experience and confront the traumatic event. She also pointed-out that individuals who have experienced past traumatic events or relationships have been a major clientele who has shown benefits of BMGIM therapy (Mi Hyun, Bae. Personal Communication. 4/25/2010).

In session three, Lalenia picked up her sister from the airport, which resulted in them being late for music therapy. Larna fell asleep in the car and, when her mom brought her in the room, she was still sleeping. Her mom ran to the bathroom and when Larna opened her eyes and realized her mom was not there she began crying. Moreover, during the sixth session, Lalenia was feeling sick and participated less in the session. The emerging themes included: Need for Power and Control, Handling Frustration, Hair Pulling/Twirling, Struggling with Reciprocity, Seeking Mom's Approval, Developing Reciprocity, Developing Trust and Feeling Safe, and Teaching.

Need for Power & Control

The need for power and control was greater during the first three sessions, which I infer was an attempt by Larna to test boundaries and feel safe in music therapy. Power and control manifested by Larna assumed an 'apathetic' stance that involved keeping her arms limp on each side, not touching any instruments, maintaining flat affect, and ignoring verbal and non-verbal bits to participate. For example, during the first session, I sang a song and tapped a tambourine using a steady rhythmic pattern. Then I sang the song a second time while extending the tambourine to each family member to take turns and tap once. Despite verbal encouragement by Lalenia and me to play, Larna remained apathetic.

Maintaining an apathetic disposition for a long stretch of time only occurred in the first and third music therapy sessions and only once during the sixth session, when her mom had to briefly leave the room to go use the bathroom. Thus, it may have been a direct response to feeling unsafe. Commenting about the lack of engagement, Lalenia

wrote in her journal: "She wanted to experiment and explore but I sensed a fear in her that she was unsure of herself and her surroundings" (Parent L Journal, Week 3).

During the first three sessions, I also noticed that Larna showed excitement about an activity and began to participate. Then suddenly, she would switch to an apathetic posture, ignoring further attempts to engage her or shift her attention to another prop or instrument available in the room. During the first session, for example, Larna showed excitement in her voice and jumped up and down when I took a stretch rope, asking to stand in the middle while Lalenia, myself and Hannah (the research assistant) held it in a circle. I began to sing and move the rope and Larna smiled and started to dance. Suddenly, she twirled her hair; her affect changed to flat and said, "I am all done with this activity." During the third session, I was improvising on the piano, Larna was playing a drum while her mom was playing a xylophone, and her brother was moving around in the room. Our tempo became synchronized, and then Larna stopped, and her affect was flat. She visually scanned the room, and then she took the scarves.

Another way Larna manifested her need for power and control during the first three sessions was to find an excuse not to try a new activity. During the first session, when I asked her to join me and play on the piano, she responded, "my hands are too small." When I invited her to strum the guitar, during the second session, she said, "I do not have strumming fingers." During the third session, when I took out the stretch rope, she said, "I do not like it because it does not have pink in it."

Handling Frustration

Addressing the developmental needs of an 18-month old and a 3-year old in the sessions was a challenge. It became my research assistant's primary task to distract

Lindy and engage him in active play, which successfully reduced the incidences in which Lindy disrupted Larna's play. Observing Larna's and Lindy's interactions in the session offered many opportunities for identifying how Larna handled her frustrations.

Often Lindy would disrupt a play idea unintentionally. For example, Larna was pretending she was putting a teddy bear to sleep by covering him with scarves and Lindy would walk around and step on the scarves. Other times, Lindy would follow Larna around the room and attempt to take an instrument or a prop she was holding out of her hand. In other instances, Larna would put a scarf on her head to pretend she was a princess and Lindy would pull it off to play peek-a-boo with her. Sometimes Lindy would disrupt Larna's play intentionally when he wanted to play an instrument she was playing.

Larna's typical reaction was to scream when Lindy interfered with her play. She calmed down when we offered her a different choice or when we successfully distracted Lindy, allowing her to continue her pretend play or musical play. Sometimes Larna explained to Lindy, "I was playing with it." or said "No." Once, during the fourth session, when Lindy attempted to grab some scarves that Larna was playing with, and she told him 'no', Lindy reached out and hit her on the head with a mallet. Larna began crying, turned around and hugged her mom. When she calmed down she told Lindy, "I don't like it when you hit me." During the fifth session, when Lindy attempted to play the drum, a mallet that he did not have a strong grasp of left his hand and hit the back of Larna's thigh. Larna turned around and said, "That hurt me Lindy." Such examples showed Larna's capacity to use words and express her frustration with her brother's behavior.

In all the instances of sibling rivalry and conflict, Larna controlled her frustration and did not exhibit any physical aggression towards her brother. She spontaneously hugged her brother during the sessions and reached out to take his hand when exiting or entering the clinic area. During instances of sibling rivalry, mom would either explain what had happened to Larna or attempt to redirect both children. There was no effort, however, to acknowledge Larna's feelings arising from the conflict situation.

Hair Pulling/Twirling

In an entry in her journal Lalenia commented that hair pulling began when they still lived with her father. She noted: "Larna began to exhibit stress symptoms, pulling her hair out in clumps, for which her father would spank her and express his disgust at her" (Parent L Journal, Week 3). Lalenia also shared with me during the sessions that hair twirling incidences increased in March, a fact she attributed to the court mandated forensic interview the social worker was conducting.

Hair pulling or twirling occurred consistently throughout the sessions. Lalenia brought to my attention that a bald spot had appeared on Larna's head; a fact that I confirmed by looking at Larna's head. According to Lalenia, the bald spot had appeared sometime between March 2 to 5. The function of this behavior seemed to be self-regulatory; it occurred in instances when Larna may have experienced anxiety. She twirled/pulled her hair prior to delivering a request to an adult to gain access to a prop or to end an activity. The behavior stopped when the adult (either her mom or me) addressed her request. She also exhibited this behavior during waiting periods, when we transitioned from one therapeutic application to another. Once she used hair

pulling/twirling to calm herself down, after Lindy accidentally hit her with his foot and also when she began talking to her mom about her fear of monsters.

When Larna was actively engaged in making music and interacting in musical ways the hair pulling behavior ceased. Lalenia made similar observations as she noted in her journal:

> She did seem to lose herself in the fun we were having. I notice Larna twirls her hair when something feels wrong- uncomfortable, anxious, painful, or just concerned. This occurs when she observes or hesitates from the activity. But when Larna really engages in an activity she doesn't twirl her hair. So, when Larna is playing music, etc. she relaxes and engages- is able to concentrate and doesn't pull on her hair (Parent L Journal, Week 6).

Struggling with Reciprocity

I observed lack of reciprocity between Larna and her mom during sessions one to four, again showing how Larna was adjusting to being in music therapy. I also observed incidences of lack of reciprocity during session seven, which may have been triggered as we were approaching termination of the sessions. Examples of the lack of reciprocity included refusing to take a mallet that the mom was offering, not catching a scarf that the Lalenia was throwing to her, looking the opposite direction when mom kissed her cheek, or requesting to play by herself when everybody was engaging in active music making/improvisation.

It is interesting to note how Larna withdrew from joint attention experiences with her family. For example, during the second session, I was chanting songs while modeling how to dance with the scarves, throw them in the air and blow them away. Both mom and Lindy giggled and joined me. Larna, on the other hand, turned her back to us, took some bean bags and began to pile them on a drum. During the third session when I used pitched chimes and xylophone bars, Larna showed excitement and wanted

to try the instruments. After I let her explore the instrument, I tried to create an Orff-bordun[5] and engaged the family in singing and playing. Larna participated for a few seconds, then turned around, grabbed a scarf and hid under it. Avoidance of engaging in joint-attention tasks had the following pattern: (a) Either Larna noticed a prop or an instrument and asked to use it, or I showed her a prop or an instrument and she seemed interested in using it, (b) I modeled how to use the instrument/prop and begin to sing a song or improvise, or (c) When Larna's attention shifted to something different, she would likely say: "I am done with this activity."

As the sessions progressed, I attempted to increase participation in joint attention tasks by eliciting Larna's input in organizing the activity. Even after giving her input, Larna sometimes felt the need to withdraw. For example, during the seventh session she said she wanted to play the drums. She initially shared a drum with her mom but did not make eye contact with her. Then she moved to another drum further away. I asked her if she wanted to try a new song on the drum in an attempt to maintain her attention. She responded yes and I began singing while mom and Lindy continued playing the drums. Larna moved across the room, got a different non-pitched percussion instrument (a rattle resembling a caterpillar) and began to look at it.

Seeking Mom's Approval

Instances in which Larna sought her mom's approval and comfort occurred throughout the eight music therapy sessions. A routine with scarves began emerging during our second session. Larna imitated me and put a scarf on her head. I then began

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[5] A bordun is a harmonic interval containing the first and fifth degree of a pentatonic scale. During improvisation, it creates the harmony of the tonic chord. The bordun can be played as a sustained drone or as a repeated (ostinato) rhythmic pattern.

improvising a song describing Larna as a beautiful girl. While I was singing, Larna was using her mom as a social reference. Her posture was straight with her tummy protruding forward, her affect was positive, her body titled towards her mom's direction and she was glancing sideways towards her mom. This routine occurred and evolved from session to session. Larna would stand, sway her body while we sang the improvised wonderful princess song, and then she would approach her mom, sit on her lap and cuddle while we continued singing.

Writing in her journal, Lalenia noted her reaction to Larna seeking to cuddle during the scarves routine. She wrote: "For the 1st time ever- in your sessions or her own play therapy Larna voluntarily sat and cuddled with me. I started to notice her gazing at me and interacting more with me. I truly hope this is a sign that it will continue and our bond will deepen" (Parent L Journal, Week 6).

Another instance of seeking mom's approval occurred during the fifth session. I was improvising on the piano while Larna was playing the drum. When her drumming tempo was entrained to mine she turned her head around and looked at her mom and smiled. Her mom reciprocated and smiled back.

Developing Reciprocity

Larna began initiating spontaneous play interactions, manifested as non-verbal or verbal/musical attempts to engage adults or her brother in a joint attention task, during the second session. As we continued music therapy, the frequency of attempts or bids to engage others increased. Such spontaneous interactions involved imitating me during the second music therapy session, putting a scarf on her mom's head, and subsequently repeating the behavior in the remainder of the sessions. In the sixth

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session, during free improvisation, she asked her brother to come and share instruments with her. Later during a structured activity that invited instrument sharing, she reached out and played instruments that her mom and I were playing.

From the fourth session onwards, Larna began to accept her mom's attempts to engage in joint tasks. This involved allowing her mom to reach out and share playing instruments with her and not disengaging from an activity as soon as her mom joined in. Also beginning in the fourth session, I increased my efforts, not only through modeling, but also verbally, prompting and encouraging Lalenia to interact with Larna. I began interacting with Larna, prompting Lalenia to imitate me and join us, and then allowing Lalenia to continue the interaction with her daughter. Examples of such modeling efforts included playing the drum with Larna while singing a song and then inviting the mom to play the drum while singing another song, prompting the mom to add improvised lyrics or sing responses to songs describing what Larna was doing, and placing instruments strategically between them and giving them each a mallet.

An action song/game that became part of our session routine (sitting on the parachute while playing a game, which involved singing short-melodic phrases, touching another person at the end of each phrase and pretending to 'buzz' them) was a joint-attention task that I used as an opportunity to nurture mother-child interactions. I would use phrases or questions such as "I wonder who my buzzing finger would get next", "who should I buzz next?", "I wonder if Larna can get mom with her buzzing finger" to sustain their interactions. I believe that learning to touch each other in a playful and non-threatening manner was a critical aspect in the development of their relationship as Lalenia had commented in her journal: "In our healing process, I have

sought to not touch Larna unless she is in danger or have been given permission" (Parent L Journal, Week 3).

Developing Trust & Feeling Safe

This theme emerged only after the third session. Larna's pattern in developing trust consisted of being an onlooker of our active play prior to deciding to join us and participate. For example, in the fourth session, during an action song involving balls, she said, "I don't want a song" and went to a corner of the room. When I continued singing with her brother, she joined the activity. Both Larna and her brother took turns catching and throwing balls with the adults. When Larna began moving the ball side to side we imitated her. We also repeated throwing the ball in the air doing a dominant-tonic pattern. Both the mom and Larna initiated interactions (i.e., showing different balls to each other, and then throwing the ball to each other).

Each week I repeated familiar tasks and songs while attempting to introduce at least one new activity. While Larna readily engaged and participated in familiar activities, she was initially apprehensive when I introduced unfamiliar tasks. She developed a behavioral pattern of being an onlooker while her mom and brother attempted the task. It appeared as if she needed to observe us play and judge whether the activity was 'safe' prior to joining. In session five, I brought hand-bells that were designed to be placed on a table and had a button on top that a child could press to make sound. When I asked her to play, she initially said 'no' and withdrew in a corner. As her brother and her mom approached the bench, I set up the bells and began pressing them to make music. Larna also approached and began exploring the instruments.

Lalenia made journal entries expressing her delight that Larna was participating and not withdrawing from activities on weeks 5, 7 and 8. In one entry she wrote: "She loved the scarves and seems to know what to do with all of the instruments- they were familiar and she knew what to do" (Parent L Journal, Week 7). I believe a critical aspect to developing trust and participating was incorporating Larna's musical ideas into the musical activity. On the fourth session, we were playing a game using shaker eggs, going fast and slow. Larna, who was initially playing along, began twirling her hair when I asked her if she wanted the song fast or slow. She chose fast and began visually scanning the room as we were shaking our eggs fast. Her mom was looking at her and smiling. Larna's hair was sticking up from pulling. Her affect changed to positive as she began doing fast movements with her hands.

After the fourth session, Larna seemed to feel safe in music therapy, as indicated by increased occurrences of spontaneous engagement in active play during the sessions. Those occurrences included a spontaneous scarf dance during session five, sharing a xylophone with her mom and Lindy during session six, giving instructions and asking us to put the scarves inside the parachute without twirling her hair prior to delivering the request in session seven, and finding a creative way of using the boom-whackers as microphones and singing songs in session eight. In her journal, Lalenia wrote:

> These sessions have been so much fun and so encouraging for Larna. I see her engaging more with music and improving her confidence. She got out of the car when we got to the music building and said "Varvara is my friend – this will be exciting- I like Varvara- Varvara won't hurt me." She then said something about why it was so exciting and "Mommy I like to come here." Very positive (Parent L Journal, Week 5).

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Teaching

During the sessions, Lalenia appeared more comfortable and spontaneous in her interactions with Lindy rather than Larna. When Larna began withdrawing from a joint attention task, Lalenia continued to be playful and interactive with her son without making attempts to re-engage Larna. The difference between mother-song interactions and mother-daughter interactions directly relates to the question of mutuality between parent-child. Lindy seemed more sociable and was more likely to respond to his mother's attempts to be playful with him. Subsequently, he evoked more positive responses from his mother than Larna did.

Lalenia redirected her children using a firm and assertive manner consistently throughout the eight music therapy sessions. She redirected Lindy when he attempted to grab instruments out of Larna's hands, and set limits (e.g., we can do it one more time then it is time to go). She often offered positive attention by looking at both children, noticing when they were engaged in active play and delivering verbal praise.

Whereas she acknowledged positive emotions that her children experienced, she failed to acknowledge negative emotions. During our first session, I began throwing scarves in the air and catching them while I sang. When Larna attempted to throw a scarf in the air and said, "I can't catch it..." her mom responded, "It's OK. Have fun with it". This interaction exemplifies another intricate aspect of Lalenia's parenting: She reassured rather than acknowledge the negative emotion. Another way Lalenia dealt with negative emotions was a tendency to explain why certain things happened. For example, during the second session, when Larna attempted to organize play by putting scarves on the xylophone bars and pretending she was putting them to sleep, Lindy

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approached and took the scarves. When Lalenia responded by saying, "Sometimes we have to share", she delivered an explanation and excused Lindy's behavior without showing empathy towards Larna. I hypothesized that Lalenia's inability to acknowledge negative feelings of her daughter may have been directly related to how she was experiencing her own negative emotions, either trying to distract herself or rationalizing what happened.

