Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

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#### **ABSTRACT**

The impact of multiple disabilities causes difficulties in the area of communication. Individuals with severe and multiple handicaps often have no verbal language as a result of serious physical impairments. This population may show little obvious response and it is therefore difficult to know if they are engaged and for the person him or herself to maintain engagement when involved in activities. The purpose of the study was to find out what happens in a normal music therapy session, during moments of perceived engagement. Four individuals experienced in the field of multiple disabilities were invited to take part in semi-structured interviews where they observed a half hour video of a therapist and a student with severe and multiple handicaps participating in music therapy. Data was analyzed in two steps, firstly through participants observing and explaining their reactions to video of music therapy and secondly by the researcher interviewing the participants and writing up a transcript of their commentaries about the video. The key themes that emerged in participants' descriptions of engagement during moments in music therapy suggest it is possible to observe and identify engagement as reflected in the students' non-verbal responses, such as body movement, eye contact and vocalizations.

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#### CHAPTER I

#### INTRODUCTION

### 1.1 The source of the study

The basis for my research originated from the thoughts and feelings I experienced when working at a special needs school with students who presented with communication difficulties due to multiple and severe handicaps. I often felt a high level of engagement during music therapy and would notice that the student was aware and interested in the music I sang and played on the guitar, because of eye contact, attention directed at me or instruments I was playing, an attempt to lean forward and touch the instruments I was playing, or smiling in response to changes in the music. After the session I wondered whether the experience was the same for both the student and me, as the student was unable to verbally communicate and confirm what I was interpreting to be moments of engagement. I thought that other people who are experienced in the field of multiple disabilities such as teacher aides or other therapists, who are part of the multidisciplinary team, and have worked with the client over a long period of time, might have a better understanding of the clients I work with and can read what the client is trying to convey based on the observational pattern developed over time that results in interpreting the clients responses in such a way. I set out to explore in detail what I and other professions think engagement is, to gain multiple perspectives.

I am interested in engagement and interlocking in the moment, what happens in the moment as referred to in studies of meaningful moments during music therapy (Amir, 1992; Craig, 2007), that motivate engagement. Engagement is complex to describe and is dependant on many elements. The purpose of my present study is to explore issues of engagement, as defined and interpreted by the participants in the study. To interpret is to unravel, understand and clarify the observable changes, gathered by using qualitative methods, analyzing video and interview material to document these changes.

### 1.2 Research questions

What happens in a normal music therapy session that looks like engagement?

What do others think?

How do the client and student music therapist engage within a session in music therapy?

A qualitative approach is taken to explore these issues.

#### CHAPTER II

#### RELATED LITERATURE

The review of the literature will outline relevant studies to the research topic in music therapy, raise some of the methodological challenges for study in the field of severe and multiple handicaps and introduce trends of investigation in music therapy, particularly the use of microanalysis. The chapter will be divided into the following main sections:

- 1. Defining and introducing the field of 'children with special needs'.
- 2. Specific problems of 'engagement' as a concept.
- 3. Growth of microanalysis in music therapy and other fields.

# 2.1 The child with special needs and the role of music therapy in education and care

#### 2.1.1 Defining the term 'special needs'

Within special needs population areas, there are many diagnoses (Goodman, 2007; Michel, 1985; Olson, Platt & Dieker, 2008). Children's needs can be approached from a developmental perspective. Development involves refining, improving and expanding on the existing skills acquired through the process of growth (Hooper & Umansky, 2009, p. 44). The range of development is considerable as everyone develops at a different pace, and this is unique to each individual. Recognizing these individual differences in the development of children is the basis for determining special needs (Hooper & Umansky, 2009, p. 45).

Individual differences are grouped into categories to describe the general disability of the child. The Individual with Disabilities Education Act (IDEA) in America defines children with disabilities as those children with mental retardation, hearing impairments including deafness, speech or language impairments, visual impairments including blindness, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury,

other health impairments, specific learning disabilities, deaf-blindness, or multiple disabilities (Goodman, 2007, p. 181; Hooper & Umansky, 2009, pp. 25-26; Olson, Platt & Dieker, 2008, pp. 4-5). However, difficulties or delay in a child's pattern of development might not always appear to fit under just one disability category as noted by Michel (1985, p. 19), individuals are likely to be affected by more than one disabling condition, for example they may be multiply disabled, which makes any one label of any kind greatly inadequate.

Children having delayed development result in diagnosable conditions and complex needs affecting a range of domains. The concept of multiple disabilities indicates that it is unlikely that a child will be handicapped or disabled in one way only. Children whose primary need is considered to be physical may be disabled as a result of birth defects, such as cerebral palsy, brain damage, debilitating disease (encephalitis, meningitis, poliomylitis), or disabling accidents. The specific challenges for physically disabled children can include sensory disabilities such as vision (including the blind), hearing (including the Deaf), speech and language disabilities (ranging from articulation difficulties to aphasia), and locomotion/coordination disabilities (from walking to eyehand coordination). The term 'multiply disabled' is therefore used to describe an individual who has disabilities in two or more areas of development.

The term 'children with severe disabilities', as described under the IDEA disability category, refers to children with disabilities who, because of the intensity of their physical, mental, or emotional problems, need highly specialized education, social, psychological, and medical services in order to maximize their full potential for useful and meaningful participation in society and for self-fulfillment. The term includes those children with disabilities with severe emotional disturbance (including schizophrenia), autism, severe and profound mental retardation, and those who have two or more serious disabilities such as deaf-blindness, mental retardation and blindness, and cerebral palsy and deafness (as cited in Goodman, 2007, p. 203). A main characteristic common across persons with severe physical disabilities, is motor impairment, primarily responsible for

their difficulties with spoken and written communication (Cumley & Jones, 1992, p. 240).

## 2.1.2 General issues in the area of communication for people with special needs

Individuals with special needs present with a variety of abilities, disabilities, strengths and intervention needs. They often have significant limitations in their use of formal language and their potential for normal development, particularly in the area of communication development. With clients who have multiple disabilities in particular, there is often a total lack of verbal language, and therefore they need other media of communication for self-expression and to interact with their surroundings (Wigram, Pedersen & Bonde, 2002, p. 169).

Children with severe physical disability may develop alternative means of communicating using vocal sounds, gestures, body movements, facial expressions, and eye contact. The difficulty with this, Perry (2003) notes, is that people with severe and multiple disabilities may show a low level of responsiveness, and the idiosyncratic responses they do make may be ignored or misinterpreted by others. Boswell and Vidret (1993) suggest that one must go beyond the surface events and appearance to experience the meaningful and to make connection with the person inside the physical body. Working with students with severe and profound impairments requires that one looks beyond the superficial characteristics and communicates with the inner person.

# 2.1.3 Music Therapy: A medium of communication for self-expression and interaction

A wide range of music therapy methods have been reported in the literature to meet the needs of people with severe and profound disabilities. Used in a therapeutic way, music can encourage contact and communication. Music can provide a raw form of non-verbal communication, where the therapist uses the elements of music with this population to

create communicative intentionality and shared meaning, by the development of a shared repertoire of events that have meaning and context for therapist and client (Wigram, Pedersen & Bonde, 2002, p. 171). The therapist and client participating in music therapy are like two people participating in a conversation, they require something in common which they can share. Once this is established, the clients' communication skills can develop. During music therapy, the therapist responds to and acknowledges the client's vocal, physical, instrumental responses in the music. Any change in the client's movements and facial expression for example can be interpreted as feelings and are also reflected in the therapist's music. In this way the client is able to hear his or her own feelings being accepted and supported, at the same time discovering and developing his or her own way of communicating using non-verbal methods such as music.

# 2.1.4 Research related to the use of music therapy to meet the communication needs of severe and multiply disabled individuals

Music therapy literature presents evidence that suggests music therapy is both a suitable and an effective form of intervention for this population (Boswell & Vidret, 1993; Elefant & Wigram, 2005; Stevenson, 2003; Wigram, Pedersen & Bonde, 2002, pp. 169-175).

A number of music therapy studies focusing on communication with people who have severe and multiple disabilities, have been conducted. Expressive communication is a problem for this population and as noted by Perry (2003), there is a need to understand how music therapy can be related to general issues in communication for individuals with severe and multiple disabilities. The purpose of Perry's study (2003) was to describe patterns in the communication of children with varying levels of pre-intentional and early intentional communication and how the consequences of disability affected children's communication, in the context of individual music therapy sessions. This study demonstrated a number of possible avenues for children to develop social closeness and experience shared communication despite difficulties with being able to communicate.

Harding and Ballard (1982) investigated the effect of using music (not music therapy intervention) as a stimulus and as a contingent reward in a program of music activities

aimed at developing the spontaneous speech of three physically handicapped preschoolers. The findings of this study supported the use of music for developing spontaneous speech in physically handicapped children.

In other music therapy studies, vocalizations during music therapy are used to establish and develop a therapeutic relationship in which the client's communicative skills can grow (Graham, 2004; Wylie, 1983). In her study, Graham (2004) used vocalizations in music therapy with pre-verbal adults to establish an interactive relationship. Wylie (1983) aimed to determine the effectiveness of various accompanying instruments or timbres for eliciting sung or vocal responses in severely and profoundly mentally handicapped students. Both research findings support the idea that music therapy can be an effective medium for establishing an interpersonal relationship with non-verbal clients.

Further studies are recommended to determine whether varying instruments and/or timbres promote changes in expressive or receptive language and more expressive response in mentally disabled subjects. Music therapy studies centered on communication with pre-verbal adults and people with severe and profound disabilities, also consider and discuss the need for understanding the emotions underlying the vocal sounds, movements and facial expressions in people with limited abilities to express themselves (Boswell & Vidret, 2003; Graham, 2004).

# 2.1.5 The contribution of music therapy in the field of special education settings

Music therapy has been used increasingly as a teaching modality with physically and multi handicapped children and adolescents in school settings (Krout, 1987; Patterson, 2003; Pellitteri, 2000). The contribution of music therapy in the field of special education is extensive and unique. Music therapy practice embodies the philosophical principles on which special education services are based as it aims to assist students' cognitive, psychological, physical, and socio-emotional development (Daveson & Edwards, 1998).

In New Zealand music therapy is a relatively new but rapidly growing profession. The value of using music with children who have special needs is being recognized by teachers and other professionals, and the work of music therapists in education is increasing (Rickson, 1997). Key tasks in education settings in New Zealand are to assess students to determine the value of music therapy intervention in areas of physical, emotional, intellectual, and social development, and to devise and implement appropriate programmes to enable students to develop their abilities and reach their learning potential (Rickson, 2001). In both New Zealand and other educational settings around the world, music therapy interventions are informed by individual education plans (IEP) which guide the education of the student in many areas (Daveson & Edwards, 1998).

Some relatively recent music therapy and special education literature however, implies the need for evidence-based practice (McFerran & Stephenson, 2006; Rickson, 2007) as according to Stephenson (2006) there is little evidence to support the use of music therapy as an effective educational intervention.

# 2.1.6 The definition of evidence-based practice in special education settings

In a dialogue between McFerran and Stephenson (2006), the two researchers consider the meaning and relevance of the evidence-based framework in the special education settings. Stephenson argues that education can be studied scientifically as most special education practice has emerged from applied behavior analysis within the scientific tradition (p. 121). To judge whether or not the student with severe disabilities is communicating with another person, one would consider behavior such as: whether or not the student alternated eye gaze between the person they were communicating with and the object or activity of interest; whether or not they persisted in the behavior believed to be communicative; whether they ceased the behavior when the perceived goal was achieved; whether they changed the signal until the goal was achieved; and whether they waited for a response from the communication partner and indicated satisfaction or

not with the outcome (Carter & Iacono, 2002: as cited in McFerran & Stephenson, 2006, p. 122).

McFerran states that qualitative researchers believe that the way an individual understands the meaning of evidence is related to their beliefs about the nature of reality-their ontological stance (p. 122). She considers that reality can be perceived from multiple perspectives, and that the same situation may be perceived differently by different people, and even by the same person at different points in time. It is however, common practice in special education to consult with caregivers and therapists in order to gain multiple perspectives and therefore better understanding of the behaviors of children with significant communication impairment, because they do not provide the usual cues (Pellitteri, 2000).

McFerran suggests that definitions of evidence that focus only on what can be observed and quantified do not account for what is perceived beyond measurable behaviour (McFerran & Stephenson, 2006, p. 122). While the behavioral 'tick chart' approach to music therapy provides a relatively quick and reliable measure of progress, it is extremely limited in terms of describing a child's overall functioning (Rickson, 2001) and measuring musical responses (McFerran, as cited in McFerran & Stephenson, 2006, p. 122). The evidence-based approach seems to be objective because it involves measuring observable behaviour. McFerran argues that it remains subjective because of the number of interpretations that need to be made in reaching conclusion about a particular child's communicative intention (McFerran & Stephenson, 2006, p. 123).

Both McFerran and Stephenson discuss the gaps that appear in the existing and recent research evidence (2006). Stephenson argues that there are few well-designed scientific studies to meet the criteria for an effective educational intervention, claiming that the use of music therapy as an educational intervention has support only from case studies and that well designed quantitative studies are needed. McFerran explains that the small gap appearing in the recent research evidence regarding communication outcomes for children with moderate to severe intellectual disabilities is because of the nature and

moment-to-moment responsiveness of musical interaction that includes many elements which are not straight forward to describe. Qualitative music therapy studies therefore, are being conducted to describe more fully the essential processes of music therapy in order to articulate the intervention before linking it with the outcome (McFerran & Stephenson, 2006, p. 125).

## 2.1.7 The definition of evidence-based practice in New Zealand special education settings

'Enhancing Effective Practice in Special Education' is a project that has been undertaken as part of a wider New Zealand Ministry of education initiative "aimed at supporting and enhancing teacher capability to meet the growing diversity among students" (Dharan, 2006, as cited in Rickson, 2007). The outcomes of the project articulate new directions for 'Evidence-Based Practice' in special education in New Zealand. The model suggests that evidence comes from three sources, namely from professional practitioners, from families and young people about their lived experience; and from 'research' (both national and international). All 'evidence' is valued equally (Rickson, 2007).

# 2.1.8 Relevance and value in qualitative methods of conducting music therapy research.

Many music therapists choose qualitative methods of gathering data (Perry, 2003; Graham, 2004; Whitehead-Pleaux, Zebrowski, 2007) because these descriptive means of gathering data relate directly to their experiences with patients and clients and become a type of field note, a method used in ethnographic research that easily translates into the more general qualitative practice of research, which includes both observing (Toolan and Coleman, 1995; Sherratt, Thornton and Hutton, 2004) and interpreting (Wheeler and Kenny, 2005).

One example of the value of qualitative investigation is Wheeler's (1999) study, conducted to examine her own experience and pleasure in working as a music therapist

with children who have severe and multiple disabilities. The children that Wheeler worked with were all classified as multiply handicapped and had serious intellectual deficits as one of their problems. None used words to communicate, however Wheeler describes her work with these students as pleasurable and explains that this provided a starting point for her research. She wanted to find out the source of her pleasure and began by studying videotapes of her own music therapy sessions from several angles. After viewing the tapes, Wheeler wrote comments about things that she noticed, things that were exciting, comments on her work or the children's responses. As part of her analysis procedure, Wheeler selected particularly exciting spots from the tapes on which to focus. Her observations and enjoyable experiences were then categorized into four main themes: Observations of child intentionality (allowing assistance, continuing on own after assisted initiation, initiation upon request, spontaneous initiation); emotionality (smiling, physical closeness); communication (humming, specific sounds or words); and mutuality (with another child, with therapist, upon request, with physical cues, spontaneous).

The results of her study suggested that consistency, frequency, or duration of the child's response, led Wheeler to feel that their behavior was intentional. She found that it was the children's emotional responses such as smiling that led her to believe that they were aware of the experience. She found it very enjoyable when clients were responsive to her, when their responses indicated that they had heard or understood her. Similarly, when examining the period of engagement in musical interaction with severe and multiply disabled students, Perry (2003) found that they were aware of themselves, of the therapist, of their own music, and the therapist's music. Wheeler thinks that emotion is conveyed in most of these children's responses, or she would not feel involved enough with the children to enjoy working with them or find their response rewarding.

In her conclusion, Wheeler points out "since these children cannot tell me what they find rewarding, it is particularly useful if I am able to use my emotional response to help me to understand their emotions, thereby hopefully creating a course of therapy more congruent with the child's desires for him- or herself". Wheeler's (1999) study is relevant

in highlighting the issues of children who are not able to communicate easily. Perry (2003) suggests that subject to improvements in our ability to understand and describe these children and the interaction in music therapy, they provide music therapists with general and specific considerations that are relevant both to developmental perspectives in special education, and to actual music therapy practice.

When working with students who have moderate to severe communication difficulties, music therapists often report experiencing a high level of engagement in music therapy as seen by alertness, attempts at musical participation, eye gaze and vocalizations (McFerran & Stephenson, 2006; Nowikas, 1999; Wheeler, 1999). These are all observable behaviors that can be measured and interpreted but are a unique expression of the individual. Severe and multiply disabled clients are not able to confirm what they are feeling or experiencing in music therapy verbally, therefore the music therapist relies on his or her own feelings and interpretations resulting in subjective opinions.

### 2.2 The concept of engagement in music therapy

The subject of engagement is intriguing as it allows plenty of room for interpretation and/or argument. As research on engagement has shown, people are interested in defining and trying to understand therapeutic engagement by stressing the importance of a therapy which emphasizes the dynamics of interpersonal communication for people with limited opportunities to express thoughts and emotions (Toolan & Coleman, 1995).

It is important for people with disabilities to be able to communicate and convey meaning and research on communication with some relevance to engagement has began to encompass this (Graham, 2004; Perry, 2003).

# 2.2.1 Music therapy techniques for promoting engagement during music therapy

To promote engagement and contact, music therapists create stimulation and excitement in music with variations in tempo and dynamics, and the music becomes 'psychologically interesting' through the context of harmony and melody, texture and phrasing. When

clients with developmental disability experience stimulation and learn how to initiate and motivate themselves through the stimulation of music-making, their potentials increase and they develop greater engagement with the external world and the people in it (Wigram, Pedersen & Bonde, 2002, p. 171).

Part of Perry's study (2003), involved analyzing video recordings and other data to find out how long severely and multiply disabled children with difficulties in expressive and receptive communication engaged in music interaction during music therapy sessions. Analysis of the data revealed that to encourage the engagement of the child in the interaction, the therapist used strategies to build up the musical excitement that involved more playing and singing together. Successful musical interaction relied on creating sufficient pleasure, interest, and excitement through the use of a variety of musical media and approaches, including the use of favorite instruments. Such approaches motivated and provided the children with a reason to communicate and engage in the musical interaction for an extended period of time.

This population needs creative experiences through which they can enjoy relative success and through which they can develop (Wigram, Pedersen & Bonde, 2002, p. 170). Each child needs sufficient opportunities to communicate at his or her current level of competence, as well as to extend this level of competence. Opportunities for both initiating and responding, including the use of musical forms of interaction, need to be provided as without these efforts natural opportunities to communicate may be very limited (Perry, 2003).

#### 2.2.2 Engagement with non-verbal clients

Other studies focus on measuring engagement levels (O'Callaghan and Colegrove, 1998; Sherratt, Thornton and Hatton, 2004; Whitehead-Pleaux, Zebrovski, Baryza and Sheridan, 2007) in hospitalized patients and people with dementia, however relatively little research has surfaced that focuses on engagement with severely and multiply disabled children (Stephenson, 2006). There appears to be a need to understand what

actually happens in music therapy sessions and to find reliable methods of describing change and therapeutic processes occurring within music therapy.

