

Collaborations between music therapist and parents to transfer music therapy activities into the home context for children with Autism Spectrum Disorder

by

Kerryn Ann Tracey

Student number: 14346321

A dissertation submitted in partial fulfilment of the requirements for the degree

MMus (Music Therapy)

in the Department of Music at the

UNIVERSITY OF PRETORIA
FACULTY OF HUMANITIES

Supervisor: Mrs Andeline dos Santos

Date: February 2017

Abstract

This qualitative research study explored areas of similarity and contrast between a music therapy student's interpretations of selected audiovisual excerpts from music therapy sessions with a child with Autistic Spectrum Disorder (ASD), and his parent's interpretations of the same. A further feature of the study was investigating how these interpretations could inform the collaborative creation of a music activity for use in the home environment. Eight one-on-one music therapy sessions were conducted with an eight year-old boy with ASD at Alpha School in the Western Cape. The sessions were video recorded. Once the music therapy process was complete, four primary excerpts and five secondary excerpts were selected. Interpretations of the four primary excerpts were written by the music therapy student. A semi-structured interview consisting of two parts was then conducted with the child's parent. Part one involved eliciting the parent's interpretations of the four primary excerpts. Part two involved the viewing of the five secondary excerpts as part of a discussion between the music therapy student and parent, leading to the collaborative creation of a music activity for the home environment. The interpretations of the music therapy student and parent were matched with the music therapy student's interpretations for the purposes of qualitative content analysis and comparative analysis. Codes were derived for the interpretations, and then grouped into sub-categories and categories. Two overarching themes were then drawn from the data: operation of the music therapy student's contextual lens; and operation of the parent's lens. Within these two themes, different sub-themes were present: music therapy student's reflexivity; focus on developing relationship; focus on clinical musical features; valuing offerings as musical; parent's pride in her child; noticing musical interactions; and focusing on successful interactions. These themes then implicitly informed the collaborative creation of a music activity for the home context.

Keywords: Autism Spectrum Disorder, music therapy, family-centred intervention, parental involvement, parent and therapist collaboration, music activities in the home, interpretations

Acknowledgements

Many people have supported me and assisted me throughout my degree and this research process.

I would like to express my deepest gratitude to my supervisor, Andeline dos Santos, for her guidance, and support. This extended beyond what is required of a supervisor in matters dissertation-related and otherwise.

To Carol Lotter, head of the UP MT unit, thank you for being a safe harbour in a storm and for all your encouragement.

Thank you to all the lecturers involved in the music therapy degree. You facilitated one of the most challenging and amazing journeys of growth and discovery I have ever had the privilege to experience. I have learned so much about music, compassion, and myself. I feel this process has truly changed me for the better.

Thanks also to Alpha School for allowing me to conduct my research on the premises and for assisting me during the process. To the participants, thank you for your time and energy.

I would also like to thank my family in Pretoria. Without your hospitality it would have been difficult to complete this degree.

Lastly, to my wonderful parents, Carol and Michael Tracey. Thank you for all your encouragement, support, assistance... the list goes on. I could not have undertaken this journey without you on my side.

Table of Contents

Abstract	ii
Keywords	ii
Acknowledgements	iii
Chapter One: Introduction.....	1
1.1 Introduction.....	1
1.2 Background and context.....	1
1.3 Aims.....	2
1.4 Research questions	2
1.5 Chapter Description	3
1.6 Conclusion	3
Chapter Two: Literature Review	4
2.1 Introduction.....	4
2.2 Autism Spectrum.....	4
2.3 The effect of ASD on family members and home life	7
2.4 Parental involvement in ASD interventions.....	8
2.5 A brief overview of music therapy	9
2.6 Music therapy as an intervention for children with ASD	11
2.7 Family-centred music therapy and ASD	12
2.8 Conclusion	13
Chapter Three: Methodology.....	14
3.1 Introduction	14
3.2 Research paradigm.....	14
3.2.1 Ontology and epistemology.....	14
3.2.2 Qualitative methodology.....	15
3.3 Research Questions.....	15
3.4 Design of the study	16
3.5 Sample.....	17
3.6 Data collection	18
3.6.1 Preliminary data collection	19
3.6.2 Data source A: My interpretations of audiovisual excerpts	20
3.6.3 Data source B: In-depth interview with Helen as parent (two parts)	21
3.7 Data preparation.....	23

