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A Teacher's Experience in Improvisational Music Therapy with her Students with Autism Spectrum Disorder: A Phenomenological Inquiry

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A TEACHER'S EXPERIENCE IN IMPROVISATIONAL MUSIC THERAPY WITH HER STUDENTS WITH AUTISM SPECTRUM DISORDER: A PHENOMENOLOGICAL INQUIRY

A THESIS

Submitted in partial fulfillment of the requirements
For the degree of Master of Science
In Music Therapy

by

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Molloy College
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A TEACHER'S EXPERIENCE

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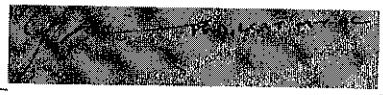

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Abstract

The purpose of this phenomenological study was to examine the lived experience of a teacher who participated in one 30-minute Improvisational Music Therapy (IMT) session with her students with Autism Spectrum Disorder (ASD). Participants included a teacher who has never participated in music therapy sessions with her students, as well as four of her students, ages 12-17, with a primary diagnosis of ASD, and each of their paraprofessionals. Data were collected and thematically analyzed based on transcriptions of the interview with the teacher and videotaped music and verbal interactions in the session. Four essential themes that emerged were identified as follows: cultivating relationships, following the students' lead, observing the students from a different lens, and gaining and integrating new knowledge. Results of the study highlight the value of this investigation for the teacher who collaborated with her students in the music-making process. She gained new knowledge about their social and communicative abilities that enhanced her desire to implement music-based strategies in her classroom. Overall, this study offers the first evidence about a teacher's lived experience in active music-making process of IMT and provides qualitative support for existing literature about the benefits of employing a relationship-based approach when working with students with ASD.

Keywords: autism spectrum disorder, relationship-based approach, improvisational music therapy, teacher-student relationship

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A Teacher's Experience in Improvisational Music Therapy With Her Students with Autism Spectrum Disorder: A Phenomenological Inquiry

According to the Centers for Disease Control and Prevention (2013), it is estimated that about 1 in 68 children have been diagnosed with Autism Spectrum Disorder (ASD). This alarming statistic is a significant source of motivation to this study, as there is still unclear understanding of the origins for this complex disorder, and it is still difficult to assert how to best support individuals with ASD (Robson, 2013).

The purpose of this study was to examine the lived experience of a teacher participating in an Improvisational Music Therapy (IMT) group with her students with ASD at a special education Jewish school on Long Island, New York. Data were derived from one 30-minute music therapy group session with four students, ages 12 to 17 years old, their paraprofessionals, and the classroom teacher. Data were collected via a semi-structured interview with the teacher following the session, as well as through video recording of the music therapy session.

Music therapy has been demonstrated to be an effective treatment modality for this population across various domains (Carpente, 2011; Edgerton, 1994; Howat, 1995; Kaplan & Steele, 2005; Kern & Aldridge, 2006; Kim, Wigram, & Gold, 2008; Kim, Wigram, & Gold, 2009; Lagasse, 2014; Thompson, McFerran, & Gold, 2013). Further, there is a growing body of literature about the benefits of employing a relationship-based framework within various treatment modalities to help target core features of ASD such as social and emotional capacities (Carpente, 2012; Casenhiser, Shanker, & Stieben, 2013; Kim et al., 2008; Kim, et al., 2009; Liao et al., 2014; Pajareya & Nopmaneejumruslers, 2011; Solomon, Van -Egeren, Mahoney, Huber, & Zimmerman, 2014; Thompson et al., 2013).

Because individuals with ASD have complex challenges in relating and developing relationships with others (American Psychiatric Association [APA], 2013; Robson, 2013), I find it important to explore my clients' underlying sources for motivation by providing them with opportunities for intrinsic musical-emotional experiences through which they may desire to engage and relate to others. Thus, the focus in my practice is formulating individually-based interventions to help my clients develop functional skills according to their developmental capacity, all within a pragmatic social context rather than targeting their isolated behaviors.

My previous music therapy practicum, in which I had gained an invaluable experience working with children and young adults with ASD, has significantly influenced my mission and philosophy as a clinician. My work was guided by the Nordoff and Robbins (NRMT) and Developmental Individual-differences Relationship-based models (DIR®) which similarly focus on client-led interventions within a relationship-based framework while conceptualizing and identifying the client's unique developmental and sensory profiles in terms of his or her individual and musical differences (Bruscia, 1987; Carpente, 2009; Carpente, 2011; Geretsegger et al., 2015; Nordoff & Robbins, 2007). Further, I personally witnessed tremendous growth with my clients when I utilized the method of improvisation, which can be referred to as "the collective term of Improvisation Music Therapy (IMT)" (Geretsegger et al., 2015, p. 260) when spontaneous music-making is the main focus in therapy (Bruscia, 1987). These past experiences have helped shape my humanistic, music-centered lens as a professional music therapist who is currently serving this population. Consequently, I believe that our music-making can be a reflection of how we view ourselves, how we relate to others, and how we view the world around us.

As a board-certified music therapist who recently launched a new music therapy program at a special education school, I was curious to know how teachers, who play an integral part in the students' daily life, would experience improvisational-based musical engagement with their students and me.

While there is some evidence about the contribution of caregivers' active involvement in music-making processes with their children with ASD (Pasiali, 2012; Thompson et al., 2013; Thompson et al. 2015), there is no research that solely focuses on teachers' active involvement in music therapy with students with ASD. Furthermore, the role of teacher-student relationship in the academic, behavioral, and social functioning of typically developed students has been continuously highlighted in the literature (Alderman, 1999; Birch & Ladd, 1997; Graziano, 2016; Pianta, Steinberg, & Rollins, 1995; Pianta, 2004). Yet, there is very limited data about the essence of teachers' relationship with students with ASD and its construct within music therapy processes. Therefore, gaining an understanding of how teachers experience active participation in a music therapy group with their students could be a step towards discovering the essence of teacher-student relationship that naturally emerges during shared music-making processes and carries over into the classroom.

The research question guiding this phenomenological inquiry was: What is the lived experience of a teacher participating in one IMT session with her students with ASD?

Review of Literature

Currently, there is no research that solely focuses on teachers' experiences in music-making processes in music therapy with students with ASD. There are a few studies that highlight teachers' and staff's active involvement in music therapy sessions with students with ASD (Kern & Aldridge, 2006; Twyford, 2012), and one unpublished thesis that explores students' and staff's experiences of shared music-making process of Improvisational Music Therapy (IMT) with students with ASD (Boniface, 2009). In addition, there are several studies about teachers' and staff's perception of music therapy derived from music therapy consultation (McFerran, Thompson, & Bolger, 2015: Pethybridge, 2013; Rickson, 2012; Twyford, 2012). Therefore, this review will cover published and non-published articles within the field of music therapy that explore the characteristics of music therapy in special education, relationship-based approach for ASD, teachers' and staff's general perception of music therapy, as well as teachers' general experiences and relationships with students with ASD.

Teachers' Experiences with Students with ASD

Teachers in special education settings are faced with many challenges while trying to meet the diverse needs of their students on a daily basis. The lack of clear understanding on how to best support students with ASD may be due to the continuous debate about efficacy of treatment and complexity of this diagnosis (Kern, Chandler & Humpal, 2013; Reschke-Hernández, 2011; Simpson, 2004). Moreover, with the rising numbers of students with ASD who are being integrated in inclusive educational settings, special education teachers are under pressure to help them meet grade-level competencies (Witmer & Ferreri, 2014).

According to the U.S Department of Education (2015), the number of special education teachers in the majority of states has significantly declined since the 1990's. This drastic decline may have attributed to teachers' burnout, which in turn may have led to an increase of behavior problems with neurodevelopmental disabilities (Hastings, 2002). Therefore, it is imperative for special educators to manage emotional exhaustion in order to maximize their ability to tailor educational plans necessary for each student (Hastings, 2002).

Recent research about special educators' perspectives on the social support needs of students with ASD indicates that teachers could benefit from acquiring additional support strategies through which they could promote the students' successful development (Able, 2015). In addition, teachers' attitudes towards students (e.g., acceptance, disapproval, enthusiasm or rejection) may play a role in the process of inclusion and formulation of interventions for students with ASD in a regular classroom (Horrocks, White, & Roberts, 2008).