#### 2.2.3 The most relevant study in the field of engagement

Toolan and Coleman (1995) carried out a descriptive study to examine and document change occurring in five people with learning disabilities, in terms of their levels of engagement in music therapy and in the therapeutic relationship. The researchers measured changes using video analysis of music therapy sessions. They also developed a method to measure patients' engagement in a therapeutic relationship.

The verb engage, as defined in the Concise Oxford Dictionary of English (1987) means: to attract and to hold, especially attention or sympathy; to cause to participate; to begin or take part in a venture; to connect or interlock, to mesh; bind, commit, attach. Such is the aim of the therapist, to engage the client in music interplay, such as musical improvisation, creating songs, playing pre-composed music or listening to music. But how do we know when the client is engaged or not engaged?

In Toolan & Coleman's study (1995), engagement implied both positive and negative affect and a variety of levels or states of involvement. The physical evidence for engagement would include all observable signs that indicate the feeling of change. The measuring technique developed also used the same area of affective judgment, of 'feeling awareness', that the therapist employs during therapy sessions, to assess how much the patient is engaging with the therapist or is involved with the feelings and qualities of the present moment.

Their descriptive research project is quite large and looks at the patients' engagement with the therapist over the first 30 sessions of music therapy. The study involved videotaping of sessions to observe notable changes in patients. Seven 30-minute therapy sessions were videotaped for each of the five patients and a 10-minute extract was then randomly taken and analyzed for each session, for each patient.

In the method section of Toolan & Coleman's study (1995), the word 'engage' is defined and guidelines are provided for the participant observers in order to have an idea of what to look for during the recorded music therapy sessions. The method employed in their study including guidelines, provides a means whereby patients' engagement in a therapeutic relationship can be measured.

Toolan & Coleman, (1995) conclude that such a changing and developing relationship, with its emphasis on the dynamics of interpersonal communication, is a structure which has therapeutic potential for patients. The results of their study suggest that music therapy can provide such a structure. This is particularly important for people who have limited opportunities to express or explore their thoughts and feelings, as these are not necessarily obvious or apparent and are easily overlooked.

While both qualitative and quantitative methods of conducting research can provide insight into the communicative potential of non-verbal and severely, multiply handicapped people, they frequently offer only limited explanation of how musical or verbal material has been systematically analyzed (Wosch & Wigram, 2007, p. 14).

#### 2.3 The growth of microanalysis in music therapy research

There is increasing interest amongst music therapists in understanding the changes that take place in music therapy and video recording music therapy sessions is an important and useful tool that can be used to analyze and document changes or responses and how they come about. Most recently, microanalysis, a method of analyzing in detail, verbal, musical and video data has been used, so that one can finally see represented a comprehensive outcome of processes from a single music therapy session (Wosch and Wigram, 2007).

# 2.3.1 The history of microanalysis in music therapy and related disciplines

The term 'microanalysis' has a larger and longer history in the field of psychotherapy (Wosch and Wigram, 2007, p. 18) and has only recently began to appear in music therapy literature. Wosch and Wigram (2007) explain that specific 'objects' in focus for a microanalysis should be understood and defined as:

Minimal changes in relationships or interactions between people or minimal changes in the music and in dynamic forces. (p.14)

Microanalysis in music therapy is a detailed analysis of a small but relevant amount of data drawn from a single experience with a client, or a single session (Wosch and Wigram, 2007, p. 14). It can involve detailed analysis of video, music and/or interviews. Microanalysis in music therapy clinical work and research developed as music therapists began to analyze and break apart smaller responses, musical experiences and interactions during music therapy rather than focusing on the entire process of what has occurred in the music therapy session. Studies of smaller responses make up a larger picture and help us to better understand the changes and processes that lead to these changes during music therapy.

The microanalysis method of analyzing and documenting music therapy intervention, offers a system for analysis that can help to make changes, and help music therapists understand what they mean in terms of interaction and communication (Wosch & Wigram, 2007, p. 15). Very often the music therapist might not remember the various changes that occurred when engaged in a shared musical interaction with the client, requiring more time to reflect on the music therapy session afterwards. The music therapist often asks him or herself similar questions to the ones Wosch and Wigram present in the introductory chapter of the *Microanalysis in Music Therapy* textbook (2007, p. 15). What did actually happen? In what way can one perceive the problem that is the focus of the therapy? When and how did it start? Did the client really behave in the way that I believed they behaved? In my own practice these thoughts and questions evolved from the student not being able to verbally communicate and confirm their experiences during the session.

### 2.4 Summary of findings

The main findings that emerge in the literature are: communication difficulty is common in children with special needs. Children who present with multiple disabilities in particular, often have little or no speech due to severe physical impairments. As a result expressive communication is limited for this population. They can develop alternative means of sharing communication in the form of non-verbal expressions such as smiling, vocalizing, body movement and eye contact. Sometimes these responses might be accidentally ignored and/or are not easily understood by others. We do not know what the client is really thinking and we can not confront the client to find out.

While searching through the literature, I was able to find a number of music therapy studies that relate to the use of music to meet the communication needs of severe and multiply disabled individuals (Boswell & Vidret, 1993; Harding & Ballard, 1982; Perry, 2003; Wheeler, 1999; Wylie, 1983). The studies employ music therapy techniques in order to provide the students with opportunities for interaction and means of self-expression. An important idea is that there is not a lot of engagement in students with severe and multiple handicaps. Opportunities should exist where engagement can be fostered in these people.

'Engagement' is widely reported in the literature to be an outcome used by music therapists to promote interaction by engaging clients through musical, verbal and/or non-verbal activities such as improvising and playing music. I have been able to find very few studies that relate directly to engagement and music therapy (O'Callaghan and Colegrove, 1998; Sherratt, Thornton and Hatton, 2004; Toolan & Coleman, 1995; Whitehead-Pleaux, Zebrovski, Baryza and Sheridan, 2007). These studies are based on music therapy work with a population that is difficult to engage in activities and who show little response, such as individuals suffering from dementia or pre-verbal adults with learning disabilities. I have not been able to find any studies on engagement with the severe and multiply disabled population. Even so, all the gathered studies highlight the issues of communication in people who have little or no verbal response.

Historically, music therapy research has involved observing and reporting behavioural changes. Most recent music therapy studies seem to be qualitative. With the recent growth of music therapy in special education, music therapists and other professions have begun to question the most appropriate methods of reporting findings that constitute evidence-based practice. A series of debates between Stephenson (2006), McFerran (McFerran & Stephenson, 2006), Rickson (2007) and Rickson and McFerran (2007), force me to question the relevance and value of my research study to Special Education and the kind of research that needs to be conducted in the future.

My research leads out from Wheeler's (1999) approach and the joy that I experienced during my first music therapy session at a special needs school that supports children and adolescents presenting with severe and multiple handicaps. The first music therapy session I had at this placement was with a non-verbal and severely physically disabled teenage student. I remember feeling positive at the end of the session and began to wonder what the client was saying to me and how I interpreted it to be. The idea of non-verbal communication and what transpires between the client and therapist within a music therapy session excited me. I became interested in finding out how the client and therapist engage within a session in music therapy and questioned how we know when the client is engaged or not engaged within a session in music therapy.

My research question is based around what happens in a normal music therapy session that looks like engagement. What do others think? How do the client and student music therapist engage within a session in music therapy?

In seeking answers to these questions I hope to improve our understanding of the benefits of music therapy with the severe, multiply handicapped individual. The research was conducted at a special education setting with participants who are all experienced in the field of severe and multiple handicaps including professional practitioners and parents of the student (referred by Rickson (2007) as sources of evidence-based practice in New Zealand educational settings), I anticipate that the findings might offer valuable

information on working with this client population from which other goals might develop and be applied to meet the individual needs of the student.

#### CHAPTER III

#### **METHOD**

### 3.1 Introduction

The purpose of the present research was to find out what happens in a normal music therapy session that looks like engagement. My primary reason for engaging in qualitative research was because I aimed to uncover the 'immeasurable', the 'something' that people 'know' about because of their experience. Thus multiple perspectives on the idea of a student's 'engagement' in music therapy becomes important to validate findings. The student participating in the music therapy video presented with severe, multiple disabilities and communication difficulties. Individual participants might have noticed specific things that have an impact on this student's engagement and particular things that music therapy can offer for this population. Multiple perspectives provide the reader with a rich set of data to determine whether the present findings may be relevant to music therapy work with other clients who have similar difficulties and strengths.

Two previous studies that centre on a client population who present with communication difficulties valued the methodology of qualitative approaches (Perry, 2003; Wheeler, 1999). I found these studies useful and influential in the process of answering the research questions.

#### 3.1.1 Qualitative "Methodology"

'Qualitative research is about organic, dynamic, multiple, complex, and idiosyncratic realities. To understand these multiple realities, we must understand and interact subjectively and use a research design that is not predetermined but can be accommodated to natural reality. The research design and techniques are processes, as is the treatment itself. As a result, there is no gap between research findings and clinical significance. Qualitative research is descriptive, which

means that we describe a phenomenon as fully as possible with words' (Smeijsters, 1997, p. 17).

Bruscia (1995a) identifies four broad categories of phenomena of interest in qualitative research. They are:

- 1. "events (behaviors, interactions, incidents, contextual conditions),
- 2. experiences (how persons apprehend, perceive, feel, and think about events, person or things),
- 3. materials (objects that result from events or experiences), and
- 4. persons".

A qualitative study might focus on one or more of these phenomena and subcategories within them, depending on the purpose of inquiry (?Bruscia, 1995a, p. 68).

The present research study is a description of participants' personal experience. The data are in the form of words and include participants' feelings, thoughts and intuitions on the subject of engagement. Their personal process is the focus of the research.

### 3.2 Recruitment of Participants

In order to gain multiple perspectives on the subject of engagement in music therapy and not exceed the limitations and time frame of a Masters thesis, I aimed to invite at least three and no more than four willing participants experienced in the field of severe and multiple disabilities to take part in the study. Different methods of recruitment were used as participants came from a variety of backgrounds.

An advertisement (refer to Appendix A, p. 74) was posted on the New Zealand Music Therapy website inviting all registered music therapists in the local area who expressed interest in the study to contact the Deputy Principal of the school where the research was being conducted.

Two separate information sheets were prepared, one for recruiting potential participants (refer to Appendix B, p. 76) and one for parents (refer to Appendix C, p. 79).

#### 3.2.1 Inclusion criteria for recruiting participants

The criteria outlined in the information sheet for participants were:

Individuals who have knowledge and experience of working with and/or caring for people who present with a variety of severe and multiple disabilities who are either employed at or affiliated to the school where the research was being conducted. Ideally I was looking to recruit:

- One registered music therapist;
- One parent, guardian or caregiver of the student participating in the music therapy session observed;
- One teacher aide employed at the school for a period of 6 months or more.
- One registered therapist employed at the school, from a group of Occupational,
   Physio, Speech and Language Therapists.

Since the subject of engagement is a complex one that requires interpretation, and interpreting involves "construing the data from a particular perspective" (Bruscia, 1995b, p. 420), multiple perspectives were sought in order to be able to create meaning and understanding of the concept of 'engagement' during music therapy.

Information sheet for parents:

The selection criteria for the secondary participant in the study (the student who appears in the music therapy recording) were, a student:

diagnosed as multiply handicapped with high and complex needs;

• who also has no functional verbal language.

At the time, I was facilitating regular, individual music therapy intervention with three students who fit these criteria. A separate information sheet was prepared and sent home to the caregivers and/or parents of the three students, seeking written permission for the video recording of their child participating in the music therapy session, to be included in the research. The caregiver and/or parent also received a copy of the information sheet for participants as an invitation to take part in the research study.

### 3.2.2 Challenges in the recruitment process

The recruitment of a teacher aide in the study was a particularly challenging process. All participants received information sheets (refer to Appendix B, p. 76) which included a date at the bottom of the document, that gave participants interested in the study a time period by which to respond by. No teacher aide responded to the invitation sheet (refer to Appendix I, p. 87) to participate, for a week after the initial date set. The difficulty in this might have been that the teacher aides were busy and simply had no time to read through the invitation and information sheets provided.

The Deputy Principal of the school where the research was being conducted distributed a second round of invitation sheets to all the classrooms. Eventually a teacher aide approached the Deputy Principal expressing interest in the study which resulted in the recruitment of another participant.

#### 3.3 Research procedure

#### 3.3.1 Data gathering

In order to limit the amount of data I decided to select and observe a single video recording of a music therapy session where the student and I are engaged in a shared

musical experience, and invite other willing participants to watch and gather notes on 'engagement'.

The five steps of gathering data:

Step 1: Digital recording of music therapy sessions. Throughout the course of the year I regularly videotaped music therapy sessions with clients based at the school where I was completing my training towards becoming a qualified music therapist. I received written permission from the parents of all students to videotape them and to use the videotapes in supervision. The recordings served as a learning tool, providing me with details that I might have missed during the session and could reflect on afterwards. I would often share my thoughts and experiences of the music therapy session with my supervisor.

Step 2: A single, half hour music therapy session was selected to be studied in detail. Once written consent was obtained from the parent of the student with severe and multiple handicaps allowing permission for the recordings to be used in the study, the second research step was to select appropriate video material to be studied.

Criteria for the selection of video:

In the process of selecting video material to be included in the research, I first viewed all four available tapes produced during the course of the year where the secondary participant/student and I are participating in the music therapy session. The final video was selected that in my mind showed observable engagement, followed by the criteria:

- Client and student music therapist are fully visible, including their bodies and faces.
- In the full view, movements and direction of movement can also be recognized.

I then viewed the video selected for the study in detail, where I picked three moments of engagement and made my own notes and comments on observations of 'engagement' during the music therapy session (refer to Appendix L, p. 106).

Step 3: Four willing participants experienced in the field of severe and multiple handicaps from a group of professionals and caregivers were invited to observe video of a recorded music therapy session and comment on their observations of 'engagement' within the session. Individual observers from a variety of backgrounds were invited to attend a semi-structured interview where the aim was to develop and discuss their ideas and observations on engagement in the music therapy session.

#### Step 4: Semi-structured interview:

Questions were asked in the form of an interview. An interview schedule (refer to Appendix D, p. 80) was prepared for participant observers to read though before watching the video. In the brief section of the interview schedule, independent observers were asked to pick three moments from the recorded music therapy session that they identify as 'engagement' and comment on what makes them think so.

Participants were free to note down as many or as little significant moments while observing the video. At the end of the video, we watched the three most significant moments of engagement again, selected by the participant. Open-ended questions were then asked that centered on 'engagement' and what happens in a normal music therapy session that looks like engagement.

Four individual interviews were conducted with each participant. A voice recorder was used during the interviews to gather and keep a record of the main data.

#### 3.3.2 Data analysis

Data was analyzed in two main steps. Firstly through participants 'microanalysing' and explaining their reactions to video of music therapy and secondly by the researcher interviewing the participants and writing up a transcript of their commentaries about the video. Themes and categories were derived for each participant and finally the themes and ideas from different interviews were brought together.

### Microanalysis method of analyzing:

Microanalysis is a detailed method investigating microprocesses. Microprocesses are processes and changes/progressions within one session of music therapy. The amount of time can be one minute (moment) or five minutes (therapy event) of one session, one clinical improvisation (episode), or one complete session. To analyze process over time, several microanalyses can be undertaken to look at several events (Wosch & Wigram, 2007, p. 22).

I referred to the microanalysis method of analyzing because I too was interested in the finer details of what actually happened during my first music therapy session with a severely and physically handicapped student as the student was not able to verbally reflect and confirm their experiences of the music therapy session. I found it particularly helpful when I referred to a chapter in the textbook by Ridder (2007, pp. 54-67) as her study focused on analyzing in detail communicative response in music therapy. Parts of the detailed method that Ridder developed to study communicative response seemed applicable to what I was thinking about and trying to find out in my research. I formed a simpler system of analyzing engagement in music therapy, using Ridder's chapter as a guide.

Ridder's study was based on individual music therapy work with people suffering from severe dementia. Like the severe and multiply handicapped population, this group of people presented with similar difficulties in the area of engagement and communication. Although detailed video analysis can provide rich information about the music therapy approach and processes leading to change in client response and communication,

analyzing in detail video material like Ridder would have been time consuming and exceeded the limit of my Masters thesis.

Phenomenological microanalysis of interview data:

'Phenomenological microanalysis is a valuable method for investigating client and therapist's perceptions of the music therapy experience in depth. Whether this method is used to investigate how a single session has been understood, or to reflect on a longer process of intervention, its intention is to elucidate the experience in a way that captures its essential meaning to the person who is describing the event. When more than one person has participated in the experience, phenomenological microanalysis can be useful for identifying the essential features described by those involved. '(McFerran & Grocke, 2007, p. 273).

I transcribed the recorded interviews word for word, from the point when the participant began his or her description of the moment of engagement selected during the observation of the music therapy video. The interview transcripts were then returned to participants for verification. Once the participants had a chance to look at the transcripts and return the written form, giving authority for the transcripts to be used in the study (refer to Appendix H, p. 86), necessary changes were made to respect the participant's wishes. Methods of analysis that involved the process of interpretation were then employed.

Interpretation is defined in the glossary of terms (Wheeler, 1995, pp. 558-559) as "qualitative research level of analysis in which the researcher goes beyond surface descriptions to discern or suggest deep structures or layers of meaning hidden in them; the aim is to go beyond examination of what is manifest or embedded in order to hypothesize what meanings may be latent, underlying, hidden, implied, or at the subconscious level".

Based on this process, analysis of interview transcripts collected during the study involved the following steps:

- 1. I read through each interview transcript.
- 2. I also listened to the recordings again as I read through the interviews. I concentrated on each participants tone of voice to be able to understand the emotional truth behind what they were conveying and how passionate they were at the time of describing these moments of engagement.
- 3. I *identified key statements* (McFerran & Grocke, 2007) which involved systematically identifying which parts of the interview focused on the experience being investigated. The key statements or themes were highlighted in red font so that I could refer back to them.
- 4. I summarized the key statements or themes in blue font and inserted comments that included my thoughts and ideas triggered as I read the transcript. These were used as a basis for interpretation (Bruscia, 1995b, p. 420).
- 5. A table of findings was created for each participant, categorizing their statements under the four main headings:
  - Extract: this included the participants description of what was observed during the moment selected.
  - Time: the time that the moment occurred within the half hour music therapy video.
  - Key points/themes: included the key statements highlighted in red font that focused on the experience being investigated.
  - Criteria: includes a description of the participant criteria used in the
    extract to identify and define whether the student is or is not participating
    or 'engaging' in the music therapy session.
- 6. I then read through individual transcripts and table of findings again. I deleted re-occurring participant statements from the extract column and wrote a final summary at the end of each table. The summary included my interpretations of the essence and meaning of participants statements.

- 7. I *identified collective themes* (McFerran & Grocke, 2007) by gathering and collectively examining individual participants' opinions on the concept of engagement. I then constructed a combined definition of engagement based on common features described by the participants.
- 8. Towards the end of the study, two graphs were plotted in order to be able to see where participants spontaneously chose to place engagement within the half hour music therapy video.

During the process of analyzing raw data, I organized a peer-debriefing meeting with another registered music therapist who was also my visiting supervisor at the time, where we discussed ideas and comments that emerged from reading the transcribed interviews, in order to check for subjectivity and guard against interpretive bias.