3.7.1	Data source A: My interpretations as music therapy student	23
3.7.2	Data source B: Transcription of interviews.....	23
3.8	Analysis.....	23
3.9	Research quality.....	25
3.10	Ethical considerations	27
3.11	Conclusion	29
Chapter Four: Data Collection and Analysis Methods.....		30
4.1	Introduction	30
4.2	Data collection and preparation	31
4.2.1	Preliminary data	31
4.2.2	Data source A: My interpretations of audiovisual excerpts	39
4.2.3	Data source B: In-depth interview with caregiver (two parts).....	42
4.3	Coding.....	45
4.4	Creating sub-categories and categories.....	46
4.4.1	Sub-categories	46
4.4.2	Categories.....	50
4.5	Determining themes	53
4.5.1	Theme one: Operation of music therapy student's contextual lens.....	55
4.5.2	Theme two: Operation of caregiver's contextual lens	57
4.5.3	Sub-theme one: Reflexivity.....	61
4.5.4	Sub-theme two: Highlighting developing relationship.....	65
4.5.5	Sub-theme three: Focusing on clinical musical features	67
4.5.6	Sub-theme four: Valuing offerings as musical	69
4.5.7	Sub-theme five: Caregiver's pride in her child	73
4.5.8	Sub-theme six: Noticing musical interactions.....	74
4.5.9	Sub-theme seven: Focusing on successful interactions	75
4.6	Collaborative creation of music activity	77
4.7	Conclusion	78
Chapter Five: Discussion.....		80
5.1	Introduction	80
5.2	Comparing interpretations	80
5.2.1	Areas of intersection and similarity.....	81
5.2.2	Areas of divergence and contrast	83
5.2.3	Comparing and combining interpretations.....	86

5.3	Collaborative creation of music activity	86
5.3.1	Negotiating an aim	87
5.3.2	Considering practical aspects of the activity.....	90
5.3.3	Building relationship.....	92
5.3.4	Musical features	93
5.3.5	Considering pitfalls	93
5.4	Conclusion	94
Chapter Six: Conclusion		96
6.1	Introduction	96
6.2	Summary of findings	96
6.3	Limitations of study.....	97
6.4	Recommendations for future research	97
6.5	Conclusion	98
8.	Reference List.....	99
Appendix A: Invitation to parents to participate in research study.....		110
Appendix B: Participant information form		112
Appendix C: Participant consent form.....		114
Appendix D: Questionnaire for completion by parent(s) of child taking part in music therapy sessions.		116
Appendix E: Thick Description of Excerpt One.....		121
Appendix F: Thick Description of Excerpt Two.....		123
Appendix G: Thick Description of Excerpt Three.....		125
Appendix H: Thick Description of Excerpt Four.....		127
Appendix I: Thick Description of Excerpt Five.....		129
Appendix J: Thick Description of Excerpt Six		131
Appendix K: Thick Description of Excerpt Seven.....		132
Appendix L: Thick Description of Excerpt Eight.....		133
Appendix M: Thick Description of Excerpt Nine		134
Appendix N: Transcript: Interview with caregiver.....		135
Appendix O: Interview Guide:.....		173
Appendix P: Table of interpretations and codes.....		175
Appendix Q: Table of codes, sub-categories, and categories		232
Appendix R: Table showing creation of sub-themes and themes.....		255
Appendix S: Assent script and form for child participants.....		277

Appendix T: Consent form for Alpha School, Western Cape	281
Appendix U: Summary of information provided by Helen in questionnaire	282

LIST OF FIGURES

Figure 1: Visual overview of data collection and analysis	30
Figure 2: Layout of the hall for the majority of sessions	33
Figure 3: Fig 3: Template for own interpretations with possible prompts	40
Figure 4: Example of text for the same material falling under more than one section heading	41
Figure 5: Selecting key phrases for units. My interpretations appear in purple.	42
Figure 6 : Selecting key phrases from transcript for units.	43
Figure 7: Aligning units in the interpretations/units table	54
Figure 8: Example of codes assigned to units	45
Figure 9: Table showing all 45 sub-categories into which codes were sorted	47
Figure 10: Example of codes organised under the sub-category "quality of P's movement with corresponding codes that did not fit into the same sub-category	48
Figure 11: Table showing final categories and sub-categories	50
Figure 12: Table of codes, sub-categories, and categories with written notes	53
Figure 13: Visual representation of themes and their relationship to one another	64
Figure 14: Representation of my contextual lens as music therapy student	56
Figure 15: Representation of Helen's contextual lens as parent	57
Figure 16: Examples of contrasting interpretations as influenced by the operation of contextual lenses	58
Figure 17: Examples of music therapy student's feelings in interpretations	60
Figure 18: Reflexivity in my interpretations as music therapy student	61
Figure 19: Helen's reflections on own feelings and thoughts	63
Fig 20: Examples of my interpretations of developing relationship and Helen's corresponding interpretations	64
Figure 21: Aspects of clinical musical features in my interpretations as music therapy student	66
Figure 22: Examples of my interpretations of Philip's offerings as musical	69
Figure 23: Examples of interpretations of sounds by music therapy student	71
Figure 24: Examples of Helen's interpretations constituting pride in her child	72
Figure 25: Examples of Helen's interpretations where the theme of noticing musical interactions is present	73
Figure 26: Examples of Helen's interpretations where the theme of focusing on successful interactions is present	75

Chapter One: Introduction

1.1 Introduction

This research uses a case study design to explore how techniques in music therapy sessions with a child with Autism Spectrum Disorder (ASD)¹ can be transferred to the home environment through a process of collaboration between the child's parent and the music therapy student in order to create music activities individually tailored to the child. My interest in this topic began when I conducted music activities at Alpha School in Cape Town as part of the Master's degree in music therapy at the University of Pretoria. The school offers support and education to children with ASD, particularly those from disadvantaged communities. It aims for a holistic approach to addressing challenges linked to ASD. A review of the literature indicates that music therapy shows promise as an intervention for children with ASD. While family-centred approaches may be considered ideal practice for this client group, limited resources may preclude full family participation in interventions. Through involving a parent in a collaborative process when creating music activities for use in the home I hope to value her expertise and participation, whilst remaining cognisant of potentially restricted resources.