Development of the Parent-Child Relationship

The time dimension is critical for relationships, because strong bonds develop as a result of accumulated history of interactions. Lalenia's and Larna's history of interactions evolved in a context of fear and mistrust as a result of domestic violence and abuse building a context for how they interacted together in the present. In music therapy, they experienced difficulty in initiating and sustaining joint-attention interactions. The observed difficulty was bidirectional. Larna was unwilling to engage or ignored her mom's bids. As a result Lalenia may have felt uncomfortable and exhibited fewer non-verbal attempts to engage with her daughter.

Initially, some of the difficulties in their interactions were likely the result of Lalenia feeling uncomfortable in the music therapy setting. Lalenia was aware of her discomfort as she wrote in her journal:

> It was very difficult for me to relax because I found myself uncomfortable being recorded and not sure how to handle myself at the same time worrying that my children were going to do something wrong- like break something or make someone upset. I realized after the experience that these were old thought patterns coming back to me unfortunately due to the fact that I was in a new situation with people I didn't know. My daughter could have sensed my uneasiness but I tried to mask it. She held back and then started to engage and finally – it seemed- fully participated in the end (Parent L Journal Week 1).

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Noteworthy is that as the sessions progressed and Larna began making attempts to reciprocate interactions with adults, she gravitated toward me or the research assistant. Even though Lalenia enjoyed observing her daughter interact and play (as indicated in her journal entries, our discussions, and the positive affect she exhibited during the session while observing her daughter), she perhaps compensated by seeking dyadic interactions with her son. A back and forth reciprocal quality of mother-daughter interactions emerged during the fourth session. I continued to model to Lalenia how to invite her daughter to play with her in an effort to decrease awkwardness and increase duration of their interactions. With only four remaining sessions progress in their dyadic interactions was just beginning to emerge.

Lalenia commented in her journal that music therapy allowed her to set time in her busy schedule to interact with her children (week 4). She also reported using some of the modeled activities and using music to interact in fun and warm ways with her children: (a) engaged in dancing and singing with her children (week 1), (b) she used pots and pans to create homemade drums to play dance and sing (week 2), and (c) played piano with both of her children (week 2). By week 3, Larna was repeating tunes and songs we sang in the session at home and, by week 4, the children were spontaneously initiating and imitating modeled activities at home, including 'jamming' on their home-made instruments. By week 8, music had permeated Larna's and mom's interactions. They attended a concert together and tried to identify different instruments when they listened to classical music in the car.

Our discussion during the exit interview indicated that Lalenia understood the damage that domestic violence had inflicted on their relationship. Even though Larna

did not seem to manifest any psychological disorder symptoms, Lalenia recognized that her daughter was dealing with feelings of pain and loss that were difficult to face. During the exit interview, she acknowledged that she needed her own therapy to help her address her own issues and insecurities so that she would not project those on her children.

When I asked Lalenia what she hoped for the future she stated:

> I think very specifically that the children would truly feel the freedom and experience the childhood joys of exploring and playing. I think the second thing is that I would unlearn apathetic responding so that these automatic responses of my coping mechanisms don't hurt them. And I think the third thing would be that they would continue in the music therapy relationship or something, um, that would provide an outlet to difficult times that they are going to have in their relationship with their father (Parent L Exit Interview, 3/26/2010)

Domestic violence has caused mistrust and tension in Larna's and Lalenia's relationship, inhibiting their ability to play and have fun together. They have both adopted a similar mechanism in their interactions: perceiving that they were likely to have negative emotions they coped by shifting their attention, distracting themselves toward something else, or disengaging from the activity. Participation in the music therapy intervention may have helped Lalenia and Larna take a few steps forward in healing the damage caused in their relationship.

CHAPTER VII

CASE STUDY IV – FAMILY H

Family Portrait: Henrietta, Hunk, Hailey, Harold, & Henry

Henrietta was a 37-year-old Caucasian woman. She was married to Hunk, who was also Caucasian, and they had three children, Hailey (12 years), Harold (9 years), and Henry (5 years). Henry was the target child participant in this study. Henrietta and Hunk were married for ten years and had lived together prior to getting married. Hunk was a professional musician, who made a living by playing in a band. At the time of this study, Henrietta was attending school full time, completing a graduate degree.

Both Hunk and Henrietta grew up in poverty, and they were the first people on both sides of the family to own a house. Henrietta also grew up in a violent household. She described her husband as smart and resourceful. He built the house the family lives in. He hired someone to do the foundation and the frame, and what he could not do, he bartered with individuals who worked in construction by providing music for a party, graduation, or wedding, so they would come and help him. Their goal was to have a house in which they could raise a family together.

Henrietta and Hunk had recently discontinued couples therapy. Henrietta said that it was her fourth year in graduate school and she felt that the stress had affected their relationship. She felt counseling had helped their relationship, and they both agreed on how to handle Henry's challenging behaviors. Parenting Henry had been a source of disagreement. Henrietta believed that some of Henry's behaviors were borderline and excessive, whereas Hunk disagreed, thinking that she was over-reacting.

Henrietta described her family members as creative and extroverted. They enjoyed talking with each other and having dinner together prior to Hunk leaving to go to work. They had a routine in which Hunk was responsible for cooking dinner. After dinner he went upstairs and spent time with his kids while Henrietta had time to "decompress" while cleaning up the kitchen.

Regarding their parenting style, Henrietta emphasized that both of them were honest with their children and not hesitant to admit when they made mistakes. She expected her children to have responsibilities and do chores in the house. Henrietta stated that both Hunk and her, refrained from punishment and preferred to allow natural consequences: "I mean, we do have consequences, they do get upset with them sometimes and stuff like that, but we generally try and not be, like, punitive kind of people" (Parent H Interview, 1/15/2010).

The family members did not belong to a church, nor did they practice a specific religion. They occasionally went to a Unitarian/Universalist church because they felt it was in accordance to their humanistic values and beliefs. Henrietta stated, "our book of graces has things from Native American traditions, to Buddhist, to Christian, to the Beatles, you know?" Henrietta believed in the interconnectedness of all people, nature and religions.

A clinical assessment conducted in the 1980s while Henrietta attended elementary school indicated the possibility of a non-specific learning disability. However, she had never received any special accommodations in school and had gradually learned to cope with it. She described her disability as affecting her visual-spatial skills. While attending high-school, Henrietta had depression as a result of the

violence she witnessed at home. At the time of this study she was taking a prophylactic dose of an antidepressant. A psychiatrist she was seeing had diagnosed her with adult ADHD and recommended use of a psychostimulant to help her maintain her focus during lengthy lectures. Henrietta was sensitive to noise and could not withstand sensory input for an extended period of time: "I think we have a very boisterous family, but, you know, in the kitchen cooking we're all sitting around talking and laughing but as soon as somebody turns on the oven fan, and then the radio's still on and we're talking. I have a meltdown" (Parent H Interview, 1/15/2010). When she was exposed to many different sounds simultaneously she experienced discomfort.

Henrietta felt her low tolerance of auditory stimulation may have affected her attachment relationship with Henry. Henry was loud, energetic and often made silly noises with his body. Henrietta stated: "Sometimes I have to say to him, 'I can't, Henry, you're so loud right now, I need to give myself a time out. I need to go to my room.'" She understood that part of his impulsiveness was developmentally appropriate and chose to leave the area to avoid yelling at him. Despite his impulsivity, Henry responsively contributed to the family life by completing many chores. "So at home he unloads the dishwasher, he switches the laundry with me, he makes the beds, he wakes up to his alarm, he does a lot of those things" (Parent H Interview, 1/15/2010).

Henry seemed to like things organized and tidy. For example, he put all his toys away after finishing playing with them. He disliked unpredictable changes to his daily routine. Henrietta stated:

> We always talk to him about his routine, or we're used to call it his routine instead of saying, 'It's your responsibility' we say 'Now what's our routine? Remember, when I come to pick you up after school the routine is, is that you come and we go and get Harold and his friend and then you can swing on the swing for a few minutes and then we go home.' So we just kind of do the recap of what's going to happen. You know? He likes to be, he likes to know, and he likes to be in control and make as many decisions as he can (Parent H Interview, 1/15/2010).

Based on his mom's description, Henry was intellectually functioning at a higher level than his chronological age. He could read, write phonetically, and create short stories by using phonetic writing and drawing illustrations. Henrietta said:

> He just loves to learn. So writing, counting, and math: insane. Geography. Yeah, so I mean he loves maps and they're all over [the house]. So he knows his continents, he knows his oceans, he knows many countries within Europe and Asia and all actually, South America, Central America, North America, all of it. Um, he knows more than I do, quite frankly, which is very embarrassing. Um, so he is a sponge, um, he's also the youngest of three kids, who are also spirited. Um, and very smart in different ways (Parent H Interview, 1/15/2010).

Emotionally, he was able to express frustration by talking about his feelings. The family maintained a 'tattle-box,' a box in which family members could write and drop 'tattle' notes, describing things that frustrated them. Henrietta laughed and talked about Henry leaving a note that said, 'if you don't listen to me again I am moving.' He was affectionate with his parents, hugged them often, and asked to sit on their laps.

Harold, similar to his mom, was also sensitive to auditory sensory input and disliked loudness. Henry's loudness was often a cause of friction and sibling conflict. Henrietta observed that Henry would often purposefully be loud in order to obtain negative attention from his brother. The two boys had a difficult time engaging in positive interactions while doing things together. On the other hand, as a preteen, Hailey was more tolerant of Henry.

Henry attended Kindergarten at a Montessori school. Henrietta stated that adults seemed to like Henry. His relationships with peers, however, seemed strained. Discussions with Hunk during the music therapy sessions revealed that a particular group of boys at school seemed to bully, be mean, and belittle Henry. Socially, Henry seemed naïve, gullible, and an easy target.

The main reason why Henrietta was interested in participating in this study was the family's love for music. They believed that music enhanced a child's learning and helped a child cope with emotions. There were many instruments available in the house, including a child size drum set and various guitars. Hunk also had a small recording studio in the basement. Even though Hunk had never taken formal music lessons, he knew how to play guitar, bass and piano. He was adamant that his children learn music. Hailey was playing the viola in her school's orchestra and taking private lessons. Harold's grandfather was teaching him to play the bass. While participating in this study, Hunk decided to teach Henry how to play the drum set.

The family had diverse musical tastes, including classical and popular music. Henry liked the Beatles and knew many of their songs by heart. He would sing portions of the songs. He loved to rhyme and make up his own songs or dance to music. Henrietta said that sometimes Henry would be singing while doing certain tasks (e.g., I am brushing my teeth, I am getting my boots).

By participating in this study, Henrietta hoped to learn how to better understand Henry's needs. She also hoped that Henry would gain more insight into himself and how to function better within his family. She expected our therapeutic relationship to be honest and egalitarian and hoped that I would be able to understand Henry's strengths

while being able to help him grow. Our mutually agreed upon goal for Henry was "To increase his attunement towards his family members." The therapeutic goal for the family was "To improve interactions and communication among family members."

The Music Therapy Intervention

Results of Psychometric Assessments

Henrietta's score on the PSOC was 74 which was higher that the average scores reported by Johnston and Mash (1989) and Gilmore and Cuskelly (2008). Her answers indicated less satisfaction with getting things done and feeling frustrated with how well her child was doing at his current age. She also reported feeling less efficient in finding parenting problems manageable. Henry's scores on the DECA protective factor dimension subscales were all within the typical range. He scored within typical but borderline range for Attachment. On the Behavioral Concerns subscale he scored high, indicating the possibility of having significant problems. Table 4 includes Henry's DECA scores.

Table 4. DECA Scores of Henry

	IN*	SC	AT	TPF	BC
Raw Score	35	19	25	79	18
T-Score	56	47	41	48	72
Percentile	73%	38%	41%	42%	99%
Description	Typical	Typical	Borderline	Typical	Concern

*IN=Initiative, SC=Self-Control, AT=Attachment, TPF= Total Protective Factors, BC=Behavioral Concerns.

Music Therapy Sessions

All music therapy sessions took place at a family room located in the finished basement of the family's home. Hannah, a female undergraduate research assistant

attended all the sessions. Because of the family's hectic schedule, who attended music therapy varied each week as follows: Session 1: intact family, Session 2: Henrietta, Henry, and Harold (Hunk was present during the parent consultation at the end of the session), Session 3: Henrietta, Henry (Harold and Hunk joined for part of the session), Session 4: Henrietta, Henry, Harold (Hailey and Hunk joined for part of the session), Session 5: Henrietta, Henry and Harold, Session 6: Henrietta, Hunk, Henry and Harold, Session 7: Hunk and Henry, Session 8: Hunk and Henry (Henrietta attended end-of-session consultation). The scheduled time for our sessions was Tuesdays, 4:00 pm. Summarized below are the family responses to the music therapy therapeutic applications.

Only during the first music therapy session did Henry exhibit apprehension. When the session began, he looked at other family members playing instruments but turned his back to me when I offered him a turn to play an instrument. Once, when I switched to singing and playing a song by the Beatles, his affect changed, and he began participating. By the fourth session, beginning the sessions by jamming to a familiar song that Henry had requested the previous week became our opening ritual. Jamming provided opportunities for the family to make music together, sing-along and verbally reinforce each other at the end of the song. When Hunk attended the sessions, he would bring his guitar and play along while I played a keyboard. During the exit interview, Hunk commented that selecting songs that were familiar and he could play on the guitar was something he enjoyed; Henrietta added that those songs helped Henry orient his attention that music therapy was beginning. Other family members sang and played non-pitched percussion. Sometimes I color-coded pitched instruments such as chimes or

a Q-chord and created song charts to allow other family members to play a more active role in our jamming.

I also engaged the family in performing short musical compositions using chimes and percussion instruments as an ensemble. This therapeutic application encouraged them to listen to each other. Henry had to self-regulate to wait for the musical cue and my conducting gesture to play his musical instrument. He also had to inhibit his tendency to make off-task verbal comments while we were performing the pieces.

Playing instruments gave him an opportunity to interact with his brother, Harold. For example, during therapeutic applications involving improvisation, I modeled how to reach out and play instruments that another person was holding. The two brothers imitated my behavior and smiled at each other. Both Henry and his brother were curious about exploring the sounds of the different instruments I brought to music therapy. It was difficult to maintain coherence and unity in the musical improvisation; the two boys were more intrigued by exploring the instruments than they were with creating music together. At times when Hunk participated in the improvisations, our improvisations sounded more aesthetically pleasing. As a musician, he would either create a steady rhythmic pattern or play melodies on pitched percussion instruments.

With the exception of the final two sessions, I incorporated movement with music activities targeting body awareness, sensory integration, and regulation. During these activities, I often used props including bean bags, hula-hoops, and a stretch rope. When using props, the adults and Hailey were less inhibited and shy doing movement awareness activities. Sometimes, only the two brothers performed the movement-type

activities, which became an opportunity for them to engage in positive interactions with each other. During the exit interview, both parents admitted feeling apprehensive and silly doing the music therapy planned activities. Hunk talked about taking him a while to relax and participate. Henrietta discussed her sensory difficulties and how her aversion to loud noises made participation difficult.

Henry sang portions of songs in tune. Once, we experimented with chanting rhythmic patterns and he responded back to me by creating his own patterns, without altering the meter I established. When playing instruments, he tended to accelerate the rhythmic beat; if he was not distracted, he would recognize he was off beat and correct himself. While participating in music therapy, he expressed interest in learning how to play the drums. Thus, his dad began giving him drumming lessons.