#### 3.4 Ethical considerations

The vulnerability of the client who was at the centre of the study was a key ethical consideration. For this reason, consent to record and use video material (refer to Appendix E, p. 82 & Appendix F, p. 83) was required from the participants and parents of the student. Information regarding the research project was supplied for the parent/guardian to ensure they understood what was involved in the study.

All information was kept confidential and data on the student/client participant was only shared with the school staff and others directly concerned with the welfare of the student. No information that could lead to the identification of a participant in this study has been revealed. All raw data relating to the research was stored safely and will be destroyed at the completion of the study.

Ethical issues for interview participants:

Interview participants' real names were not used in the findings of the present study. Each participant is identified by their profession, for example Speech and Language Therapist (SLT) or relation to the student participating in the music therapy video, for example Parent. A pseudonym was assigned to the student and the teacher aide who appear in the music therapy video. Interview participants were asked to sign a confidentiality agreement form (see Appendix G, p. 85) to keep all information concerning the child observed in the research project confidential.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 08/39.

#### CHAPTER IV

### **PARTICIPANT FINDINGS**

My purpose in this chapter is to introduce the reader to the concept of engagement and present research findings based on interview transcripts with individual participants. The findings of the study are organized as follows:

- 1. Tables and summaries of individual participants' findings.
- 2. Participants' definitions of 'engagement'.
- 3. Graph: visual representation of where participants placed 'engagement' within the half hour music therapy session.

### 4.1 Tables and summaries of individual participants' findings

Themes and ideas were derived from different interviews and categorized under the main headings:

**Extract:** The participant is asked to identify and describe what they are observing during the moment selected. This column includes what the participant is watching, hearing, perceiving and detecting.

**Time:** The participant is instructed to make a note of the time the particular moment occurred by looking at the time counter shown on the video.

**Key Points/Themes:** The participant is asked to discuss his or her ideas on what they observe and interpret to be engagement during the moments selected. This column includes a collection of themes that the participant identifies during the interview in order to describe engagement. The **extract** and **themes** column overlap.

**Criteria:** The final question asks the participants to describe the criteria used in the extract to identify and define whether the student is or is not participating or engaging in the music therapy session.

The researchers' comments are summarized in a descriptive form at the end of each table of findings. Where individual participants own words are quoted, line numbers were inserted to guide the reader to the interview transcript in the Appendix section of the thesis.

<u>4.1.1 Table of findings: Participant 1: SLT (Speech and Language Therapist)</u>

Extract	Time	Key points/themes	Criteria
One: The SMT is holding *Lola's hand.  *Lola is looking at the SMT's face, sometimes looking away.  *Lola seems to be responding to the SMT's change of vocal pitch, facial expression and touch.  Sometimes there is a slight shift in *Lola's body position. Her body is orientated towards the SMT.	4:05-4:10	Direct eye contact  Holding hands  Smiling  Laughter  Big, open wide mouth.  Body position	SLT background.  Eye contact or looking at the SMT's face.  Body position.
Two:  *Lola is watching and responding to the SMT's facial expressions, tone and pitch changes in the music.  *Lola is watching the drum and where the SMT's hands are gonna to go.	6:47-7:04	Eye contact Vocalization Laughter Visual tracking of hands, instruments and SMT.	Looking, not just at the SMT but looking at what the SMT is looking at.  3 things going on at once and *Lola managed to handle all three.
*Lola looks at the drum as the SMT is looking at		Looking	Shared attention

the drum.			
*Lola is tracking the SMT raise the bells up and bring them back down, anticipating what's gonna happen.  She is looking at the SMT's face and mouth.  Her body is ever so slightly looking down the drum towards what the SMT has just dropped the bells on.	15:38-15:58	Attention Listening Visual tracking Interaction Anticipation Looking direction Laughter Body position Smiling Eye contact	SLT background, focus on area of communication.  Socially acceptable engagement.  Shared attention

# Summary of findings:

The Speech and Language Therapist (SLT) has identified 3 brief moments of engagement during the music therapy session where the student is participating in the music activities by listening, looking and responding to the Student Music Therapist's (SMT) voice, facial expression and hand movements. In order to be able to interpret 'engagement' during the moments selected, the SLT focuses on non-verbal aspects of communication such as eye contact, looking direction, laughter, mouth shape and body position. She spontaneously chooses to focus on the student's facial expression, having been trained in the area of Speech and Language Therapy. When describing the criteria used for identifying whether the student is engaged or not during the music therapy session, the SLT commented "I think from my point of view, a speech therapy point of view, this is what we, look for" (214), "the eye-contact, the facial expression, the tracking, the anticipation, her body language and her facial expressions and her vocalization of laughing" (220). Shared attention is a re-occurring theme that the SLT refers to during the interview. She noticed \*Lola's eye direction and that she was "looking, not just

looking at you (the SMT in the video) but looking at what you're looking at. You are looking at the drum and so she was looking at the drum, and that's really, it's what we call shared attention" (97). \*Lola was also visually tracking instruments, movement of hands and the SMT with her eyes.

Important issues about engagement that emerge from the interview with the SLT are that "a child can enjoy something but not be engaged in it" (170). The SLT believes that being bored, "you still could be engaged but you're not fully engaged" (267).

"I could be looking away from you and you can be talking and I can still be engaged with you because I'd still be participating, I would be engaged in a conversation but it's not, it's not a socially acceptable engagement. I do think that when she (\*Lola) is looking away she is still participating and she is engaged but this is the best engagement. Socially acceptable and the best for an interactive ....coz, I do fully, I think in that session she is fully interactive with you in that bit (Moment 3), fully interacting" (227-133).

The SLT seems to have a natural level of detail and view of engagement coming from a speech and language therapy background.

She noticed specifically and commented on the SMT's facial expression during the recorded music therapy session as being "very important" (279) in motivating the student to respond. "I think if you did that in a really (pause) umm, you know mouth barely opening, kind of you looked bored, I think she would really pick up on that coz she does look at your face a lot" (285).

"I think it's a combination of the tone of your voice, your facial expression, the noise of the different instruments but ahh more you (SMT), more with the way you interact with the instruments and what happens" (291). "If you did that in a boring, dull way, you kept a monotone, I don't think she'd be engaged. I think she's just having a great laugh" (295).

The quality of this interview is significant. The SLT has provided rich data and strong answers for what other professions might be hoping for. I noticed that she chose to look at readily available and brief moments during the recording of the single music therapy session, yet was able to identify and interpret in detail what she was noticing about engagement during music therapy. The SLT had described a focused sense of joined attention, eyes widening, and non-verbal methods of sharing communication. Her interest and passion in describing \*Lola's facial expression for example, offer strong data that confirms to me it is possible for other people to observe and identify aspects of a child's engagement during music therapy.

# 4.1.2 Table of findings: Participant 2: TA (Teacher Aide)

Extract	Time	Key points/themes	Criteria
One: *Lola is just in there with her whole body and with the SMT as soon as the song starts, throughout the whole song.  *Lola and the SMT look at each other.  She is not looking at the TA because she is so engaged with the SMT.  At 4:47 *Lola is looking at the TA.	Hello Song 1:00-5:00	Communication Interaction Body orientation Laughing Eye contact  Eye direction	Eye contact  Observable behaviors such as facial expression, body direction and gestures.  *Lola's response to the changes in the song.  When the song starts and stops.
When the song stops, *Lola appears unsure of what is going to happen and her whole body is different.  *Lola is more engaged with her ears and eyes and the contact with the SMT.		Physical aspects  Physical contact	

Two:	6:47		
When the SMT takes out the bells, *Lola	0.47	Recognition	"She's done them before and she gets really,
seems to recognize them.		Anticipation	really happy" (181).
*Lola's whole body,		Body movement	Eye contact with the
face gets happy.		Facial expression	SMT.
When the SMT moves her hand up and down,		Smiling	
*Lola appears to be concentrating and		Interaction	
working hard, really trying to do it herself.		Concentration, intent to play the bells on her	
		own.	
*Lola makes a lot of vocalization.		Vocalizing	
Three: *Lola is working hard	23:00		What the body is doing.
physically with the up and down arm		Body and arm movement.	what the body is doing.
movements and with her body.		Physical and active participation.	
*Lola is looking at the TA.		Eye direction	
*Lola plays the cymbal		Facial expression	
using the bells.		Wide open mouth	
*Lola is responding to what and how the SMT		Concentrating on using her arms.	
is doing it.			
		Connection	
		Interaction	

# Summary of findings:

The TA is comparing what she is observing here in the video to what often occurs in a different setting such as the classroom. She interprets \*Lola's responses and supports this with her knowledge and work experience with \*Lola in other environments, for example at line 261 the TA comments "She is making sounds and she doesn't make that sound in class... I think. She makes a lot of vocalization in umm in this session. Yeah! Because she, she, she works on the morning greetings when we ask her to say is it your turn, she's trying but nothing comes but here comes sort of easier... I think".

The TA chooses to focus on \*Lola's body direction and facial expressions during the interview. Common themes that the TA identifies in describing the moments of engagement selected, are non-verbal aspects such as eye contact, eye direction, laughter and listening, physical aspects such as movement of body and body parts, as well as cognitive aspects such as recognition and anticipation.

Body movement seemed important in the moments selected by this participant as a concept of a student's engagement. The TA seemed to focus a lot on what \*Lola's body is doing during the music activity in the selected moments. She often repeats the comment \*Lola "is with you (the SMT in the video)" (42, 43, 61, 75) "following you, what you are doing" (93) and "is there with her whole body" (65), "she's just in there isn't she, with her whole body, eyes, laughing, no she is with you" (112). The TA interprets engagement from what she can see in the student's body movement, \*Lola is actively and physically engaging in the music activity by working hard with her body, lifting her arms up and down in order to be able to play the instruments. As commented by the TA "the last moment is strong because \*Lola is working so much with her body" (425), "Compared to the first times (first MT sessions) she didn't, you know she didn't really make a sound did she? And she was looking away all the time and she was more sort of loose in her body but now she is there with.. she's there with her whole body, yeah! That's how I can describe it" (444-447). This participant points out that since the first music therapy sessions with \*Lola, aspects of her responses have changed, suggesting something about my work and music therapy techniques in general. The familiarity, client/therapist relationship established. The progress and involvement in music therapy might occur over time and what happens during one music therapy session might be the result of what has happened over time that has built up to this point.

One of the issues that appeared during the interview with the TA is the difficulty in being able to accurately describe what is being observed during the moments selected so that other people can also understand what is happening without having to observe the video.

Her criteria for identifying and defining whether the student was engaged or not during the moments selected were:

"Everything. Coz if you see after the song is done, you can see that she gets unsure. She's not you know, what's gonna happen, so that's also one thing you can observe that when the song is on she is there, when the song stops, she.. you can see that she gets you know, yeah she doesn't really know what's, you know... the whole body is different. It's hard to explain, you just see it, I don't know how you can describe it" (125-130).

I knew what the participant (TA) was observing and what she was trying to describe in her own words as I, the researcher was there observing the video and selected moments of engagement with her. I felt that I needed to direct her more by asking specific questions, for example "what is it about the student's facial expression or movements that make you feel she is happy?" (185). The TA often interpreted what she felt but seemed to have difficulty in describing the changes that were taking place. English is also her second language and although I understood everything and felt the same as the TA when I observed these moments with her, I felt I needed more observable data to support and be able to document and understand the changes that were taking place.

I felt this interview was interesting in terms of gaining a perspective of how a non-trained professional selects to observe and describe moments of engagement during the MT video. I was struck by how observational and detailed the SLT was about very brief moments for example. The TA seemed to repeat her self often, describing how she is feeling. This is an important way of identifying engagement as our feelings tend to be informed by what we observe.

The TA showed difficulty in being able to describe what is happening during the moment that makes her feel this way. She was however very observant and often pointed towards the moment in the video when she felt this moment was significant. The TA would ask the researcher to "look at this" often. As an aspect of her character, she is responding to

my research, demonstrating her need to show me the important moment. She continuously draws my attention towards something as we are participating in observing the MT video together (shared attention).

# 4.1.3 Table of findings: Participant 3: RMT (Registered Music Therapist) (See Appendix J, p. 89)

Extract	Time	Key points/themes	Criteria
One: The SMT is singing "up", *Lola follows with her eyes and raises her arm.  She spontaneously hit the cymbal with the wooden beater attached to a string.  The timing of *Lola's hand reaching out towards the cymbal seemed "in tune with the whole music" (71).  *Lola is observing the SMT's animated facial expressions.  SMT sings the lyrics "up" and is raising tone and volumes and pitch up and resolving it down with decrescendo and lower pitch.  Feeling that SMT's gestures and singing tone are creating an inviting atmosphere.	Time 23:40	Active and physical participation.  Attention  Awareness  Mouthing  Giggle  Cognitive aspects, showing understanding of the high and low, up and down concept.  Interaction between the SMT and *Lola.  Orientation towards instrument, intent to touch and hold instruments.  Containment  Moment of settling  Giggling  Facial expression  Awareness of the nonverbal cues.  Eye direction	Musical responses Gestural responses Eye contact Observing *Lola's next move. Physical aspects Personal experience having facilitated music therapy intervention with *Lola in the past.
		Eye direction  Reinforcing the action.  Gesture	

			T
Two: *Lola is being supported musically and physically	9:40	Vocalization  Physical contact	Face
by the TA and SMT.			Facial expression
The TA and SMT are modelling the hand movements go up high and down low.  *Lola looking around and is watching the TA's hand go up high and following it down.  The SMT supports *Lola's hand to go up.		Attentive  Visual tracking of where the hands are going to go.  Showing awareness of being supported and what is happening around her.	Focus on what is happening with *Lola's eyes, because she is physically supported. Is she aware of what is going on and that she is being physically supported.
Three: *Lola appears to be listening carefully to the words that the SMT sings.	00:34	Listening  Laughter  Realization and taking	Observing *Lola's gestural cues.
The SMT is following *Lola and reflecting what she and the TA are doing in the music. *Lola laughs a few		time to respond.  Cognitively aware  Gentle smile demonstrating *Lola's listening skills.	
*Lola gently smiles when the TA sings "kia ora".  The music is very gentle.		Inviting and not demanding. It is acknowledging of everyone present in the MT session. A good sense of support.	

# Summary of findings:

The RMT has selected three different moments of engagement in the music therapy video where she believes the student (\*Lola) is participating by listening (Moment 3), showing awareness where physically and musically supported by the TA and SMT (Moment 2) and actively and physically participating in the music activity by movement of hands and in turn sounding the instrument (Moment 1). The RMT chose to discuss the last moment (Moment 3) first during the interview.

The RMT identifies three moments all showing the student to engage in different ways. The common themes that emerge during the interview with the RMT cover physical, cognitive, musical and non-verbal aspects of communication such as gestures, vocalizations and facial expressions. Her criteria for defining whether the student is or is not participating or engaging in the music therapy session involves the way that \*Lola is responding, musically or with gestures as well as eye contact. The RMT recognizes during Moment 1, that "although she (\*Lola) wasn't looking at you (the SMT in the video), you know I sense that she was listening because of her next move" (127).

The RMT's concept of a student's engagement is based on whether or not the student is participating in the music activity by showing awareness of what is going on. Does the student seem to be listening? Is the student showing interest in the SMT and towards instruments? Does the student respond to or show interest in the music? Below is a list of concepts that the RMT observed and identified during the three moments selected.

<u>Physical engagement:</u> actively participating in the music activity by moving hands up and down and playing instruments, body position, physical contact with the SMT and TA, instruments.

<u>Facial expressions:</u> mouthing, eye direction, visual tracking of where the hands are going to go.

Non-verbal responses: giggle, gesture, laughter, listening, vocalizations.

Cognitive aspects: understanding of the high and low, up and down concept, showing awareness of the non-verbal cues, attentive.

The RMT interprets engagement from observable features. She does not seem to specifically focus on one aspect of engagement as all three moments are described by the RMT to be different. The criteria that the RMT uses to identify whether or not the student is/is not participating or engaging during Moment 2 for example, is based on behaviors that she can observe such as \*Lola's facial expression, eye contact and visual tracking of hand movements. To understand awareness, the RMT focuses on \*Lola's eyes and facial

expression, rather than physical aspects as \*Lola is already being physically supported by the TA and the SMT during this moment.

During Moment 3, the RMT identifies cognitive and musical aspects that make her think that the student is participating or engaging in the music therapy session. She was observing \*Lola's gestural cues as the main criteria for identifying and defining whether the student is or is not engaging or participating in the music therapy moment selected (267-279).

"Gestural, gestural cues here, umm. Here \*Lola didn't seem to make a lot of eye contact here, I mean she does look at you time to time but it feels very brief and often have her head, I mean eyes kind of gazing, you know below the eye level... towards the guitar, yeah, umm so... that's why I said that she wasn't actively participating but it feels like she is listening here because of her next umm, next response to your initiations, umm, yeah so here I mean.. gestural cues would be the main criteria that I observed" (373-382).

Issues of identifying and defining 'engagement' in music therapy emerge during the interview with the RMT as commented in line 339, "Mhm, well it really hard to say, the term engaged it's very, very hard. I mean you can see on my paper I wrote many numbers of moments of engagement but I wanted to write every second, you know, because I felt throughout she was engaged, its just a matter of you know engaged in what?!".

The RMT also contributes to this research because of her background and training in the field of music therapy. She has also been able to identify musical aspects of the student's engagement that other participants did not focus on. During Moment 1, the RMT describes the timing of \*Lola's hand "reaching out to the cymbal... was really in tune with the whole music" (66-71).

She also often recognizes and makes a few comments based on what the SMT is doing during the moments of engagement selected from the music therapy video.

She identifies gestures and musical elements such as tones and volumes and pitch alteration in the music that the SMT creates. This leads the RMT to feel that what the SMT is doing musically is "really reinforcing" (\*Lola's movements?) (106-112).

# 4.1.4 Table of findings: Participant 4: Parent (See Appendix K p.98)

Extract	Time	Key points/themes	Criteria
One: The SMT sings a high note.	8:52	Eye direction	Eye direction, where is *Lola looking.
*Lola turns her head and body around to focus on the SMT.		Physical aspects  Captured attention	
She is staring into the SMT's eyes.		Maintained eye contact.  Body language, the way	
*Lola is being part of it, seems to be involved.		her hands are.	
Two: *Lola is holding the bells.	18:30	Participation and "real involvement" (133-144).	Everything that *Lola is doing throughout the sequence, responses that
She appears to know that something is going to happen.		Sequence of laughter in anticipation of what is going to happen next.	can be observed.  Eye direction
The SMT stops singing and there is no noise.		Silence Physical contact	Where *Lola is focusing her attention in response to what is happening
Contact between the SMT and *Lola.		Physical aspects	during the moment.
*Lola lifts her hand for the SMT to place the bells onto her arm.		Hand movement in anticipation of knowing what is going to happen.	
*Lola is being entertained.		Musically and by participating in playing.	
Three: *Lola is starting to get her hand movements going with what the SMT is singing.	21:18	Active and physical participation.  Arm movements	*Lola achieved what was instructed and reinforced in the music and lyrics of the song.
She is trying to get up		Involvement	"The song is all about

and down movements.  The SMT is singing what *Lola is doing.	Aware and understanding of what the song is all about.	ups and downs and, and she was wanting to please you" (303-305).
*Lola appears pleased with her self and her efforts to get the ups and downs.	Facial expression  Smiling and laughter.	