1.2 Background and context

ASD is a neurologically-based developmental condition featuring atypical behaviours related to social interaction and communication, and excessively restricted/repetitive actions (American Psychiatric Association [APA], 2013a:31). Accurate statistics for the prevalence of ASD in South Africa are difficult to obtain (Bateman, 2013:276) as prevalence studies here are ongoing (Elsabbagh et al., 2012:161). Bateman (2013:276) notes that nine schools in South Africa cater specifically to children with ASD. Using referrals from doctors and queries to schools as a baseline, Bateman (2013:276) estimates that 135 000 children in South Africa with ASD do not receive the specialised assistance they require.

People with ASD often seem to show an affinity for music (Dimitriadis & Smeijsters, 2011:108; Hillier, Greher, Poto & Dougherty, 2011:202; LaGasse, 2014:253; Simpson &

¹ It should be noted that Autism Spectrum Disorder (ASD) is also referred to as Autism Spectrum (AS). Literature critiquing the biomedical model (Broderick & Ari Ne'eman 2008:469; Bumiller, 2008:968, 970; Carmel, 2014:2,14; Krcek, 2013:10-11; O'Dell, Rosqvist, Ortega, Brownlow & Orsini, 2016:167-169,171; Runswick-Cole, 2014:1120) suggests that the former term, ASD, can be pathologising in its reference to disorder, situating autism as a deficit. For the sake of consistency, I use the term Autism Spectrum Disorder in this dissertation. However, it is not my intention to further pathologise autism and the reader should be aware of alternative nomenclature, as described in the literature above.

Keen, 2011:1507) and music therapy shows potential as an intervention for this population (Aldridge, 2012:14-15; Boso, Emanuele, Minazzi, Abbamonte & Politi, 2007:709-710; Dimitriadis & Smeijsters, 2011:108; Finnigan & Starr, 2010:339-341). Music therapy may promote social skills (Finnigan & Starr, 2010:322, Vaiouli, Grimmet & Ruich, 2013:80) and may reduce stress (Dimitriadis & Smeijsters, 2011:117) in individuals with ASD. This may then also reduce negative impact on family members since symptomology of ASD, such as the insistence on routine and/or a seeming lack of social/emotional responsiveness, contributes greatly to parental stress (Altiere & von Kluge, 2009:143; Ludlow, Skelly & Rohleder, 2011:702,709). Many ASD interventions privilege parental/family involvement (Schertz, Baker, Hurwitz & Benner, 2010:18) but music therapy with this population has typically involved the individual client only (Geretsegger, Elefant, Mössler & Gold, 2014:6). Given constraints on resources, parents may not always be able to participate in fully-fledged family-centred music therapy. The study seeks to involve a parent in the process of music therapy by collaborating with her to form an individually tailored music activity that may be transferred to her homes.

1.3 Aims

The aim of this study is to investigate how music therapy techniques in sessions with children diagnosed with ASD can be transferred collaboratively by a music therapy student and parents into activities that can be facilitated by the parents in the home.

1.4 Research questions

The main research question that will guide the proposed study is:

How can techniques in music therapy sessions with children who have ASD be transferred collaboratively by a music therapy student and parent(s) into musical activities that can be facilitated by parents in the home?

The two sub-questions that will be addressed are as follows:

1. How do a music therapy student's interpretations of video recordings of sessions with children with ASD compare to the interpretations of the children's parents?
2. How can these interpretations collaboratively inform the development of musical activities to be facilitated in the home by the parents?

1.5 Chapter Description

The following chapter presents and reviews literature pertaining to ASD and the effect that ASD has on family and home life. Parental involvement in ASD interventions will be discussed. A brief overview of music therapy will be presented and this will be followed by an exploration of music therapy with this client population. Finally, family-centred music therapy with children with ASD will be examined. Any gaps in the literature will be highlighted.

Chapter three will examine the ontological and epistemological foundations of the study. The nature of qualitative methodology will be discussed. The research design, sample, and data collection methods used in the study will then be presented. In addition, research quality and ethical considerations will be investigated.

Chapter four provides a detailed description of the analysis of data by examining each step in the analysis process. The related findings are then presented.

In the fifth chapter, the research findings are examined in more detail. Sub-themes and themes that emerged through analysis will be discussed in reference to the research questions. Existing literature will be drawn on during the discussion.

The concluding chapter briefly presents a summary of findings and the study's limitations. Finally, recommendations for future research are suggested.

1.6 Conclusion

This chapter has situated the study contextually and presented the research aims and questions, as well as providing an overview of the proceeding chapters. The next chapter will examine current literature pertaining to the field under research.