Chung et al. (2015) investigated in their survey-designed study the perceptions and attitudes of in-service teachers towards typically developed students and those with ASD in the U.S. Through a convenient sampling, participants included 234 pre-kindergarten to grade 12 teachers from public and charter schools in a metropolitan city. The teachers were invited to fill out a questionnaire in which they denoted their feelings towards a student with ASD and a typically developed student. Chung and colleagues employed an unpaired *t*-test to detect any attitude differences between teachers who held a special education certificate and those who did not. In addition, a regression analysis was performed in order to examine demographic and professional factors that predict a teacher's attitudes toward a student with ASD. Findings in this study suggest that

teachers, particularity females (t = -2.63, p = 0.01) at an elementary level (t = 2.16, p = 0.03), who were holding special education certification (t = - 4.83, p = 0.00), perceived the student with ASD more negatively than typically developed students, and were more likely to dislike students with ASD (t = 15.70, p = 0.00).

Whilst teachers' general knowledge about ASD is fundamental in order to adequately support students with ASD (Liu, 2016), teachers' ability to be emotionally attuned to their students with ASD may also play a part in helping students with ASD foster academic growth. Manti (2013), who explored teaching strategies that aim to foster academic development for children with ASD in the Netherlands, found that long-term academic gains could be partially predicted by the level of emotional support they received from their teachers. Thus, examining the construct of teacher-student relationship is central to this study.

Teachers' Relationships with Students with ASD

Teachers' relationships with students have been demonstrated to be pivotal in the academic, behavioral, and social development of students (Birch & Ladd, 1997; Graziano, 2016; Pianta, Steinberg, & Rollins, 1995; Pianta, 2004). Researchers have discovered that there is correlation between teacher-student conflicts and behavioral outcomes for students (Birch & Ladd, 1998; Ladd, Birch, & Buhs, 1999; Ladd & Burgess, 2001). Yet, there is a limited research that explores the nature of relationships between teachers and students with ASD.

Robertson, Chamberlain, and Kasari (2003) assessed the relationship between general education teachers and their students with ASD in an inclusive school setting. Participants were asked to describe their perceptions of their relationship with an included student with ASD via Student-Teacher Relationship Scale (Pianta, 1992) and the

SNAP-IV Rating Scale (Swanson, 1995). Although limited due to small sample size (N=12), findings of this study suggest that students who had poorer quality of teacher-student relationship demonstrated higher behavior problems and experienced more social exclusion in school.

Similarly, Blacher, Howell, Lauderdale-Littin, Reed, and Laugeson (2014) examined the correlations between teacher-student relationship, behavior problems, and social skills in their comparative study. Through a comparison sample of children with ASD, children with typical development, and children with Intellectual Disabilities (ID), Blacher and colleagues (2014) found that the quality of teacher-student relationship was substantially poorer for the children with ASD when compared with the other two groups. In addition, the "teacher-reported child externalizing behavior and social skills accounted for significant variance in the total score on the Student Teacher Relationship Scale" (p. 320).

The complexity of teacher-student relationship is further exemplified in a recent longitudinal study (Eisenhower, 2015) that examined the correlation between teacher-student relationship and the externalization of behaviors problems of 66 children with ASD through three assessments over a 1.5-year period. Data were collected "as part of a larger study examining the adaptation to early schooling among young children with ASD" (p. 166), and analyzed via descriptive statistics, correlations between variables, cross-lagged Structural Equation Modeling (SEM) analysis, and Full Information Maximum Likelihood (FIML) scale. Eisenhower (2015) found a "bidirectional relation" (p. 170) between the quality of teacher-student relationship and externalizing behavior problems. She concluded that higher externalizing problems predicted poorer quality of

earlier relationship, as well as an increased conflict and decreased closeness between the teacher and the student in the following academic year.

Recently, researchers have begun to examine the effects of teacher-student relationship on the perception of loneliness in children with ASD (Zeedyk, Cohen, Eisenhower, & Blacher, 2016). Zeedyk et al. (2016) assessed 127 children with ASD, aged four to seven, through child self-report, using a modified version of the Loneliness and Social Dissatisfaction Questionnaire (LSDQ) (Cassidy & Asher, 1992). The researchers found that while most children reported they perceived themselves having positive friendships with their peers, nearly 40% of them reported social difficulties with making friends, or feeling lonely and excluded. Based on regression analysis of reports made by the parents via Social Responsiveness Scale (SRS) (Constantino & Gruber, 2005), and by the teachers via the Child Behavior Checklist (CBCL) (Achenbach, 2000; Achenbach & Rescorla, 2001), Zeedyk and colleagues (2016) found correlation between the children's perception of loneliness and the perceptions of their caregivers and teachers (e.g. perception of parents' of their child's social skills was linked to the child's perception of feeling excluded). However, limitations in the study indicate that these statistics only represent children with ASD who have higher language capacities. Therefore, the possibility to assess the perceptions of children with limited language or cognitive abilities was recommended (Zeedyk et al., 2016).

Music Therapy in Special Education

For decades, music therapists have been working alongside teachers and other professionals in educational settings while utilizing a wide range of therapeutic interventions to help students regulate, communicate, and achieve various developmental

milestones (Adamek & Darrow, 2005; Kern & Aldridge, 2006; Kern & Humpal, 2012; Lim, 2012; McWilliam, 1995; Nordoff & Robbins, 1971; Oldfield, 2006).

According to Rickson (2007), music therapy in special education and music education are different for several reasons. They described:

> Music therapy in special education differs from music teaching in its emphasis on the acquisition of non-musical skills, using music as a symbol of emotional and personal growth rather than as a cognitive skill-set to be learned and practiced. The profession is guided by ethical policies grounded in the acknowledgement of the importance of the relationship between client and therapist. (p. 40)

As the prevalence of ASD has increased significantly in recent years, so has the number of available treatments and education options (Berger, 2002). Parents face the task of sorting through many treatment possibilities. Thus, detailed child assessments and diagnostic processes can be crucial for developing the most effective treatment plan for children with ASD (Berger, 2002; Kern & Humpal, 2012; Oldfield, 2006).

At a school setting, music therapists provide services that support the students' Individual Educational Plan (IEP), seeking to provide the utmost assistance in the least restrictive environment in order to help children gain academic growth (Davis, Gfeller, & Thaut, 1999; Patterson, 2003). Prior to treatment, the music therapist conducts a detailed assessment for the students and tailor a wide range of interventions, which are focused on either musical or non-musical goals, depending on the therapist's philosophy and approach (Carpente & Lagasse, 2015). For example, one of the biggest areas of need for individuals with ASD is communication (Kern & Humpal, 2012). When working with non-verbal clients, music therapists offer musical experiences that help foster basic listening skills and encourage the development of expressive and receptive language.

Some of the goals are targeted through receptive experiences, improvisation, and vocalization (Kern & Humpal, 2012).

Clients with ASD often demonstrate challenges in the area of social reciprocity (APA, 2016). Therefore, music intervention may focus on socialization, either in a group or individual experiences through turn taking, problem solving, and sharing ideas (Carpente & Lagasse, 2015; Mahoney & Perales, 2003). When clients with ASD struggle to accept boundaries from the outside world and become resistant, it is helpful to utilize improvisational musical experiences through which they can help develop a greater sense of trust and flexibility that is needed for fostering relationships with others (Oldfield, 2006).

As the number of students being taught in inclusive classrooms has risen, so have the challenges increased for them. For some students, this may present many difficulties in and out of the classroom due to poor ability to relate and cultivate meaningful relationships with their peers (National Research Council, 2011). Kern and Aldridge (2006) have identified the opportunity for music-based therapeutic interventions to help promote socialization for children with ASD on the playground. The researchers, who conducted their study at an inclusive community-based childcare program, examined the influences of music therapy interventions on the behaviors of four boys diagnosed with ASD, ages three to five years old, during their outdoor playtime. A special designated music center was created and original songs were composed for the boys, and their responses were sampled and measured within four conditions: baseline, adaptation to the music center, responses to an original song sung by the teacher, and responses to an original song sung with peers. Kern and Aldridge found that although the musical adaptation of the playground did not necessarily improve the boys' social interactions, it

was the active facilitation by the therapist and the peers on the instruments that helped them increase engagement with their peers.

Relationship-based Approach for ASD in Music Therapy

There is growing evidence in the literature that suggests that utilizing a developmental, relationship-based approach formulated around the client's unique differences is beneficial for achieving various milestones for individuals with ASD, and help them foster meaningful relationships with others (Carpente, 2009; Carpente, 2011; Kim et al., 2008; Kim et al., 2009; Thompson, McFerran, & Gold, 2013; Thompson & McFerran, 2015; Vaiouli, Grimmet, & Ruich, 2015).