Music-assisted relaxation exercises emerged as an ending routine for our sessions. During those exercises, Henry often moved in close proximity or sought physical contact with his mom. He needed few redirections to participate and stayed quiet. I often ended those relaxation exercises with asking the family to complete statements that promoted intimacy such as, "I love you because..." or "I am (use positive adjective)." This activity created warm interactions between family members, and they did not seem to struggle finding positive adjectives or statements to describe self or other family members.

During week four, Henrietta reported getting an iPod and a docking station for Henry. The iPod was a reward for Henry having decreased bowel movement and urination accidents. Henry used the iPod to listen to music for relaxation, dancing around his room, and listening to books on tape.

Parent Consultations

Parent consultations took place during music therapy sessions or by e-mail communications. Initially, I focused on providing the parents information about sensory integration and how to accommodate the different sensory needs of each family member. I modeled sensory experiences during the session and made suggestions for how the parents could follow-up at home; I also gave them copies of materials discussing sensory integration and recommended books they could obtain from the local library.

During the consultations, I found myself mediating between Hunk, who felt that Henry could outgrow some of his sensory and self-regulation difficulties, and Henrietta, who asked my advice on whether to seek a diagnostic evaluation of Henry. Even though I did not discourage the family from seeking further help for Henry, I explained to them that a diagnostic evaluation would not necessarily offer a solution to the challenges they faced. I reiterated my role as a clinician to support them as parents and as a family and validated the parents' skills to work with Henry to help him learn skills to self-regulate and be more socially-appropriate in his interactions at school.

Problems at school were a recurrent topic of our discussions. Being unable to ignore his off-task peers and acting goofy created problems at school. During the sixth music therapy session, we discussed the possibility of focusing on social skills during the final two sessions. Our therapeutic focus shifted to addressing two main concepts of social skills and self-regulation: the ability to ignore, and the concept of 'stop and think' prior to acting out. During the seventh session, Hunk expressed disappointment that

music therapy was ending and said, "I feel just now we are getting to the core of what we are searching for."

During the final session, I provided both parents information on how to obtain social skills curricula they could use at home to help Henry increase his problem solving, assertiveness and social adeptness. At the conclusion of this study I did not feel Henry would have benefited from individual music therapy sessions. During the exit interview, I discussed with both parents the possibility of referring Henry to a boy's music therapy group, focusing on attention and social competence training that was scheduled to begin at a university affiliated music therapy clinic in the fall of 2010.

Clinical Assessment & Interpretation

The family did not experience any major life changes or events during the course of this study. Other contextual stressors, however, affected participation: timing of the sessions, Henrietta's sensory difficulties and the additional pressure of being a full time graduate student, attempting to balance family life and workload. I further elaborate on these stressors and their impact in the discussion of the emerging themes and the section documenting the development of the parent-child relationship. The emerging clinical themes were: Being Independent, Capacity for Self Control, Distractibility & Off-Task Behaviors, Establishing Expectations & Scaffolding, Family Discussion, Attachment & Bonds, and Mom's Stress & Sensory Overstimulation.

Being Independent

Henry's responses during music therapy indicated that he enjoyed being independent in meeting his own needs. He asked to play different instruments or

requested specific songs. He also made decisions about ending activities. Being creative, he often tried different ways to play or describe instruments. For example, during the seventh session, while we were singing the Beatle's song *Octopus' Garden,* he put the beater in a hole of the guiro and pretended the guiro was a fish.

Fear of not being successful in an activity sometimes triggered complaining. Examples of such complaining included saying he could not balance the bean bag on his foot, he did not have all the lyrics of the song memorized, he could not look at the lyric sheet and play at the same time, or he did not get all the chord changes when playing the Q-chord because the song was too fast. He did not however perseverate in complaining. He stopped if his mom reassured him, offered to help him, or if we transitioned to a different activity.

Henry cooperated with adults who attempted to help him but was more amenable if he had initiated the request for help. He particularly disliked hand-over-hand assistance. On session four he responded, 'I don't need help' when my research assistant used hand-over-hand to cue him when to play his instrument. He reacted in a similar manner when I used hand-over-hand assistance while I was attempting to conduct a chime ensemble with the family. During the exit interview, Henrietta commented that Henry's independence was reinforced by the school he was attending. The philosophy of the school was to encourage children to seek help only when they needed it.

Capacity for Self Control

Henry controlled his anger and frustration and calmed himself down when upset. Once, during the seventh music therapy session, he hurt himself accidentally with the

guiro. He calmed himself down and appeared to make an effort for us not to see him cry. When adults redirected him, he complied with instructions. I only noticed three times in music therapy when he verbally expressed frustration. Those instances involved: (a) in session four when being told by his dad to follow my instructions in performing progressive muscle relaxation movements, rather than showing me his own ideas, (b) in session six, when he lost his balance after I touched him to regain his attention, and (c) in session seven, when both his dad and I misunderstood that he wanted to show us something he wrote down and redirected him to return to the music therapy area.

I believe that for Henry, being able to control his behaviors during music therapy demanded a lot of effort on his part. As the sessions occurred after his parents dropped him home from school, he frequently stated he was hungry. In journal entries on weeks 3 and 6, Henrietta commented on how difficult it was for both Henry and Harold to sit through sessions feeling hungry and being preoccupied with food. Feeling hungry likely affected his ability to focus and concentrate. In instances during the sessions that involved gaining access to a prop or a preferred instrument such as the chimes, Henry was self-regulated, listened, and participated without making disruptive comments or noises. Also during instances in which I challenged him (e.g., by saying 'let's see if you can focus and do this without help'), he inhibited his tendency to fidget or disrupt. Last, progressive muscle relaxation exercises for children paired with imagery prompting controlled muscle movements seemed to help Henry remain quiet and focused.

Distractibility & Off-Task Behaviors

Transitions from activity to activity triggered off-task behaviors. Examples of off-task behaviors during transitions included seeking access to tangibles that were not relevant to music therapy, leaving the music therapy area to write something or to get food, fidgeting, or jumping up and down. Those behaviors stopped immediately after I began another activity, or if his mom or dad redirected him. He refocused following one redirection. The function of those off-task behaviors was sensory, as they seemed to occur impulsively during the transitions, perhaps as a reaction to the unpredictability of what was planned next and not as a reaction following a request by an adult.

Off-task behaviors during periods he had to wait for his turn or instructions were more challenging, as their function seemed to be attention seeking from adults or his siblings. This may explain why such off-task behaviors during waiting periods did not occur during the final two sessions, in which it was only he and his dad participating. Thus, his need for attention was being met. These behaviors involved playing instruments out of turn, running and climbing on his mom back, fidgeting with his instrument, or making silly noises or inappropriate comments.

Off-task behaviors during tasks or planned activities were either verbal or physical. Inhibiting verbal off-task comments seemed to have either attention seeking or impulsive/sensory functions. Those behaviors occurred during the first six sessions, which were not dyadic. Attention seeking off-task comments included attempting to initiate a conversation with my research assistant who was sitting next to him, talking about favorite cartoon characters, and singing a song while I was giving instructions. Impulsive physical behaviors included pretending he was conducting, looking around

the room, reaching out, and playing musical instruments. Off-task behaviors during transitions and waiting periods occurred more frequently, in comparison to those occurring while being engaged in an activity.

Establishing Expectations & Scaffolding

Using praise and making positive statements was one way Henry's parents facilitated and increased his participation in music therapy. Instances of shared positive affect occurred every session. His mom would often look towards Henry and smile, watching him participate in planned activities. When he noticed his mom smiling, he reciprocated the positive affect. Henry also shared moments of positive affect with his brother and his dad. Both parents showed interest in the activities by speaking with excited voice and commenting about the different instruments or songs and making positive statements when we finished a joint routine.

Henry's parents redirected him when he was not focusing on the task at hand, when he reached out and played instruments during waiting periods or transitions, and when he was making off-task comments. Even though he sometimes complained, Henry often cooperated without needing another reminder. Their redirections were firm and assertive and often accompanied by an explanation. For example, during the fifth session when Henry began jumping around without waiting for my instructions, his mom asked him to wait for instructions and explained how he may get hurt or break things.

They aided Henry's participation by rephrasing the therapist's question and asking him to answer, asking additional open ended questions, and providing him with verbal or gestural cues, as needed (to remember a sequence of movements during

movement with music activities or playing his part when we performed short instrumental pieces). In the fourth session, Henry's dad noticed that his son was struggling to perform his part in our ensemble and offered to switch instruments with him, in essence giving him an easier part to perform. Hunk found a solution to make Henry be successful without belittling him. Also, in the same session, Hunk assumed a teaching role in showing Henry how to hold, play, and stop the sound of tone chimes. Henry responded by eagerly following his dad's instructions. In the seventh session, Hunk and Henry worked together figuring out the different buttons of the Q-chord. During the fifth session, Henrietta held the lyric sheet up to help Henry see the lyrics while playing an instrument and later during the session while we played a short chime piece she gave him reminders about when to play. By their responses and interactions Henry's parents ensured he had successful experiences during the music therapy sessions.

Family Discussion

Henry's family enjoyed talking with each other. Often, a question that Henry asked triggered a discussion among family members. Other times, a therapeutic application of music therapy triggered the discussion. The topics of our discussion ranged from commenting on the music tasks to sharing personal information. Examples of discussions triggered about the music the family created together during improvisation occurred during the second session when Harold and Henry commented on the music, and during the fifth session when Henry commented that the cymbal reminded him of China. During the first session, their discussion focused on roughhousing and cuddling experiences. I often concluded the music therapy session

with a music-assisted progressive muscle relaxation exercise. Often, I asked the family to remain quiet at the end and ponder completing positive statements about themselves or other family members. During the fifth session, Henry said, "I am a good kid because daddy says so," Henrietta said, "I am funny," and Harold said, "I am awesome," resulting in all breaking in giggles at the end.

During the final two sessions, Henry, Hunk, and I engaged in lengthy discussions about Henry's negative experiences at school. The discussion was triggered by lyric analysis and an exercise aiming to teach Henry how to ignore classmates who might be off-task. Discussion topics triggered during the final two sessions based on lyric analysis also included these topics: the importance of stopping to think about consequences and the concept of responsibility. I used role-plays that I incorporated into musical activities; those role-plays seem to help Hunk understand the need for helping Henry develop his assertiveness and self-esteem in order to deal with problematic peer situations at school.

Attachment & Bonds

Henry displayed multiple attachment behaviors towards his parents and siblings. He frequently sought adult approval while participating in a music therapy task, either by looking toward his parents when playing an instrument or smiling when he noticed they were looking at him. He also smiled and looked at them after successfully completing planned tasks during the session. In the seventh session, he was eager to show his dad how he had learned to play the Q-chord by himself. He was proud to share his successes with his parents and thrived when they acknowledged him.

Those instances in which he felt successful triggered spontaneous displays of love and affection towards his parents. When feeling a sense of success, Henry spontaneously reached out to either hug his mother or sought proximity with either parent. Henry also sought proximity when attempting a task he perceived as difficult, thus, non-verbally seeking parental support. He also moved closer to his parents after they expressed interest or excitement about materials for the session. He did not hesitate to ask his mom to help. For example, when we were performing a piece using chimes he looked at his mom and asked her 'now?' to verify it was his turn to play.

Some tension did arise in his relationship with his brother. A few times Harold expressed annoyance when Henry acted silly or used inappropriate words during music therapy. Only twice during music therapy did I notice Henry provoking Harold in an intentional manner. During the second session, Henry continued playing a percussion instrument, even though Harold yelled stop and covered his ears. During the fourth session, while playing a chimes ensemble piece, Henry made fun of Harold for missing his entry and not playing his part correctly.

Henry's ability to participate in turn-taking activities with his family members highlighted his ability to reciprocate interactions. Henry would make eye contact with the person who was modeling different ways of playing instruments or using props. He would then follow the instructions and imitate modeled movements while exhibiting positive affect. The only instance in which Henry's parents and his older sister were non-participatory or hesitant was when I used movement therapeutic applications. Their lack of participation did not prevent Henry and Harold from enthusiastically

participating. In fact, the two boys seemed to derive mutual pleasure in performing such tasks together as indicated by frequent bouts of laughter.

Opportunities to cuddle his mom occurred while jamming or while doing music-assisted relaxation exercises. Twice during the music therapy sessions Henrietta redirected Henry, who attempted to play roughhouse and climb on her shoulders in order to get attention. Whereas for Henry climbing on his mom may have also been a display of affection, it was not a source of pleasure for Henrietta.

Mom's Stress & Sensory-Overstimulation

Between school and caring for her family, Henrietta felt stressed and overwhelmed. In a journal entry on week 5, she lamented how difficult it was to balance commitments to all her kids and expressed frustration with Henry. She felt that the way he acted and behaved demanded too much attention, diminishing the positive atmosphere within the family. During the exit interview, she commented on how she began to feel upset and hopeless. She was looking forward to music therapy being something that could help address Henry's behaviors. Even though she noted in all her journals that music therapy was a joyful experience for Henry, she also wrote about her stress and discomfort in participating. She had to pick up both Henry and Harold from school and get home immediately to begin music therapy. In her journal entry on week 6, she wrote "it is at a difficult time of day because I am depleted and so is he as well, it is hard to make it home in time because of always having to talk to the teacher about his behavior"(Parent H Journal, Week 6). Rushing to bring her boys home from school and finding a teacher eager to discuss Henry's problematic behaviors, in combination with Henrietta's sensory difficulties, made matters worse.

In her journal entry on week 6 she noted how her stress level affected her interaction with Henry:

> My level of stress has everything to do with my reaction to him. I know that noises & movement, all of it really is overwhelming to me if there is a lot going on. I have a heavy load this semester and have been trying to handle my TA stress, class stress, and grad school stress. I am not sure if it is my own sensory issue or if it has to do with ADHD or if it has to do with growing up in a loud & abusive household. I guess it doesn't matter. What matters is that the type of noise he makes – these neologisms and echoing – those things make my skin crawl. I can handle it to a point but weeks, like midterm week when I am getting my stuff done and my TA stuff done – my defenses are low and then we all lose (Henrietta's Journal; Week 6).

Making music together as a family, especially during free improvisation, jamming, or performing pieces using chimes, was a loud sensory experience. Even though Henrietta did not complain, her body language indicated possible discomfort during those therapeutic applications of music therapy. She did not stop participating; however, she did not seem as wholeheartedly invested in the active music making. Henrietta's stress and discomfort seemed to have peaked during the fifth session. This discomfort may have caused her, in an irritated tone, to tell Henry who was sitting next to her and making silly noises, "It is hard for me to be next to you when you make that noise." Later that session, when Henry began playing his chime out of turn, she told him, "I cannot hear when you do that." In the same session, she was distracted once, attempting to send a text message to Hunk who was doing grocery shopping.

Hunk was aware of his wife's sensory discomfort and while we were playing the chimes during the sixth session he commented: "If the noise is bothering you, then you can go." Henrietta's response provided an inside look into her level of discomfort with the sensory input. She said, "It is not that, I am trying, it is just hard, I just want it to finish" and chuckled. As the therapeutic focus of the intervention switched to

assertiveness and social skills during the final two sessions and Hunk expressed interest in learning how to use music to help Henry, Henrietta chose not to attend the final two sessions. I believe that her decision not to attend was the result of feeling overstressed with the amount of work she had to do for her doctoral program in combination with the sensory discomfort she felt during music therapy. In her journal entry on week 6 she wrote: "I think it will be useful for him to continue but by himself. It is really hard for me to sit through it especially (no offense)" (Parent H Journal, Week 6).