Chapter Two: Literature Review

2.1 Introduction

In this section I briefly discuss literature pertaining to ASD from a biomedical perspective and situate this perspective within the broader ASD discourse. I then explore the effect ASD has on family members and home life. A review of literature on interventions with children with ASD is also included, followed by a brief overview of music therapy and an exploration of music therapy with children with ASD. Family-centred music therapy is then discussed in relation to the client group. It should be noted that there is a gap in the literature concerning ASD in South Africa and Africa.

2.2 Autism Spectrum

When considered from a biomedical perspective, ASD is positioned as a developmental disorder that is neurologically-based and is characterised by pervasive behaviour patterns affecting an individual's social communication and interaction, as well as excessively restricted/repetitive activities or interests (APA, 2013a:31; Frye, 2010:348; Goldson & Reynolds, 2012:104; Sue, Sue & Sue, 2010:414-416). These behaviours cause impairment in functioning, but differ in severity (APA, 2013a:50). The term 'spectrum' is used as presentation varies greatly "depending on the severity of the condition, developmental level, and chronological age" (APA, 2013a:53). Intellectual and/or language impairments are often displayed, and problems with motor skills are prevalent (APA, 2013a:55). Symptoms are usually apparent during the second year of life (APA, 2013a:55; Frye, 2010:348; Goldson & Reynolds, 2012:105). Behaviours are persistent, but individuals typically continue learning and developing compensatory methods throughout their lives (APA, 2013a:56) and some individuals with less severe manifestations of ASD can be self-sufficient adults (Sue et al., 2010:421).

Frye (2010:348) notes that the aetiology of ASD is not known, whereas Goldson and Reynolds (2012:105) state that it is unknown for the *majority* of cases. Frye (2010:348) indicates that a "triple hit hypothesis" – genetic vulnerability and exposure to a stressor (internal or external) during a critical developmental period – accounts for complexities found within the disorder. Studies indicate that there may be a genetic component to the aetiology of the disorder (APA, 2013a:57; Frye, 2010:349; Goldson & Reynolds 2012:105; Sue et al., 2010:419-420).

The Diagnostic and Statistical Manual of Mental Disorders, fifth edition, (DSM-5) (APA, 2013a:50-59) has revised the clinical diagnosis of ASD. It encompasses disorders previously referred to under separate categories. The following disorders now fall under the umbrella diagnosis of ASD: pervasive developmental disorder not otherwise specified; atypical autism; childhood disintegrative disorder; early infantile autism; childhood autism; Kanner's autism; high-functioning autism; and Asperger's disorder (APA: 2013a:50-59). These individual diagnoses were found to be applied inconsistently by practitioners and the revision to a single umbrella disorder seeks to remedy this (APA, 2013b:1). The current study is informed by the DSM-5 definition of ASD.

It should be noted, however, that challenges to the biomedical view of ASD abound. Critiques have sought to reposition ASD, asserting that the biomedical model is pathologising and that it situates the locus of deficit primarily within the individual (Broderick & Ari Ne'eman 2008:469; Bumiller, 2008:968, 970; Carmel, 2014:2,14; Krcek, 2013:10-11; O'Dell, Rosqvist, Ortega, Brownlow & Orsini, 2016:167-169,171; Runswick-Cole, 2014:1120). It is beyond the scope of this literature review to present an in-depth discussion of the varied perspectives and approaches within the field of ASD studies. However, it is pertinent to mention some other key areas of discourse.

Working within an emerging critical autism studies approach, O'Dell et al. (2016:167-170, 176) discuss how knowledges about ASD are created and understood differently depending upon context. They challenge dominant constructs of ASD-as-deficit, instead situating ASD as an identity created in and influenced by sociocultural contexts (O'Dell et al., 2016:167). The concept of 'epistemic communities' is used to explain how experiences of and ideas about ASD are valued and legitimised (O'Dell et al., 2016:170). O'Dell et al. (2016:170) draw upon Ian Hacking's (1995, 2002) concept of 'looping' to suggest that the use of labels transforms not only the label itself but also the population defined by that label. The looping effect is present in all discourse about ASD. This transformative process is further affected by the interaction of different discourses surrounding ASD. As such, meanings are constantly changing and negotiated (O'Dell, 2016:171). In a similar vein, Broderick and Ne'eman (2008:460) examine the dominant metaphors used to describe ASD. They draw on Susan Sontag's concept of 'Illness as metaphor' (Sontag 1990) to illustrate ways in which knowledge is constructed and metaphor reified as fact (Broderick & Ne'eman, 2008:459-461). Metaphor within the dominant biological ASD narrative is positioned as entrenching the understanding of ASD as disease and deficit, excluding individuals from 'normalcy' (Broderick & Ne'eman, 2008:461-469). Broderick and Ne'eman (2008:474) assert that

dominant deficit-based constructions must be challenged because the personhood of those with ASD is at stake. O'Dell et al. (2016:174) highlight that situating those with ASD as abnormal, disabled, and deficient can have a dehumanising effect.