Clinical improvisation, a primary method used in this approach, involves spontaneous musical interactions in which the music therapist improvises music based on the client's musical and non-musical expressions (Bruscia, 1987; Carpente, 2012). The course of therapy focuses on moment-to-moment musical experiences, and can be considered therapeutic due to the ability to promote channeling of impulses, development of trust and control, growth motivation, self-actualization, and intrinsic learning (Bruscia, 1987; Nordoff & Robbins, 2007; Oldfield, 2006). Nevertheless, Improvisational Music Therapy (IMT) does not imply that music therapists only follow the clients' lead or do not challenge their nonfunctional behaviors (Geretsegger et al., 2015). Depending on the client's level of interactional competence, the musical experiences can be modified or adapted in order to evoke certain responses, thus providing the client with novel opportunities to reciprocate ideas in order to become more flexible with others. Musical alterations can be facilitated via several clinical improvisation techniques (Bruscia, 1987) such as empathy (e.g. reflecting or synchronizing with what the client is doing), structuring (e.g. providing rhythmic grounding in accompaniment or clear tonal–

centering in harmonic structure), elicitation (e.g. repeating phrases or making spaces for the client to fill in), and redirection (e.g. calming or intensifying musical elements), all with an aim to engage the client in a robust back and forth interaction (Bruscia, 1987; Carpente, 2012).

While providing opportunities for reciprocal interaction is an essential element in IMT, there is a strong emphasis on building and maintaining strong therapeutic relationships in which the "musical, emotional, and intersubjective experiences may be shared, developed, and built upon" (Geretsegger et al., 2015, p. 273). These experiences may be generalized into other areas in the client's life when implementing this principal through caregiver-mediated interventions or participation of family members in the IMT session (Thompson, McFerran, & Gold, 2013).

IMT for ASD in group settings. Group music therapy is a widely known application for treatment in various settings (America Music Therapy Association, 2016). It addresses multiple goal areas and is considered a cost-effective intervention. Some of these goal areas include shared attention, initiation of new ideas, turn-taking, flexibility, and interaction (Kim et al., 2008; Kim et al., 2009; Thompson, et al., 2013; Thompson & McFerran, 2015; Vaiouli, Grimmet, & Ruich, 2015). Recent research has shown that implementing improvisation-based interventions within a group setting can enhance joint attention behaviors that help facilitate learning and academic growth in children with ASD (Vaiouli, Grimmet, & Ruich, 2015).

Vaiouli and colleagues (2015) conducted a mixed method study, which focused on three targeted engagement actions (focus on faces, response to joint attention, and initiation of joint attention) where multiple baselines of the academic performances of participants were compared and then evaluated during follow-ups. According to Vaiouli

and colleagues, the participants "demonstrated increased levels of focusing on faces, responding to joint attention, and initiating ", and "all three children maintained generalizable results after a 1-month follow-up" (pp. 79-80).

There are several studies that highlight the positive effects of IMT in a group setting on social-emotional responsiveness when comparing it with other play context modalities (Kim et al., 2008; Kim et al., 2009). Although both IMT and play therapy interventions commonly provide interactive opportunities for social engagement that aim to help facilitate these skills in children with ASD, there is some evidence that suggests that IMT is more effective than play therapy on the duration and frequency of joint attention behaviors and emotional responsiveness (Kim et al., 2008). Kim and authors (2008), who compared the effects of IMT and play therapy on thirteen preschoolers, hypothesized that "the child's ability in joint attention will increase positively over time and joint attention behaviors may be better in music therapy condition than play condition" (p. 1759). The researchers found that IMT significantly increased responses to joint attention in which children were engaged longer in turn-taking musical experiences rather than in play experiences. In their later study (2009), the researchers found that IMT produced more frequent and prolonged emotional responses (e.g. joy, emotional synchronicity, and initiation of engagement) in their participants than toy therapy; however, common limitations and recommendations for increasing sample size and blind assessors were found across these studies (Kim et al., 2008; Kim et al., 2009).

The effects of IMT group on parent-child relationship. There is emerging evidence in the literature that suggests that involving parents in the active part of the therapeutic process can strengthen the parent-child relationship and facilitate reciprocal communication in children with ASD (Pasiali, 2012; Thompson et al., 2013; Thompson

et al. 2015). This evidence can be better understood when examining the effects of Family Centered Music Therapy (FCMT).

FCMT, which aims to facilitate social interactions within the context of musical play (Thompson et al., 2013), encourages the parents to actively engage in the music-making process, thus offering a unique opportunity for children and their parents to collaborate in a creative process through various types of media. During the music therapy session, the music therapist utilizes a wide range of methods such as improvisation, pre-composed songs, and movement, to address various aspects of social interactions in order "to create flexible opportunities for reciprocal interactions" (p. 843).

Parents who have participated in a mixed-method study and partook in their children's sessions provided invaluable insight into what they believed motivated their children to meaningfully engage with them, as well as into their own emotional responses to their children or therapy (Thompson et. al, 2013; Thompson et al., 2015). In addition, the parents described how their perception of their relationship with their children changed significantly as they began to adopt new, more creative ways to communicating with their children following the conclusion of the study (2013; 2015). Thompson and authors further illustrate these changes in the parents' experiences in their thematic analysis, in which they found common themes such as changes to the parent-child relationships, changes in the parents' perception of their children, and changes in the parents' response to their children.

Similarly, Pasiali (2012) investigated family-based music therapy in her qualitative study by examining Mutually Responsive Orientation (MRO) behaviors of four young children ages five to eight and their families during music therapy. Participants included four families with low income and maternal self-reported history of

depression who engaged in eight music therapy sessions and parent consultations. Through a rigorous data collections process of analyzing videotaped sessions, interviewing with parents and reviewing their journals, as well as a cross-case analysis, Pasiali (2012) concluded that "music therapy assisted development of MRO within parent-child dyads" (p. 304), such as joint attention, communication, and emotional reciprocity.

Relationship-based approach for ASD in related fields. There are several control-trial studies worldwide in fields related to music therapy, such as play therapy or occupational therapy, that highlight the benefits of utilizing relationship-based interventions for individuals with ASD (Casenhiser, Shanker, & Stieben, 2013; Liao et al., 2014; Pajareya, & Nopmaneejumruslers, 2011; Solomon, Van -Egeren, Mahoney, Huber, & Zimmerman, 2014).

Liao et al., (2014), who investigated the effects of in-home, DIR®-based occupational therapy interventions in their pre-post pilot study conducted in Taiwan, recruited 11 children with ASD, ages three to six and their mothers, who completed a 10-week home-based intervention program. The researchers found "significant changes in mean scores ($p< 0.5$) for emotional functioning, communication, and daily living skills" (p. 356). In addition, the mothers of the participants reported that they perceived a positive change in their relationships with their children (2014).

Casenhiser, Shanker, and Stieben, (2013), who investigated the outcomes of a DIR®-based intervention in their randomized controlled trial, found significant improvement ($p <. 001$) in the treatment group in which 51 children ages two to four received 12 months of DIR®-based interventions while the control group received free community treatments such as speech therapy, ABA, and social skills group.

Solomon, Van Egeren, Mahoney, Huber, and Zimmerman (2014), who conducted a randomized controlled trial of a DIR®-based intervention called the Play and Language for Autistic Youngsters (PLAY), randomly allocated 128 families to either the treatment group (PLAY) or to Community Services (CS) which included speech and language therapy, occupational therapy, and public education services. In the PLAY project the families were coached and received feedback via video 15 hours per week for a total of 600 hours of parent-coaching throughout the year. This feedback included the PLAY's methods, principles, activities and techniques via PowerPoint lecture slides and video examples. Measurements included the DIR® Functional Emotional Assessment Scale (FEAS), the Maternal Behavior Rating Scale (MBRS), the Child Behavior Rating Scale (CBRS), which assesses parent and child interaction behaviors, and the Autism Diagnostic Observation Schedule (ADOS), which assesses social and communication behaviors of children with ASD. Pre- and posttest data were collected. Based on their Intent-to Treat Analysis (ITT), the researchers found overall significant improvement for the PLAY group when compared with the control group on various functional skills such as social emotional reciprocity, shared attention and initiation (CBRS, $p<.001$, FEAS-$p<.05$). In addition, based on the MBRS scale, the PLAY parents showed significant improvement ($p<.001$) in their parent-child communication and engagement (Solomon, Van Egeren, Mahoney, Huber, & Zimmerman, 2014).