# Summary of findings:

In describing moments of engagement, the parent spontaneously chooses to compare \*Lola's responses to music at home with the way she responds to music during the selected moment. In a way he seems to get distracted by his own experience of playing music to \*Lola in a home environment. A number of themes emerge that appear important for the parent in order to be able to identify and define the student's engagement.

# Concepts:

Moment 1: eye direction, physical aspects, head turned towards the SMT, maintained eye contact with the SMT, body language and the way her hands are suggest "\*Lola is being part of it, you know that's her body language, that's \*Lola being involved. Yeah!" (72-73).

Moment 2: participation and "real involvement" (133-134) in the music activity by holding onto the bells, sequence of laughter and movement of hands closer towards the SMT in anticipation of what is going to happen next, the SMT stopped singing and \*Lola "then focused on you (the SMT) to see what was going on and what was gonna happen next" (217-221).

Moment 3: active and physical participation by movement of arms, involvement and motivation to participate in the music activity by "trying to get up and down movements" (266-267). \*Lola is cognitively aware and understanding of what the song is all about. Facial expression and non-verbal responses such as smiling and

laughter, "she was pleased with her self, you can look at her facial expression and you can see her smiling, happy, little bit of laughter in places" (276-278).

The parent recognized and commented that "when she (\*Lola) had the opportunity to try and join in with the various percussion instruments, she was really motivated to try" (333-335) suggesting how important it is for this population to be able to connect with things and people. This population has difficulty with learning and expressive communication. They get the best out of experiences and other people. Music therapy can help them connect with people, engage with the thing and person.

The criteria that the parent describes for Moment 2 in being able to identify and define whether or not \*Lola is participating or engaging in the MT session is based on responses he is able to observe. He identifies eye contact, \*Lola looking at the TA when the TA supported her shoulders physically, then focused her attention towards the SMT when there was silence during the moment.

The parent's criteria for identifying engagement during Moment 3 is whether or not \*Lola achieved what was instructed and reinforced in the music and lyrics of the song. He comments that "the song is all about ups and downs and, and she (\*Lola) was wanting to please you (the SMT)" (303-305).

# 4.2 Participants' definitions of 'engagement':

Before observing the video, participants were asked to give their own definition of engagement. The question was asked to determine each participant's concept of 'engagement' and whether these definitions or ideas would coincide with their descriptions of 'engagement' during the music therapy moments. I was also interested in finding out whether there was a relationship between participants' ideas of engagement.

Q: When you are engaged in a conversation or an activity with another person, what aspects do you look at that make you think this person is paying attention and focusing on

the activity? (Possible Prompt: Perhaps think about out conversation taking place right now?)

#### 4.2.1 Participant One: SLT (Speech and Language Therapist)

In order to be able to recognize whether someone is or is not engaged in a conversation, the SLT looks for non-verbal cues such as eye-contact, body orientation, head nodding confirmation and facial expressions as well as shared attention.

"Engaged in a conversation, and I count engagement and I do eye-contact, looking at the face if not the eyes, body orientated, so here I've got my head turned toward you (models) and our bodies are ever so slightly angled towards one another. Umm, I think you know, kind of head nodding, kind of confirmation of what people are saying (demonstrates), umm, I think yup! Peoples facial expressions, do I look really bored? (laughs)" (254-259).

"I think other people probably wouldn't see that but from my training I am, the children I work with, it's a real continuum. So they are the, and shared attention. If you're talking about something, like we are talking about this, both of us are looking at this, you don't necessarily need the eye-contact with that, we're both talking about this because we're both sharing the same, kind of visual information" (267-274).

# 4.2.2 Participant Two: TA (Teacher Aide)

The TA's idea of engagement is "when someone is participating on their own level, whatever level they have" (8). The TA comments that "if you can't talk, you can do it with your body language, your eyes" (14). When you know somebody, it is easier to "tell if they are in a discussion or if they are not participating" (15). The TA emphasizes that you can also "see.. you can see it more in what they want if you know them but if you

don't know them, you can still see, I mean if you meet people that you have never met before, you can still see if they are there or not, even if they don't speak or talk" (22-24).

The TA is suggesting that being familiar with one person gives a better idea of what their needs might be than if one is to meet this person for the first time. But it is possible to observe whether someone is or is not participating in a discussion or what their needs are, and you do not necessarily need to know this person.

She identifies participation, body language, eye attention and suggests that knowing someone makes it easier to identify whether they are or are not participating in the discussion.

# 4.2.3 Participant Three: RMT (Registered Music Therapist)

When engaged in a conversation or activity with another person, this participant is looking for "eye contact and... the responses that I get, maybe nodding or... when they are actually asking me back to confirm the things that I have said" (12-14) to determine whether that person is paying attention and focusing on the activity. Her idea of being engaged in a conversation or an activity with another person is whether they are responding by non-verbal cues such as nodding and eye contact or asking questions to confirm that they are listening and paying attention.

# 4.2.4 Participant Four: Parent

The parent's idea of "engagement in relation to \*Lola" (8) is being able to "see it in her eyes coz she is looking at you. Umm, you can see it in quite often in body language, especially if you sing a funny song to her because I often do that at home, I sing songs that make her laugh and you can pick up engagement like that very easily "(12-15) and "sometimes if I'm quite close to her umm, she would try and umm, touch the guitar" (23).

The parent judges engagement in relation to \*Lola, from having previously experienced playing music to her at home and being familiar with her responses.

He identifies eye contact, body language, and desire to touch and interact with the instruments, in being able to recognize whether or not \*Lola is engaged with the music that the parent plays and sings at home for example.

# <u>4.2.5 Similarities and distinguishing features in participants' definitions of engagement</u>

All participants identified eyes: eye-contact, eye attention: what the eyes are doing and eye direction: what the eyes are looking at.

All participants also identified physical responses: body, body orientation, body language and head nodding.

SLT, RMT & Parent: head nodding, confirmation, non-verbal cues/responses and laughter.

TA & Parent: being familiar with person.

TA: when someone is participating on their own level.

Parent: intent to touch and interact with instruments, reaching towards instruments, thinking influenced by previous experiences.

SLT: facial expressions.

The most common themes shared amongst all participants in the present study are recognition of eyes and body in being able to identify engagement. For each participant 'engagement' seems to be in relation to different situations as the question does not

specifically focus on engagement in music therapy, but definitions of engagement in general. The parent for example, chooses to focus on engagement with music in relation to \*Lola, based on experiences at home and this is consistent throughout the interview as the parent regularly refers to and compares what he observes during the moments in the video to experiences in a home setting (14, 15, 23, 24, 95-100, 207-210). Similarly the TA comments on "if you know the person" (15) or being familiar with one person "you can tell if they are in a discussion or if they are not participating, its easier when you know somebody" (15-16). Again the TA is familiar with \*Lola and the way that she responds in a classroom setting and similarly to the Parent she often refers to \*Lola's experiences in the classroom when describing moments of engagement in music therapy during the interview (261-264, 274-276). The TA is also able to compare what she is observing during the interview to previous experiences in having attended regular music therapy sessions with \*Lola as part of her support (437-440, 444-447, 452-454).

The TA's comments on the idea of familiarity are interesting, as what all participants in the study have in common is that they have all previously worked with \*Lola in a variety of different settings, including the RMT. It is important to note that this was not done intentionally when recruiting participants. In a way all participants therefore share knowledge and understanding of \*Lola needs and abilities. All participants have established a relationship with \*Lola in some ways.

When engaged in a conversation or activity with another person, the RMT is looking for "eye contact and... the responses that I get, maybe nodding or... when they are actually asking me back to confirm the things that I have said" (12-14) to determine whether that person is paying attention and focusing on the activity. Her idea of being engaged in a conversation or an activity with another person is whether they are responding by non-verbal cues such as nodding and eye contact or asking questions to confirm that they are listening and paying attention. This is relatively consistent with how the RMT goes on to identify engagement during moments in the music therapy video (Table 3). In interpreting engagement during music therapy, the RMT chooses to focus on how \*Lola is responding to the SMT's singing and animated facial expressions (Table 3, Extract 1,

23:40). Under Key points and themes, Table 3, Extract 1, the RMT identifies the student is giggling, mouthing, physically participating by playing instruments, vocalizing, these statements overlap with her definition of engagement in a conversation. In the same way, the SLT describes being engaged in a conversation by looking at non-verbal cues and responses such as eye contact, body orientation and head nodding as confirmations that the person is paying attention and focusing on the activity. It is possible however that her definition or concept of engagement might have been informed by the criteria used in describing the moments of engagement during music therapy because she was accidentally asked to give a definition of engagement nearing the end of the interview, when the question was initially meant to be presented before the start of the video at the beginning of the interview. In identifying engagement during moments in music therapy, the SLT chooses to focus on \*Lola's facial expressions and non-verbal responses such as smiling, laughter, mouth shape, vocalizations as well as eyes and eye direction, attention and contact with the SMT, as described under Key points and themes (Table 1) and these descriptions of engagement in music therapy match the SLT's definition of engagement in a conversation.

Along with sharing similar feelings of engagement, individual participants have also commented on some interesting features while describing engagement in general. For example the TA's definition of engagement struck me the most, "Engagement..hmmm...is when umm someone is participating on their own level, whatever level they have, that's what I think about engagement" (8-9).

Some interesting points identified by the SLT in describing engagement are that being "bored, you still could be engaged but you're not fully engaged. I'd probably work on the scale of, kind of like totally blacking off, like listening to you, definitely engage by that so to me it is a continuum" (267-269). As I understand this comment, a person can be bored but still engages by listening, so there is a whole continuum that engagement can be placed on. One definition therefore might not be appropriate for all situations.

There are other things that come up that are important here, for example the parent was the only one to identify engagement from \*Lola's interest in and intent to interact with objects (23-24). Also, the RMT chooses to focus on some musical aspects when describing moments of engagement in music therapy under *Extract*, Table 3, that do not match her definition of engagement in general.

To summarize, participants' definitions or concepts of engagement are not very divergent. The participants share some similar ideas on what they identify as engagement.

# <u>4.2.6 Combined definition of 'engagement', as identified and described by participants</u>

Engagement can be identified when someone is participating on their own level in a verbal or non-verbal music activity or conversation. It may be reflected in the eyes, the body, facial expressions, non-verbal responses such as laughter, as well as intent to touch and interact with a musical instrument.

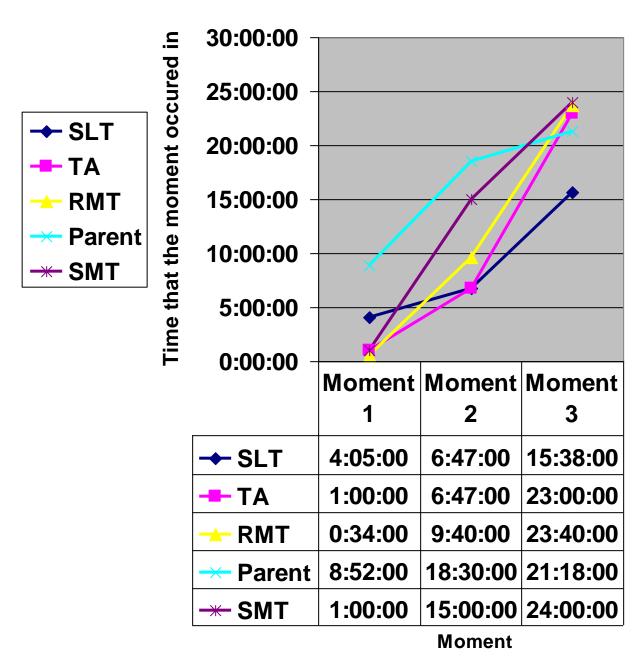
# **4.3 Moments of Engagement Graph**

# 4.3.1 Graph analysis

Overview: This graph is an attempt to visually present the participant observers experience of watching the recorded music therapy session, what they chose and where they place engagement within the 30 minute video.

The graph shows two areas of concentration.

# **Moments of Engagement Graph**



#### Moment 1:

4 out of 5 participants have identified the first moment of engagement within the first 5 minutes of observing the music therapy video. The moment occurred at the start of the music therapy session, during the 'Hello' song where the student is engaging by listening and looking.

#### Moment 3:

A similar pattern emerges towards the end of the MT recording where 4 out of 5 participants have identified the third moment of engagement in between the 21<sup>st</sup> and 24<sup>th</sup> minute of observing the video. The third and last moment selected focuses on an instrumental activity where the student is engaging by actively and physically participating in the music.

#### Moment 2:

The second moment selected by the participants appears dotted along the graph in between 5 and 21 minutes (Y axis). There is a relationship between the Teacher Aide (TA) and the Speech and Language Therapist (SLT), both have selected the second moment of engagement to have occurred at 6:47. The rest of the participants in this study have placed the second moment of engagement at different points in time between 5 and 21 minutes of the 30 minute music therapy video.

# Trends indicated by the graph:

Participants were free to note as many or as little significant moments while observing the video and then choose the significant three to describe and discuss during the interview. There is a relationship between participants and where they chose to place Moment 1 and Moment 3 of engagement while observing the music therapy video. The

graph shows the TA and the Student Music Therapist (SMT) to have placed Moment 1 at 1:00 minute. The rest of the participants, apart from the Parent have also identified Moment 1 to occur within the first 5 minutes of the 30 minute video.

The graph shows a cluster of Moment 3 between the 21<sup>st</sup> and 24<sup>th</sup> minute of the 30 minute video. The TA, Parent, SMT and Registered Music Therapist (RMT) have all placed Moment 3 within a short time frame near the end of the video and in close proximity to one another, suggesting that something particularly important was being observed here that 4 out of 5 participants identified and chose to discuss.

In comparison to Moments 1 and 3, Moment 2 appears scattered along the time axis of the graph, over a 16 minute time period between the 5<sup>th</sup> and 21<sup>st</sup> minute of the video, with the exception of the TA and SLT who meet at 6:47 minutes. 16 minutes is a long time frame in which many occurrences are possible, therefore significant moments were selected and appear scattered along the graph.

The cluster of Moments 1 and 3 on the graph suggests that majority of the participants shared a similar experience of engagement during the selected time period. What was occurring here was observed to be significant by more than one participant, suggesting it is possible to observe and identify moments of engagement. The graph also shows the SLT to have placed Moment 3 at 15 minutes and 38 seconds of the video, almost 6 minutes before the rest of the participants. This suggests that what the SLT identifies as engagement might be different from what other participants identify to be engagement within music therapy.

#### A closer look at overlaps:

In terms of looking at the graph, the TA overlaps with the SMT at **Moment 1**, 1 minute into the music therapy video. The TA also coincides with the SLT at **Moment 2**, at the point of 6 minutes and 47 seconds.

Moment Two: 6:47. As observed by the researcher:

SMT sings "The hand on the drum goes" and demonstrates hand movement "up and down" on the bongos. SMTs' vocal pitch ascends as she sings "up, up" and lifts her hand above the bongo, before altering vocal pitch, now descending to sound low and accommodate the hand movements, now moving slowly downwards towards the bongo before sounding on the word "down". \*Lola moves her head up and down and focuses attention on the direction of SMTs' hand movements. \*Lola laughs and vocalizes short, low notes, SMT responds by singing low and releasing hand downwards on the bongo. SMT vocalizes lyrics to accommodate \*Lola's hand movements. \*Lola's head and attention are turned away from the SMT as she lifts her left hand above the bongo. \*Lola lowers left hand on the drum to produce a soft sound. SMT responds by vocalizing in a low tone. \*Lola vocalizes short melodic sounds and smiles.

The next section takes a closer look at how the SLT and TA observed and commented on this moment: their responses and approaches towards the moment and what is shared between them, their feelings and character.

Focus: Moment 2, 6:47 overlaps: where the TA and SLT chose to locate engagement:

In Table 1, Extract 2, the SLT observed and described \*Lola watching and responding to the SMT's facial expressions, tone and pitch change in the music. \*Lola is watching the drum and where the SMT's hands are gonna go. \*Lola looks at the drum as the SMT is looking at the drum.

The SLT seems to be very observant of not only what the student is doing during this moment that looks like 'engagement', but what the student is doing in response to what the student music therapist (SMT) is doing. Under *Criteria*, Table 1, Extract 2, the SLT has observed that what the student is doing is looking, not just at the SMT but looking at what the SMT is looking at. Her approach to identifying engagement during this moment in music therapy seems to come from a Speech and Language Therapy background, as

her observations naturally focus on the facial expression of the student and how she responds with her eyes. In Table 1, Extract 2, under *Key points and themes*, the SLT describes \*Lola's laughter and vocalizations in response to the SMT's facial expressions, tone and pitch change in the music.

In Table 2, Extract 2, the TA observed and similarly described \*Lola's responses to what the student music therapist is doing. When the SMT takes out the bells, \*Lola seems to recognize them as "she's done them before and she gets really, really happy" (181). When the SMT moves her hand up and down, \*Lola appears to be concentrating and working hard, really trying to do it her self (Table 2, Extract 2, 6:47) Similarly to the SLT, the TA's observations focus on \*Lola's facial expression and non-verbal responses such as smiling and vocalizing. Both share the same feeling of interpersonal communication as observed in \*Lola's facial expressions and non-verbal responses such as smiling and vocalizing. However, the TA also chooses to focus on \*Lola's whole body in identifying engagement during this moment. Both the SLT and TA placed engagement at 6:47, where they differ in their descriptions is that the SLT has observed and based her descriptions on a brief moment nearly 20 seconds in length, while the TA focused on a moment approximately 2 minutes long.

# The researcher's interpretation:

All of the above observations describe engagement, as identified by the SLT and the TA. The student is engaged with the SMT and what the SMT is doing, she is engaged with her eyes, watching and responding to what the SMT is doing as described by both the SLT and TA and she is engaged physically by trying to copy and imitate the SMT's hand movement of up and down by lifting her hand up and down, as described by the TA (Table 2, Extract 2, 6:47).

#### CHAPTER V

#### **DISCUSSION**

In this discussion section I will be considering various aspects of the research findings. Findings will be discussed by drawing on research methods and suggestions for limitations and future research are proposed.

### 5.1 Discussion of the findings

# 5.1.1 Moments of engagement in music therapy

An important aspect of this study was to examine how participants identified and described engagement in music therapy. The participants watched a single half hour recording of a student and therapist participating in the music therapy session. Participant observers then discussed their experiences of moments of engagement during the interview with the researcher. Analysis of interview transcripts revealed that most common descriptions of engagement during music therapy involved observable criteria. The participants identified 'engagement' during the moments based on their observation of the student (\*Lola) and the student music therapist (SMT). Categories of observations included \*Lola participating in the music therapy activities actively: by playing instruments and receptively: by appearing to be listening and showing recognition of instruments. Participants interpreted and identified 'engagement' as reflected in the student's eyes and non-verbal responses, for example vocalizations, laughter, gestures and body movement.

Participants' observations of the SMT show significance. The findings suggest that the student's responses and engagement in music activities depended on the SMT and what the SMT was doing. In their process of describing 'engagement' during moments in music therapy, participants often identified engagement from observing the way that the student was responding to the SMT's change of vocal pitch, facial expression, and hand

movements. The Speech and Language Therapist (SLT) specifically noticed and commented on the SMT's character:

"I think it's a combination of the tone of your voice, your facial expression, the noise of different instruments but ahh more you, more with the way you interact with the instruments and what happens" (291)..."If you did that in a boring, dull way, you kept a monotone, I don't think she'd be engaged. I think she's just having a great laugh" (295).