Neurodiversity is discussed by these authors (Broderick & Ne'eman, 2008:468; O'Dell et al., 2016:172-173) and others (Bumiller, 2008:970-971; Krcek, 2013:11; Runswick-Cole, 2014:1118) as challenging the classical biomedical model of ASD-as-deficit and the construction of 'normalcy' against which those with ASD are pitted. The approach is spearheaded by autistic self-advocacy movements² (Broderick & Ne'eman, 2008:470; Bumiller, 2008:968; Krcek, 2011:11; O'Dell et al., 2016:172). Neurodiversity constructs ASD as a result of naturally occurring variations in the brain that create diversity rather than deficit (Broderick & Ne'eman, 2008:470; Bumiller, 2008:971; Krcek, 2013:11; O'dell et al., 2016:172; Runswick-Cole, 2014:1118-1120). This diversity produces varied skills, competencies, and identities (O'Dell, Rosqvist, Ortega, Brownlow & Orsini, 2016:169) and ASD may be seen as having some benefits (Broderick & Ne'eman, 2008:473). O'Neil (2008:789-795) discusses research into areas labelled as impairment by the biomedical model, noting where findings have been contested and providing many examples of autistic individuals who have excelled in activities or fields. It is important to note though that not all autistic individuals align themselves with the neurodiversity model and some consider themselves to be 'pro-cure' (Krcek, 2011:12).

According to Krcek (2011:11), neurodiversity has its roots in the social model of disability. Here, disability is considered to be a social construct resulting from the failure of society to support impairment (Baines, 2012:549; Broderick & Ne'eman, 2008:473; Brownlow, 2010:15; Bumiller, 2008:975 Krcek, 2010:17). Society is considered to be at fault, causing or maintaining disability rather than a deficit being that which is located within the individual (Krcek, 2010:7). A distinction is drawn between 'impairment' and 'disability', with impairment being considered unproblematic in itself (Krcek, 2011:6-7).

Carmel (2014:2) notes that a sociocultural approach considers behaviour in terms of complex interaction with others that is situated within a social context. It is a perspective that

² A note on terminology: The current essay uses person-first terminology in the main as it is currently the most accepted format within the field of music therapy (Strauss, 2014:3, notes). However, many proponents of the neurodiversity movement argue that person-first terminology is not appropriate as it negates ASD as central to identity and positions it as a negative (O'Neil, 2008:788; Strauss, 2014:3, notes). Broderick and Ne'eman (2008:474) indicate that person-first terminology situates ASD as an object and draws upon medical discourse. They (Broderick & Ne'eman, 2008:475; O'Neil, 2008:788) suggest that identity-first language (eg autistic person) is more appropriate. For this reason, I will use identity-first language when discussing neurodiversity.

values the competencies that individuals brings to the interaction (Carmel, 2014:2). Carmel (2014:6) notes that complexity should be acknowledged in social contexts as well as within ASD itself. This approach has value for the current study as music therapy is concerned with ASD in the context of relationships, between client and therapist, between parent and child and in the content of conversation and interpretation between therapist and parent.

Krcek (2011:17) discusses neurodiversity and its implications for social workers. He notes that those required to work within the realm of disability treatment may have difficulty combining this with the social model of disability (Krcek, 2011:17). This is because they must simultaneously conceive of individuals as ill whilst also valuing the strengths and diversity of those individuals (Krcek, 2011:17). This is true for the current study as well. Brownlow (2010:15) states that the experience of individuals with ASD may be lost during the therapeutic process if reliance on impairments rather than diversity is paramount. During the study I attempted to balance the necessity of using a biomedical definition of ASD and to delineate possible areas for intervention with the need to approach participants as diverse, complete persons, valuing their individuality and strengths.

2.3 The effect of ASD on family members and home life

ASD affects development and functioning and thus impacts the child with ASD as well as other family members (Nealy, O'Hare, Powers & Swick, 2012:188). The severity and duration of ASD, the child's lack of adherence to social norms (Altiere & von Kluge, 2009:143, and the complexity of symptoms (Ludlow et al. 2011:702) all contribute to parental and family stress. In an integrated review of literature investigating stress in parents of children with ASD it was found that these parents experienced more stress, anxiety, and depression than parents of typically functioning children as well as those with other disabilities (Bonis & Sawin, 2016:np).

The DSM-5 (AMA, 2013a:57) states that insistence on routine and aversion to change is common to many children with ASD and may interfere with the provision of everyday care, as well as sleeping and eating patterns. Bonis and Sawin (2016:np) reported that sleep disturbances and interrupted sleeping patterns were experienced by 50 to 70 percent of children with ASD. Impaired responses to stimuli (either hypo- or hyper-responsiveness) were also common, often leading to tantrums or self-injury (Boris & Sawin, 2016:np). Case-Smith, Weaver and Fristad (2015:132) note that hyper-responsiveness to sensory input is linked to distress, hypervigilance, and/or avoidance in children with ASD. It is estimated that

80 percent or more of children with ASD also experience problems processing sensory stimuli (Case-Smith, Weaver & Fristad, 2015:132).