Similarly, in a recent pilot randomized controlled trial in Thailand, examining the effects of DIR® model in treating preschool children with ASD, Pajareya and Nopmaneejumruslers (2011) utilized a pre-posttest baseline and measurements such as the Childhood Autism Rating Scale (CARS), The Functional Emotional Assessment Scale (FEAS), and the Functional Emotional Developmental Questionnaire (FEDQ).

They found statistical significance (p=. 031) when they compared the experimental group who received the addition of DIR®-based intervention to their routine care with the control group that received only routine care (Pajareya & Nopmaneejumruslers, 2011).

Teachers' and Staff's Perception of Music Therapy in School Settings

Music therapists who work in special education schools often collaborate with a team of professionals to formulate treatment plans for students with disabilities that aim to help them foster their development (Adamek & Darrow, 2005; Kern & Humpal, 2012). Therefore, educating teachers, paraprofessionals, and therapists within the multidisciplinary team about the benefits of music therapy is warranted.

Marpole (2011) surveyed teachers, staff, and parents about their perceptions of music therapy and its effectiveness to address IEP-based goals for students within several age groups and categories of disability. Results of the study suggest that the majority of participants found music therapy to be mostly effective in targeting social and emotional goals (92.5%) for preschoolers with a wide range of disabilities (87.5%). Yet, Marpole indicates several confounding variables that may have limited these findings, particularly those relating to parents with disabilities who required additional verbal support from the researcher to fill out the questionnaires. In addition, some parents may not have openly responded to the questions, as their sense of anonymity may had been compromised.

Music therapy consultation. Whilst evidence suggests that the use of music therapy consultation services can provide beneficial strategies for teachers and staff to be carried over to the classroom (Rickson, 2012), the therapist's competency levels and cultural understandings of norms and boundaries should be considered in order to ensure ethical practice. Rickson (2012), who developed a music therapy consultation protocol, argued that providing music therapy consultation services through which the staff can

increase their scope of knowledge about music therapy and implement music-based strategies may be of greater importance than providing direct therapy for students.

This type of collaboration is illustrated in a recent study conducted by Pethybridge (2013) in Scotland. In her qualitative study, Pethybridge evaluated the ways in which a music therapist and a nursery school teacher were involved in planning and implementing 11-week group music-based interventions for children with ASD. Themes were generated based on analysis of the teacher's semi-structured interview. Findings of this study suggest that teacher's direct involvement in the experiential portion of the session provided her with a new sense flexibility that helped her develop new teaching strategies and increase awareness "of what can be achieved through music" (p. 31).

Shared music-making. Valuable knowledge about how to support students with ASD can be further attained through understanding teachers' and staff's perception of their own involvement in shared music-making experiences with their students.

In her longitudinal qualitative study in New Zealand, Twyford (2012) investigated peers' and staff's perceptions of involvement in music therapy groups with students with developmental disabilities. Twyford aimed to help promote peer relationships while also helping to enhance skill development for the typically developed students and staff. Participants in the study included students with special education needs, two to three typically developing peers with ages ranging from five to 10, and one or two school staff members who regularly attended the session together. The music therapist facilitated musical experiences for the group that aimed to provide opportunities to promote leadership, integrate new ideas, and increase collaboration among the participants.

Over a two-year period, Twyford (2012) invited the peers and staff to reflect upon their involvement in the music therapy program through open-ended questionnaires

during and after each session. Based on their answers, Twyford identified five main themes that emerged: the concept of wellbeing through music, acquisition of musical skills, new ways of learning and relating to others, and generalization of skills. The findings in this study highlight the staff's perceptions of their own involvement. Many of them expressed a newfound, more flexible way of relating and engaging with their students through following their lead, which they felt is necessary in order to help the students maintain motivation and engagement (Twyford, 2012).

Comparatively, Boniface (2009) examined in her phenomenological designed study the perceptions of students and teachers of IMT group at a special education school in New Zealand. Specifically, she sought to explore the students' and teachers' perceptions about the use of music therapy interventions aimed toward promoting socialization that may be generalized into a classroom setting. The participants included nine students, 16-18 years old, with various developmental disabilities, a teacher-aide, and a teacher. The students and teacher-aide partook in three weeks of active music-making followed by one week of group discussion while listening to the recorded sessions. Data were collected via two interviews of the teacher and the teacher-aide who observed the group discussion videos; the teacher-aide also answered questions relating to her own experience in the music therapy sessions. Boniface (2009) concluded that the study offered, "evidence about how improvisational group music therapy can help create a positive social environment in the classroom and complement socialization goals in education" (p. 4).

Summary

ASD is a complex neurodevelopmental disorder, which presents many challenges for the individuals, their caregivers, and the professionals who are working with them. Music therapists who utilize relationship-based framework focus on tailoring developmentally appropriate musical experiences based on the clients' own individual differences in order target core features of ASD such as social and emotional capacities. While there is some evidence about teachers' involvement in music therapy with students with ASD, no research has been done that solely focuses on their experiences in shared music-making processes. Therefore, this present study aims to address this gap in the literature by exploring the phenomenon of a teacher's experience as an active participant in music therapy group session with her students with ASD.

Method

Participants

This study included a purposeful sample of a teacher who had never participated in the music therapy sessions with her students with ASD. Secondary participants included four students, primarily diagnosed with ASD, ages 12-17, and their paraprofessionals. Upon receiving approval from the Molloy College Institutional Review Board (see Appendix A), the recruitment process ensued. First, invitational emails and consent forms were sent to parents of all students who have been receiving group IMT, as they would potentially be the secondary participants in the study (see Appendix B). This step informed which teacher was recruited for this study since the students attend the music session according to their placement in class. In the next step, invitational emails and consent forms were sent to the teacher of the class (see Appendix C and D), as well as to the paraprofessionals (see Appendix E) who normally attend the music session with the students whose parents signed the consent form.

Research Design

A phenomenological design was used to collect and analyze the data. This qualitative approach allows researchers to discover the essence of lived experiences and how people construct meaning through them (Creswell, 2014; Giorgi, 1975; Husserl, 1962; Moustakas, 1994). In addition, qualitative researchers collect that data in the natural setting and analyze the data in order to establish patterns or themes (Wertz, 2005). This approach aligns with the constructivist worldview that I hold, as I sought to construct meaning of the teacher's lived experience in my session. According to Creswell (2014), constructivism is based on the principle that humans construct reality based on their lived experiences, and shape their view on the world around them through the

process of interpretation rather than through sheer observation. Thus, employing this design suited the purpose of this study, which aimed to gain an in-depth understanding of the teacher's lived experience.

Setting

The study took place in the music/art room at a special Jewish education school located on Long Island, NY, which provides academic, vocational and social services for adolescents and teens, ages 11-20.

Materials

Materials in the study included musical instruments such as handheld drums, shakers, wind chimes, cabasa, clave, a large djembe, guitar, as well as one's own voice. Recording equipment included a Samsung camcorder, which was utilized to record the music therapy session and collect the verbal and musical data. To ensure confidentiality of the study and that all ethical guidelines are met, pseudonyms were used to protect the anonymity of the participants. The data, which included a list that links the actual names of the participants, were stored in a double password-protected MacBook Air Computer to which only the researcher had access.

Clinical Procedure

The session included the implementation an IMT procedure that was adapted from Bruscia (1987) and Geretsegger et al. (2015) as follows:

1. Greeting- a familiar composed greeting song, which the therapist improvised for the group in the previous academic year. This type of experience aims to help orient the participants into the therapeutic setting while informing the therapist about their musical and emotional state (Wheeler, Sholtis, & Polen, 2005).

2. Improvisational experiences- following the greeting, IMT strategies are employed in order to provide novel musical opportunities to help spontaneously engage the group in an interactive musical-play. These interventions are informed the group's moment-to-moment interactions and supported by the music therapist's musical and verbal attunement with effort to help the group foster self-awareness, relationship building, joint attention, and social reciprocity (Bruscia, 1987; Geretsegger et al., 2015). The therapist facilitates these interventions by utilizing several clinical improvisation techniques (Bruscia, 1987) such as empathy, elicitation, and redirection, which are geared to follow the group's musical and emotional state in order to deepen their experience in the music-making (Bruscia, 1987; Carpente, 2012).
3. Closing- the session concludes by the therapist utilizing a composed goodbye song in order to provide closure and assist the group with transitioning out of the therapeutic setting (Wheeler, Sholtis, & Polen, 2005).