Similarly, the Registered Music Therapist (RMT) identified gestures and musical elements such as tones, volumes and pitch alterations in the music that the SMT was creating, which led her to feel that what the SMT was doing musically was "really reinforcing" (106-112) \*Lola's movements. The Teacher Aide (TA) summarized her observations of the SMT and client participating in music therapy as follows:

"you know, it's all about what you are doing and how you're doing it because you can just see this connection" (487-488).

The parent also observed the student was reflecting in her hand movements what the SMT was singing in the song and vice-versa (263-268). Individual participants' observations and above comments offer an insight into the developing therapeutic relationship of the client and SMT and how they might engage in a music therapy session.

The strongest moments of engagement that the participants noticed and commented on were when the student had the opportunity to interact with and play instruments. The introduction of instruments was described by participants to show significant impact on the student's engagement. Participants agreed that instruments played a part in motivating \*Lola to really work hard physically with her body and the up and down hand movements, as well as participate in the music activity by playing instruments.

Analysis of interview transcripts showed that each participant's perspective on 'engagement' depended on their circumstances. The SLT chose to focus on communicative responses when identifying engagement, presumably because of her background and training in the field of Speech and Language Therapy. The TA and parent's criteria for identifying whether or not the student was engaging during the moments in music therapy depended on experiences in a classroom or at home, while the RMT focused on whether or not the student was showing awareness of what was going on. She was the only participant to identify musical aspects of 'engagement' in describing a moment (see *Extract 1, Table 4.1.3*, p. 39) during which the SMT and student both engaged in a shared musical interaction.

Music therapy training involves learning to observe and listen in detail and use these skills to collect and interpret information about a particular client in order to be able to make an assessment of their needs. Music therapists therefore tend to make in-depth observations of experiences in music therapy. This is reflected in the analysis of the transcribed interview with the RMT. She provided in-depth descriptions on the student's engagement during the moments of music therapy, based on cognitive, musical, nonverbal, physical and emotional aspects of how the student participated in and responded to the therapy. Similarly, the SLT provided detailed descriptions on how the student was communicating non-verbally by choosing to observe the student's facial expression and eyes in particular to be able to identify engagement. The SLT offered a lot of valuable information from observing the students facial expression, in relation to her training in the areas of language and speech.

Although where observers spontaneously placed moments of engagement during the music therapy video varied (and this could be the result of having observed a relatively long video where it was possible to see more than 3 moments of engagement), the key descriptions that emerge in the observed categories (see Tables 4.1.1- 4.1.4, pp. 32-43) are very similar, suggesting that there is a phenomenon which was common to the participants and which could be identified as engagement.

# 5.1.2 Combined definition of 'engagement', as identified and described by participants

Once individual participants' definitions of 'engagement' were gathered and collectively examined, the findings revealed that participants shared similar ideas in their descriptions. A combined definition of 'engagement' was constructed based on common features described by the participants.

"Engagement can be identified when someone is participating on their own level in a verbal or non-verbal music activity or conversation. It may be reflected in the eyes, the body, facial expressions, non-verbal responses such as laughter, as well as intent to touch and interact with a musical instrument."

Distinguishing features were found in the Teacher Aide's (TA) description who commented "Engagement...is....when someone is participating on their own level, whatever level they have" (8). The parent was also the only participant to identify engagement from \*Lola's interest in and intent to interact with objects (23-24).

#### 5.1.3 Moments of engagement Graph

The graph was plotted to visually demonstrate where each participant chose to place engagement within the half hour music therapy session and video. It values the participants' choices, by respecting their process of when each moment of engagement occurred in the video and at which point they chose to discuss each moment during the interview.

From plotting the graph, we can see that understandings can be shared amongst different observers. Independent observers chose to focus on or emphasize different things within the extracts but the agreements in timings were interesting.

The graph shows moments when there was strong agreement between two or more participants. There are two occurrences of this, during Moment 1, one minute into the music therapy video, where both the researcher and the TA chose to place the first moment of engagement and Moment 2, where the second moment of engagement occurred at 6:47 for both the SLT and TA, as presented on the graph.

I took a closer look at the video and what was happening during this period of time identified by participants as moments of engagement. In order to be able to identify common and distinguishing features in how the SLT and the TA approached and described Moment 2, I also had a closer look at the interview transcripts. Both participants shared similar features in their descriptions of the particular moment. The SLT and TA described a period of music therapy where it was possible to observe engagement as indicated in \*Lola's reactions. Their observations not only on how \*Lola was reacting but how \*Lola was reacting in response to what the student music therapist (SMT) was doing were interesting. Their similar approach to describing Moment 2, 6:47 suggest two things to me. One: that it is possible to observe and identify engagement from the way that the student with severe and multiple handicaps participates in the music activity, whether this is active or receptive participation, and two: the relationship between what the SMT is doing and the client seems to be important and makes me ask the question: Is engagement about two parties, for example 'reciprocal engagement'? This would be worthy to investigate further, particularly with the client population who present with high physical and communication needs.

Where observations diverge is in the middle period of the music therapy session and video where people seem to see different things. I wonder then if engagement does often seem more intense at the beginning and end of sessions? Having said that, I would like to refer back to the interview with the Registered Music Therapist (RMT) who in her reflections of Moment 3, which occurred at the beginning of the video, often commented on the "time to warm up" (290) and "time to settle" (276, 306-306, 318-321), time for \*Lola to "settle in to the atmosphere" (307) of the music therapy session, and after that "moment of settling" (77) "everything is just tuned" (82, 83). The RMT was able to

recognize and comment on the time required for this particular student to settle in the music therapy session, which might explain why \*Lola was more actively and physically engaged by participating in body movement and playing instruments towards the end of the music therapy session in comparison to the beginning where \*Lola seemed to be more engaged by "listening" and "less movement" (267-279). This also offers a possible explanation as to why there is a level of agreement amongst observers nearing the end of the music therapy video.

# 5.1.4 Research strategy

Part of my research strategy was to allow three or four different people to select most memorable moments of engagement from observing the half hour music therapy video. I could have selected the three moments of engagement and asked the participants to observe and comment on these same moments. Initially first raw data for the study was gathered from my own observations of and comments on moments of engagement, identified during the music therapy recording selected for the study. Before the research commenced, my supervisor and I discussed the idea of asking individual participants to watch and describe three moments of engagement that I selected and then compare key points and themes. I made a decision to offer people a free choice of what their idea of engaged time is because I was interested to see what each participant initiated themselves.

Toolan & Coleman (1995) employed a variety of approaches in their study to measure and document changes in the levels of engagement occurring in five people with learning disabilities during music therapy. Where our methods diverge is in the research procedures. The method developed by the researchers to measure levels of engagement provided the three participants in the study with a definition of the verb 'engage' and guidelines of what to look for during observations of video. In the present study, I asked individual participants to identify what engagement signifies to them. I was interested in their own definition and interpretation of engagement before they went on to observe and identify moments of engagement during the music therapy video. The guidelines provided for the participants in Toolan & Coleman's study (1995) have some

resemblance to the questions in my research, however instead of directing the participant, my strategy was to leave things open by asking open-ended questions during the semi-structured interview so that that the participant observers were free to express their own feelings and views about what they were watching.

Toolan & Coleman (1995) conducted a descriptive study that involved both quantitative and aspects of qualitative approaches. The researchers developed a method that was suitable to their research question and what they were trying to document. The method helped to produce significant findings relevant to the client population who present with learning and communication difficulties, as well as useful for other clinicians and researchers interested to know more about the nature of music therapy with this population.

### **5.2 Methodological considerations**

There is a flexible approach to qualitative methods of conducting research. I value having an open-ended research focus because I believe it was the most appropriate in terms of what I was trying to find out. The flexibility of the qualitative research method allowed me to conduct interviews and ask questions that emerged in my clinical work. Aigen (1995:297) describes why flexibility can prove advantageous for the researcher. These include:

- (a) accommodating the overlapping stages of research: I repeatedly went through the process of reading and interpreting individual interview transcripts, looking for key themes and hidden meanings that I could categorize. As a result of this vigorous process I was able to find a focus in the data which lead to a better understanding of findings as a whole;
- (b) allowing for the evolution and openness of the research focus: Qualitative methodology provided me with different ways of analyzing that go beyond just raw data. For example I never thought that I could plot a graph based on present research findings. As a result the trends indicated by the graph provide interesting

insight on where during the music therapy video, observers placed the most significant moments of engagement.

(c) generating research method appropriate to the content: The focus of the present study was to find out how the student with severe and multiple handicaps participates or 'engages' in a normal music therapy session. The subject of engagement is captivating and requires the process of interpreting in order to be understood. Identifying 'engagement' becomes more difficult if the individual who is showing engagement is unable to verbally communicate and confirm their experiences. Speech and communication difficulty is common in individuals with severe and multiple handicaps. The method employed to gather data involved interviewing four participants experienced in the field of severe and multiple handicaps in order to gather multiple perspectives on the idea of engagement in music therapy with this particular population.

Drawing together multiple perspectives on the concept of a student's engagement in music therapy helped me to better understand the meaning of my own work as a student music therapist. Reading participant's descriptions and looking at my own observations and reflections of moments of engagement in the music therapy video (see Appendix N, p. 123) reveled that in our experience and process of describing these moments, both the participants and I shared similar feelings and ideas of 'engagement'. Participant's comments and natural descriptions confirmed my interpretations and experiences of 'engagement' with the student during the session. As a student music therapist reflecting on music therapy sessions with clients, I regularly questioned my therapeutic skills and approaches. In my personal reflection of Moment 1 for example, (see Appendix L, p.106) I wrote:

"I wonder why \*Lola did not vocalize in response to the familiar music and the space left in the song for her to respond as she has been heard to vocalize in the past music therapy sessions following the correct key of the Greeting Song. She responded by smiling, appearing to know what is expected of her and in a way

shy to respond by vocalizing single notes. She is observed to open her mouth and it appears widened as if though she wants to respond by vocalizing".

The TA who experienced Moment 1 of 'engagement' close to the time that I selected, between the 1<sup>st</sup> and 5<sup>th</sup> minute of the music therapy video, described during this time \*Lola was more engaged with her ears and eyes and the contact with the SMT. (*Table 4.1.2, Extract 1, TA*, p. 35). The TA noted:

"as soon as you start she is with you and this, I mean the whole song, you can just, if you just look at it, she is with you in the whole song. This is a communication between you. The whole time and its intense.. I think, that's why I picked that one, coz its, you can just see you know you just sit and watch, I think its so strong, this song" (42-46).

The TA's description and accentuated tone of voice suggests how significant this moment was for her and her need to show me, suggesting that the student was indeed engaging and sustaining engagement in the therapy with me and what I was doing. I was glad to be able to share similar feelings and perceptions of 'engagement' during the music therapy with all participants. Participant's personal experiences and knowledge offered insight and led me to better understand the student that I was working with. I was able to develop goals that addressed other areas of the student's needs.

### 5.2.1 Researcher limitations

Several challenges emerged in the process of analyzing qualitative material for this study. After raw data was collected from interviews, I was left with rich descriptions from each participant. As I scanned each document, I lost a sense of what I was really looking for, in a way I became absorbed in the data. New ideas and questions were triggered in my mind and it was challenging to focus on the essence of what I was researching. I believe this was the result of initially feeling overwhelmed by the data. I referred back to and kept in mind the research questions developed for the original research proposal. It was

also a good time to peer debrief with an external supervisor in order to keep on track, check for subjectivity and limit bias.

As I progressed through stages of reading interview transcripts and listening to the voice recorder I found my self slowly moving away from a rich set of data towards a more grounded statement of the data. With the help of my supervisor and the McFerran & Grocke (2007) chapter on interview analysis, I was also able to develop and adapt an appropriate method of analyzing the data that I gathered. As well as transcribing interview commentaries, the method involved drawing together different interviews and themes which were then shaped into categories. The tables were a final presentation of participant findings, created to store categories and guide the reader through the findings that relate directly to the questions asked during the semi-structured interview. I felt that the participant observers were noticing and communicating particular things about the music therapy session that were not associated with the interview questions but emerged naturally from their observations and discussions of engagement. As a researcher, I felt it was important to therefore include examples of interview transcripts in the Appendix section of the thesis (see Appendix J-L, pp. 89-106) for the reader to refer to.

# 5.3 Recommendations for future research

The findings show how strong yet simple 'engagement' can be for the severely, multiply disabled student taking part in the music therapy in the present study. Individual participants share the same concept of the students 'engagement' in music therapy. The student's eyes seemed to be an important feature in being able to recognize engagement. Future studies that focus on measuring eye direction with this client population are recommended, to examine whether there is a relationship between 'engagement' and where the client is focusing his or her attention.

Analysis of participant interviews revealed that during moments of engagement in the music therapy session the student was attentive towards the SMT and the variety of music therapy approaches employed during the session. One example is Moment 3, where most

observers placed engagement in between the 21<sup>st</sup> and 24<sup>th</sup> minute of the 30 minute video. This period of music therapy involved the use of music to motivate hand movement and interaction with instruments. The participants observed: \*Lola working hard physically with the up and down arm movements and with her body in response to what and how the SMT is doing it (Table 2, Extract 3, 23:00, TA, p. 35). The SMT is singing "up", \*Lola follows with her eyes and raises her arm, \*Lola is observing the SMT's facial expressions (Table 3, Extract 1, 23:40, RMT, p. 39). \*Lola is starting to get her hand movements going with what the SMT is singing, she is trying to get the up and down movements. The SMT is singing what \*Lola is doing, \*Lola appears pleased with her self and her efforts to get the ups and downs (Table 4, Extract 3, 21:18, Parent, p.43). The above observations suggest that the introduction of instruments as well as a variety of music therapy techniques used by the SMT in therapy, such as reflecting \*Lola's hand movements in the tone, volume, pitch and lyrics of the music, all play a part in motivating \*Lola to engage with both the instrument and the music, by playing the instrument. The Parent highlighted "that the bells and the drums and the shakers and things... \*Lola was wanting to get involved with, with all of them" (322-324). Further studies to determine whether different types of instruments have an affect on the engagement level of students presenting with severe, multiple handicaps are recommended.

#### 5.3.1 Future research in the field of music therapy

Historically, early music therapy research was predominately quantitative and drew heavily on behavioral principles, observing measurable change in response to musical interventions (Rickson & McFerran, 2007). This method is reliable when documenting the effects of treatment. It does not describe the whole spectrum of (subjective) effects, but it succeeds in showing with certainty that there is an effect and that the effect is a result of therapy (Smeijsters, 1997, p. 5). Smeijsters (1997, p. 3) reported that in the early 1990's, during the First Symposium for Qualitative Research in Germany, participants frequently asked whether quantitative research can describe the essence of music therapy. In recent years, music therapists have embraced qualitative investigations that explore

process and the 'why' of intervention effectiveness, rather than the more basic question of efficacy (McFerran & Stephenson, 2006). Qualitative research is valued in the field of music therapy because it captures rich descriptions of participants' experiences. This is particularly relevant for researchers who are interested in the hidden aspects of the music therapy experience. However, the results of rigorous qualitative research are not fully recognized under the evidence based framework (Rickson & McFerran, 2007).

The recent introduction of the evidence-based framework is the current standard for research in special education, however knowledge of all types of research is required in order to present a variety of types of evidence acceptable to a range of other professions as well as our own. (McFerran & Stephenson, 2006).

In addition to the kinds of studies that draw on behavioral analysis, it is also important that music therapists continue to investigate the questions that emerge from their clinical practice (Rickson & McFerran, 2007). A greater understanding of the communicative and symbolic meaning of clients' musical material is needed and qualitative analysis has been used to address these questions (Graham, 2004; McFerran & Stephenson, 2006; Perry, 2003; Rickson & McFerran, 2007; Wheeler, 1999).

### CHAPTER VI

### **CONCLUSION**

The present research explored how one student engages in a normal music therapy session. I was investigating a therapeutic concept of 'engagement' with one child who presented with severe and multiple handicaps and as a result experienced additional difficulties in the areas of communication and learning. Because they have limited opportunities to interact and express their thoughts and emotions, this group of people get the best out of experiences and other people. Music therapy can help them to connect or engage with a thing or person.

The main findings of the present study reveal that it is possible to see engagement in a music therapy session based on criteria that is not only observable. How individual participant's responded to 'engagement' related to their training and profession. Findings also suggest that engagement is difficult to identify and describe because it depends on interpretation. There is a relationship between what observers defined engagement as and how they identified engagement in the moments during the music therapy session. The main issues that emerge are that what we interpret as engagement from personal experience, remains subjective. We can not consult the student or ask the student to confirm their experience of the moment but we can create opportunities to encourage engagement in students with severe and multiple handicaps.

#### REFERENCES

Aigen, K. (1995). Principles of Qualitative Research. In Wheeler, B.L. (Ed.), *Music Therapy Research: Quantitative and Qualitative perspectives* (pp. 283-313). Phoenixville, PA: Barcelona Publishers.

Amir, D. (1992). Awakening and Expanding the Self: Meaningful Moments in the Music Therapy Process as Experienced and Described by Music Therapists and Music Therapy Clients. *Published Doctoral Dissertation*, Michigan: University Microfilms International.

Boswell, B. & Vidret, M. (1993). Rhythmic Movement and Music for Adolescents with Severe and Profound Disabilities. *Music Therapy Perspectives*, 11, 37-41.

Bruscia, K.E. (1995a). Differences between Quantitative and Qualitative Research Paradigms: Implications for Music Therapy. In Wheeler, B.L. (Ed.), *Music Therapy Research: Quantitative and Qualitative perspectives* (pp. 65-79). Phoenixville, PA: Barcelona Publishers.

Bruscia, K.E. (1995b). The Process of Doing Qualitative Research: Part II: Procedural Steps. In Wheeler, B.L. (Ed.), *Music Therapy Research: Quantitative and Qualitative perspectives* (pp. 401-429). Phoenixville, PA: Barcelona Publishers.

Craig, D.G. (2007). An Exploratory Study of the Concept of Meaningfulness in Music. *Nordic Journal of Music Therapy*, 16(1), 3-13.

Cumley, G. & Jones, R. (1992). Persons with Primary Speech, Language, and Motor Impairments. In Beukelman, D. R. & Mirenda, P., *Augmentative and Alternative Communication, Management of Severe Communication Disorders in Children and Adults*. Baltimore, Maryland: Paul H. Brookes Publishing Co.

Daveson, B. & Edwards, J. (1998). A Role for Music Therapy in Special Education. *International Journal of Disability, Development and Education*, 45:4, 449-457.

Elefant, C. & Wigram, T. (2005). Learning Ability in Children with Rett Syndrome. *Brain and Development*, 27, S97-S101.

Fowler, H.W. and Fowler, F.G. (1987). 'Engage' and 'Engagement', in J.B. Sykes, *The Concise Oxford Dictionary of Current English* (7<sup>th</sup> ed.), New York: Oxford University Press.

Goodman, K. D. (2007). *Music Therapy Group-work with Special Needs Children, The Evolving Process.* Springfield, Illinois: Charles C Thomas Publishers.

Graham, J. (2004). Communicating with the Uncommunicative: Music Therapy with Pre-Verbal Adults. *British Journal of Learning Disabilities*, 32, 24-29. Harding, C. & Ballard, K. D. (1982). The Effectiveness of Music as a Stimulus and as a Contingent Reward in Promoting the Spontaneous Speech of Three Physically Handicapped Preschoolers. *Journal of Music Therapy*, 19(2), 86-101.

Hooper, S. R. & Umansky, W. (2009). *Young Children with Special Needs* (5<sup>th</sup> ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.

Krout, R. (1987). Music Therapy with Multi-Handicapped Students: Individualizing Treatment within a Group Setting. *Journal of Music Therapy*, 24(1), 2-13.