Development of the Parent-Child Relationship

A gradual deterioration and emergence of problematic behaviors during the seven months preceding this study caused tension in mother-child relationship. Henrietta wrote in her parent journal (Week 1) that those behaviors included self-stimulatory noises, hanging on people and things, and frequent urinating and bowel movement accidents. Those challenging behaviors had affected Henrietta's overall sense of parenting competence. She wrote:

> It has to be his temperament – and who knows what else. I hate feeling like I can't be around him – I can't control him – I can't get through to him. I hate feeling like I was a good mother to the other kids and not to him. I wonder and worry that it could be my own family & personal history with mental illness and then I get even more worried and in a knot because then I think I will never get relief and he will never get relief. I promise I am not a negative person in general but it is just beginning to wear me down (Parent H Journal, Week 1).

During the course of music therapy, both the parents and myself were able to determine that Henry's challenging behaviors were likely related to the negative experiences he had at school. An entry on week 4 in Henrietta's journal indicated that his teacher blamed Henry for being the victim of bullying:

> Henry had a rough end of the week at school. He got in trouble for annoying the bullies and when I tried to talk to the teacher about it her response was, "He brings the bullying on himself. He irritates the kids." I asked her how she has helped him and she was unable to give me any sort of targeted answer. I was so angry that she can't understand that he doesn't mean to be socially awkward or that he imitates the bullies' bad behavior back to them. I mentioned something about him being placed away from the boys and she said there will always be more and Henry will find them. I am so angry at her. I came home Thursday and cried. I really assumed that teachers would understand these sorts of things and be more attuned to the nuances of power in classrooms (Parent H Journal, Week 4).

The lack of support and understanding at school frustrated both parents. Henrietta wrote in week's 4 journal that she felt if Henry had a diagnosis, it might be easier for teachers to understand and support him. Henrietta was seeking a diagnosis as an answer to the problematic relationship she experienced with her son. Hunk, on the other hand, experienced ambivalence: he understood that Henry had problematic behaviors and needed help but resented the notion of seeking a diagnostic evaluation. Parallel to participating in music therapy, Henrietta and Hunk enrolled Henry in counseling at a clinic center. They discontinued therapy after attending the first session, during which the therapist told them they needed to change their parenting style and spend more time with their son. The above circumstances made it difficult to develop rapport with both parents and be able to shift their perspective from a deficit-focus to a strength-based approach. I felt the process had to be gradual in order not to alienate them or cause resistance.

Many changes in the mother-child as well as the father-child relationship occurred over the course of participating in the music therapy intervention. Music therapy resulted in both parents giving individualized attention to Henry. They commented that music therapy: (a) became a novel setting in which Henry received positive attention and praise (Henrietta's Journal, Week 4), (b) helped him bond with

his dad (Hunk's Journal, Week 7), and (c) prompted discussions about what triggered Henry's problematic behavior at school (Hunk's Journal, Week 8). Our interactions during music therapy seemed to help both parents recognize Henry's difficulty in social skills and identify ways in which they could help him.

In her parent journal on weeks five and six, Henrietta commented on finding concrete ways to express her feelings to Henry about behaviors that bothered her without shouting (e.g., saying "When you do xxx, it hurts my ears"). During the exit interview both parents commented that they understood the importance of being patient and explaining prior to redirecting Henry. He seemed more amenable to parental influence when both his parents remained calm and explained the situation to him. Furthermore, both parents discussed how they worked together to develop and write down a systematic morning and bedtime routine to alleviate stress and reduce challenging behaviors.

Initially, Henrietta seemed to want a 'quick-fix' of the problems in her relationship with her son. She expressed difficulty understanding how music therapy could help. Following the first session, she wrote in her journal: "I am trying to wrap my head around how this can translate – how this can help him." In the same journal entry she wrote how she hoped to find a way to 'be better' with him. I provided Henrietta with as much information as I could to explain the therapeutic benefit of the pre-planned activities and how they promoted sensory integration, regulation, and interconnectedness. In her journal entries, she reported using some of the activities that I recommended for sensory integration, such as pushing hands against each other and

wrapping him in a blanket like a burrito in order to feel pressure. She also used singing to regain Henry's attention and focus.

Henrietta appreciated the fact that Hunk stepped in to do the final two music therapy sessions with his son. During the final interview, she commented on how she had to trust her husband to be the one to handle Henry's behaviors at home and at school. Realizing that she did not need to be in charge of 'fixing' Henry or 'bettering' herself was a relief for her. She stated: "If I have sensory things and the issue is the kids are bouncing off the walls, I am at a disadvantage if I want to go in there and be on the front line" (Parent H Exit Interview, 4/15/2010). She reported staying involved with Henry in more structured activities, such as taking him to the library. She also signed him up and took him for swim lessons.

Both in his journals[6] and during the final interview, Hunk stressed that our final dyadic father-child sessions were central in increasing their bond. During those last sessions, he felt I was more assertive, giving him specific recommendations on what he could do to help Henry. In the final interview, he mentioned that he particularly enjoyed using songs that targeted social skills that were problematic. He reported using the songs throughout the week (Hunk's Journal; Week 8) and that playing the drums together with his son was an emotional outlet (Hunk's Journal; Week 7). Both the shared music and the individualized attention the dyad received seemed to solidify their relationship.

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[6] Because Hunk attended the final two sessions with his son, I asked him to complete the music therapy journals instead of Henrietta.

At the time of the exit interview, both parents reported that Henry's challenging behaviors were declining. He was interacting in a non-provoking manner with his siblings. His verbal off-task behaviors, according to his parents, also decreased as they observed Henry was likely to stop and think prior to blurring out ideas. It is unknown whether reduction in problematic behaviors can be attributed to the individualized attention both his parents provided him during the course of this intervention, or that his parents were involved in helping him handle and cope with bullying behaviors at school. During the exit interview, when I asked Hunk what he hoped for the future, he stated that he wanted Henry to continue to mature while continuing to maintain the crazy, fun, and humorous aspects of his personality. Henrietta mentioned that she wanted to find more activities like swimming, in which Henry could feel proud and successful.

Participation in music therapy forced both parents to slow down, pay attention to their child, and pinpoint possible triggers and functions of his off-task behaviors. Shifting from viewing Henry's behaviors as possible signs of psychopathology, they were able to respond to his demands in a more patient manner and assume parenting responsibilities that suited their skills and comfort level. This shift seemed to have increased mutual cooperation and decreased parent-stress level. Hunk realized that his son struggled with social competence and lacking assertiveness skills made him a victimization target at school. He was committed to addressing those issues and helping Henry as much as possible.

CHAPTER VIII

MUTUALLY RESPONSIVE ORIENTATION

This chapter contains the results of axial coding and cross-case analysis, studying the phenomenon of how music therapy may support mutually responsive orientation behaviors between family members. Relying on the theory of mutually responsive orientation (MRO) proposed by developmental psychologists (see Aksan et al., 2006; Kochanska, 1997) was an analytic decision for the purpose of data reduction. Glaser and Strauss (2009) cautioned against using a preconceived theoretical framework for Grounded Theory research. Miles and Huberman (1994), however, pointed out that, even at the onset of a study, the proposed questions place demands and configurations on how a researcher views the data. They explained that in cross-analytic multiple case study designs, using a more structured framework for data interpretation increases comparability and allows reducing massive data into coherent categories.

I adopted a loose inductive process in managing and analyzing the data for each individual case study, which enabled me to be receptive to the idiosyncratic responses of each family to the therapeutic applications of music therapy. In the cross-case analysis, I used a deductive process by imposing the MRO theory as a conceptual framework. MRO theoretical definitions helped focus the direction of my findings, likely increasing their potential relevancy across related disciplines.

As explained in Chapter III, for cross-case analysis purposes I followed Charmaz's (2006) axial coding recommendations in order to identify the conditions, actions and interactions, and consequences relevant to the phenomenon of mutually

responsive orientation behaviors occurring during family-based music therapy. Based on her recommendations, I developed the conceptual model guiding cross-case analysis in this study as follows: Therapeutic applications of music therapy are the "conditions" providing a context that promotes responsive "actions and interactions" among family members, which promote high Mutually Responsive Orientation in the parent-child relationship "consequences".

Coding involved reviewing the eight field notes for each participating family and identifying all incidences of high mutually responsive orientation occurring during the sessions. While analyzing the data, I asked "why, where, how come, and when questions" to help describe the therapeutic applications of music therapy that elicited responsive interactions. Appendix D contains generic descriptions of the therapeutic applications used in this study. In my conceptual framework, the definitions and descriptions of Aksan's et al. (2006) Mutually Responsive Orientation Scale (Coordinated Routines, Harmonious Communication, Mutual Cooperation, and Emotional Ambiance) were the consequences of the action and interactions. When analyzing the data, I asked "by whom and how" questions to describe those interactions that were consequently relevant to the MRO subscales. Below, I present the findings of the cross-case analysis.

Coordinated Routines

Aksan et al. (2006) defined coordinated routines as "the extent to which the dyad displays coordinated activity and settles comfortably into routine activities that become scripted over time. Easy and comfortable coordination reflects implicit shared

procedural expectations" (p. 848). Implicit expectations and routines developed with each participating family by the fourth music therapy session. Clinical intuition played a role in developing those routines. The routines seemed to develop collaboratively over time, based on participant preferences, as well as their verbal and musical responses during the sessions. The emergence of those routines seemed to be a collaborative process. Each family's greeting and ending routine varied slightly, based on arousal levels, preferences, and intuitive clinical observations.

Greeting and farewell rituals contained implicit shared expectations for all participating family members. Our opening routine for family S was to sing the same song each week (*Funga Alafia*) while playing pitched and/or non-pitched percussion instruments. Often, we ended the session with me leading a music-assisted relaxation exercise. Sunnaya touched and played different instruments while we packed everything – we often took the keyboard to the car last to allow her more time to explore it. Sam helped my research assistant carry all the instruments to the car. Our opening routine for family R involved beginning the session by playing an action game. I sang the same melody each week and played the tambourine. I reached out the tambourine to different family members to tap while I continued singing. The ending routine involved singing a goodbye song. Ramona had a choice of either dancing or playing instruments while we sang.

An original improvised song, which evolved over the first four sessions, the *Good morning Larna* song was the opening ritual for Family L. The family either danced with scarves or most often played instruments while I sat on the piano and played the song. I sometimes alternated playing the song with improvising (in essence

moving from something familiar to something more playful and unfamiliar). We ended the session by singing the same goodbye song that I used with the R family. Jamming to familiar songs was the routine that emerged for the H family. At the end of each session, Henry requested a song. I created lyric sheets and chord charts and we began the subsequent session by playing and singing the song he requested. We often ended the session by doing a music-assisted relaxation exercise.

The session structure for each family also involved an underlying implicit routine that evolved over time. I included both non-therapist directed experiences (e.g., movement-type therapeutic applications, improvisation) and therapist directed activities (e.g., playing short ensemble pieces, Orff-type therapeutic applications). The structure, however, remained loose in order to allow for moment-to-moment flexibility when needing to incorporate parent or child initiated playful ideas in the musical play. Promoting playful exchanges between parents and children was the underlying goal of the session structure. I included at least one novel/new therapeutic application of music therapy each week, while repeating activities in a similar manner (or sometimes extending or simplifying) from previous sessions. Overall, from session to session, I tried to balance novelty, to maintain interest, and repetition, to maintain familiarity and predictability.

My observations indicated that the above structure supported parent-child interactions from week to week. For example, when using scarves, I initially had to take a leading role showing parents how to engage in playful exchanges, such as throwing scarves in the air, rolling on the floor with scarves, playing peak-a-boo, dressing with scarves and so on. Over time, the need to model interactions faded. For example, when

Larna requested the scarves, our routine was as follows: she pretended she was a princess, hiding under the scarves while we sang, cuddled with mom, or danced with the scarves. Then, she requested the parachute. We placed all the scarves in the parachute, she sat in it with her brother and then we shook the parachute, turn it around, or play stop and go games. We put the parachute down and played an action game that involved touching and pretending to 'buzz' people in the room. Then we resumed playing with the parachute. Maintaining a balance between predictability and flexibility during the sessions created a context in which mutually responsive orientation behaviors could emerge and be nurtured. Table 5 summarizes how coordinated routines evolved in music therapy.

Table 5. Coordinated Routines in Music Therapy

Coordinated Routines in Music Therapy*		
Greeting Rituals	Farewell Rituals	Flexibility of Session Plan
Singing a melody (song without words) and playing instruments Jamming together, singing and playing instruments Singing a greeting song and playing instruments or dancing Creating an original improvised song Improvising	Singing a goodbye song and playing instruments or dancing Music-assisted relaxation	Therapist-directed vs. child centered/non-directed approach Repetition, extension, or adaption of planned therapeutic applications Novelty vs. familiarity of planned therapeutic applications

*"The extent to which the dyad displays coordinated activity and settles comfortably into routine activities that become scripted over time" (Aksan et al., 2006; p. 848).

Harmonious Communication

Aksan et al. (2006) define harmonious communication as "the extent to which both verbal and nonverbal aspects of communication flow smoothly. Interaction that

flows smoothly is harmonious. Communication flows effortlessly and has a connected back-and forth quality. Dialogue promotes intimacy and connection" (p. 848). Musicking[7] (Orff-Type, Playing Instruments, Jamming, Improvising, and Exploring Instrument Sounds), Movement-Type, Action Songs and Fingerplays were the "conditions" or the therapeutic applications of music therapy, providing a context that promoted effortless communication flow as well as back and forth quality of interactions. Songwriting, Music-Assisted Relaxation exercises and discussion based on chants/songs performed during the sessions provided a context that encouraged intimacy and connection.

Playing and sharing instruments provided a context that supported harmonious communication between parent-child. Musicking, or the act of making music together, was a means of non-verbal communication. Therapist's actions that supported communicative musical interactions included: (a) placing instruments at strategic positions (i.e. in front of the child, middle of the room), (b) lifting up instruments and placing them within the visual field of the parent or the child, and (c) modeling how to play an instrument, inviting the adult to play, and when the child joined, allowing the parent-child to sustain the musical play. Such interactions included reaching out and playing each other's non-pitched percussion instruments, improvising and sharing hand bells while the child sang an improvised song, switching instruments with each other, offering mallets to each other, and playing together on the same instrument (e.g., creating duets on pitched percussion instruments).

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[7] Elliot (1995) spells this word musicing. In the music therapy literature, the term has appeared as musiking or musicking. I preferred the latter spelling.

> During an Orff-type therapeutic application, the research assistant places a xylophone in front of Larna and her mom. Even though I gave a glockenspiel to Lindy, he focuses his attention on the xylophone instead. The whole family gathers around the xylophone. Mom explores how to play it on one side while Larna experiments with it on the other. As his mom begins to play a steady pattern and makes up a tune, Lindy begins to swing his body with the music (Family L Session 6 Field Notes).

Instances in which both mother and child had the same metric tempo in their musicking, which I defined as entrainment, were other examples of a harmonious communicative attempt. For those children who had the developmental readiness to maintain a steady beat, entraining meant that they put conscious effort into listening to the music others in the room were making. This included listening to their parent(s). Instances of entrainment occurred during improvisation or Orff-type activities. Jamming and singing together also demanded effort to listen to each other.

Making music together was a collaborative effort between parent and child. Parents assisted their children by holding instruments for them, reminding the children with verbal or gestural cues when to play a specific part on their instruments, or helping follow visual props, such as chord sheets to play chimes, the keyboard or the Q-chord. Sometimes a parent or a child initiated a discussion about the sound or shape of a particular instrument, which resulted in both showing eagerness and excitement in playing the instruments.

I used many props during music therapy, primarily during movement-type activities. Using props became the focus of joint mother-child attention. Giving different props to their children to play, switching props with their children, imitating each-other's ways of playing with the prop, giving ideas of using the props in a turn taking format, going back-and-forth in imitating each other's movements, are some of the ideas developed into pretend play (e.g., when using scarves, they would bury

different family members under the scarves, or pretend they were dressing up). I adopted and encouraged many of those ideas as a way to extend play and support parent-child interactions:

> During a movement-type therapeutic application, I throw scarves into the air and begin to sing a song and Ramona spontaneously dances around the room. Mom acts excited and participates, too. When I comment that Ramona is swimming in scarves Ramona chuckles and puts scarves on her mom too. Both child and mom laugh (Family R Session 4 Field Notes).