Data Collection and Analysis

Data collection included a semi-structured interview with the teacher at the school following the music therapy session, as well as the videotaped session. The 15-minute personal interview took place shortly after the session ended in the same room where the music therapy session was held. During the interview, I asked the teacher to reflect upon her experience in the session while utilizing verbal techniques such as amplification and reflection (Comeau, 2004) with effort to help capture the essence of her experience. By the end of the session, I collected some demographic information such as the teacher's gender, professional experience, as well as years of teaching her students in order to gain an understanding of her educational, professional, theoretical or cultural background.

Data derived from the interview and taped musical and verbal interactions in the session were then analyzed via inductive thematic analysis (Braun & Clarke, 2006). In addition, the musical and verbal data were also indexed according to the time in which they occurred. This process is essential in IMT work, as it allows the therapist to record and review all of the clients' musical or non-musical responses and transcribe them in greater detail (Bruscia, 1987).

According to Braun and Clarke (2006), this method is not limited to a specific paradigm or theoretical approach, and offers a flexible framework for coding, analyzing and reporting the emerging themes. Further, since the purpose of a phenomenological study is to understand lived experiences in order to develop universal meanings (Creswell, 2014), it was my hope that through the analysis of the emergent themes I would gain insight into the lived experience of the teacher.

Braun and Clarke (2006) describe the process of inductive thematic analysis within six phases:

1. Becoming familiar with the data while transcribing it;
2. Creating initial codes based on ideas based on the transcription;
3. Collecting and organizing the codes into potential themes;
4. Continuously reviewing the themes in order to create a map for analysis;
5. Refining the themes in order to generate clear definition of each one to the codes;
6. Reporting the data by providing vivid examples for the final phase of analysis while reverting and relating it back to the research question and literature.

Trustworthiness

In order to ensure the quality and consistency of this study, I utilized several validation strategies (Creswell, 2014) such as triangulation via multiple sources for

analysis (i.e., interview with the teacher and interactions within the music therapy session) in order to provide a full picture of the teacher's experience. To ensure the credibility of the interview, I made use of member checking for this study. After completing the transcriptions of the video recorded interview, I emailed it to the teacher. The teacher was then asked to review the transcription and confirm that the information is correct. In addition, I utilized peer debriefing via consultations with my research advisors to ensure the validly of the analysis process (e.g., coding, grouping of themes), as best described by the teacher and myself.

Epoché. As a new researcher and a relatively new Board Certified music therapist, I am aware that this dual role creates a question of trustworthiness. I have limited experience in research, and I conducted this study at my first place of hire. As a colleague of the teacher, who is the primary participant in this study, I acknowledge that she might have felt uncomfortable making any negative statements during the one-on-one interview regarding her experience. However, the teacher was encouraged to give her honest thoughts and opinions for all the interview questions, and was offered additional outside resources if she felt the need to clarify any responses that she may felt to be uncomfortable.

I am aware that I possess a firm approach to therapy for individuals with ASD, which is heavily rooted in humanistic philosophies. As a result, I believe all human beings, regardless of their pathology, have individual differences that they can build upon through self-actualizing a sense of agency and potential in their life. Therefore, I believe that my job as a music therapist is to facilitate and a guide my clients' process where the emphasis is on providing them with opportunities to bring about their own change through an abundance of empathy, support, and patience.

Further, I strongly believe that social relationships are fundamental for healthy living. Hence, I work within a relationship-based framework that focuses on nurturing the growing therapeutic relationship in order to provide my clients with a safe space in which they can gain a sense of trust and desire to meaningfully engage and enter a shared world.

These core values also play a great part in the way I perceive the music-making process. I see music as a health domain on its own, in that how we make music reflects how we perceive ourselves, how we relate to others, and how we view the world around us. Therefore, I believe that utilizing a broad range of novel musical experiences in a spontaneous manner, such as through Improvisational Music Therapy (IMT), is essential for a flexible musical expansion, which may subsequently help to promote growth in other domains of health (e.g., social, cognitive, motor, etc.). Moreover, it is my hope that the results of this study will also help promote the utilization of IMT for individuals with ASD across all types of educational and clinical settings.

I am aware that these aforementioned philosophical and theoretical orientations impacted my process of analysis of data and the study's findings. In order to account for these biases, I utilized validation strategies (Creswell, 2014) such as member checking, triangulation, and peer debriefing to increase trustworthiness and validity of my study.

Results

The purpose of this study was to explore the lived experience of a teacher in one IMT session with her students with ASD at their special education school. Findings of this study are presented via a qualitative thematic analysis that was based on the transcriptions of the teacher's interview and videotaped music therapy session.

Participants

The identities of the participants are protected through the use of pseudonyms. The main participant, who will be referred to as "Debra," is a 34-year-old female who has been working at the school for the past nine years and has been co-teaching the students (secondary participants) for the past two years. According to Debra, some of her duties include conducting assessments, creating individualized programs for each student, as well as formulating educational and behavioral plans based on Discrete Trial Testing (DTT) that focus on communication, social skills, behaviors, and activities of daily living. While Debra has never participated in the music therapy sessions, she had observed the students during their music therapy intake session in the beginning of the previous academic year. Secondary participants included four students ages 12-17 with a primary diagnosis of ASD. They will be referred to as "Zachary", "Sean", "Gal", and "Maya", as well as their paraprofessionals who will be referred to as "Para 1", "Para 2", "Para 3", and "Para 4." Since the researcher is also the clinician, she will be referred to as "the therapist." The therapist began her professional career as a music therapy contractor for the school in 2015. She sees four classes on a weekly basis. Each class has between four and 10 students with a primary diagnosis of ASD who attend their 30-minute IMT group at the art/music room on the first floor.

Thematic Results

The data in this study consisted of the transcriptions of Debra's interview along with transcriptions of the videotaped musical and verbal interactions, which were indexed according to the time at which they occurred. This process was done to examine any correlations between what Debra described in her interview and the therapist's own interpretation of the session as both the researcher and the clinician. In addition, during the bracketing process of the interview, several categories were derived as part of the inductive process. The categories included Debra's reflections on the following:

1. Reflections on the process of making music
2. Reflections on the students
3. Reflections on the therapist
4. Reflections on the therapeutic process
5. Reflections on the acquisition of new knowledge derived from observing or participating in the session.

However, these categories were not refined further, but rather cross-analyzed alongside the musical and verbal data from the session, which were essential to the inductive process of capturing Debra's experience.

Through this process of thematic analysis, four essential themes emerged: a) cultivating relationships; b) following the students' lead; c) observing students from a different lens; and d) gaining and integrating new knowledge. These themes are presented in the following sections along with excerpts from the interview and transcriptions of the recorded musical and verbal interactions in the music therapy session to support the findings.

Theme 1: Cultivating relationships. Throughout the interview, Debra made several comments in which her experience of nurturing and discovering relationships through the music-making process was highlighted. Debra expressed how making music "…was a nice way to bond, a way to let go, and be more vulnerable with yourself in a way." Debra's sense of emotional connection with her students was captured when she expressed the following:

> I wanted to see the kids in action, and them enjoying themselves. I love watching them enjoying experiences that they normally do not get, so even though now it [music therapy] is part of their routine and they are excited for it, it is just nice to see them engaged in it. I just enjoy seeing them happy! [exclaiming and laughing].

Debra also reflected on the nature of the therapist's relationship with the students and conveyed her perception of its role in their therapeutic process. For example: "You know how even though they had their stance and their distraction, they came right back to you when you sang to them [laughing], and I thought it was nice to see." Transcriptions of Debra's musical and non-musical responses (e.g., facial expressions and/or body movement) during the session revealed several moments when Debra seemed to discover a musical relationship with some members of the group. This was evident in three different interactions, which will be described in the following sections.

Excerpt 1: Debra and a student (13:34). The therapist creates a call-and-response section during improvisatory musical play in C major and verbally cues Sean and Debra to take a turn at playing solo together on their instruments; the therapist briskly plays on guitar a F-C-G-C chord progression in 4/4 meter and provides musical support by utilizing several clinical improvisation techniques such as rhythmic grounding clinical

technique (i.e., strums on the first beat of every measure then taps the next three beats), and empathy technique (i.e., synchronizing with Sean and Debra's rhythm). Debra looks and smiles at Sean who smiles back at her; Debra plays four beats on the drum in a legato-like manner that seems to imitate Sean's tender movement on the wind chimes; Sean turns his body around and sustains purposeful engagement with Debra for 16 musical measures.