In a study conducted by Ludlow et al. (2011:709), parents of children with ASD were interviewed about their experiences of daily life, challenges, stresses and coping mechanisms. Participants were drawn from towns and cities east of England, as well as London. Fourteen mothers and six fathers took part. Most parents referred to their child's challenging behaviours involving tantrums due to changes in routine and the difficulty their child had in coping with this. These behaviours were considered to be stressful to the parents (Ludlow et al., 2011:709).

Sue et al. (2010:416, 419) indicate that children with severe ASD appear not to need emotional and/or physical interaction with caregivers and may not show emotional reciprocity. The lack of conventional expression of affection or social communication can be a significant source of stress for parents (Bloch & Weinstein, 2009:34). Participants in the study by Ludlow et al. (2011:709) explained that their child's lack of social responsiveness in broader social contexts had an impact on them socially, and this was especially difficult. Parents expressed feelings of loneliness, rejection, and loss (Ludlow et al., 2011:709). However, some parents indicated that they felt lucky because their child was physically affectionate when compared to others with ASD (Ludlow et al., 2011:708). Trevarthen (2002:87) notes that children with ASD can form attachments and show affection if demands placed on them are not in excess of their ability to understand or imagine those demands.

It is beyond the scope of this literature review to detail the myriad possible behavioural patterns displayed by children with ASD and the affects that these may have on family members and home life. The presentation of ASD differs widely (as mentioned earlier) and each family is different. Other possible challenges include: restrictions on family activities, changes to family goals, financial strain and significant stress levels experienced by siblings (Altiere & von Kluge, 2009:146,147; AMA, 2013a:57; Ludlow et al., 2011:703).

2.4 Parental involvement in ASD interventions

Sue et al. (2010:421-422) state that ASD is particularly difficult to treat. Papalia and Feldman (2011:144) indicate that there is currently no known cure for ASD. However, comprehensive treatment programs involving educational intervention and assistance with the development of social skills have sometimes resulted in improvement of symptoms/behaviours typical of ASD (Papalia & Feldman, 2011:144; Sue et al., 2010:422).

Goin-Kochel, Myers and Mackintosh (2007:197) conducted a study in order to investigate what treatments were used by families of children with ASD. Internet-data collection was used to gain information from a large sample of parents ($N=479$). Most participants were from the United States, Australia, Canada, England, Ireland, or New Zealand (Goin-Kochel et al., 2007:197). Results showed that the majority of families were engaged in between four and six different therapies simultaneously (Goin-Kochel et al., 2007:207). Furthermore, parents had often tried between seven and nine therapies altogether (Goin-Kochel et al., 2007:207). Interventions included pharmacological and diet treatments, and behavioural/educational/alternative treatments (Goin-Kochel et al., 2007:199-207). It may be that the experiences of parents in South Africa, and of parents without access to the internet (particularly due to economic circumstances), are different from those represented in the study.

In the study by Goin-Kochel et al. (2007:207) some interventions were implemented by specific therapists or by schools, whilst others were implemented by parents or a combined effort of parent and professional. In a review of early interventions with children with ASD, Schertz et al. (2010:18) found that 59 percent of interventions involved parental delivery. In addition, 52 percent of interventions had elements that actively supported the parent-child relationship (Schertz et al., 2010:18).

According to Goin-Kochel et al. (2007:207), involvement in a number of simultaneous therapies may place parents under a large amount of strain. However, sources such as Allgood (2005:93), Sue et al. (2010:422), and Thompson (2012:109) note that the inclusion of family in interventions has been found to be beneficial. In their review on the literature examining the impact of ASD on parents and family, Karst and Van Hecke (2012:258,259) note that parental involvement appears to be vital to the success of interventions. In a review of studies investigating the effectiveness of parent-implemented early intervention with children with ASD, McConachie and Diggle (2007:127) found that parental involvement had a positive effect on parent-child interaction and improved social communication skills on the part of the child. Parental involvement in intervention was also found to increase parents' knowledge about ASD and to lower the symptoms of maternal depression (McConachie & Diggle, 2007:127).

2.5 A brief overview of music therapy

Music therapy is defined differently depending upon context (Bruscia 2014:9; Karkou & Sanderson, 2006:122; Wigram, Pedersen & Bonde, 2002:29-30). Rykov (2005:4) suggests

we might think of music therapies rather than music therapy. Bruscia (2014:36) proposes the following working definition of music therapy that encompasses the fundamental aspects found in most contexts:

Music therapy is a reflexive process wherein the therapist helps the client to optimise the client's health, using various facets of music experience and the relationships formed through them as the impetus for change. As defined here, music therapy is the professional practice component of the discipline, which informs and is informed by theory and research.

Implied in this definition is the synthesis of music and therapy which, according to Préfontaine (2006:2), is necessary to the process of becoming a music therapist. A therapeutic client-therapist relationship is formed through musical experience (Bruscia, 2014:42; Pavlicevic, 1997:1; Ruud, 2012:25). This therapeutic relationship requires the therapist to care about the client in order to help them (Bruscia, 2014:39-40). The relationship can be considered to be musical and also interpersonal (Brown & Pavlicevic, 1997:389).