Playing turn-taking games allowed the parent-child dyad to practice back and forth verbal and non-verbal interactions. Those games involved using props, musical instruments, or doing action songs that involved touching another person or imitating another person's modeled movements. I initiated such activities by providing the musical structure. However, parents and child instituted the back-and-forth interactions while actively participating and doing behaviors such as: taking turns touching each other, giving stop and go verbal directions, modeling different ways to play the instruments, waiting for a turn to play an instrument. Sometimes children would ask their parents' help to think of different ways to play an instrument. Turn-taking during improvisations involved alternating between playing as an ensemble or improvising as a 'soloist'. Such turn-taking allowed all family members to 'show-off,' be in the 'spot-light' and share each other's joy in playing the instrument.

> I am leading a music-assisted relation exercise with Henry and his dad. I finish the relaxation by having them think something positive about themselves. After Hannah (my research assistant) and I model an answer, Henry says "I am good at cooking cookies and cooking with my dad." He also compliments Hannah and says, "You are a very helpful person." His dad says, "I am patient. You know what that means? I do not get frustrated that easy but I do sometimes." (Family H Session 7 Field Notes).

During music therapy, families engaged in other spoken or sang dialogue that promoted intimacy and connection. During Orff-type activities I often sang questions

and incorporated their answers into our improvisation. Other times I asked participants open ended questions and incorporate their answers into pre-existing songs in a piggybacking manner. Topics of our song creating experiences included: being a big sister, talking about things we are thankful for, reminiscing about being happy, and so on. Sometimes, a topic of a particular song prompted a discussion between family members. Finally, during relaxation exercises, I often asked family-members to think of specific positive statements (e.g., I am.... or I love you because...) and say them aloud at the end of the exercise. Table 6 lists the therapist's actions and summarizes parent-child nonverbal and verbal aspects of harmonious communication occurring during family-based music therapy sessions.

Table 6. Harmonious Communication in Music Therapy

Harmonious Communication in Music Therapy*		
Therapist's Actions		
Organizing Task	Encouragement & Modeling	Positioning Instruments
Providing visual supports Structuring improvisation (see Wigram, 2004) Providing an interplay (giving and taking) of musical ideas	Encouraging child to play Encouraging parent to play Encouraging parent and child to play together Modeling playful interactions	Middle of room/music therapy space Within the child's visual field
Parent-Child Actions		
Nonverbal Aspects	Verbal Aspects	
Collaborative effort Being playful, Being creative Pretend play Joint-attention Imitating, Turn-taking Sharing instruments Entrainment Touching	Collaborative effort Being playful, Being creative Pretend play Talking & listening Making positive statements	

*"The extent to which both verbal and nonverbal aspects of communication flow smoothly" (Aksan et al., 2006; p. 848).

Mutual Cooperation

Aksan et al. (2006) defined mutual cooperation as "the extent to which the dyad effectively resolves potential sources of conflict and the extent to which partners are open to each other's influence. Subtle influences are sufficient for cooperation. Parent and child adopt a receptive, willing stance toward each other's influence. Parent and child are psychologically in tune with each other" (p. 848). Mutual cooperation also stipulates that the dyad accepts roles without power-struggles and diffuses escalation of conflicts (Aksan et al., 2006). All types of therapeutic applications of music therapy presented during the sessions provided "conditions" for exhibiting mutual cooperation.

When child participants were intrigued by music making and motivated to attempt a task, they responded to subtle parental influences for cooperating. If a child, however, sought negative attention and had difficulty with issues of power and control, participation in planned or improvised therapeutic applications of music therapy did not suffice to gain cooperation. Parent participants who used permissive (Rachel) or power-assertive (Susan) parenting were less likely to resolve or avoid conflicts, and willingness and receptivity toward each other's influence suffered. In the parent-child dyad (Lalenia) that exhibited low harmonious communication, mutual cooperation was also affected. Because Lalenia and Larna made fewer attempts to interact with each other during the session, they also had fewer opportunities to cooperate with each other. Child participants who did not find pleasure in provoking their parents were more likely to cooperate and attempt a task if their parents exhibited positive affect and showed excitement with body language when I introduced an activity.

Parents attempted to influence their children by guiding them to refocus on my instructions. Such attempts included reminding the child to look at me when I was conducting their ensemble playing, repeating the expectation to play instruments quietly, asking them to look at the color-coded or letter-coded charts to play instruments, or asking them to listen to each other while playing their instruments. I interpreted such top-down parent influences as an attempt to scaffold a child's participation in music therapy and ensure a successful experience. Child influences directed toward the parents included requesting specific instruments or asking the parents to switch instruments with them. It is noteworthy that children perceived me, the therapist, as being the 'authority' adult figure leading the session and made frequent and overt attempts to influence me in regard to changing the direction of the session. If a child made a direct request relevant to the activity, parents often redirected them to ask my permission.

> I place instruments in front of the children and state that we are going to sing our greeting song. I show Sunnaya the vibraslap and she smiles as she attempts to play the instrument. As both kids begin to play their instruments, Susan turns towards each of them and makes eye contact and smiles. She also repeats the expectation for them to play their instruments quietly. We sing the greeting song while playing the instruments following the expectation to play quietly (Family S Session 6 Field Notes).

Discipline strategies included parents telling children to wait for instructions, not playing instruments off-task, or stopping silly noises and off-task verbal comments. Parents also encouraged their children to attempt and actively engage in presented tasks. I believe the tasks I presented were developmentally appropriate, drawing on my clinical experience. Appropriateness of therapeutic applications of music therapy was also a topic that I discussed with the clinician who served as my peer reviewer for this study. Regardless, my therapeutic style and approach directly influenced child

participation and susceptibility to parent influences. Internal motivations (hunger, fatigue), pleasure factors (provocation, attention-seeking, sibling rivalry), life changes (court mandated forensic interviewing, new sibling), stress at school (bullying, rejection by teacher), as well as environmental pollutants (access to new toys in the home) were possible antecedents affecting mutually cooperative behaviors observed in the sessions.

> I am using the keyboard and improvising; my improvisation is based on a familiar tune. Available instruments include drums and reed horns. Mom prompts both Henry and his brother to listen and play with the music. While playing together, Henrietta makes eye contact with both boys and displays positive affect. Hunk comes to the music therapy area. He takes the fish cracker bowl away from Henry. He then begins to play the drum. His rhythmic meter and tempo of playing is the same as mine. Both boys and Henrietta look at the dad and attempt to also match his tempo. The improvisation transforms from random playing to everybody playing in the same rhythmic meter. The family seamlessly switches to playing and experimenting with different instruments. When I finish the improvisation dad asks about the frog guiro. A discussion about the clinic instruments follows. Henry, meanwhile, finds his bowl and continues to eat his crackers (Family H Session 3 Field Notes).

The children participating in this study adopted a receptive and willing stance when their parents assumed a didactic role helping them play instruments. Parents modeled how to play the instruments (e.g., modeling how to stop the sound of chimes by touching it on your body), used hand-over-hand assistance (e.g., cuing the child when to play when playing short ensemble-type pieces) or pointed which buttons to press or where to play on instruments such as the Q-chord, electric keyboard, and resonator bells. During less structured tasks, parents responded to child initiated ideas by imitating movements modeled by child, or praising and cheering child efforts.

Children were more likely to complain or verbally indicate their hesitation in attempting a presented task (e.g., saying "I can't do it") during more structured, therapist-directed tasks, such as playing chime pieces or short ensemble-type pieces. Conflicts between a parent expecting participation and the child not complying were

avoided or resolved when the parent: (a) helped by simplifying my instruction, making the task easier for the child, (b) redirected child in a positive manner, focused on a child's strengths (e.g., saying "You have a good sense of rhythm" or "I know you can do this"), (c) explained to a child why she or he wanted them to participate, and (d) ignored a complaint, not catering to child demands. When possible, I modeled parenting strategies such as choice giving, stating expectations using 'I' statements rather than 'You need to do this' commands, or adopting a conflict resolution approach. As explained above, parenting style was not the sole factor predicting how quickly conflicts were resolved or avoided. As revealed in each case study analysis, transactional patterns of parent-child interactions and established habitual communicative interaction patterns within each dyad determined cooperation levels.

> We are playing an ensemble-type piece. Sam is playing the cymbal, Susan the tambourine, and Sunnaya has the drum. I am conducting from the keyboard. Sunnaya attempts to play when it is not her turn. Her mom explains: "Your bang bang is after I play." When Sam attempts to show her, she redirects, "Sam you stay at your instrument." Sunnaya complains under her breath, her mom ignores the complaint and reminds her to listen. We are practicing segments of the piece, and she misses her cue to play again (she was distracted and not looking at me). We attempt to do the piece and she plays when I cue her. Her mom smiles and gives her high five and says "good job." When we do it again, she reaches out to play her instrument, realizes it is not her cue, and then waits until it is time to play (Family S Session 5 Field Notes).

Psychological attunement is in essence an emotional response signaling love, connectedness, and protectiveness between a parent and a child. To show psychological attunement, a parent needs to be aware of visual, gestural, and verbal signals that the child needs. Psychological attunement is bidirectional, as it entails parental responsiveness to both signals of comfort and distress, as well as a child who actively attempts to send such signals to a parent. Attachment theory considers psychological

attunement as critical for developing secure attachment (Ainsworth et al., 1978; Bowlby, 1988).

One possible interpretation of parental didactic and scaffolding attempts could be that they were a manifestation of psychological attunement. Sensing that their children found the task too difficult, the parents assumed an active role in helping them. A more overt expression of psychological attunement following child distress occurred when two participants hurt themselves accidentally with instruments (both lost grasp of the instrument and banged their head), which prompted one of them to hug her mom (Sunnaya) and the other to gaze towards his dad (Henry). Both parents expressed concern, both verbally and with their body language. The verbal interaction between parent-child helped address the distress and calm the child down. I further discuss and give additional examples of how parents addressed distress and negative affect in the next section.

More subtle expressions of psychological attunement occurred when children sought proximity with their mom when discussing domestic violence they had witnessed (Sam and Sunnaya). All child participants in the study sought physical proximity or sometimes cuddled with their parents during most of the music-assisted relaxation exercises presented in music therapy, which I interpreted as a manifestation of a need for connectedness with their parents.

> It is the beginning of our session. Larna takes two mallets and she immediately begins to play a drum. Her mom watches her and nods her head to the rhythm and displays positive affect. I begin to play the greeting song on the piano. Larna entrains her drumming with the tempo of my song. She then turns her head and sustains eye contact with her mom, who smiles at her. She then turns around and continues to play the drum (Family L Session 5 Field Notes).

Social referencing is an overt expression of psychological attunement and emerged as one of the most frequently observed behavior among the participants in this study. The joint experiences of playing instruments or playing with different props were a source of pleasure, which the children expressed by seeking to make eye contact with their parents. In one of our dancing with scarves activities, I used a recorded song that began with the lyrics 'No, I don't want to.' It is of interest that two of my participants looked at their mother with a quizzical look on their face when the singing began. In other words, they sought to see her emotional reaction as a source of confirmation on what affective state they should assume. Table 7 shows how mutual cooperation evolved in music therapy as a result of attempting a novel musical task in the context of exerting bidirectional attempts to influence each other.

Table 7. Mutual Cooperation in Music Therapy

Mutual Cooperation in Music Therapy*	
Bidirectional Influences	
Therapist-Child or Parent-Child	Child-Therapist or Child-Parent
Scaffolding Parenting style Discipline strategies Making requests Shaping direction of session	Seeking proximity Seeking comfort Social referencing Making requests Shaping direction of session
Novelty of Attempting Musical Task	
Lowers defenses Captivates attention Increases impulse inhibition	

*" The extent to which the dyad effectively resolves potential sources of conflict and the extent to which partners are open to each other's influence." (Aksan et al., 2006; p. 848).

Emotional Ambiance

Aksan et al. (2006) defined emotional ambiance as "the extent to which the dyad enjoys an emotionally positive atmosphere indicating clear pleasure in each other's company. [The] dyad effectively addresses occurrences of distress and negative affect. Overall emotional ambiance is positive and warm. [The] dyad engages in clear bouts of joy. There are natural displays of affection. Expressions of affection are a source of pleasure for both" (p. 848). All types of therapeutic applications of music therapy presented during the sessions provided "conditions" for exhibiting positive and warm emotional ambiance.

Hugging their daughters when they were upset and swaying their bodies in synch with the tempo of the music was an approach that two parent participants chose to soothe their children when attempting to re-engage them in music therapy, following a bout of negative affect (Sunnaya), when returning to the room after having to use the bathroom and finding the child in distress (Larna).

> I am using color-coded charts and give the children turns to play the song on either the Q-chord or the electric keyboard. Sunnaya had left the area, following a bout of negative affect. She has now returned to the room and she is observing what we are doing. I am setting up the keyboard. Sam is sitting next to Josh playing the Q-chord. Her mom is on the floor next to Josh observing them. I offer Sunnaya to share the keyboard with Sunnaya in an attempt to get her to engage with me. Her mom moves closer to Sam and gestures to Sunnaya to join me on the keyboard. Sunnaya continues to pout and goes and sits on a chair away from us. As I continue to set up the keyboard, she comes and looks at the keyboard. She then approaches her mom and gives her a hug. I am setting up the rhythm and style setting on the keyboard. I notice that Susan continues to hug Sunnaya and sways her synch with the tempo of the music and rubs her back. As I finish setting up and begin to play the song (while Sam and Josh share the Q-chord), Sunnaya approaches me and joins me to play the keyboard keys. Her mom sings the song (Family S Session 6 Field Notes).

The parents participating in this study enjoyed siblings interacting together. In movement-type activities using props or action-song, siblings seemed to be distracted

from attempting to engage in interactions provoking each other. Using the props or performing different actions/movements became a joint attention task that siblings and parent(s) enjoyed. Musicking together also provided a context in which dyads shared interactions that were overall positive and warm. It also created a context within which parents could notice and encourage a child's efforts by delivering praise statements or specific positive reinforcement.

> Larna notices the boom-whackers on top of the piano and requests to play those. While she gets those from on top of the piano, she is stuck and asks for help. I help her out. She gives two to Lindy and then states that she does not want mom to have some. Before I have a chance to show Larna how to play them, she brings one to her mouth and she begins to sing, using them as a pretend microphone. Lalenia and I play shaker eggs with a steady rhythmic beat in synch with the child's singing tempo. Then, Larna says I am done. I show her then a different way of playing (alternating hitting boom-whackers on the wall then floor) and she engages again. I begin to sing a song, but then Larna brings the whackers back to her mouth and sings *Itchy Witchy Spider* instead. We all join her and sing along. At the end of the song, I ask her what else she knows and then she spontaneously makes up her own song using random syllables and words. We listen. Her mom sustains eye contact with her while she does this song. At the end we all smile, cheer, and clap for her (Family L Session 8 Field Notes).

The therapeutic applications of music therapy, whether those involved creating a song together, playing instruments, using props, singing songs, jamming, or relaxing together, afforded the families in this study an opportunity to engage in a joint exploratory play process. When they were able to get distracted in the process of active music making, receptive listening, or dancing/moving, and lower their defenses (avoiding provocation or power-struggles), they derived joint pleasure. Warm feelings expressed by smiling, cheering, leaning their bodies toward each other were reciprocal.

When the children participating in the study were finding joy in the joint playful interaction, they did not verbally talk about it. Rather, they showed in non-verbal ways their excitement. When signing songs, they would often begin a spontaneous dance.