Excerpt 2: Debra and Para 1 (22:16). Para 1 takes a turn at singing solo during the call-and-response swing-like improvisatory musical play in F major 4/4 meter; he makes percussive sounds with his voice, mouth, and lips in a syncopated manner (i.e., beatboxing) while the therapist utilizes an empathy technique (e.g., she reflects Para 1's vocalization while tapping with the tip of her fingers on the edge of the guitar). Debra then spontaneously joins Para 1 as she improvises a rhythmic pattern on the drum consisting of two quarter-notes followed by three eighth-notes while nodding her head to the beat and smiling at Para 1 during 16 consecutive musical measures.

Excerpt 3: Debra and the therapist (21:28). Swing-like improvisatory musical play in F major 4/4 meter; the therapist sings "La la la" while strumming an F major chord and utilizing elicitation technique of making spaces to elicit responses from the group (e.g., plays on the first beat of each measure then mutes her guitar while exaggerating her facial expression in anticipatory manner). Debra then fills in the space by singing "La la la" in an operatic manner while smiling at the therapist who then plays a C major chord and sings "La la la" on a different harmonic interval while looking back at her with a smile; Debra improvises new harmonic intervals and rhythmic patterns on "La" in a syncopated manner while smiling at the therapist during eight consecutive musical measures.

Theme 2: Following the students' lead. While reflecting on the therapeutic process, Debra made comments about how meaningful it was for her to watch the students engage in novel musical experiences and how following the students' lead seemed to have deepened their experience in the session. She reflected:

> They seemed responsive like 'oh, I am thinking randomly about a monster truck and now she's singing about one!' [laughing]...so you know, it is nice, especially in a classroom setting, trying to redirect them back to topic, but when you are making the topic and you are working around *their* words, [exclaiming] that was so nice for me to watch them, but probably more special for *them* [exclaiming] to experience that.

Debra also made several comments in which she expressed how she found the therapist's student-led approach to be important for the students. For example: "It was really nice to see some of the kids calling out and then you incorporated it; it made what they said and current thought validated, that stood out to me."

Debra's expressions also correlate with the transcriptions of a musical interaction, which captured a moment when her musical and affective expressions during an intervention with Sean helped to shape a clinically significant moment for him. This interaction will be illustrated in the next section.

Excerpt 1 (22:44-23:30). Swing-like improvisatory musical play in F major 4/4 meter; Sean initiates a spoken phrase, "Go back to sleep!" in an authoritative tone of voice; the therapist then reflects Sean's expression as she sings, "Oh no! I am feeling so sleepy, somebody wake me up!" while utilizing an empathy technique of exaggerating her prosody and facial expression (i.e., leaning on her guitar and making snoring-like sounds while pretending to sleep). Debra then imitates the therapist's expression as she

leans on her own lap and then on Sean's shoulder while pretending to sleep. The therapist asks Sean, "How should I wake up?" Sean responds by pulling his wheelchair closer to her and reaching his hand over to hers while smiling. The therapist holds Sean's hand and says in an anticipatory tone, "We are going to wake up together. Ready?" then exclaims, "Wake up!" in a deep-toned voice while lifting their hands together; Sean laughs aloud. Debra joins the therapist by playing tremolo on the drum in a celebratory manner in fortissimo; the therapist matches Debra's energy and sustains a G7 chord in a majestic manner, which she resolves to C major, musically cueing the entire group to join back in the interaction.

Theme 3: Observing students from a different lens. On several occasions, Debra reflected on how important it was for her to observe her students in the session. She expressed feelings of excitement and curiosity prior and during the session about having the opportunity to watch them interact more closely. She described: "I also think that the two that I was very interested in seeing was how Zachary would interact and Gal, too, as he is a very unique individual." Debra also indicated that throughout the session she sought to examine some specific behaviors and levels of engagement amongst the students, and that observing them in the session had allowed her to compare certain behaviors to the ones she had observed in the classroom. For example: "It was interesting to see how [the students] would wind down with it, like the different behaviors like the ones that we experience with Maya."

Transcriptions of the data derived from the music session, in which Debra's affective expressions were also recorded, indicated several moments in which she appeared curious, as evidenced by her facial expressions (i.e., eyes open wide), as well as by her body movement and eye gaze (e.g., leaned over to Zachary and Sean who sat next

to her while continuously looking at them and the therapist during each intervention). An example of a recorded observation is portrayed in the next section.

***Excerpt 1* (24:27).** Zachary appears withdrawn as evidenced by his low posture and facial expression (i.e., flat affect). The therapist moves closer to Zachary's visual space and softly sings the phrase: "What about Zachary? What about Zachary? What about Zachary? You can sing with us if you like to," while she utilizes an empathy technique as she gently plucks a FM7-G7-FM7-G7-CM7 chord progression on guitar that provides a supportive harmonic space for Zachary; Debra watches Zachary while glancing at him and intermittently leaning over to him with a smile; she joins the therapist by softly playing a steady beat on the drum on every second beat for eight consecutive musical measures.

Theme 4: Gaining and integrating new knowledge. Debra made several comments on how her experience in the session had provided her with the opportunity to gain new perspectives about the students' abilities to attend, communicate, memorize, and problem-solve in a shared manner. She also indicated that she had not seen some of these abilities in her classroom. She described:

> It was also nice to see how they remember things from the past because for them to recall things is not always easy; we do not always get a straight answer, like for example, I would ask them what did they do a week ago, unless it was a big monumental thing, they will not be able to tell me…I like seeing how they [Maya and Sean] were arguing like 'no I want to do the goodbye song; no I want to do so long to music' [laughing]… like, 'there are two songs I like, and now we are going to fight back and forth which one we get to sing!' [exclaiming while smiling].

Debra also conveyed how her experience in the session made her realize the significance of music therapy process for her students. She enthusiastically described: "I feel good about sending the students down [to music] and to know, and this is actually a good thing for you too [laughing], to know that this [music therapy] is monumental too." Debra then related this impression to her experience of observing the students in their music therapy intake session in 2015 and explained how that experience had provided her with additional tools to communicate with her students throughout their day. She described: "I actually sing quite a bit after last year I had remembered just observing how it worked, and I was like, 'oh my gosh.'"

In addition, Debra expressed her desire to integrate her knowledge derived from her experience in the session, such as implementing music-based strategies with one of her students. She expressed: "If I ever needed Sean's attention I think for sure I will just sing to him my questions and see what comes up."

Summary

The thematic results revealed that, for Debra, participating in her students' music therapy session for the first time provided her with opportunities to foster relationships with the group members while experiencing a sense of joy, curiosity, and excitement. Debra's spontaneous musical and affective expressions seemed to offer invaluable support for her students that was particularly evident when she joined the therapist during an intervention she tailored around Sean's musical and verbal lead.

While reflecting on her experience in the session, Debra conveyed how observing her students in the session had allowed her to assess their abilities and realize some of their strengths for the first time. Gaining this new knowledge about her students, Debra expressed her overall appreciation for the therapist's student-led approach and the role

that music therapy plays in the wellbeing of the students. She also expressed that she plans to integrate that knowledge by implementing music-based communicative strategies in the classroom with her students.

Discussion

The purpose of this phenomenological study was to examine the lived experience of a teacher who participated in one IMT session with her students with ASD. The participants in the study included a teacher, referred to as Debra, four of her students, ages 12-17 with a primary diagnosis of ASD, and each of their paraprofessionals. Data derived from the interview with Debra and the videotaped music therapy session were collected and analyzed according to a phenomenological thematic analysis protocol (Braun & Clarke, 2006) through which four essential themes emerged and presented: a) cultivating relationships; b) following the students' lead; c) observing students from a different lens; and, d) gaining and integrating new knowledge.

These thematic results provide insight into Debra's experience in her first music therapy session with her students, which seem to offer additional qualitative evidence about the contribution that this type of investigation can bring for teachers, students, and music therapists at a special education setting. Specifically, the findings in the study highlight some of building blocks of relationship-based framework in music therapy and the value it may bring when working with students with ASD. For example, Debra made several reflections about how she had found it beneficial for her students that the musical interventions were tailored around their moment-to-moment expressions, which resulted in the theme of following the students' lead. This thematic finding supports the findings in Twyford's (2012) longitudinal study in which staff reflected on their own involvement in the music therapy session with their students with ASD. They conveyed how they found the process of utilizing client-led interventions to be essential in helping students to foster motivation, engagement, and social skills in the classroom.