Authors indicate that music therapists conceive of music as something more than an aesthetic object (Bruscia, 2014:113; Wigram, Pedersen & Bonde, 2002:36). Here, it is a form of communication and self-expression (Wigram, Pedersen & Bonde, 2002:36). The concept of 'music person' suggests that each person is able to access an innate response to music in order to communicate, despite barriers of pathology that the person may experience (Wigram, Pedersen & Bonde, 2002:126). At times, the client's innate musicality is affected by their condition and their musicking reflects this (Pavlicevic, 1997:25,118; Wigram, Pedersen & Bonde, 2002:97). The therapist should therefore try to value a client's musical offerings without assigning a value judgment based on aesthetics (Bruscia, 2014:113-114; Karkou & Sanderson, 2006:50).

A number of different music therapy models exist in practice (Wigram, Pedersen & Bonde, 2002:113). My approach was based on the creative music therapy mode, which emphasises active music making (Finnigan, 2010:323). Another model that is commonly used with this population is behavioural music therapy. The model is based on the concept of stimulus-response and of reward (Wigram, Pedersen & Bonde, 2002:134-135). The therapeutic use of music may also be paired with other arts modalities. For example, a music-and-movement activity may increase a client's sense of physical control or stability, thereby increasing their sense of self and confidence (Emck, 2014:220).

2.6 Music therapy as an intervention for children with ASD

Goin-Kochel et al. (2007:204) revealed that 26.9 percent of surveyed participants had attended music therapy, although details of the music therapy methods were not presented. Clients with ASD often appear to show an affinity toward the components of music (Dimitriadis & Smeijsters, 2011:108; Hillier, Greher, Poto & Dougherty, 2011:202; Kern & Aldridge, 2006:273; Simpson & Keen, 2011:1507). As a non-verbal approach, music therapy shows promise as an effective intervention for those with ASD (Allgood, 2005:92; Boso et al., 2007:710; Dimitriadis & Smeijsters, 2011:108; James, Sigafoos, Green, Lancioni, O'Reilly, Lang, Davis, Carnett, Achmadi, Gevarter & Marschik, 2015:51-52; Kim, Wigram & Gold, 2008:1758; Raglio, Traficante & Oasi, 2011:127; Wigram & Gold, 2006:535). Wigram, Pedersen & Bonde (2002:219) note that music therapy can help people with ASD to experience connection and relationship.

A meta-analysis of music therapy intervention studies involving children with ASD was undertaken by Geretsegger et al. (2014:23). Ten studies fitting the criteria for inclusion (randomised controlled trials, controlled clinical trials, cross-over RCTs/CCTs) were analysed (Geretsegger et al., 2014:7). Music therapy interventions were compared with a control group (placebo therapy, no treatment, or standard care) or were added to standard care and compared with a standard care control group (Geretsegger et al., 2014:7). Non-generalised outcomes (behavioural changes within the treatment context) and generalised outcomes (aspects occurring in the child's daily life outside of the therapy context) were considered (Geretsegger et al., 2014:23). According to Geretsegger et al. (2014:23), music therapy had a moderate to large effect on "non-generalised social interaction skills, generalised social interaction skills, non-generalised non-verbal communicative skills, initiating behaviour... social-emotional reciprocity...joy and quality of parent-child relationships". Small to moderate effects were seen for verbal communicative skills and social adaptation (Geretsegger et al., 2014:23). Geretsegger et al. (2014:13) note that duration of the studies ranged from one week to eight months, with no follow-up assessment. The sample size in six of the studies was small (four to ten participants), with three studies consisting of between 22 and 24 participants. The sample size of the remaining study was 50 participants (Geretsegger et al., 2014:13).

Five studies reviewed by Geretsegger et al. (2014:13) used predominantly receptive techniques (participants listened to live or pre-recorded music) with signs and/or words to be learned. The remainder involved interactive and relational techniques. Here, improvisation and structured musical games were employed, as were songs (Geretsegger et al., 2014:14).

Improvised or responsive techniques are thought to facilitate moments of synchronicity within the music through therapists attuning to the child (Geretsegger et al., 2014:14; Kim, Wigram & Gold, 2009:404). Improvisational techniques use active music-making and are child-centred (Geretsegger, Holck & Gold, 2012:2). According to Kim et al. (2008:1759), children with ASD often seem to realise that the music created by the therapist has some relation to themselves.

2.7 Family-centred music therapy and ASD

Music therapy has most often been employed as individual therapy for clients with ASD, with some reports of group music therapy occurring (Geretsegger et al., 2014:6). However, family-centred approaches are becoming more important with this client population (Geretsegger et al., 2014:6; Thompson, 2012:110). A family-centred approach involves families and practitioners collaborating, with a key focus on building the family's resources (Corlett & Twycross, 2006:1309; Thompson, 2012:109). Such collaboration involves some level of negotiation between practitioners and caregivers (Smith, 2010:171) and the valuing of caregiver's input (Attfield & Morgan, 2007:52). According to Thompson, McFerran and Gold (2014:841), a family-centred approach to music therapy with this population would focus on the child's development as well as bettering/enhancing the parent-child relationship.