Their positive affect was contagious; their parents shared in their joy. During dancing and movement type therapeutic applications of music therapy, adults had the opportunity to witness their child's imagination, playfulness, and creativity. Each time the parents in this study heard their child giggle in delight, they also smiled, sharing their child's joy. Musical games (involving movement or actions) afforded a cause and effect interactive opportunity. Parents would act silly or do a behavior in response to an action the child made. Interactions that allowed the child to be 'in-control' of an adult's responses also resulted in expressions of shared joy.

> Lalenia holds the Q-chord while Larna presses the different buttons. We select a preprogrammed style accompaniment. I show Larna how to play with the tempo button. As Larna makes the tempo faster, her mom matches the tempo and plays a shaker egg with one hand faster while shaking her body faster, too. Larna chuckles but does not make eye contact with her mom. This becomes a 'make it go fast, make it go slow' game. Both children chuckle as the mom continues to help Larna hold the instrument with one hand, plays the shaker egg with the other hand, and matches the movement of her upper body to the changes of the tempo that Larna initiates. Mom smiles and continues to match the tempo as both Larna and Lindy chuckle (Family L Session 6 Field Notes).

Musicking together created a collaborative experience leading to a musical end product. Creating an end product (new lyrics to a song, jamming performance, and improvisation) acted as a catalyst in supporting warm and positive interactions between family members. To create music together demanded intersubjectivity; each person played a role in how our musicking experience evolved and developed. Creating music was something the family had to do together, each playing 'a role' in how we sounded. Musicking was a joined effort achievement. Children would giggle and show excitement by jumping up and down, clapping, or smiling when they finished participating in a musicking experience.

Natural displays of affection included mother-child moving in proximity to each other or cuddling. They occurred when children leaned or sat on their parent's lap while playing instruments or when doing relaxation exercises. The function of such behaviors included seeking comfort, seeking reassurance when attempting a novel task, or finding an opportunity to show the parent what they were able to do using a musical instrument. Hugging a parent was a way to seek comfort, as well as an implicit way to share their contentment with parents.

> I am doing an Orff-Type activity that involves singing a chant about penguins, doing different movements and playing pitched and non-pitched percussion instruments. Rachel calls Ramona and when Ramona approaches her she gestures for her to sit on the floor next to her. Ramona stands on the sofa behind her mom. When Josh approaches her she hugs her mom's back. Her mom points to the floor next to her and Ramona this time sits down. I begin singing the chant and modeling movements. Rachel looks towards the direction of Ramona while they perform the action movements I modeled. When Ramona begins to chant the lyrics, she looks back and forth between Josh and her mom who are sitting at either side of her. When Josh models the waddle of the penguins, Ramona also joins and does the movement as modeled. When I ask Ramona to come up with an original movement depicting how penguins moved, Ramona repeats the movement that Josh has made. When I prompt her to find a different movement that penguins do and show us, she leans towards her mom and hugs her. Rachel embraces her. She continues to hug her mom. When I ask mom to think of a movement that penguins did, the mom could not give a response and chuckles. Josh prompts by saying that penguins swim, too. Ramona shakes her head, and she says ice. The therapist asks her if penguins ice-skate. Ramona nods yes. Ramona complies with doing both the movements 'waddling' and ice-skating. When I prompt Ramona to describe another movement, she turns to her mom and says "it's your turn" She smiles and looks at her mom while waiting for her mom's answer. When her mom seems unable to think of something, Ramona whispers to her an answer "eating fish", and then her mom models how the penguins eat fish. Ramona then stands up and does the movement with her mom (Family R Session 5 Field Notes).

As children become toddlers and preschoolers, they become more independent. Whereas a preschooler may seek a parent as a secure base, their natural curiosity and drive to learn propels them to explore their environment in an independent manner. Opportunities for physical contact and playful touch between parent and child begin to

decrease. Opportunities to cuddle with their child were the expression of affection from which parents in this study seemed to derive the most pleasure. Pretend play musical games that involved movement and relaxation exercises afforded opportunities in which children spontaneously sought to cuddle with their parents. Table 8 displays parent-initiated actions as well as parent-child interactions occurring during music therapy that promoted positive emotional ambiance during music therapy.

Table 8. Positive Emotional Ambiance in Music Therapy

Positive Emotional Ambiance in Music Therapy*	
Top-Down Parent Actions	Parent-Child Interactions
Hugging & swaying child to music beat to soothe Noticing and encouraging child's effort Finding delight in watching their child participate Acting playfully; acting silly Rediscovering childhood	Engaging in joint play exploratory process Finding shared delight in mastering a musical task Sharing contentment by hugging Cuddling

*" The extent to which the dyad enjoys an emotionally positive atmosphere indicating clear pleasure in each other's company" (Aksan et al., 2006; p. 848).

CHAPTER IX

DISCUSSION

Overview of the Study

The purpose of this research was to gain an understanding of how shared musical experiences during family-based music therapy nurtured resilient child outcomes and fostered parental sense of self-efficacy. The music therapy intervention promoted parent-child interactions that exemplified mutually responsive orientation: coordinated routines, harmonious communication, mutual cooperation, and positive emotional ambiance. The initial generative questions of this study were: (1) How did the relationship between parent-child develop over the course of the intervention? (2) What were the parent-reported changes of their child's adaptive functioning and resilient behaviors over the course of the intervention? (3) In what ways do family members exhibit mutually responsive orientation behaviors during music therapy? Emerging data, however, indicated that the parents focused more on describing the relationship with their child rather than reporting changes in child adaptive functioning. Thus, I merged findings relevant to questions one and two and presented them by discussing the emerging clinical themes for each participating family, drawing a clinical interpretation in separate case-study chapters of how each relationship evolved.

Collective Case Study informed by Grounded Theory was a fruitful method for this study. A specific theory guiding music therapy clinicians who work with families does not exist in the current literature. Using a constructivist approach, I sought to understand the phenomenon of family-based music therapy by gaining insights into

each family's experiences. I collected data using parent interviews, reviewing videotapes of music therapy sessions, writing field notes and analytic memos, and asking parents to maintain journals. The music therapy intervention involved conducting an initial psychometric assessment, implementing a series of eight music therapy session, conducting ongoing parent consultations, and writing a developmental assessment report summarizing emerging clinical themes and pertinent interpretive inferences.

Summary & Discussion of Case Study Findings

Participants in this study included four families who had a preschooler between the ages of three to five. All the mothers involved in this study self-reported a history of depression. The families also faced additional challenging circumstances and threats to adaptation. Even though the mother-child dyad was the primary target of the therapeutic intervention, sessions were delivered using a family format.

Family S faced adversities such as skill deficits (Sam), emotional difficulties (Sunnaya & Susan, self-esteem), challenging family circumstances (history of maternal depression, domestic violence, divorce, paternal incarceration, and paternal substance use), ecological risk (biracial identity, living in an unsafe neighborhood, poverty) and school behavioral problems (Sunnaya, Sam). Emerging clinical themes indicated that Sunnaya excelled in organizing play and was responsive to problem solving conflict management strategies. Occurrences of shared joy and affection occurred frequently between mother and daughter. Susan adopted a didactic scaffolding attitude, assisting Sunnaya as needed to enable her to have successful experiences in music therapy.

Sunnaya exhibited difficulty inhibiting impulsive tendencies such as fidgeting, making silly noises, or off-task comments. Sam's participation in music therapy seemed to have a direct effect on increasing Sunnaya's impulsivity, as they both rivaled for maternal attention. A problematic aspect of the parent-child relationship was the power-assertive parenting style used by Susan. It created a context of ongoing power-struggles and defiance. The more Susan sought to gain cooperation, Sunnaya and Sam ignored or disobeyed creating a feedback loop of negative interactions.

Hibben (1992) suggested that researchers should "look at how music interventions can help families experience the qualities of conciliation and connection over dominance and competitiveness" (p. 43). Susan was committed to finding ways to continue to bond and learn to communicate better with her children. Susan effectively addressed incidences of negative affect and distress exhibited by Sunnaya, knowing when it was more appropriate to ignore or when she needed to soothe her child. Despite problems in mutual cooperation, the dyad exhibited many instances of harmonious communication, engaging in joint and reciprocal play interactions in music therapy. Participation in music therapy may have increased Susan's awareness of how each family member, including herself, contributed to negative actions and may have validated her commitment in finding ways to support her children and seek ways to change habitual problematic interactions.

Resistance to verbal approaches aiming to foster intimacy through dialogue (i.e., lyric discussion or songwriting experiences) permeated our sessions. When writing about using songs and song-writing in therapy, Hibben (1992) proposed that those types of therapeutic applications of music therapy can elicit discussion about repressed

feelings and create a sense of interconnection. However, she pointed out that songs can also elicit resistances such as denials or negative talk. Writing or discussing song lyrics elicited resistance responses from Sam and Sunnaya. By the eighth session, they spontaneously volunteered positive descriptions of themselves and their mother, indicating that their defenses were beginning to lower. If the sessions had continued, songs and song-writing could have been a therapeutic application of music therapy to address the traumatic effects of the challenging life circumstances this family had been facing.

Family R faced stressors, such as Ramona's emotional immaturity, family stressors (history of maternal depression, unexpected pregnancy and c-section birth), interpersonal problems such as social isolation, problems with school immersion, and contextual risks such as poverty. A need for power and control dominated Ramona's interactions with her parents. Catering to Ramona's demands and showing inability to ignore her negative affect bouts permeated mother-daughter interactions. Ramona selected when to participate and was not susceptible to adult influences to cooperate when she wanted to attain another payoff (i.e., preference to play with a toy or deriving pleasure from provoking). Ramona's parents showered her with love but were unable to set appropriate boundaries and expectations. Permissive parenting in combination with Ramona's demanding personality seemed to have led to developing coercive parent-child interaction patterns. At the conclusion of the study, I was unsure if Rachel understood the bidirectional aspect of the negative interactions that occurred between her and Ramona as her focus continued to be on how to change Ramona's behaviors. A life change, such as the birth of the new baby preoccupied the family, which may

partially explain the problematic child behaviors as well as the observed lack of therapeutic benefit.

Family L faced multiple stressors to adaptation including emotional difficulties (Larna's initial apathy stance in the sessions, self-esteem issues), family circumstances (maternal history of depression, maternal history of being molested, domestic violence, physical abuse, child's poor bonding to mother), and ecological risks (poverty, living with maternal grandparents). Larna socially referenced her mother when engaging in playful interactions, indicating that she was seeking affirmation, reassurance, or a communicative connection with her mother. She also sought opportunities to cuddle with her mom and with support/modeling she attempted to touch her mother in playful ways. Being deprived from such interactions during infancy, Lalenia and Larna were learning to bond. Similarly, Abad and Williams (2006) reported a case study of music therapy facilitating cuddling and gentle touch interactions between a mother and her infant aiming to increase bonding and intimacy.

Larna handled incidences of sibling conflict in an age appropriate manner; even though sometimes she screamed 'no' she did not exhibit any physical aggression toward her brother, even when he hit her. Hair pulling seemed to function as a compulsive self-soothing behavior. Lalenia shared mutual positive affect with her daughter and soothed her when she cried during the session. In instances, however, when Larna expressed an implicit negative feeling in response to parent-child, sibling-sibling interactions occurring during the session Lalenia tended to reassure and not acknowledge her daughter's negative affective state.

Therapeutic progress was slow because of Larna's hesitation in engaging with adults. The observed lack of cooperation, manifested in refusing requests to play instruments or use props, or quickly disengaging from an attempted activity were communication attempts to establish music therapy as a safe activity. Withdrawing from joint attention tasks was problematic in that it limited opportunities for mother-daughter interactions.

In a case study with a child who had been abused, Robarts (2006) explained how difficult it is for a therapist to develop a relationship between the music, the therapist, and the child. Aspects that aided therapeutic change over the course of three years of therapy included using predictability of the sessions to develop trust, sustaining intentional interactive play, as well as developing a capacity for experiencing play and perceiving new experiences in the session as fun. Family-based researchers also reported vignettes of parents who learn by participating in music therapy more adaptive ways to interact and play with their children (Oldfield, 2006; Oldfield, Adams, & Bunce, 2003). In the case of Larna and Lalenia, developing reciprocity, sustaining joint interaction and musical play, increasing bids to interact with her mother, and learning to cuddle and touch in playful ways, were slow processes that were beginning to emerge by the conclusion of the music therapy sessions.

Family H faced stressful family circumstances (such as mental health illness on the maternal side of the family, maternal history of depression symptoms, maternal sensory difficulties), and ecological risks, such as financial difficulties. Henry was being bullied by peers at school and faced teacher rejection. He liked doing activities independently. During music therapy, he was able to calm himself down when

experiencing frustration. He was motivated to participate in music therapy tasks, but exhibited off-task behaviors during transitions and waiting periods. Henry's family was supportive, understanding, and sought to help. He exhibited attachment bonds with his siblings and parents, as indicated by reciprocating verbal and non-verbal interactions, socially-referencing his parents, and sharing mutual joy.

Henrietta's over-sensitivity to auditory stimuli in combination with academic stress, resulting from being enrolled in graduate school full time, overwhelmed her. Unable to handle being in music therapy, she did not participate during the final two sessions. Lack of assertiveness and low social adeptness emerged as possible areas of growth for Henry, that could likely reduce bullying and teacher rejection. Participation in the sessions prompted a lengthy discussion outside of music therapy, which allowed Henry's dad to identify problems in school and attempting to find ways to help his son cope. Being in music therapy resulted in both parents giving positive attention to Henry and dividing parenting responsibilities in a manner that better suited their individual needs and hectic lifestyle. The father-son interactions, which evolved between Hunk and Henry, parallel anecdotal findings in case studies reported in the literature. Hibben (1992) found that a father's ability and willingness to sing with his son improved their mutual communication. Moreover, Davies (2008) reported a father and son who met regularly to play music together.

Music therapy, according to Hibben (1992), provides playful strategies that allow the therapist to penetrate the family system and join them in a manner that is supportive, respectful and nonintrusive. Overall, the inductive analysis results of each case study and the emerging clinical theme findings suggested that eight weeks of

sessions as a 'therapeutic dose' may adequately allow a clinician to assess family dynamics, initial hesitation, and determine developmental needs and areas of prospective therapeutic growth. The therapist may begin to formulate ways to address the most critical areas of concerns for each family by adapting and matching the therapeutic applications of music therapy. In eight sessions, clinicians may set the foundations to begin building skills such as communication or problem-solving. Adopting a psychoeducational approach, the therapist may also provide information and additional support resources.

Even though a time-limited intervention may be attractive for funding purposes, the results of each case study indicated drawbacks. Addressing development or resilient interpersonal skills and coping with emotional problems of all the constituents involved in family therapy is a complex endeavor. Rigid interaction patterns, coercive behavioral cycles, and lack of responsiveness between parent-child develop and stabilize over time as the dyad operates within the larger contexts of extended family, school, neighborhood, and socio-cultural norms (Granic & Patterson, 2006).

The therapist may represent a top-down attempt to cause a perturbation of the family system and exert influences forcing destabilization of maladaptive interaction patterns. Whether a music therapist may function as a strong attractor that may trigger the family system to reorganize and drift into more adaptive schemas of interpersonal functioning is difficult to determine. Short-term music therapy may provide the context to allow rehearsal of emergent adaptive patterns; it may however, not allow enough repeated occurrences for those patterns to stabilize upon treatment termination.

Summary & Discussion of Cross-Case Analysis Findings

I used the Mutual Responsive Orientation as a conceptual framework in conducting cross-case analysis. The analysis explored how participation in therapeutic applications of music therapy created a context that promoted mutually responsive parent-child interactions. Moreover, it documented that participating in music therapy allowed parents and children in this study to find a supportive environment within which they could rehearse adaptive and resilient ways of interacting, bonding, and playing together.