McFerran, K. and Stephenson, J. (2006). Music Therapy in Special Education: Do We Need More Evidence? *British Journal of Music Therapy*, 20:2, 121-128.

McFerran, K. & Grocke, D. (2007). Understanding Music Therapy Experiences Through Interviewing: A Phenomenological Microanalysis. In Wosch, T. and Wigram, T. (Eds.), *Microanalysis in Music Therapy: Methods, Techniques and Applications for Clinicians, Researchers, Educators and Students* (pp. 273-285). London: Jessica Kingsley Publishers.

Michel, D. E. (1985). *Music Therapy: An Introduction, Including Music in Special Education* (2<sup>nd</sup>ed.). Springfield, Illinois: Charles C Thomas Publishers.

Nordoff, P. & Robbins, C. (1995). *Music Therapy in Special Education* (2<sup>nd</sup> ed. 1983, 3<sup>rd</sup> printing, 1995). Saint Louis: MMB Music, Inc.

Nowikas, S. (1999). Discovering Meaning in Kelly's Nonverbal Expressions. In Hibben, J. (Ed.), *Inside Music Therapy: Client Experiences*. Gilsum, NH: Barcelona Publishers.

O'Callaghan, C.C. and Colegrove, V. (1998). Effect of the Music Therapy Introduction when Engaging Hospitalized Cancer Patients. *Music Therapy Perspectives*, 16(2), 67-74.

Olson, J. L., Platt, J. C. & Dieker, L. A. (2008). *Teaching Children and Adolescents with Special Needs* (5<sup>th</sup> ed.) Upper Saddle River, New Jersey: Pearson Education, Inc.

Patterson, A. (2003). Music Teachers and Music Therapists: Helping Children Together. *Music Educators Journal*, 89:4, 35-38.

Pellitteri, J. (2000). Music Therapy in the Special Education Setting. *Journal of Educational and Psychological consultation*, 11(3&4), 379-391.

Perry, M.M.R. (2003). Relating Improvisational Music Therapy with Severely and Multiply Disabled Children to Communication Development. *Journal of Music Therapy*, 40(3), 227-246.

Rickson, D. (1997). The Music Therapist Working in New Zealand Schools with Children who have Disabilities. *New Zealand Society for Music Therapy*, 44-53.

Rickson, D. (2001). A Music Therapy Practice in Special Education Settings in New Zealand. *New Zealand Society for Music Therapy*, 26-47.

Rickson, D (2007). Music Therapy in Special Education: Do We Need More Evidence? A response to K. McFerran & J. Stephenson. *British Journal of Music Therapy*, 21:1, 28-29.

Rickson, D. & McFerran K. (2007). Music Therapy in Special Education: Where are we now? *Kairaranga, New Zealand Journal of Educational Practice*, 8(1), 40-47.

Ridder, H. M. (2007). Microanalysis on Selected Video Clips with Focus on Communicative Response in Music Therapy. In T. Wosch & T. Wigram (Eds.), *Microanalysis in Music Therapy: Methods, Techniques and Applications for Clinicians, Researchers, Educators and Students* (pp. 54-67). London: Jessica Kingsley Publishers.

Sherrat, K., Thornton, A. and Hatton, C. (2004). Emotional and Behavioral Responses to Music in People with Dementia: an Observational Study. *Aging and Mental Health*, 8(3), 233-241.

Siegel-Causey, E., Guy, B. and Guess, D. (1995). Severe and Multiple Disabilities. In E.L. Meyen and T.M. Skrtic (Eds.), *Special Education and Student Disability: an Introduction. Traditional, Emerging and Alternative Perspectives* (4<sup>th</sup> ed.). Denver: Love Publishing.

Smeijsters, H. (1997). *Multiple Perspectives: A Guide to Qualitative Research in Music Therapy*. Gilsum, NH: Barcelona Publishers.

Stephenson, J. (2006). Music Therapy and the Education of Students with Severe Disabilities. *Education and Training in Developmental Disabilities*, 41(3), 290-299.

Stevenson, K. (2003). Music Therapy Assisted Communication with children with Severe Disabilities. *New Zealand Journal of Music Therapy*, 1, 82-92.

Toolan, P. and Coleman, S. (1995). Music Therapy, a Description of Process: Engagement and Avoidance in Five People with Learning Disabilities. *British Journal of Music Therapy*, 9(1), 17-24.

Wheeler, B.L. (Ed.) (1995). *Music Therapy Research: Quantitative and Qualitative Perspectives* (pp. 549-573). Phoenixville, PA: Barcelona Publishers.

Wheeler, B. L. (1999). Experiencing Pleasure in Working with Severely Disabled Children. *Journal of Music Therapy*, 36(1), 56-80.

Wheeler, B.L. and Kenny, C. (2005). Principles of Qualitative Research. In B.L. Wheeler (Ed.), *Music Therapy Research* (2<sup>nd</sup> ed.). Barcelona Publishers.

Whitehead-Plaux, A.M., Zebrowski, N., Baryza, M.J. and Sheridan, R.L. (2007). Exploring the Effects of Music Therapy on Pediatric Pain: Phase 1. *Journal of Music Therapy*, 44(3) 217-241.

Wigram, T., Pederson, I. N. & Bonde, L. O. (2002). A Comprehensive Guide to Music Therapy: Theory, Clinical Practice, Research and Training. London: Jessica Kingsley Publishers.

Wosch, T. and Wigram, T. (Eds.) (2007). *Microanalysis in Music Therapy: Methods, Techniques and Applications for Clinicians, Researchers, Educators and Students*, London: Jessica Kingsley Publishers.

Wylie, M. E. (1983). Eliciting Vocal Responses in Severely and Profoundly Mentally Handicapped Subjects. *Journal of Music Therapy*, 20(4), 190-200.

### APPENDIX A

### ADVERTISEMENT FOR THE RECRUITMENT OF A MUSIC THERAPIST



### INVITATION TO PARTICIPATE IN THE RESEARCH PROJECT TITLED: Engagement in Music Therapy: A detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

### Dear Colleagues,

There is an opportunity to participate in a research study being prepared for a Masters Degree at the New Zealand School of Music, Wellington. The purpose of the research is to find out how one child participates or 'engages' in an ordinary music therapy session. I would like to recruit four willing participants, who are experienced in the field of severe and multiple handicaps, from a group of professionals and parents to observe video of a recorded music therapy session and comment on their observations of 'engagement' within the session.

If you agree to participate, you will be invited to take part in a semi-structured interview, which I will facilitate, for no longer than 1 ½ hours at a time convenient to you. During the meeting the aim will be to develop and discuss your ideas and observations on engagement in the music therapy session.

### Inclusion Criteria for Recruitment of Participants:

Participants will have knowledge and experience working with and/or caring for people who present with a variety of severe and multiple disabilities. I will aim to include no more than 4 people from a group experienced in the field of severe and multiple disabilities, who are either employed at or affiliated to

School. Ideally this will be:

- One registered music therapist;
- One parent, guardian or caregiver of the student participating in the music therapy session observed;
- One teacher aide employed at the School for a period of 6 months or more.
- One registered therapist employed at the School, from a group of Occupational, Physio, Speech and Language Therapists.

The first 4 respondents who meet these criteria will be invited to take part in the project.

If you would like to take part and you can meet the inclusion criteria above, please contact the Deputy Principal of School, , by emailing , by 22/09/2008 and we will forward you a consent form and information sheet. Thank you for your interest.

#### APPENDIX B

### INFORMATION SHEET FOR PARTICIPANTS



### INFORMATION SHEET

Title of research: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

Kia-ora,

You are invited to participate in the research study being prepared for a Masters Degree at the New Zealand School of Music, Wellington. The research is being undertaken by Miona Stamenovic, 2<sup>nd</sup> year Masters Student and supervised by Sarah Hoskyns, Director of the Master of Music Therapy Programme at the New Zealand School of Music.

### **Introduction:**

My research project is based on a music therapy session with a student with high needs attending . The purpose of the research is to find out how one child participates or 'engages' in an ordinary music therapy session. I would like to recruit no more than four willing participants who are experienced in the field of severe and multiple handicaps, from a group of professionals and parents to observe video of a recorded music therapy session and comment on their observations of 'engagement' within the session.

If you agree to participate, you will be invited to take part in a semi-structured interview, which I will facilitate, for no longer than 1 ½ hours. The meeting will take place at , at a time convenient to

you, probably late afternoon/evening on a weekday. During the meeting the aim will be to develop and discuss your ideas and observations on engagement in the music therapy session. As researcher, I will ask you to identify 3 moments in the session that you think look like engagement. I will then ask you some open ended questions about those moments and you will be free to communicate your ideas about what you saw.

### **Inclusion Criteria for Recruitment of Participants:**

You will have to have knowledge and experience working with and/or caring for people who present with a variety of severe and multiple disabilities. Due to the limitations and time frame of a Masters thesis, I will aim to include no more than 4 people from a group experienced in the field of severe and multiple disabilities, who are either employed at or affiliated to School. Ideally this will be:

- One registered music therapist;
- One parent, guardian or caregiver of the student participating in the music therapy session observed;
- One teacher aide employed at the School for a period of 6 months or more
- One registered therapist employed at the School, from a group of Occupational, Physio, Speech and Language Therapists.

The first 4 respondents who meet these criteria will be invited to take part in the project.

### **Project Procedures:**

The interview will be recorded and a written transcript will be prepared by the researcher. The transcript will be returned to you for verification and for correction of any specific details if necessary. The transcript will then be analysed for themes and constructs of meaning, and a summary will be prepared for inclusion in my research. Every effort will be made to protect your privacy and confidentiality as a participant: for example names will be changed and identifying information disguised. During the process of the research, raw data will be stored in a locked cupboard at the school where the research is being conducted. At the end of the study all raw data relating to the study will be stored securely at the New Zealand School of Music for a period of five years before it is destroyed.

If you would like to take part and you can meet the inclusion criteria above, please contact the researcher, Miona Stamenovic, by email at the bottom of this information sheet, by (*date to be inserted following ethical approval*).

### Your rights as a participant:

You are under no obligation to accept this invitation. If you decide to participate, you have the right:

- To decline to answer any particular question;
- To withdraw from the study;
- To ask any questions about the study at any time during participation;
- To provide information on the understanding that your name will not be used unless you give permission to the researcher;
- To be given access to a summary of the project findings when it is concluded;
- To ask for the audio/video tape to be turned off at any time during the interview.

If you would like to see a summary of the results, please tick the relevant section on the consent form. If you have any questions about the study, please contact the researcher and/ or the supervisor, at the contact details below:

Researcher:	Supervisor:
Miona Stamenovic	Sarah Hoskyns
2 <sup>nd</sup> year Masters Student,	Associate Professor,
NZSM, Wellington	Director of Master of Music Therapy
Email: miona_stamenovic@msn.com	Programme
	NZSM,
	PO Box 2332,
	Wellington
	Email: sarah.hoskyns@nzsm.ac.nz
	_

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application08/39. If you have any concerns about the conduct of this research, please contact Professor John O'Neill, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 8771, email: <a href="mailto:humanethicsoutha@massey.ac.nz">humanethicsoutha@massey.ac.nz</a>.

### APPENDIX C

### INFORMATION SHEET FOR PARENTS/ CAREGIVERS



### INFORMATION SHEET FOR PARENTS

Title of research: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

Kia-ora, Hello

My name is Miona Stamenovic and I am a Music Therapy student with the New Zealand School of Music. Your child has been attending regular half hour music therapy sessions on a weekly basis at School facilitated by me for over a period of 15 weeks now.

Some music therapy sessions have been video taped with your consent and stored in a secure cupboard at School. Up until now, recorded music therapy sessions have been viewed by me and my supervisor only. As part of my Masters thesis I am about to conduct research at the school and am interested in finding out how a child with high needs participates or 'engages' in an ordinary music therapy session.

I would like to select one half hour video that involves your child participating in the music therapy session to be included in the research. As part of this I am seeking your permission, for other professionals participating in the study and who have experience in the field of severe and multiple disabilities, to observe the selected video. I would also like to invite you to be a participant in the study as outlined in the Information Sheet.

Please understand that if you choose to give permission for the video of your child to be observed, you are under no obligation to participate in the study. Any personal identifying information regarding your child will be kept confidential and neither the participant's name nor the facility will be revealed.

All the information regarding the study and research process is outlined in the Information Sheet. Thank you, Miona Stamenovic, Student Music Therapist

### APPENDIX D

### AN EXAMPLE OF INTERVIEW QUESTIONS



### INTERVIEW SCHEDULE

Title of research: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

### **Before the video:**

**Q1:** When you are engaged in a conversation or an activity with another person, what aspects do you look at that make you think this person is paying attention and focusing on the activity? (Possible Prompt: Perhaps think about our conversation taking place right now?)

### **Brief:**

I would like you to observe the recorded video of a child and therapist engaging in music therapy. As you observe the video I would like you to identify three moments that you think look like the student is participating or 'engaging' in the music therapy session. When you identify the particular period of importance, make a note of the time it occurred in by looking at the time counter shown in the video.

You are free to note down as many or as little significant moments in which you think the student is taking part in the music therapy session. You might identify more than three moments or none at all. At the end of the video we will watch the three moments again and you will be free to describe these moments and why you have selected them.

### **After the video:**

**Q2:** You have just observed video of a recorded music therapy session with a student and therapist. Let us watch the first moment you have identified again. Can you please describe this moment to me and why you have selected it? (To repeat for  $2^{nd}$  and  $3^{rd}$  moment)

**Q3:** What is the student doing here that makes you think this moment looks like the child is participating or engaging in the music therapy session? For example, think about

musical, physical, emotional, cognitive and non-verbal aspects such as gestures, vocalizations and facial expressions.

**Q4:** What criteria did you use in this extract to identify and define whether the student is or is not participating or engaging in the music therapy session?

### APPENDIX E

### **CONSENT FORM FOR PARTICIPANTS**



Title of Research Project: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

# CONSENT FORM FOR PARTICIPANTS

# This consent form will be held for a period of five years

me.	I have read the Information Sheet and have had the details of the study explained to
□ ask	My questions have been answered to my satisfaction, and I understand that I may further questions at any time.
	I agree to the interview being audio taped.
	I understand that I can ask for the recording device to be switched off at any time.
com	I understand that I can access the results of the research when the thesis is apleted.
The	refore I consent to participate under the conditions outlined in the information sheet.
	nature: Date: Name Printed

### **APPENDIX F**

### CONSENT FOR PARENT AND/OR GUARDIAN TO OBSERVE VIDEO



Title of Research Project: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

# CONSENT FORM FOR PARENT AND/OR GUARDIAN FOR THE OBSERVATION OF VIDEO OF THEIR CHILD IN MUSIC THERAPY

# This consent form will be held for a period of five years

☐ I have read the Information Sheet and have had the details of the study explained to me.
☐ I understand that the researcher is requesting consent for other professionals to observe one session of music therapy of my child recorded on video.
☐ My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.
☐ I understand that the video will be kept stored in a secure cupboard at the School and that it will be destroyed at the completion of the study unless further permission is granted for the material to be used for teaching or other specific purpose.
☐ I understand that the video will only be observed by professionals experienced in the field of severe and multiple disabilities participating in the study.
☐ I understand that any personal identifying information regarding my child will be kept confidential. Neither my child's name nor facility will be revealed in any written summary of the research.
$\Box$ I understand that if I request it, I can receive a summary of the research results when the thesis is completed.
Therefore, I agree to give consent for my child:(Name of Student-printed)

to be observed on video by other professionals productions set out in the Information Sheet.	participating in this study under the
Signature:	
run Name Printed	

### APPENDIX G

# CONFIDENTIALITY AGREEMENT FOR PARTICIPANTS OBSERVING THE VIDEO



Title of Research Project: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

CONFIDENTIALITY AGREEMENT FOR PARTICIPANTS OBSERVING THE

### **APPENDIX H**

### AUTHORITY FOR THE RELEASE OF INTERVIEW TRANSCRIPTS



Title of Research Project: Engagement in Music Therapy: a detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

### AUTHORITY FOR THE RELEASE OF INTERVIEW TRANSCRIPTS

	This consent form will be held for a period of five years
	I confirm that I have had the opportunity to read and amend the transcript of the
inte	erview/s conducted with me.
	I agree that the edited transcript and extracts from this may be used by the
res	earcher, Stamenovic Miona in reports and publications arising from the research.
α.	
_	gnature: Date:
rul	Il Name Printed

### APPENDIX I

# INVITATION TO PARTICIPATE IN THE RESEARCH PROJECT: TEACHER AIDE



# INVITATION TO PARTICIPATE IN THE RESEARCH PROJECT TITLED: Project entitled: Engagement in Music Therapy: A detailed study of communication between the therapist and client presenting with severe and multiple handicaps.

### Dear Colleagues,

There is an opportunity to participate in a research study being prepared for a Masters Degree at the New Zealand School of Music, Wellington. The purpose of the research is to find out how one child participates or 'engages' in an ordinary music therapy session. I would like to recruit four willing participants, who are experienced in the field of severe and multiple handicaps, from a group of professionals and parents to observe video of a recorded music therapy session and comment on their observations of 'engagement' within the session.

If you agree to participate, you will be invited to take part in a semi-structured interview, which I will facilitate, for no longer than 1 ½ hours at a time convenient to you. During the meeting the aim will be to develop and discuss your ideas and observations on engagement in the music therapy session.

### Inclusion Criteria for Recruitment of Participants:

Participants will have knowledge and experience working with and/or caring for people who present with a variety of severe and multiple disabilities. I will aim to include no more than 4 people from a group experienced in the field of severe and multiple disabilities, who are either employed at or affiliated to

School. Ideally this will be:

- One registered music therapist;
- One parent, guardian or caregiver of the student participating in the music therapy session observed;
- One teacher aide employed at the School for a period of 6 months or more.

• One registered therapist employed at the School, from a group of Occupational, Physio, Speech and Language Therapists.

The first 4 respondents who meet these criteria will be invited to take part in the project.

If you would like to take part and you can meet the inclusion criteria above, please contact the Deputy Principal of School, , by emailing , by 22/09/2008 and we will forward you a consent form and information sheet. Thank you for your interest.