Importantly, Debra made several comments about her desire to compare some of

her students' behaviors to the ones she typically sees in the classroom. Reflecting on the opportunity to observe the students' musical and verbal responses while in the session, Debra expressed how participating in the session had allowed her to discover some of their new abilities in the areas of joint attention, communication, memorization, and problem-solving. Upon witnessing the students' abilities for the first time, Debra conveyed her overall positive impression of music therapy for her students and its meaningful role in their routine at school. This thematic finding of observing students from a different lens offers apparent support to the qualitative findings in Thompson and McFerran's (2015) study. Thompson and McFerran found that caregivers expressed how their process of active music-making with their children, along with opportunity to reflect upon their experience, had provided them with creative ideas to engage with their children while interacting with them in their natural environment.

Significantly, this theme of observing the students from a different lens supports the thematic findings in a recent study about a partnership between a music therapist and a nursery school teacher who collaborated in implementing music-based interventions for students with ASD (Pethybridge, 2013). The teacher expressed how the active involvement in the group music therapy process had helped enhance her understanding of her students' abilities such as in the areas of self- expression, initiation of ideas, imitation, and joint attention. Similarly, both Debra and the nursery school teacher commented how they found the uniqueness of improvisational music-making process to be of importance for their students. While Debra's experience did not include music therapy consultation for future implementation of music-based interventions in the classroom as did the experience of the teacher in Pethybridge's study, both teachers expressed that collaborating with the music therapist and their students in the music

therapy sessions had enhanced their desire to utilize song-based interventions in the classroom. Thus, the theme of gaining and integrating new knowledge in this present study offers additional support to Pethybridge's study and illuminates the potential benefits that students with ASD may gain from this exclusive collaboration.

Furthermore, the desire to connect with her students that Debra expressed in the interview and the emerging musical relationships during the music-making process that were captured in the videotaped session appeared to play an important role in the therapeutic process for the students. This was particularly evident in Debra's comments about taking pleasure at seeing her students' enjoying themselves, as well as in her spontaneous expressions in the session. Significantly, Debra's musical and affective attunement to one of her students (Sean) seemed to contribute to a clinically significant therapeutic moment for him where he sustained prolonged purposeful engagement while appearing spirited and related. The thematic result of cultivating relationships highlights an important element in a relationship-based framework where emotional or musical attunement, derived from preexisting or emerging relationships, plays an essential role in the therapeutic process (Aigen, 2014; Birnbaum, 2014; Carpente, 2011; Greenspan, 2006; Mahoney, Huber, & Zimmerman, 2014; Nordoff & Robbins, 2007).

Interestingly, Debra's highlighted experience within the theme of cultivating relationships may also reflect the phenomenon of the intersubjective experience in IMT work (Birnbaum, 2014). Birnbaum (2014), who examined the correlation between the intersubjectivity theory, derived from psychotherapy practice (Mitchell, 1988; Scharff & Scharff, 2011; Stern, 1985, 1990; Stolorow, 1988; Traverthern, 1988; Wayne, 2008), and Nordoff-Robbins Music Therapy (NRMT), conveyed how the music-making process, particularly with an improvisational approach, reflects the fundamental mechanism of

spontaneous human interactions (conscious or unconscious expressions), such as those that occur within the intersubjective experiences of infants and caregivers. Birnbaum (2014) explained: "When we engage in musical interactions, we are constantly reacting to and influencing the other's unconscious," (p. 32) and "the relationship created in music can be seen as an intersubjective field, the shared space in which communication and growth can take place" (p. 32). Therefore, while it is hard to ascertain the motivational source for Debra's musical and affective expressions, it seems that these sources may have "led them [her] to a bonding that was expressed in their [her] musical attunement...and that her "experience of creating together, in turn, strengthened this bond" (Birnbaum, 2014, p. 36).

Limitations

There were several limitations in the study. The first limitation was that the recruitment process was very long. While I was able to utilize a purposeful sampling of the main participant (Debra), the process of obtaining consent forms from the students' legal guardians limited which music therapy session could be videotaped, and thus, which teacher would be invited. The study's small sample size of one principal participant also presented limitations, as it may have limited the ability to construct additional universal meanings of the phenomenon examined. Data were not collected to the point of data saturation, as would be recommended in future qualitative research. Last, having the dual role as the researcher and the clinician in the session may have created biases while conducting the study. It is my hope that through the process of establishing trustworthiness I conveyed reflexivity by openly and honestly reflecting on my personal, clinical, and philosophical stance.

Implications for Music Therapy Practice

The findings in the study helped to generate some insight about the experience of the teacher who participated in one IMT session with her students with ASD. Data derived from the study highlighted clinically significant gains for one of the students when the teacher musically and affectively collaborated with the music therapist. In addition, the teacher expressed on multiple occasions how she found it to be beneficial to have had the opportunity to closely observe her students and conveyed her appreciation for my student-led treatment approach. Therefore, it would be important to provide teachers with the opportunity to actively engage with their students in IMT sessions in which they could experience novel ways to interact with them. This may also enhance their knowledge about the therapeutic benefits of this approach, particularity at behaviorally-driven school settings such as where this study was conducted, where the value of relationship-based interventions may not be fully recognized.

Recommendations for Future Research

There remains a great need for future research about the phenomenon of teachers' experiences in IMT sessions with their students with ASD. This present study is the only one that solely focuses on a teacher's experience in an active music-making process with her students with ASD. Therefore, it would be important to examine this topic while utilizing a larger sample size over a longer period of time in order to gain a deeper understanding of teachers' lived experience in IMT with their students with ASD. In addition, providing teachers with multiple opportunities to observe the videotaped music therapy session and journal their reflections may enhance their reflective processes that could help them gain additional insights into their own experience. In turn, this may allow for more opportunities to interpret and analyze their experiences in greater depth.

Conclusion

This was a phenomenological inquiry that provided the first qualitative evidence about the lived experience of a teacher who participated in IMT with her students with ASD. The thematic results support previous research that revealed how teachers, who were directly involved in music therapy sessions with their students, have gained flexible ways to interact with their students and realize their abilities in several developmental areas (Pethybridge, 2013; Twyford, 2012). In addition, this investigation provided Debra with a unique opportunity for meaningful engagement with her students where she gained access into her students' emotional world. Therefore, evidence from this study sheds light on the value that this type of investigation can bring to teachers and students, in addition to bridging the gap in understanding teachers' experiences in music therapy processes with students with ASD (Boniface, 2009; Kern & Aldridge, 2006; McFerran, Thompson, & Bolger, 2015; Pethybridge, 2013; Rickson, 2012; Twyford, 2012).

Furthermore, the essence of teacher-student relationships plays an important role in the wellbeing of students in special education settings (Alderman, 1999; Birch & Ladd, 1997; Graziano, 2016; Pianta, Steinberg, & Rollins, 1995; Pianta, 2004). Therefore, examining the experiences of teachers in music therapy sessions with their students with ASD may offer an additional insight about the role of teacher-student relationships that inherently grow during the dynamic IMT processes and carry over to the classroom. As a result, this unique collaboration between music therapists and teachers may offer teachers the opportunity to strengthen their relationships with their students and conceptualize their strengths and needs more comprehensively, thus offering them the best chance to maximize their potential.

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Appendix A
IRB Approval Letter

Molloy College

1000 Hempstead Avenue
Rockville Centre, NY 11571
www.molloy.edu

Tel. 516.323.3801
Tel. 516.323.3711

Date: December 12, 2016
To: Professor Suzanne Sorel for Inbar Kaplan
From: Kathleen Maurer Smith, Ph.D.
Co-Chair, Molloy College Institutional Review Board
Patricia Eckardt, Ph.D., RN
Co-Chair, Molloy College Institutional Review Board

SUBJECT: **MOLLOY IRB REVIEW AND DETERMINATION OF EXPEDITED STATUS – MUS 551**
Study Title: **A Teacher's Experience in Improvisational Music Therapy with Her Students with Autism Spectrum Disorder: A Phenomenological Inquiry**
Approved: **December 12, 2016**
Approval No.: **09110116-1205**

Dear Professor Sorel / Inbar Kaplan:

The Institutional Review Board (IRB) of Molloy College has reviewed the above-mentioned research proposal and determined that this proposal is approved by the committee. It is considered an EXPEDITED review per the requirements of Department of Health and Human Services (DHHS) regulations for the protection of human subjects as defined in 45CFR46.101(b) and has met the conditions for conducting the research. Please note that as Principal Investigator (PI), it is your responsibility to be CITI Certified and submit the evidence in order to conduct your research.