Hibben (1992) suggested that asking family members to take turns and modeling movements or musical phrases for other members to imitate are strategies that a music therapist may use to target power relationship dynamics, reluctance or defensiveness. She added that using musical improvisation to express feelings may provide a structure in which parents can rehearse interacting in different ways with their offspring. The deductive cross-case analysis documented that participating parents in this study rehearsed interacting with their children in mutually responsive ways.

Those interactions evolved over the course of the music therapy intervention, creating implicit routines and expectations during the sessions. Music therapists who provided family-based music therapy acknowledged the need for a session structure and routine. Hibben (1992) suggested using songs to signal beginning and ending of sessions. Moreover, therapists of the *Sing & Grow* family-based music therapy intervention program also described using session plans that include greeting and farewell songs, action and movement songs. They also reported using quiet music time

in their routine, serving a similar purpose to the relaxation exercises utilized in this study, to encourage bonding and physical closeness (Abad & Williams, 2006).

Hibben (1992) suggested that music therapy as directed play involves using techniques, such as instrument sharing to increase intimacy and strengthen connectedness. In this study, engaging in reciprocal playful interactions and joint attention routines using instruments or props seemed to promote effortless communication flow between parent-child. Sharing instruments, taking turns, and offering instruments to each other, were behaviors observed during music therapy sessions that seemed to increase interconnection and intimacy between family members. In the music therapy literature, Walworth's (2009) study documented that those infants 6-24 months who attended at least three music therapy groups with their caregivers, that focused on modeling how to musically interact with each other resulted in an increasing caregiver-child joint play with toys. Similarly, Nicholson et al. (2008) documented how participation in music therapy decreases parent self-reported irritability while increasing child social play skills. The detailed qualitative observations in this study complemented the above findings because they provided a form of documentation of the processes and pathways that may lead to significant behavioral change over time.

In this study, discussions catering to elicit responses for song writing, or sharing thoughts and ideas during sessions on topics such as 'things you are thankful for' or 'I love you because' supported intimate dialogue. Dyads who struggled with power-control and had a history of coercive interaction patterns exhibited more difficulty in engaging in mutual cooperative interactions in music therapy. When the presented tasks drew families into actively participating to lower their defenses, more adaptive

interaction patterns emerged. Other researchers also reported using music therapy as a container to facilitate adaptive interactions and address power-control issues (Oldfield, Adams, & Bunce, 2003; Oldfield & Bounce, 2001).

Social-referencing a parent while playing a novel musical instrument was a behavior exhibited by all child participants in this study and documented in the cross-case analysis. Trolldalen (1997) described social-referencing in music therapy as "a child's initiative for creating a relationship" (p. 18). When observing their child playing instruments parents in this study smiled, validating musicking as a positive experience. Abad & Williams (2006) also reported parental delight in witnessing a child playing musical instruments.

I asked parents in this study to act goofy, make silly faces or silly noises. Together with their child they engaged in pretend play, in imagining and creating. Engaging in mutual joint attention tasks became a source of pleasure, creating a warm and positive emotional ambiance. Exhibited behaviors included smiling, giggling, sharing mutual positive affect, seeking proximity, touching and cuddling. Trodallen (1997) considered such experiences in music therapy as laden with opportunities for change in the relationship.

Each participating family in this study had unique and distinctive relationship dynamics. Interpretation of the cross-case analysis indicated that therapeutic applications of music therapy created a context in which dyads could rehearse mutually responsive interactions. Family socialization influences over time affect a child's psychosocial adjustment. Parents and children co-regulate their interactions based on situational demands. Both temperament and quality of interactions contribute to

differences in cooperation. Risk factors such as maternal depression, lack of parenting competence or both, in addition to other contextual influences and stressors may ignite a cycle of problematic behaviors and responses, increasing the likelihood that a child develops psychopathological symptoms in the future. Music therapy as a family-based intervention holds promise as it may provide a context to support resilient and adaptive parent-child relationship and interactions.

CHAPTER X

CONCLUSION

This study investigated the role of providing family-based music therapy experiences in influencing parenting competence and resilient child responses. The results of this study also suggested a number of possible limitations, and considerations for the practice of music therapy in relation to working with families. Furthermore, the results informed future avenues of exploration. In this chapter, I first discuss the overarching conclusions based on the clinical observations and cross-case analysis pertinent to child resilience and parental self-efficacy. I then provide suggestions for music therapy clinical practice, and continue with a discussion of limitations and other considerations. I conclude with recommendations for future research and a short epilogue.

Family-Based Music Therapy, Child Resilience, & Parental Self-Efficacy

Resilience, as defined in the introductory chapter of this dissertation, connotes competence in salient developmental tasks despite exposure to stressors and adversities. Within families, measurable attributes of each constituent (i.e., temperament, intelligence, positive responsiveness to others), as well as the quality and cohesion relationships, may function either as risk, asset/promotive, or protective factors. The above variables, combined with presence or absence of external support systems determine whether exposure to challenging experiences will have negative or disruptive effects on child adaptation over time (see Masten & Gewirtz, 2005; Sameroff, 2006).

The music therapy intervention implemented in this study targeted interactional patterns of the whole family and aimed at changing the whole situation. Even though the two psychometric assessments (DECA and PSOC) were person-focused, the music therapy sessions were not. As a therapist, I discussed the results of those assessments with parents to mutually determine therapy goals suitable for their family's unique needs. Thus, the psychometric assessment and our mutual goals became a 'springboard' for developing a problem-focused rather than an individual-focused approach in our sessions.

It would be a fallacious statement to claim that participation in eight music therapy sessions may have significantly changed individual characteristics of the four targeted child-participants in this study. Given the complexity of factors that determine developmental trajectories, individual change may not matter, however, since it may only explain small proportions of variance in development (Sameroff, 2006). Perhaps, the most beneficial outcome was making explicit the constellation of risks in each family's life. Increasing parental awareness about the possible negative outcomes of such cumulative risks and ecological factors their families experienced may have empowered parents to seek change.

Parents participating in this study may have experienced changes in parental self-efficacy. Susan reported understanding the various ways she was influencing her children. Rachel, even though she continued to focus on individual child temperament problems, she acknowledged that she learned ways she may help her daughter cope with feelings and reduce tantrums. Lalenia seemed committed to seek individual therapy to address her own insecurities so that they not affect her parenting. Henrietta allowed

Hunk to take charge and address the issues that Henry was having at school. Both parents found different ways they could help their child, using their personal strengths and capacities.

Hays (2008) noted that psychological treatment has a language-centered bias, relying on verbal skills. In her opinion, creative art therapies offer solutions to the language-centered bias of psychotherapy because they can "facilitate interactions and elicit responses when verbal modalities fail" (p. 182). All participating parents self-reported that participation in family-based music therapy prompted them to set time aside in their hectic life schedule to interact with their children. Sharing musical experiences together provided the structure and context for facilitating interactions and eliciting both verbal and non-verbal responses in a playful manner.

As a researcher-therapist I assessed family dynamics, and individualized the therapeutic intervention according to each family's unique strengths and areas of need. I attempted to influence all family constituents in an effort to target areas of dysfunction. Joint-participation and active engagement in musical experiences targeted and may have supported each participant's capacity for relating with each other at various levels. Whether participation in the music therapy intervention will have an effect on the later development and resilience of each child participant in the future will depend on many ecological variables the family will experience over time.

Suggestions for Music Therapy Practice

My dual role as therapist/researcher enabled me to make several observations that may be useful for music therapy clinicians wanting to embark on providing family-

based clinical services. Below, I list suggestions for music therapy practice that I have based on insights gained from completing this study.

Do You Really Expect Me to Do That?

> Often I have heard adults bemoan the loss of childhood. Working with children affords adults the opportunity to engage in magical thinking, pretend play, role playing, communication through facial expressions, body posturing, and the making of bodily noises once again. Remember being angry and burping loudly to object? Remember wanting to retaliate against a wrongdoer and passing gas to make your "enemy" pay? Remember building fortresses out of turned-over chairs, and using cardboard pieces as shields and sticks as swords? Play expresses abundantly more than restrictive language. It engages both the conscious and the unconscious mind, the latter of which can relate to metaphors, story-telling, and symbols (Gil, 1994).

Even though adults may bemoan the loss of childhood, returning to a state of magical thinking, pretend play and exploratory creativity is not easy for them. For a child, playfulness is second nature and a reward in itself. Time constrains, daily stressors and challenges, and social norm expectations often strip adults of their ability to stop, slow-down, and engage in creative play with their child.

Parents in this study admitted feeling awkward performing some of the presented activities. Their apprehension of attempting some of the presented tasks, in combination with possible defensiveness resulting from being videotaped, influenced participation. Genuine concerns of 'what to do' during music therapy may arise during family-based sessions. The fear of the 'silliness' and 'playfulness' of music therapy, may combine with other possible fears experienced by adults who engage in therapy, such as fear of rejection, losing control, being misunderstood or judged, or being rejected (see Corey, Corey, & Corey, 2010).

As a therapist, I aimed to reduce awkwardness by giving clear explanations, assigning adult roles, placing responsibility on parents to help. I modeled being silly

and playful (even attempting to do a summersault on the floor when a child requested that movement when it was her turn during a movement-type therapeutic application). Being a therapist is perhaps similar to being an actor on a stage; nurturing, encouraging, praising and supporting a parent's efforts to participate may draw them into acting their way into a new way of being with their child. For some, the process would be easier than others.

Show me the Therapeutic 'Gain'

Parents in family-based music therapy may find themselves wondering about the specific therapeutic benefit of being silly, playful and creative. As music therapists, we know and believe in the viability of musicking as a therapeutic intervention. We need to be explicit with parents about what participation in music therapy can and cannot do for their families. Despite being playful and silly during the sessions, I remained emphatic about how the presented tasks could potentially help the family address concerns and therapeutic areas of growth. I established communication channels through e-mail communications and talking about the tasks at the beginning or end of therapy sessions.

Therapeutic Discourse

Therapeutic discourse entails what you say and when. It is about explicit requests and implicit expectations. Balancing nurturing and understanding with using confrontation is 'slippery-slope' enterprise in therapy. In this study, I felt that I needed at least four music therapy sessions prior to beginning to understand how comfortable participating family would be exploring therapeutic material.

Being patient and receptive to client limits of how far they can go required relying on intuition and erring on the side of caution. It is noteworthy that one

participant (Hunk) commented that he did not feel that therapeutic progress was being made until I began being more assertive and directive during the session. Each family encountered in therapy is unique, and families will be ready for interpretations or interventions at different time points across therapy sessions.

I relied on clinical intuition on how to proceed during music therapy sessions. Reviewing the video-tapes in a reflective manner allowed me to hone in on those intuitions and further shape the direction of therapeutic discourse. Receiving feedback from the clinician who served as peer reviewer also aided that process. Music therapists with heavy case-loads may not have adequate time and resources to videotape and review sessions. Finding time, however, to receive feedback and supervision, in addition to being reflexive may be essential elements contributing to therapeutic effectiveness.

Writing the developmental assessment report at the conclusion of the eight sessions helped me as a clinician to gather my thoughts and evaluate the treatment. At that point, I felt adequately prepared to make more specific recommendations. If I were to continue music therapy with the participating families, the process of writing the assessment would have helped me to either alter or maintain my therapeutic approach. Reviewing the assessment form with the parents was another helpful step, as it allowed us to both reflect and evaluate therapeutic progress. This observation points to the value and the necessity of parent conferences and treatment evaluation meetings in family-based therapy.

Therapeutic Dosage

In discussing developmental systems theory and the family, Reuben (1971) emphasized that families settle into mutual implicit expectations and interaction patterns. Families have a strong tendency to maintain homeostasis, a state of equilibrium that perpetuates those expectations and interaction patterns. Because each family member's behavior influences the others, cycles of adaptive or maladaptive interactions and responses develop over time, a concept referred to as circular causality.

According to developmental systems theory the family is a social system governed by interdependence; change in one family member may bring changes in other members of the family unit (Sameroff, 2006). By providing the music therapy intervention, I became an external agent attempting to influence the different constituents of the family system. However, as I stated in the previous section, I needed at least four sessions before I could understand how to best explore therapeutic material with each family. Clinical intuition helped me determine where the participating families fell on the continuum of adaptive and dysfunctional. I needed additional sessions to determine the psycho-social functioning of each family.

Even though at the conclusion of the eight music therapy sessions I was able to make specific recommendations to each family to possibly help them gain insight into problems, I did not feel that I adequately supported changes in behaviors leading to improved functioning. Noteworthy is that all parents participating in this study shared with me that additional music therapy sessions may have encouraged and promoted behavioral changes.

The emerging clinical themes for each family unveiled that participants in this

study tended to respond in predictable ways with each other. By providing the short-term music therapy intervention I attempted to disrupt the structure of relationships and stable interaction patterns. I am unsure, however, if the short-term intervention adequately disturbed the family system, causing disequilibrium and forcing it to restore itself into new patterns of interaction and relatedness between family members. Therapists working with families should be aware that a larger 'therapeutic dose' and long-term interventions may be needed to enable families to switch previously learned patterns of interacting and relating, settling into new states of functioning. Longer interventions may also prevent the system from reverting back to such interaction patterns once the therapist's support is removed. As Sameroff (2006) pointed out, long term interventions with families facing risks to adaptation may be a necessity given "the strong continuity of environmental risk factors that continue to impinge on successful development" (p. 71).

Music Therapy as a Promotive or Protective Factor?

Given the constellation of risks in each family's life, in what ways did music therapy as a shared parent-child experience make a difference? Considering music therapy as a promotive factor for a family assumes that its therapeutic applications provide an overall positive effect for both high and low risk populations. On the other hand, considering music therapy as a protective factor for a family, presupposes that it provides experiences which only facilitate positive outcomes in the adaptive development of children experiencing high risk.[8] Because participating families in this

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[8] The reader may refer to Sameroff (2006) for a detailed discussion regarding promotive vs. protective factors.

study experienced multiple threats to adaptation, I assumed shared musical experiences would function as a protective factor. Such a claim, however, is not theory-driven. At this stage we luck sufficient understanding of how music therapy affects adaptive developmental processes. This study represents a step to develop such theory, derived directly from clinical observations and field data.

Limitations and Other Considerations

One limitation of this study is that parents self-selected to participate. However, given that this is not a quantitative experimental design, this fact does not alter the trustworthiness of the findings. This design allowed me as a researcher to draw upon the subjective experiences of those families. By conveying their experiences in this study and sharing my own insights and clinical interpretations I hope to encourage readers to look for parallels and transfer findings as they apply to their situations as clinicians (or researchers).

Results gained in this study cannot be generalized due to the methodological design. Yet, the diversity and unique qualities of the recruited families and how they experienced music therapy, may offer an opportunity for clinicians to refer to the case studies as archetypal models guiding their therapeutic treatment planning. The case studies could provide a model of operating for clinicians. The detailed descriptions of emerging clinical themes provide a thorough documentation of "what, how, when, and by whom" happened in music therapy, thus contributing to the literature in a different manner.

Another limitation is the fact that I solely relied on self-reported parental descriptions of adversities faced by the families without seeking third-party verification. Realistically, however, self-reported measures are typical when families self-refer themselves to therapy. It is noteworthy that, even though participating families faced challenges, they were not in acute distress and had pre-established networks of support prior to beginning music therapy. Families facing acute and cumulative stressors may respond differently in the course of music therapy treatment.

Music therapy sessions for three of the participating families were provided in their homes. Using a naturalistic setting had both merits and drawbacks. Providing services at the home increased attendance, because it eliminated transportation issues and accommodated busy family schedules. It also allowed observation and assessment of how a child functioned in a natural environment. Drawbacks included that the home setting contained many distractions that interfered with treatment. Also the timing of the sessions was challenging for two families, as it begin right after the children had arrived home from school.