### APPENDIX J

# AN EXAMPLE OF INTERVIEW ANALYSIS: REGISTERED MUSIC THERAPIST (RMT)

**Interview Transcript: Participant 3: RMT** 1 2 3 O1: When you are engaged in a conversation or an activity with another person, 4 what aspects do you look at that make you think this person is paying attention and 5 focusing on the activity? (Possible Prompt: Perhaps think about our conversation 6 taking place right now?) 7 8 **A:** So.. when you say another person, is it a client or just anybody there? 9 10 Q: Anybody! You know when we are speaking right now... 11 12 A: Mmm.. well.. I guess eye contact and you know the responses that I get, maybe 13 nodding or umm.. when they are actually asking me back to confirm the things that I have 14 said like you know questions to the questions or.... (pause) yeah! I guess that's pretty 15 much it in conversation, yeah, yeah... 16 17 When engaged in a conversation or activity with another person, this participant is 18 looking for eye contact, responses such as nodding and questions of confirmation to 19 determine whether that person is paying attention and focusing on the activity. 20 21 Moment One: 23:40 22 (A small wooden beater attached to a string has been placed around \*Lola's left hand) 23 \*Lola is gradually moving her left hand up and down. The SMT is copying \*Lola's hand movements in the music and lyrics of the song, singing "up and down" and following 24 25 ascending and descending pitches as \*Lola lifts and lowers her left hand. \*Lola smiles and moves her head. She vocalizes short 'ng' sounds. \*Lola's mouth widens as she lifts 26 27 her left hand at her chest level.\*Lola smiles and briefly directs her attention towards the 28 TA seated on her right hand side. 29 30 Q: Ok so the first moment is about 23:40 seconds, around that time so if you could 31 please just describe this moment to me and why you have selected it? So everything 32 that you sort of have seen or see. 33 34 A: Well, I chose that moment, as I said, I think all the way throughout the session she 35 was engaged in different ways, if she is not participating, she might be listening to you or 36 observing your playing or look around or follow you when you are moving, you know 37 trying to choose another instrument, so I feel that she was very much attentive all the way 38 through but I chose that moment because that was when umm... she was more actively, 39 physically, moving her arms, and also she showed very much good awareness of going 40 up and down. It followed with her eye, eyes as well and also, your timing was beautiful, 41 your, "up, up, up", that kind of stuff whilst her to take a moment to you know, raise her

- 42 arm in that sense. And as you're singing up and you know your, your, you know, facial
- expression is really reinforced that movement I felt and umm, she was really keen to
- umm to participate too, umm.. she was mouthing a lot, she giggled a lot and I feel like
- she, she was realizing in that, that umm.. resolution of 'down' (in relation to going 'up')
- and (demonstrates low sound) some sort of resolution...
- The RMT is referring a lot to what the SMT is also doing in the video during the music activity, identifying facial expression and singing.

### Q: ..to the music?

A: ...yeah, to the music and yeah, so I felt that there were really lovely interactions between you two and constantly she was checking at umm, the TA, yeah she was actually, you know looking back trying to see what she was doing too or maybe just to check out or show "look I did this", you know, yeah. So...

### Q: ...like a confirmation?

**A:** Like a confirmation, yes. Umm.. yes so that was beautiful and umm.. And also, I mean, its hard to kind of aim to hit with that thing, what do you call this?

### Q: I'd say it's a beater on a string that I have never used before.

**A:** Yeah, so I mean, that's a fantastic way, because I mean.. coz it swings, you know, it spontaneously hits the cymbal but sometimes it is hard to aim for her. To make that sound on that resolution moment, umm so I saw her hand actually reaching out to the cymbal...

### Q: ..towards the cymbal?

**A:** Mhm, mhm, so... but the timing you know was really in tune with the whole music so umm...

### Q: You mean her timing, reaching towards the cymbal?

**A:** Aha.. I mean, I guess, of cause you were trying to time everything at her pace as well but everything kind of after that moment of settling, it settled into a more structured and...

### Q: ... contained?

**A:** ... mhm, contained, mhm.. structure should I say. Yeah so umm, yeah everything is just tuned which was beautiful to see and she was really enjoying her self so that was great.

Highlighted statements: everything was in tune (during this particular moment towards the end of the MT session that the RMT had selected), timing, and moment of settling.

Q: Is that her facial expression that tells you that or..?

**A:** Yes, and also her umm, when something dropped or when she successfully made a sound, she always giggled so yeah. That felt to me like she was umm, enjoying that experience.

Q: Thank you, umm the next question about the same moment here... You are going to find that they are all a bit similar. It is what is the student doing here that makes you think this moment looks like the child is participating or engaging in the music therapy session? For example, think about musical, physical, emotional, cognitive and non-verbal aspects such as gestures, vocalizations and facial expressions.

A: Well, umm, your facial expression was very animated and umm that's great.

### **Q:** Do you think she is very responsive to that?

**A:** I mean she is observant of your facial expression so umm, I think she is very much aware of umm, the non, the non-verbal umm, cues. And also your umm, pitch range is very much reinforcing what you are trying to do with her you know. Not just singing up but you are actually raising your tones and volumes and pitch up and resolving it down with decrescendo and umm lower pitch. That's really reinforcing. And umm, yeah I mean, I felt that your, your gestures and your singing tone and everything, it was really inviting umm, you have created inviting atmosphere, yeah (smiles).

The RMT makes a few comments based on what the SMT is doing during the selected moment in the video. She identifies gestures and musical elements such as tones and volumes and pitch alteration in the music that the SMT produces. This leads the RMT to feel that what the SMT is doing musically is "really reinforcing" (\*Lola's movements?).

Q: So the next question is again what criteria did you use in this extract to identify and define whether the student is or is not participating or engaging in the music therapy session? I mean you seem to be very observant of, you have identified you know musical aspects, such as change of voice and that's I guess a criteria, as well as body, body movement, facial expression...

**A:** (reads question) Ok, its really difficult to define a criteria but I guess as you say it involves everything, her, her musical response as well as her gestural response, umm, eye contact, umm although she wasn't looking at you, you know I sense that she was listening because of next move.

The RMTs' criteria for defining whether the student is or is not participating or engaging in the music therapy session involves the way that \*Lola is responding, musically or with gestures as well as eye contact. The RMT recognizes that \*Lola was not looking at the

SMT during this moment in the video, however because of \*Lola's next movement, the RMT senses that \*Lola was listening. Q: I see, like anticipate? **A:** Yeah so... I mean for normal people its really hard to constantly look at somebody, you know you need a break to kind of think and digest things. So., umm... yeah, so its, its musical as well as gestural aspects. Q: Mhm, and physical? A: And physical too, yeah. I mean does that answer your question or do you... is there anything that you want me to... O: Is there anything that you would like to, sort of elaborate on? Anything more that you would like to say about this particular moment, just this moment? A: No, I just like to comment that it's a beautiful piece of work, she's yeah, I mean.... Yes, because I have seen her before.... Q: Oh yes. And you have experience... **A:** I, yes. That will give me a bit more you know information than the other, other participant whose, you know, maybe its their first time seeing her. Q: Exactly. A: ... mhm, from my personal experience with her, yeah I think getting her to do that it's a hard, hard work. O: Yeah, its very hard. **A:** So umm, yeah so I'm very impressed. Q: Thanks \*Jane (smiling). Moment Two: 9:40: The Hand on the Drum Goes Up and Down Turn-taking on the bongo drum: The SMT invites the TA to play the bongo drum. The SMT imitates the TA's hands going up and down, above and on the bongo drum in the lyrics and altering pitch of the music in the song.\*Lola follows the TA's hands moving upwards with her head and eyes. The TA's hand moves downwards to hit and sound the drum. \*Lola smiles. The SMT uses her right hand to support \*Lola's left hand and together move hands up and down on the bongo drum and along with the music. Both joined hands hit the drum producing a sudden sound. \*Lola smiles, her attention is directed away from the SMT and TA. The TA begins to support \*Lola's right hand. 

179 O: So just describe this moment to me and why you have identified it? 180 181 A: Well, I have chose that moment because I have felt that here she was supported 182 physically and musically and also umm, the modeling that you and the TA were showing. 183 She was very attentive that moment, I mean, she's watching her hands go up, up high and 184 also following it down so umm, that was very positive modeling for her. And then you 185 went on to support her hand, by hand on hand demonstration, I mean the TA followed 186 you with the other hand and then you know, you supported her hand to go up and you 187 demonstrated that movement for her. I felt it was very umm.... Encouraging moment for 188 her to, to, you know gradually do it on her own. So yeah, that's why I chose that moment. 189 190 Q: Ok, and umm well you have described what the student is doing here umm, that 191 makes this moment look like the child is participating or engaging. She seems, I 192 mean we just talked about I guess, the physical part where I am supporting her... 193 194 **A:** Mhm.... 195 196 Q: ... and she is supported by the TA and we're I guess demonstrating what's to 197 come so that she can do it on her own. What about umm, I guess ahh, some other 198 facial expressions maybe or... cognitive and non verbal aspects such as gestures...? 199 200 A: Mmm, I mean here she is, she is very much aware that you guys are supporting her so 201 she, she is looking around of, you know, what is going on and... as I said she was very 202 much following your hands and the movement that you are, that you and the TA is 203 demonstrating here so I think she's showing good awareness of, of what is happening 204 around her. 205 206 The RMT identified non verbal aspects such as attention and eye direction that make her 207 think \*Lola is aware during this moment. 208 209 Q: Thank you.. 210 211 **A:** (smiling) 212 213 Q: And I guess the criteria... 214 215 **A:** Aham... 216 217 O: .... Again, I mean what is your criteria for identifying this and defining whether 218 the student....? 219 220 A: Well, I am looking at her eyes a lot, I guess here, because, because she is physically 221 supported, you know, I'm trying to see if she's aware of... 222

223

224

Q: ... what is going on?

225 A: ... what is going on, so I am observing her face, facial expression and eye contact a lot 226 here and again I, I said it before but she's following, following umm, the movement very 227 well and... 228 229 Q: ... anticipating? 230 231 **A:** ... mmm, I think also that shows good awareness. 232 233 The criteria that the RMT uses to identify whether or not the student is/is not 234 participating or engaging during the moment selected, is based on behaviors that she can observe such as \*Lola's facial expression, eye contact and visual tracking of hand 235 236 movements for example. To understand awareness, the RMT focuses on \*Lola's eyes and 237 facial expression, rather than physical aspects as \*Lola is already being physically 238 supported by the TA and SMT during this moment. 239 240 Q: Thank you, is there anything else you want to say about this moment? I am sorry 241 I know that the questions are all very similar but... 242 243 A: ... yeah I think, I can't help saying everything that's in my mind and having to repeat 244 my self for different questions, umm... 245 246 Q: Its very hard... 247 248 **A:** Yeah! Umm, mmm, no nothing extra. 249 250 O: Should we move onto the next one? 251 252 A: Yeah! 253 254 Moment Three: 34 seconds: Hello Song 255 The SMT plays guitar and vocalizes the lyrics of the "Hello Song". \*Lola's head and attention are turned towards the SMT. \*Lola briefly maintains eye contact with the SMT 256 and smiles. SMT leaves a space in the music for \*Lola to respond, \*Lola smiles and 257 laughs, producing vocalizations. SMT instructs the TA in the lyric of the "Hello Song" to 258 259 have a turn at vocalizing. The TA vocalizes "kia ora" during the space left in the music. 260 \*Lola smiles, her head and attention are turned away from the TA. 261 O: Right, so we have just observed the 34<sup>th</sup> second into the video (both laugh). That 262 263 was just funny, the last, last moment umm, that you have selected and would you 264 like to describe to me what we have just observed and, and why, why you have 265 chosen this moment (laughs)? 266 A: Umm, well its very, here she, I can see that she was listening very umm, she was 267 268 really carefully listening to your words and there were moment where she (laughs) realized after few seconds she laughed when you are reflecting her movement like its 269 270 time for a, that we lift our hands, it took her like one or two seconds before she laughed

(smiles). Yeah, so umm, it really demonstrates that she was really listening but obviously here was more less movement. Umm, but it's the Greeting Song and umm, when you were also umm taking turns of saying hello to the TA also, I mean she responded. \*Lola didn't turn to look but she gently smiled when she (TA) said "kia ora". So that really demonstrates umm, her listening skills, I mean she was very much aware but umm, as it was the beginning part of the session, it takes time for her to settle and yeah, you know before (in the rest of the moments identified), she actively engages in umm, looking and physical participation. Umm.... Yeah, that's why I chose this moment, because umm, its quite different to the last two umm, moment I chose...

The RMT has selected a moment at the beginning of the MT session that takes place during the "Greeting Song" because it is different from the previous two moments selected where \*Lola is actively engaging in the music activity. The RMT is able to observe this in \*Lola's visual tracking as well as physical participation. During this moment the RMT seems to be interpreting that \*Lola is participating by listening based on her responses after the TA sing "Kia ora" for example.

### Q: Yeah, its quite different isn't it?

**A:** Yeah! Yeah, it feels like you know, you need this, you know time to warm up and then...

Q: And its interesting how we are looking from the end...

**A:** ... Yeah!

Q: ... now to the beginning...

A: Yeah!

Q: This is a different moment because I suppose, she is not physically engaged with playing instruments, she is more engaged umm well, I don't know, what do you think? I mean if you're thinking about the musical, or the emotional, cognitive, vocalizations, facial expressions in this moment?

**A:** I mean here I feel like, coz it's the beginning part of the session, she needs time to settle, settle in to the atmosphere, yeah. So, gentle start feels very much appropriate, umm and also I think she always needs time to register things, I mean I feel that she's cognitively umm, very aware but it just takes time to realize...

**Q: ... and process?** 

**A:** Yeah and process. So...

**Q: And then respond?** 

- A: Mhm, mhm.. so I explained earlier about umm, that her taking time to respond to what you have just reflected so yeah again it just feels like very gentle way of starting, getting her started and settled in umm, and yeah, music is very gentle. Its not, I mean its very inviting but its not so demanding, you know, its not asking her to do something, its about acknowledging that we are all here.

  Q: Thank you...

  A: And that you are following \*Lola. Its not like lets do this. Rather than that you are
- A: And that you are following \*Lola. Its not like lets do this. Rather than that you are reflecting what she is doing and what everybody else is doing in the music so, umm...
- **Q: Its about following her...** 329

- **A:** ...mmm, so that gives her a good sense that she is being supported here, so umm, yeah, that's why I chose this clip and...
- The RMT identifies cognitive and musical aspects during this moment that make her think that the student is participating or engaging in the MT session.
- Q: You mean that's what makes you think this moment looks like the child is engaged?
  - A: Mhm, well it really hard to say, the term engaged its very, very hard. I mean you can see on my paper I wrote many numbers of moments of engagement but I wanted to write every second, you know, because I felt throughout she was engaged, its just a matter of you know engaged in what?! You know, so umm yeah.
  - Q: Coz, you can be engaged with anything, but I suppose its in-between her and my self and what we are both doing in response to each other and umm, you have already highlighted a lot of things especially musical, which is really great, you know because other participants don't have the musical background.
- **A:** Mhm, how many participants?
- **Q: Only four.**
- **A:** And am I the only music therapist?
- 355 Q: Yes. And the other one is a speech and language therapist, teacher aide and 356 parent.
- **A:** Right. Different professions.
- 360 **Q:** Very, very different but actually everyone seems to know \*Lola very well.
- **A:** Mhm..

363 364 Q: So it is so nice to be able to watch the video with somebody and discuss... 365 366 **A:** Mhm, mhm... 367 368 Q: ... or just talk about it, it is so useful and everyone has such a different view and 369 its actually been so exciting, umm I guess the final question is what criteria did you 370 use in this extract to identify and define whether the student is or is not 371 participating or engaging in the session? 372 373 A: So here again, gestural, gestural cues here, umm. Here \*Lola didn't seem to make a 374 lot of eye contact here, I mean she does look at you time to time but it feels very brief and 375 often have her head, I mean eyes kind of gazing, you know below the eye level.. 376 377 Q: Mhm, and sort of towards... 378 379 A: ... towards the guitar, yeah, umm so... that's why I said that she wasn't actively 380 participating but it feels like she is listening here because of her next umm, next response 381 to your initiations, umm, yeah so here I mean.. gestural cues would be the main criteria 382 that I observed. 383 384 The RMT identifies gestural cues as the main criteria for identifying and defining 385 whether the student is or is not engaging or participating in the MT moment selected here. The RMT was observing \*Lola's gestural cues. 386 387 388 O: Thank you very much. They are all very different moments actually in terms of 389 engagement.. 390 391 A: Mhm.. 392 393 O: I there anything else that you would like to say? 394 395 **A:** Well done (laughs excitedly) 396 397 Q: Thank you (smiles). 398 399 The RMT has selected three different moments of engagement in the music therapy video 400 where she believes the student (\*Lola) is participating by listening (Moment 3), showing 401 awareness where physically and musically supported by the TA and SMT (Moment 2) 402 and physically participating in the music activity by movement of hands and in turn 403 sounding the instrument (Moment 1). The RMT chose to go backwards and discuss the moments selected form the end of the MT video (Moment 1 at 23:40 min), back to the 404 405 beginning (Moment 3 at 34 sec).

# APPENDIX K

# AN EXAMPLE OF INTERVIEW ANALYSIS: PARENT

1	Interview Transcript: Participant 4: Parent
2	
3	Q1: When you are engaged in a conversation or an activity with another person, what aspects do you look at that make you think this person is paying attention and
5	focusing on the activity? (Possible Prompt: Perhaps think about our conversation
6	taking place right now?)
7	
8	A: Ok, when I think engagement in relation to *Lola?
9	
10	Q: Yes.
11	
12	A: umm, ok. For her you can see it in her eyes coz she is looking at you. Umm, you
13	can see it in quite often in body language, especially if you sing a funny song to her
14	because I often do that at home, I sing songs that make her laugh and you can pick up
15	engagement like that very easily.
16	
17	Q: Yeah, her response in laughing and body language, her eye and visual contact?
18	
19	A: Yeah.
20	0.01
21	Q: Ok.
22	A
23	A: and sometimes if I'm quite close to her umm, she would try and umm, touch the
24	guitar.
<ul><li>25</li><li>26</li></ul>	Q: So she is reaching out her hand
27	Q: So she is reaching out her hand
28	A: reaching out her hand to touch the guitar.
29	A reaching out her hand to touch the guitar.
30	The parent identifies eye contact, body language, and desire to touch and play the
31	instrument in being able to recognize whether or not *Lola is engaged with the music that
32	the parent plays and sings at home for example.
33	the parent plays and sings at nome for example.
34	Moment One: 8:52: During the Hand on the Drum improvisation (with the bongo
35	drum)
36	*Lola briefly maintains direct eye contact with the SMT as the SMT vocalizes. *Lola's
37	left hand is extended towards the bongo drums supported by the SMT. Her head and
38	attention are turned away from the SMT. *Lola lifts her left hand up above the drum,
39	SMT vocalizes in high register, *Lola smiles and gradually releases left hand downwards
40	towards the bongo drum. The SMT gradually lowers the pitch of her voice, singing in
41	low register and the lyrics "down". *Lola leans her head backwards on the wheelchair
42	headrest, looking away from the TA and SMT, continuing to lift her left hand upwards

43	and downwards. She smiles. Her left hand touches the drum producing a slight, and very
44 45	brief, quiet sound. The SMT vocalizes soft, short staccato consonants. *Lola smiles.
45 46 47	Q2: You have just observed video of a recorded music therapy session with a student and therapist. Let us watch the first moment you have identified again. Can
48 49	you please describe this moment to me and why you have selected it?
50 51	A: There was really good eye contact with you when you hit a high note singing! She was looking away and she got that note and she turned around to look at you and just you
52 53	look at her there (points to video) just staring into your eyes.
54 55	Q: A lot of eye contact
56 57	A: it real, real engagement in what was going on.
58 59 60 61	Q: Thank you. Umm, ok, what is the student doing here that makes you think this moment looks like the child is participating or engaging in the music therapy session? For example, think about musical
62 63	<b>A:</b> Are we talking about this particular incident?
64 65	Q: Yup!
66 67 68	<b>A:</b> Yup! Alright. Ok, what is she doing? She had been looking away and she turned around, looked at you and engaged your eye contact, she caught your attention.
69 70	Q: In that one very short moment?
71 72 73 74	<b>A:</b> in that moment yeah, and, and you can look at her body language, the way her hands are, that she is kind of ahh, you know that's *Lola being part of it, you know that's her body language, that's *Lola being involved. Yeah!
75 76	Q: Do you think that she is directing her body towards me?
77 78 79	<b>A:</b> Yeah, she had been turned away and she actually twisted her self around, not just her head but all of her to, to focus on you.
80 81	Q: To focus attention on me?
82 83	A: Yeah!
84 85	Q: What about the physical, umm I guess the hand movement and, she
86 87	<b>A:</b> Can we go back about 20 seconds and have a look at the way that she moves? (both observe video) Yeah, and you can see that all of it, with you, caught her attention with

that one note, umm.. and she had been looking away.... And you hit that high note and straight away she into it. It brought her back into what you were doing.