You may proceed with your research. Please submit a report to the committee at the conclusion of your project.

Changes to the Research: It is the responsibility of the Principal Investigator to inform the Molloy College IRB of any changes to this research. A change in the research may change the project from EXPEDITED status that would require communication with the IRB.

Sincerely,

Kathleen Maurer Smith

Kathleen Maurer Smith, Ph.D.

Patricia Eckardt, Ph.D., RN

Appendix B
Invitation Email and Consent Form for Parents of Students

Invitation and Consent Form for Parents of Students

Dear Parent or Guardian,

Your child is invited to participate in a research study designed to investigate the experience of their teacher in a one of their regular music therapy sessions. This study, titled, *A Teacher's Experience in Improvisational Music Therapy with her Students with Autism Spectrum Disorder: A Phenomenological Inquiry*, is part of my thesis study as partial fulfillment for my completion of the Master of Science degree in music therapy at Molloy College. If you give consent for your child's involvement in the study, one of the weekly music therapy sessions that your child receives will be video recorded so that the session can later be analyzed.

The data for the study will be based on an interview with the teacher at the end of the session, as well as on the clinical musical interactions between the therapist (me), the teacher, your child, his/her peer, and the paraprofessionals.

Giving consent will not affect your child's services at the school – he or she will continue to receive music therapy whether or not consent to participate in the study is granted – it will simply give permission for data from the video recording to be included in the research study. Video data will be double-password protected and the name of your child will be kept confidential. Your child may benefit from collaborating with his/her teacher in music for the first time, and there are no direct foreseen risks to participating in this research. Participation is voluntary, which means your child does not have to participate and will not be penalized for not participating. In addition, you may withdraw your child from the study at any time without giving reason and without penalty.

If you have any questions, you can contact me by phone or email, or my supervisor Dr. Yasmine Iliya at yiliya@molloy.edu. If you agree to have your child participate, please complete this form and return to the school before TBD. Questions about your child's rights as a study participant may be directed to the Molloy College Institutional Review Board at: irb@molloy.edu or 516-323-3000.

Thank you for your consideration. Best Regards, Inbar Kaplan, MT-BC. Tel: (xxx) xxx-xxxx ikaplan@lions.molloy.edu.

I agree to have my child, _____, participate in this research study and be video recorded during the course of the study. I understand that this documentation will be used for research. His/her name will be changed in the study to protect confidentiality. All recordings will be kept safe and confidential.

_____ _____

Signature **Date**

Appendix C
Invitation Email for Teacher

Invitational Email for Teacher

Dear _____

My name is Inbar Kaplan and I am a graduate music therapy student at Molloy College in New York. As part of the requirement for my program, I am conducting a research study titled, *A Teacher's Experience in Improvisational Music Therapy with her Students with Autism Spectrum Disorder: A Phenomenological Inquiry*. The purpose of my study is to examine the lived experience of a teacher who will participate in one, 30-minute improvisational music therapy session with her students with Autism Spectrum Disorder at their school.

You have been contacted and considered eligible for the study because you meet the following criteria:

- You are a teacher at the school and you have never participated in the music therapy sessions with your students.
- You may be comfortable to join your students in one of their sessions and then openly share your experience during a 15 -minute personal interview, which will take place at the end of the session. You will be asked to provide some demographic information and then reflect upon your experience in the music therapy session. The music therapy session and interview will be video recorded and transcribed. About two weeks after the interview, you will be asked to review the transcription of the interview to ensure its accuracy.

All videotaped and written data will remain anonymous and confidential. I will use pseudonym identifiers rather than your name in my study records. Your name and other facts that may identify you will not appear when I present this study or publish its results. Data will be stored and secured with access only granted to the researcher (me).

Participation in this study is completely voluntary, and you may withdraw from the study at any time. If you would like to participate in this study, please respond to this email with a signed consent form. Please respond by Tuesday, February 7th, 2017 to participate in the study.

If you would not like to participate in this study, please disregard this email.

If you have any questions about the study, please feel free to contact me via phone and email, or my supervisor, Dr. Yasmine Iliya at yiliya@molloy.edu. Questions about your rights as a study participant may be directed to the Molloy College Institutional Review Board at: irb@molloy.edu or 516-323-3000

Thank you for your consideration.

Best Regards, Inbar Kaplan, MT-BC, Molloy College.

Tel: (xxx) xxx-xxxx ikaplan@lions.molloy.edu

Appendix D
Consent Form for Teacher

Consent Form

My name is_____

An explanation of the procedures to be employed in the study, *A Teacher's Experience in Improvisational Music Therapy with her Students with Autism Spectrum Disorder: A Phenomenological Inquiry*, in which I have voluntarily agreed to participate, has been offered to me via email by the primary investigator, Inbar Kaplan, a graduate music therapy student at Molloy College in New York. All my inquiries concerning the study have been answered to my satisfaction. I understand that the information collected will be held in confidence, and that my name will not in any way be identified. I understand that additional information about the study results will be provided at its conclusion upon my request. I know that I am free to withdraw from this study without negative consequences at any time. I give my permission to be videotaped during the music therapy session and interview. I understand I will receive a signed copy of this form.

Signing your name below indicates that you have read and understood the contents of this consent form, and that you have voluntarily agreed to participate in this study. Please sign your name and send it back by Tuesday, February 7th, 2017, at the following e-mail address: ikaplan@lions.molloy.edu

If you have any questions about the study, please feel free to contact me or my supervisor, Dr. Yasmine Iliya at yiliya@molloy.edu. Questions about your rights as a study participant may be directed to the Molloy College Institutional Review Board at: irb@molloy.edu or 516-323-3000.

Thank you for your consideration.

Best Regards,

Inbar Kaplan, MT-BC

Tel: (xxx) xxx-xxxx ikaplan@lions.molloy.edu

_____ _____

Participant's Signature **Date**

_____ _____

Researcher's Signature **Date**

Appendix E

Consent Form for Paraprofessionals

Consent form for Paraprofessionals

My name is_____

An explanation of the procedures to be employed in the study, *A Teacher's Experience in Improvisational Music Therapy with her Students with Autism Spectrum Disorder: A Phenomenological Inquiry*, in which I have voluntarily agreed to participate, has been verbally offered to me by the primary investigator, Inbar Kaplan, a graduate music therapy student at Molloy College in New York. All my inquiries concerning the study have been answered to my satisfaction. I understand that the information collected will be held in confidence, and that my name will not in any way be identified. I understand that additional information about the study results will be provided at its conclusion upon my request. I know that I am free to withdraw from this study without negative consequences at any time. I give my permission to be videotaped during the music therapy session and I understand I will receive a signed copy of this form.

Signing your name below indicates that you have read and understood the contents of this consent form, and that you have voluntarily agreed to participate in this study. Please sign your name and send it back by Tuesday, February 7th, 2017, to the following e-mail address: ikaplan@lions.molloy.edu

If you have any questions, you can contact me by phone or email, or my supervisor Dr. Yasmine Iliya at yiliya@molloy.edu. Questions about your rights as a study participant may be directed to the Molloy College Institutional Review Board at: irb@molloy.edu or 516-323-3000.

Thank you for your consideration.

Best Regards, Inbar Kaplan, MT-BC.

Tel: (917) 656-0980

ikaplan@lions.molloy.edu

_____ _____

Participant's Signature **Date**

_____ _____

Researcher's Signature **Date**

Appendix F

Interview Questions

Demographic Information:

1. Can you provide a brief description of yourself? (e.g., age, ethnicity, professional and educational background)
2. How long have you been teaching at the school?
3. How long have you been teaching the students in this classroom?
4. What are some of your responsibilities throughout the day?
5. Did you have any previous knowledge about music therapy prior to the launching of this one?

Interview Questions:

1. Can you describe your experience the music therapy session today?
2. Can you reflect more about your own process of music-making? What was it like for you to make music with your students for the first time?
3. How did you feel about the idea of joining your students in the session?
4. Was there anything in session that stood out to you? If so, please describe
5. Is there anything else would like to add about your experience and/or feelings when considering the parts of the sessions such as the beginning, middle and end?