Concluding thoughts include time management issues and obtaining treatment funding – factors that did not play a role since this was a research project but will be critical for clinicians seeking to work with families. Traveling from home-to-home, and the additional time it takes to carry, set-up, and pack instruments, limits the number of families a therapist may be able to fit into a caseload. Inherently, it increases cost of care. The challenges of obtaining funding to establish and maintain such interventions are often an obstacle for those therapists who want to work with families and engage in preventative therapy.

Future Research

Few studies in the literature focus on encompassing the whole family, and even fewer of those focus on prevention. Research literature using a rigorous qualitative or quantitative design is needed. Qualitative researchers may continue to examine the subjective experiences of participants in an effort to refine and further develop a theoretical model of how music therapy can be adapted to meet the unique needs of families and how to document the role it may play in the science of relationships. Purposeful sampling of participants, as well as using a variety of ways to analyze data would develop knowledge about family-based music therapy from multiple lenses and perspectives.

Developmental systems theory has been identified by Masten (2006) as the central theoretical framework in developmental psychopathology. Currently, the only author who has used systems thinking in music therapy literature is Carolyn Kenny (see Kenny, 2006). Even though development systems theory has begun to permeate my thinking about music therapy phenomena, I have only hinted upon the theory to conceptualize family-based music therapy in this study. Further exploration of developmental systems theory for family-based therapy may offer insights on how to interpret parent-child experiences in music therapy.

Quantitative researchers may continue to document the effect of music therapy interventions or compare music therapy to other treatment modalities. Using larger sample sizes, longitudinal designs and updated statistical methods that can capture developmental change will contribute to the literature validating music therapy as a viable prevention intervention for families. Operationalizing behaviors and conducting

rigorous quantitative session videotape analysis may also help develop a scientific understanding of what happens during music therapy that supports active engagement leading to development of mutually responsive actions and interactions.

It may be fruitful for researchers to collaborate with developmental neuroscientists or prevention scientists and integrate their knowledge and resources into existing research paradigms. Partnering with other professionals, and seeking research funding from federal or state agencies may allow researchers to document the power of music therapy as an approach to prevention, targeting those with the greatest need.

Epilogue

In the Fall of 2008, I enrolled in the advance philosophy class, taught by Dr. John Kratus at Michigan State. During a lecture he posed a challenge: creating a philosophical model that can guide our research agenda. "What if using therapeutic applications of music therapy with families provides opportunities for building resilience, thus supporting development of interpersonal and socio-emotional skills within a child?" I proposed. while thinking he would simply roll his eyes. Instead, his eyes sparkled and he answered "That is a philosophical model!"

Conducting this study meant putting the above 'simple' model to the 'test' using a keyboard, a guitar and lots of novel musical 'toys' as my ammunition. This project has now come to fruition and the knowledge I have gained will continue to inform my work as a clinician and researcher. Despite the challenges and stress involved in conducting doctoral research completing this project was invaluable to my professional growth.

APPENDIX A

SAMPLE SEMI-STRUCTURED INTERVIEW QUESTIONS

Initial/Entry Interview

1. What do you consider your child's strengths?
2. What do you consider your child's areas of growth?
3. What do you consider your family's (self) strengths?
4. What do you consider your family's (self) areas of growth?
5. What do you particularly enjoy about your child?
6. What are your child's musical preferences and/or musical experiences?
7. In what ways do you currently use music at home?
8. What other information can you give me about your child's development and preferences?
9. Can you describe your parenting style/philosophy?
10. What do you expect my role to be when we engage in consultation?
11. Is there anything about your values, beliefs, and family rituals that you would consider helpful for me to know?
12. Is there anything about background history and stressors faced by your family that you would consider helpful for me to know?
13. What do you expect your family to gain by participating in this study?

Final/Exit Interview

1. How was your overall experience in participating in this study?
2. What did you feel like being in music therapy with your child?
3. What have you particularly enjoyed about this experience?
4. What would you do to improve this experience?
5. In what ways has the music therapy affected your understanding of your relationship with your child?
6. Our mutually-agreed upon goals were (describe). Can you talk about what we have or have we not achieved?
7. What have you learned about yourself as a result of the music therapy experience?
8. What have you learned about your child as a result of the music therapy experience?
9. What do you hope for in the future?

APPENDIX B

PARENT JOURNAL TEMPLATE

Parent Journal: Week 1

Family: Participants R

Instructions: Please complete/maintain this journal during the week. Write as little as 1-2 sentences each day or as much as you feel you want to share. The open-ended questions are intended to help and give you guidance regarding what to write. Please e-mail the completed journal the researcher pasialiv@msu.edu prior to our next scheduled session/appointment.

What did you think about your child's responses during the session on 1/15/10?

What are your thoughts, feelings and possible insights about the process of participating in the music therapy experience on 1/15/10?

Have you repeated/used any of the activities modeled by the therapist at home during this week?

Any other thoughts/ideas you may find useful to share?

APPENDIX C

SAMPLE SESSION FIELD NOTE AND ITS ANALYTIC MEMO

Participant Name: R Session No 1 & Date: 1/14/2010
Who is attending: mom, research assistant (Josh), researcher
Session Length: 37 minutes

1. Hello Song/Greeting song

2. We are going to go and go: Sung a chant and which included instructions to stop and go. Also included decision making by asking Ramona, research assistant and mom to model different movements. Targeting: Self-control (i.e. waiting for other's turn, staying quiet when others play) & Initiative (i.e. focus attention on task, make decisions, try task that might be hard).

3. Crazy Eggs: Sing song *Merry-Go-Round* and model playing eggs using slow and fast movements. Targeting: Self-control (i.e. waiting for other's turn, staying quiet when others play) & Initiative (i.e. focus attention on task, make decisions, try task that might be hard).

4. Silly Face: Select visual prop with a feeling state, sing chant and then ask question 'What is something that may happen that will make you feel happy?"

5. Free improvisation based on tune *Twinkle*

6. Closing Song: It's time to go – with Ribbons. Therapist sang song and modeled free flow movement

Field Note	**Interpretive Analytic Memo**
1. Hello Song/Greeting Song: Therapist asked Ramona to select one instrument for each person. Therapist lead song and alternated giving instructions to play tutti or taking turns playing solo. Targeting: Self-control (i.e. waiting for other's turn, staying quiet when others play) & Initiative (i.e. focus attention on task, make decisions). 1. When the session began Ramona needed several prompts to remain in the	Initiative = Ramona's difficulty in staying in the area may have been due to her excitement with beginning music therapy Self-control = Perhaps she needed the extra prompting and structure of choice making because she wanted to maintain access to both toys. She did however listen to the therapist. She cooperated with instructions and stayed quiet during turn taking.

area and concentrate on the activity. She cooperated by selecting instruments for each participant when prompted to do so by the therapist. However, when the therapist asked her to select one instrument for herself, he left the area and brought two musical toys from her bedroom. When the therapist asked her to select one she did not follow the instruction. Therapist repeated instruction by prompting her to choose one and pairing prompt with visual cue. Ramona then selected an instrument and returned the other instrument to her room. When the greeting song began, she did not remain in the area. She returned back to the area when both mother and therapist prompted her. She showed ability to wait when mom, therapist and assistant played a solo/solo turn during the greeting song. Throughout the activity, Ramona's mother encouraged her daughter by making eye-contact, smiling, and delivering praise. Ramona made eye contact when her mom praised her. She used her mom as a social reference making eye contact when playing her solo turn.	Attachment = Parent and child mutually responsive. Smiling and making eye contact with both adults and parent shows that Ramona has skills that would enable her to establish are relationship with adults.
2. When the therapist gave instructions for movements Ramona followed them immediately. However, when the therapist asked the male research assistant to model a movement, Ramona refused to comply. Her mother redirected her speaking in Spanish and Ramona refused "No, I don't want to". Therapist assigned a positive intent "You do not like being a crab?" and Ramona shook her head. Therapist then gave clear instructions about the expectations of the activity to take turns with everybody modeling a decision about a movement and that she would begin and end the modeling of the movement.. Ramona had a turn then, modeling a ballerina twirl.	Initiative = perhaps her refusal to comply with Josh's request reflected her reluctance to try a task that she may have perceived as difficult or undesirable. There is also the possibility of showing transference, Ramona usually does not follow the instructions or comply with what her brother tries to tell her. Self-control = She had difficulty accepting that she had to do Josh's turn and was not fully cooperative. For example, she walked rather than moving her feet fast, avoided eye-contact, and took a remote and a plastic camera equipment piece during the activity. Those behaviors reflect an attempt to

Then her mother modeled jumping on one foot. When it was the assistants turn to model a movement (run in place) Ramona did not imitate the running in place exactly as modeled, even after being redirected by the therapist. When therapist used non-verbal eye contact to redirect, she avoided eye contact. She also began playing with a remote which the therapist non-verbally approach and took and placed out of sight. When it was the therapist's turn, Ramona did not imitate and shook her head 'no'. Therapist said: "For us to be your turn again, you have to do my turn and do the movement; it is your choice if you want another turn". Delivered verbal reinforcement When it was her turn to model a movement, she modeled a summersault.	avoid the request by the adult. Even though she frowned, she controlled her frustration with not getting her way. Attachment = This was the first time that Ramona saw Josh. Perhaps she was less inclined to comply to his instructions. When her mother redirected her, her tone of voice was soft; the mother is not power assertive, which could be a plus in the relationship, however Ramona appears to control or try to get her way.
3. Responded to music cues by matching tempo and doing modeled movements. She followed the movements as modeled by everybody without any delay and had positive affect.	Self-control = This was a fun activity for Ramona and thus, no issues with compliance
4. Ramona selected the surprised face. Therapist used assistant to model how to discuss about an event/trigger that might be a surprise. When she asked Ramona, she shrug her shoulders. Therapist said "mom we need help". Ramona's mom (Rachel) said with excitement in her voice "I know, I know" and talked about the Christmas gift that Ramona received. They engaged in reciprocal verbal interactions talking about the xmas gift. The next face selected was the mad facial expression. Both therapist and assistant modeled statements such as "I felt mad when….." Rachel said "I felt mad yesterday when Ramona's room was (and paused)" Ramona finished the sentence "messy" Therapist affirmed "Feeling mad is OK?" When it was her turn, she talked about feeling mad when	Attachment = Both parent and child were responsive to using the assertive framework/structure to describe situations in which they felt mad, messy. The fact that the child was attuned to her mother shows by the way she completed her sentence. I am not sure how to interpret her comment about her babies obeying.

babies come and take away the toys she was playing. Activity continued with research assistant picking a 'sleepy-face' Ramona waited for everybody's turn and picked another face one last time. Ramona picked the happy face. Mom talked about feeling happy when she goes to pick up Ramona from school and she gives her a big hug. Ramona said she is happy when her babies (=dolls) listen to her and they obey"	
5. On task, switching different instruments, looking into mom several times (grabbed one instrument that mom was holding/playing. Second time, she switched instruments with mom, will not call it grabbing. Positive affect, exploring instruments.	Attachment = Ramona's controlling behavior surfaced when she reached out the first time and grabbed the instrument that the mom was playing. I feel the mom's instinct to keep on playing was appropriate in such it perhaps helped Ramona self-regulate. The second time she wanted to get the instrument that the mom was playing she sought eye contact and waited for non-verbal affirmation (mom reaching out and giving her the instruments). It was almost as if the mom understood what Ramona was requesting and completed the request. Self-control = This activity showed Ramona's capacity for self-control. To stay quiet, calm and participatory during the improvisation; she was also responsive to musical cues. Even though she naturally engaged in play behavior of exploring the different instruments, she changed the tempo she was playing to reflect the music and looked at the therapist and smiled when the therapist used a pattern to match her movement when she began approaching the instrument bag to get more instruments out.
6. Both Ramona and Rachel dance around while therapist sung the song.	Purpose of this was to add a fun ending. Attachment = frequent eye contact and smile exchanges with mother

APPENDIX D

Generic Descriptions of Therapeutic Applications Used in this Study

I used a total of ten different types of generic therapeutic applications of music therapy in this study: The first five therapeutic applications described in this section are those that I have conceptualized as exemplifying 'Musicking' musical tasks. In designing and implementing therapeutic applications of music therapy, I have adopted an eclectic approach, drawing from various influences and theoretical approaches of music therapy. Below I provide generic descriptions of therapeutic applications for the purposes of this study.

1. Orff-Type Therapeutic Applications

Even though I have not received formal training in *Orff-Schulwerk*, taking a class with Dr. Cynthia Colwell, while I was completing my Master's Degree at the University of Kansas was instrumental in influencing how I design and implement Orff-Type therapeutic applications during music therapy sessions. For this type of therapeutic applications, I have used pitched and non-pitched percussion instruments. Often, I would set those in pentatonic scale to allow improvisation. When presenting such therapeutic applications, I altered improvisation with singing songs or chants. Sometimes I used vocal improvisation and different type of Ostinatos to accompany songs. While I provided the structure for these types of therapeutic experiences (therapist-directed task) I balanced it with incorporating musical ideas elicited from the participants (non-directed task).

2. Playing Instruments

I adopted three approaches when asking participants to play musical instruments: (a) I provided visual materials (i.e. color-coded or adapted capital letter notation charts) to enable participants to play familiar and non-familiar songs on instruments such as the Q-chord, chimes, resonator bells, or the electronic keyboard (therapist-directed task) (b) I assigned instruments and conducted short performance-like instrumental ensemble pieces using different instrument combinations which the participants learned and performed by ear (therapist-directed task), and (c) I sang songs, melodies or chants, with and without words, while participants played instruments

3. Jamming/Singing

This task involved a 'performance' element. Songs were formally requested by the participants. We played instruments and sang-along.

4. Improvisation

At Michigan State, I enrolled in courses with Dr. Frederick Tims learning about various improvisational clinical approaches. Clinicians have provided lengthy descriptions of improvisational methods (i.e. Wigram, 2004) and how those can be adapted and used with families (Jacobsen & Wigram, 2007). I used both unstructured improvisation (which involved placing instruments on the floor and asking children to explore different sounds or play while listening to each other), and thematic improvisations (i.e. play in a calm way). I sometimes supported the improvisation by playing on the piano/electronic keyboard and at other times I simply played pitched or non-pitched percussions alongside with the family. Other times, I based the improvisation on a familiar tune.

5. Exploring Instrument Sounds

Sometimes, families were so fascinated by the different instrument sounds, that I simply asked them to try playing different instruments and encouraging them to ask questions or make comments.

6. Dance & Movement-Type Therapeutic Applications

Taking a class in early childhood methods with Dr. Cindy Taggart has been influential on how I incorporate movement-type activities in my clinical sessions. I am informed by *Music Learning Theory* when I implement such activities in the sessions. The reader may refer to Reynolds et al. (2002) for detailed descriptions. For these therapeutic applications I used musical instruments (shaker eggs, rhythm sticks) as well as various props (scarves, ribbons, parachute).

7. Action Songs & Fingerplays

Working with children as a clinician, over the years, I have accumulated a vast knowledge base of action songs and fingerplays which I use in music therapy sessions to elicit different actions.

8. Song-writing

For the purposes of this study, I elicited ideas from the participants to create songs that fit the lyrics of familiar tunes. Song writing involved using familiar songs and fill-in the gab, or creating new lyrics to fit in preexisting songs.

9. Discussion based on Song Lyrics

I used phrases and lyrics from songs and engage participants in short discussion on topics that I felt were relevant to the therapeutic goals.

10. Music-Assisted Relaxation

I used adapted progressive muscle relaxation exercises that were short in duration and age-appropriate for the participants in this study. Music selections used in session included classical and new-age repertoire, based on participant preferences. Often, I would ask participants to remain quiet for 30 to 60 seconds at the end of the exercise and focus on a positive statement (i.e., completing sentences such as 'I love you because...' or 'I am ...').

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