Q: Yeah. Ok, umm well you have definitely described a lot of body movements and facial expression and eye contact but would that be the criteria that you use to describe, I mean to identify and define whether she is engaged?

**A:** Well, I, I sing and play guitar a lot to \*Lola at home and that's exactly what I get from her, that's.. I, I can tell that she is responding to what I am singing to her.... by, by where she is looking, whether she is looking at me or looking away and that tells you whether she likes the song or doesn't like it, yeah, and that sort of thing whether you are boring her or whether she is really into it. Umm.. and yeah, and that's absolutely the \*Lola body language that says I'm into this, yeah.

The parent refers to his own experience of playing songs and singing to \*Lola as the criteria for identifying whether or not \*Lola is engaged in the music during the moment selected here.

### Q: Is there anything else you would like to say on this particular moment?

**A:** No, no no more about that.

# Moment Two: 18:30: During the Hand on the Drum (with bells, bongo and gathering drums)

- \*Lola is laughing excitedly, producing short vocalizations. The SMT places the bells attached to a string in the palm of \*Lola's left hand and sings "\*Lola's hand on the drum goes...". \*Lola briefly holds onto the string of the bells, moves her hand slightly. The bells fall on the bongo drums placed on the ground next to \*Lola's wheelchair on her left hand side, to produce a sudden, loud noise. The SMT vocalizes excitedly and displays a sudden gesture, releasing both hands outwards and up in the air. \*Lola laughs excitedly. Her mouth is open wide and head tilted downwards, the SMT lifts the bells up, \*Lola
- smiles and directs her attention towards the instrument. \*Lola is visually tracking the bells as the SMT moves them up and down in her hand and draws the instrument closer
- towards \*Lola's left hand. \*Lola laughs excitedly producing short vocalizations. SMT places the bells around \*Lola's hand.

Q: You have just observed video of a recorded music therapy session with a student and therapist. Let us watch the first moment you have identified again. Can you please describe this moment to me and why you have selected it?

**A:** Yeah it was the, the laughter... (observes moment) Yeah it was all of that, that sort of sequence....

Q: A long moment...

- 133 A: ... yes, it was quite a long moment but it was the sequence of laughter and real
- involvement holding the bells, umm.. and knowing that something was going to happen, I
- put here laughter and anticipation. And, I think that she was anticipating that she was gonna drop the bells (laughs) umm.. and she was eh, also a little bit further back, she was
- anticipating what you were going to do.

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The parent has described a moment where \*Lola is physically and actively participating in the music activity by holding onto the bells. The parent identifies laughing and anticipation as reasons for selecting this moment.

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Q: Yes, which was the lifting of my hands up and down...

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145 **A:** Yeah, yeah. And she was anticipating it.

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147 Q: And laughed before I dropped it back down...

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149 **A:** Yeah.

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151 Q: Would you like to look at the moment again?

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- A: Sure thing, why not? (both observe video, trying to find moment) Silence.. and she knows something's gonna happen (observes video) And then.... that whole little sequence where there, there's.... ok! What's all that about? There's physical contact between you and her, there's the you know transferring the bells across and things like that. There's the silence when you actually stop singing and there's no noise and \*Lola is really engaged throughout that whole sequence. She is laughing bec.. and she is laughing
- in anticipation of what's gonna happen next. Yeah, and that, that's where that moment
- really gets to me, I think, its, its fun.

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The parent identifies physical contact between the SMT and \*Lola, silence, \*Lola's laughter in anticipating what is going to happen next, as showing her engagement in the music activity during the moment selected.

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Q: Yeah, thank you. Umm, so I guess we have talked about, you have identified the moment and you have described it to me and your feelings and why you have selected it. Umm, and you have also described what the student is doing here that makes you think this moment here looks like the child is participating or engaging. Umm, I guess thinking about some other aspects, umm, there are musical, physical, emotional, cognitive and non-verbal aspects such as gestures and vocalizations and facial expressions, umm... I guess you have already talked about the facial expression, umm...

- 175 **A:** Ok, when you umm, hook the, in, in anticipation of you putting the bells onto her arm,
- she actually lifted her hand ready for it, yeah. I think she, she knew it was going to
- 177 happen. Umm, and she had her, her you know coz her arm is down and she had it up,
- 178 yeah, for you to put the bells onto her arm.

179 180 Q: Very good observations. 181 182 A: Yeah, yeah, umm, but that's \*Lola being entertained, umm, the rest of it, you know 183 musically and participating, very, very much so. In fact, you know when you produce the 184 bells and the drums and things like that, she was I think probably more engaged than 185 when you were just singing and playing the guitar to her. 186 187 The parent comments that the introduction of different instruments and invitation to play 188 them, engaged \*Lola further than when the SMT was singing and playing the guitar only. 189 190 Q: Mhm, yeah because I guess its important to note that first part as well in the, in 191 the video, where she is not responding physically and or vocally in the space but 192 there is a lot in her facial expression that makes me feel like she is. 193 194 A: Oh, yes. Oh her facial expression, she is because she likes music, she likes rhythm and 195 she likes music. Mhm... 196 197 O: And changes, she responds well to changes? 198 199 A: Mhm, yeah. 200 201 Q: Change of tempo and vocal pitch... 202 203 A: Yeah, doesn't she? Yeah! 204 205 Q: ...so its umm... 206 207 A: Coz I do the same with her, change the tempo, change the strum of the song that she 208 knows really well, umm, change the key and change all sorts of things. Oh, I play songs 209 to her and I go up a semi tone each verse. Yeah and, and she really likes that, when you 210 do that. Yeah. 211 212 Q: Umm... ok, well let's move onto question 4 and that's: What criteria did you use 213 in this extract to identify and define whether she is participating, engaging in the 214 session? 215 216 A: (inhales) I think it was, I think it was all of what she was doing, watching what she 217 was doing throughout that sequence. Umm, she started out, umm... actually probably 218 more focusing on \*Lucy (TA) whose holding her, who, who was I think holding her 219 shoulder than she was on you. And then you went quiet, and she, she probably was 220 thinking, "What's happened? Has this finished?", and she then focused on you to see 221 what was going on and what was gonna happen next. 222 223 The criteria that the parent describes here as identifying and defining whether or not

\*Lola is participating or engaging in the MT session are based on responses he is able to

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225 observe. He identifies eye contact, \*Lola looking at the TA when the TA supported her shoulders physically, then focused her attention towards the SMT when there was silence 226 227 during the moment.

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O: Mhmm, and I am waiting for her, to see what is going to happen next.

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**A:** Yeah, absolutely you are.

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**Q:** Umm, should we move onto the next moment?

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A: Yeah sure.

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Moment Three: Approximately at 21:18: Before hand and moving into The Hand on 238 the Drum (with a small wooden beater attached to a swinging string and cymbal) 239 The SMT places the beater attached to a string around \*Lola's left hand. \*Lola's head is 240 tilted downwards and her attention is directed towards the floor. Her left arm is extended towards the ground and the beater hangs on her left hand. SMT places the cymbal closer 242 to \*Lola and waits. \*Lola's mouth shape tightens. After a short period of silence, the SMT joins hands with \*Lola and raises both hands with the beater upwards. SMT's vocal 243 244 pitch ascends as both hands go up and descends as both hands go down to produce a 245 sudden resonating sound on the cymbal. \*Lola smiles and briefly directs eye attention 246 and head towards the camera. Both joined hands hit the cymbal. \*Lola's head turns back towards the SMT. She is looking downwards, towards the direction of the cymbal. SMT 248 vocalizes, \*Lola briefly smiles and maintains a short period of eye contact with the SMT. 249 \*Lola leans her head backwards on the headrest of her wheelchair. The SMT lets go of 250 \*Lola's hand. \*Lola holds the sting of the beater in the palm of her hands. She smiles. She lifts her left hand up with the beater, the SMT vocalizes lyrics "up" in a higher 252 register. \*Lola releases hand downwards, her head tilts downwards and attention is 253 directed towards the cymbal in front of her. SMT sings the lyrics "down" in a lower 254 register. \*Lola successfully hits the cymbal with the swinging beater producing short, 255 vibrating sounds on the cymbal. \*Lola's head is turned towards the camera and eyes are 256 gazing as she continues to move her left hand gradually up and down. The SMT vocalizes a series of short consonants. \*Lola smiles. The stringed beater falls and hits the ground. 257 \*Lola laughs excitedly producing short vocalizations. 258

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O: You have just observed video of a recorded music therapy session with a student and therapist. Let us watch the first moment you have identified again. Can you please describe this moment to me and why you have selected it?

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A: She was starting to get her hand movements going with what you were singing and I was aware that you were following it, the ups and down but... and it wasn't so much that umm, she was doing what you were singing, coz I realized it was the other way around. You were singing what she was doing. But the fact is she, was trying to get up and down movements because that was what the song was all about and she was really making an effort to do that.

**Q:** Do you think that the song motivated her to...

**A:** I think it did, yeah, very much so. Umm, I mean she knew that there were ups and downs and, and that there was an expectation for her hand to move and finally after quite a lot of minutes of this up and down singing, she... and also at a point where she was probably getting fairly tired, she, she started at that point really responding into making an effort to get the ups and downs. And that was so neat. And not only that she was pleased with her self, you can look at her facial expression and you can see her smiling, happy, little bit of laughter in places, umm...

### **Q:** Vocalizations?

A: ... Umm, yeah and that was j, just ehm \*Lola enjoying herself.

Q: Umm, well that is very observant description and it does come a lot from your background of knowing her as well...

**A:** ... And, and from playing music to her. Mhm, yeah coz I, I'm so used to her reactions and I know what she is going to do.

Q: It is so nice to umm, to be able to describe the music as well as physical and, and facial expressions and different aspects. Umm, well you have definitely I guess explained to me what is happening here and what \*Lola is doing that tells you that she is participating and engaging in the music. And...

**A:** Mhm and there was another point actually, minute: 28 when she finally found out where with her hand to make a noise. And she really enjoyed that, did quite a bit of that after that.

Q: So, what criteria did you use in this extract to identify and define whether the student is or is not participating or engaging in the music therapy session?

A: Oh, well that was simple. In the, in the eh, bit where she's moving her arm, because she was really trying to do what you were expecting of her... umm, the song is all about ups and downs and she started getting some ups and downs and, and she was wanting to please you. And it was yeah, great to see that kind of reaction.

Q: It's interesting that you say that, hmm (laughs). Because, I think that everything she does is amazing (laughing excitedly)...

**A:** Do you?

Q: Yeah, I don't expect umm, anything, anything from her umm (inhales) I just recently been able to enable her to, to play instruments in such a way, before we tried sort of umm, drums and shakers and it was very gradual movements with her

316 hands and she'd umm extend, the umm her hand to produce movements like that. 317 Umm, is there anything that you would like to add onto this moment? 318 319 **A:** To that explanation? 320 321 Q: Mhm. 322 323 **A:** Umm..... (pause) I think that you're having the, the bells and the drums and the 324 shakers and things. Umm, eh, eh, er, it, is, \*Lola was wanting to get involved with, with 325 all of them. Umm, it was probably a shame that, that the drum, especially the big 326 (gathering) one was a bit out of reach for her... umm, that you didn't have the equipment 327 to hold it closer she could do something with it. Umm, but umm, you, you know \*Lola, I, 328 I think really got the concept that you can drop things on the drum and it makes a noise. 329 And you can shake bells and they make a noise and, and the cymbal was, that's a superb 330 thing coz she did get that working for her. 331 332 Q: Yeah, coz she really, really enjoyed that. 333 334 A: Yeah, mhm (inhales) And, and to me, eh um watching her, when she had the 335 opportunity to try and join in with the various percussion instruments, she was really 336 motivated to try. 337 338 Q: And she tried so hard. And that's what I feel. 339 340 A: Yes, didn't she? Yes, I think she did too. Yeah! 341 342 Q: That's my personal view. Ok, should I stop the tape? 343 344 **A:** Yup! That's all I have to say. 345 346 The parent commented that in \*Lola achieving the up and down movement with her hand, she also achieved what was expected of her as instructed in the "up and down" 347 348 lyrics of the song. This was the criteria used by the parent in order to understand whether 349 or not \*Lola is participating or engaging during the moment selected here.

### APPENDIX L

# AN EXAMPLE OF MOMENTS OF ENGAGEMENT IN MUSIC THERAPY: AS OBSERVED AND INTERPRETED BY THE RESEARCHER

**Beginning: the Greeting Song: 1-5 minutes** 

Observation; Experience and Interpretation; Reflection about Musical Response.

SMT plays the guitar, the "Greeting Song" starts. \*Lola smiles and directs attention towards the guitar. She maintains visual focus with the guitar as the SMT strums for a short period of time. It looks like the client is interested in the guitar, it has captured her attention. She responds to the music by smiling and focusing attention towards the guitar as the SMT plays.

L. smiles in response to SMT's singing. Both smile. L. is gradually lifting both her hand up in the air. L. smiles as the SMT plays the guitar and sings lyrics to accommodate her movements. L. focuses direct attention towards the SMT, smiles and vocalizes single notes excitedly. It appears as if though she is enjoying the music and responds to the SMT's vocalizations and playing by smiling and directing her attention towards the SMT. L. maintains visual focus with the SMT as she sings and plays. The client appears to be listening.

L. smiles in response to the TA vocalizing "hello".

L. smiles in response to the space left in the music for her to respond. Her mouth opens and appears widened as if though L. wants to respond by vocalizing but does not seem to have enough time to do so as the music moves on. The SMT plays a long sustained note waiting for L.'s response. She responds by smiling. Both SMT and L. smile.

SMT continues to sing the "Greeting Song", the guitar placed away, now holds L.'s left hand. L. maintains short period of direct eye contact with the SMT and smiles. L. vocalizes a short note and lifts both hands up in the air holding the SMT's right hand in her left hand. L. responds to the SMT singing high by laughing and vocalizing excitedly appearing to enjoy this activity. She focuses her attention away from the SMT and continues to hold both hands up in the air, smiles in response to SMT's vocalizations. Gradually, L. relaxes her hands back downwards and exhales. Both SMT and L. laugh excitedly.

**P. R.** (**Personal Reflection**): I wonder why L. did not vocalize in response to the familiar music and the space left in the song for her to respond as she has been heard to vocalize in the past music therapy sessions following the correct key of the "Greeting Song". She responded by smiling, appearing to know what is expected of her and in a way shy to respond by vocalizing single notes. She is observed to open her mouth and it appears widened as if though she wants to respond by vocalizing.

### Middle Period: The Hand on the Drum: 15-20 minutes

\*Lola focuses attention towards the instruments as the SMT brings them closer to her. L. smiles and vocalizes short note. She smiles excitedly as if knowing what will come next. The SMT continues to vocalize. SMT sings and holds the bells high up in the air above the gathering drum, S. smiles and vocalizes in response, turns her head away and a short time after, back towards the SMT and the bells as the SMT jingles the bells and sings. L. maintains direct eye contact with the SMT and visually tracks the SMT's hands as she lifts the bells up high and back down low. S. vocalizes excitedly and smiles in response to the sound produced by the bells hitting the drum. L. directs and focuses her attention towards the TA.

L. opens her mouth wide as the SMT places the bells around her left hand. S. shortly maintains eye contact with the SMT before looking downwards as the bells hanging of her left hand and above the bongos. Her facial expression alters, her mouth tightens as do her eyebrows and she appears to be concentrating and working very hard to be able to release the bells and produce a sound above the bongos. L. smiles in response to the SMT singing "jingle" in response L.'s gentle "jingle" sounds produced on the bells. L. briefly looks at the SMT and smiles.

L. smiles, gradually moves left hand upwards producing soft sounding jingle sounds on the bells, before releasing the bells above the bongos and smiling/vocalizing excitedly. L. vocalizes short notes in the key of the song. L. responds to the sound of the bells and the SMT vocalizing, by smiling and vocalizing short notes in the key of the song. Both mile and maintain short periods of eye contact. L. participates in jiggling the bells by stepwise lifts up and above the bongos.

SMT holds L.'s left hand, vocalizes. L. maintains direct eye contact with SMT, smiles, alters facial expression when SMT stops vocalizing momentarily. L. tightens lips and looks downwards. L. smiles and vocalizes excitedly as both L. and SMT participate in sharing and playing the bells together. L. laughs excitedly, appearing to run out of breath. She releases the bells above the bongos producing a sound, focuses and directs attention towards TA, vocalizes short notes, smiles. L. vocalizes short notes in response to SMT vocalizing short notes in the key of the music. The song ends when L. drops the bells on the drum one last time. L. engaged and was motivated to play and participate in the music by dropping the bells on the bongos to produce a sound. Both SMT and L. smile. L. smiles as SMT smiles.

**P. R.:** Because we have sung the song before in previous music therapy sessions, it seems that \*Lola anticipates and begins to vocalize and smile excitedly as she knows what might come next, such as the bells will drop on the bongos. This appears to excite her, sometimes she laughs having difficulty in catching a breath. L. smiles and vocalizes excitedly before the bells hit the bongos.

End: \*Lola's Hand on the Cymbal goes Up and Down: 24-30 minutes

Extended improvisation. \*Lola lifts her left hand up in the air above her chest height in response to the lyrics of the song "up, up, up" and gradually releases her hand downwards. The SMT sings lyrics to accommodate her movements, L. smiles in response. L. produces a slight sound on the cymbal by placing her left hand above the instrument as the beater hangs on the string attached to her left hand above the cymbal. L. focuses attention towards the guitar as the SMT plays. L. relaxes her hands downwards in response to the SMT singing low and produces a sudden single sound on the cymbal. As L. lifts hand up at her chest level, she focuses attention away from the SMT and smiles. L. vocalizes a single note in the key of the music. L. smiles and opens mouth wide in response to lifting her hand up high in the air as the SMT sings to accommodate her movement. L. vocalizes a short note and continues to focus attention away from the SMT. L. smiles and focuses visual attention towards the bongos on the floor in response to producing a sound by dropping the small beater attached on the string above the drum. L. vocalizes and maintains direct eye contact with the SMT for a short period of time as the SMT invite L. to play the bells by placing them in L.'s left hand. Both smile. L. is able to produce consistent lively jingle sounds by jiggling the bells along the side of the cymbal. L. engages in lifting her hand up and down to produce a sound on the bells for an extended period of time.

L. responds to lyrics by lifting left hand up while holding the bells showing he is listening and is able to produce continuous short sounds on the cymbal by playing the bells against the instrument. She plays consistently and on the beat, her head and attention turned away from the instruments, she is engaged in playing an towards the guitar and the SMT. L. releases the bells above the ground and smiles in response to the sound created by the bells hitting the ground. L. vocalizes in the key of the song as she focuses attention towards the bells on the floor. L. rests her head on the back of the wheelchair and looks up, appearing to take a rest. L. vocalizes in response to SMT reaching out to invite her to play the bells. L. responds to the loud sound she produces on the cymbal by smiling and vocalizing for a short period of time. She focuses attention downwards towards the bongo on the floor and drops the bells on the bongos, responding to the sound by smiling and momentarily turning head and focusing attention towards the TA. Both L. and SMT appear contained and relaxed. End of music therapy session.