Active participation of family members in sessions is considered by some (for example Allgood (2005:93), Thompson (2012:30,114), and Thompson et al. (2014:843)) to be an important part of family-centred music therapy interventions. Studies suggest that active parental involvement in music therapy sessions can improve the parent-child relationship and the quality of interactions in the home environment (Thompson et al., 2014:850) and can facilitate new insights relating to the child (Allgood, 2005:99). While full participation of parents in sessions may be considered ideal, such a framework may not be feasible in all cases. Thompson (2012:109) notes that it is important for practitioners to be aware of challenges facing parents as their resources and energy for full participation may be limited. As discussed, parents may be under financial strain and may already be participating in a number of other interventions (Goin-Kochel et al., 2007:207). In a South African context, this may be exacerbated by the low socioeconomic status of a large percentage of the population. This should be noted for the participants of the current study. In many cases, participation in full family-centred music therapy sessions may be precluded. As such, I collaborated with the primary caregiver outside of the session itself. This was done with the

view to valuing her knowledge and input and the hope that sustainable practices within the home environment could be created.

Walworth (2012:236) considers provision of services within the home environment to be the ideal for family-centred practice as children with ASD may find it difficult to transfer skills from one environment to another (Walworth, 2012:236). However, few studies with children with ASD include family-centred sessions within the home environment (Thompson et al., 2014:841). Bloch and Weinstein (2009:34) note that home-based interventions may be considered invasive by families. The school environment is often more appropriate and may be considered a natural environment (Thompson, 2012:109,110). Music therapy sessions for the proposed study were conducted with children in the school environment.

2.8 Conclusion

As noted, there is a gap in the literature concerning the prevalence of ASD in South Africa as prevalence studies are ongoing (Elsabbagh et al., 2012:161). However, it has been suggested that many children in South Africa are not receiving specialised care tailored to their needs (Bateman, 2013:276). From the literature presented here, it is evident that music therapy shows promise in addressing and modifying behaviours characteristic of ASD. While a full-participation family-centred approach may be considered ideal with this population, the literature also indicates that parents are often involved in a number of other interventions and may have restricted resources in terms of time, energy, and finances. The current study sought to include parents in the intervention process through the collaborative creation of music activities for use in the home environment, whilst not requiring them to participate during music therapy sessions. This was done in order to value parental participation and input whilst remaining cognisant of potentially restricted resources, particularly pertinent in a South African context.

The following chapter will examine the ontological and epistemological foundations of this study. The nature of qualitative methodology will be discussed, and the research design and sample presented. Data collection methods and analysis will be explored. Research quality will be explored and ethical considerations stated.

Chapter Three: Methodology

3.1 Introduction

In this section I discuss the research paradigm informing the study as well as the research design that was followed. The sampling method and criteria, as well as data collection methods and data analysis, are discussed. I will also review quality of data and findings and explore how this was taken into account for the current study. Ethical considerations will then be examined.

3.2 Research paradigm

'Paradigm' is not a universally fixed term (Edwards, 1999:74). For this study, I subscribe to Terre Blanche and Durrheim's (2006:6) explanation that 'paradigm' refers to a comprehensive system of theory and practice that informs and delineates the way that research is undertaken along dimensions of ontology, epistemology, and methodology.

3.2.1 Ontology and epistemology

Ontology refers to the nature of reality and what can be known about it in reference to what is to be studied (Terre Blanche & Durrheim, 2006:6). Fundamental questions posed by ontology are "What is the form and nature of reality and, therefore, what is there that can be known about it?" (Guba & Lincoln, 1994:108). Epistemology refers to *how* we are able to know (Matthews & Ross, 2010:23). It "specifies the nature of the relationship between the researcher...and what can be known" (Terre Blanche & Durrheim, 2006:6). Lastly, methodology refers to the procedures used to investigate what is considered reality (Terre Blanche & Durrheim, 2006:6).

The research paradigm informing this study is an interpretive one. It posits that reality is subjective and dependent on the internal reality and perspective of the individual (Matthews & Ross, 2010:28; Terre Blanche & Durrheim, 2006:6). This reality is influenced by context and personal experience (Gray, 2004:20). Interpretivism has at its core the concept that knowledge about the social world arises from human interpretation (Chen, Shek & Bu, 2011:129). The positivist notion of a value-free, knowable truth is rejected (Wheeler, 2005:24). I adopt an intersubjective epistemological stance, which privileges contextual understanding and explicitly situates the researcher as a subjective observer/participant (Terre Blanche & Durrheim, 2006:272). My examination of a parent's interpretations and my own interpretations is in line with the assertion that multiple interpretations of a single event

or object can be valued (Grbich, 2004:26). Through comparing my own interpretation of events with those of the parent, I am firmly situated as a subjective observer and participant in the process.

3.2.2 Qualitative methodology

A qualitative methodological approach was used to gather data. Qualitative research is aligned with non-positivistic paradigms in that it involves exploring multiple, subjective constructions of reality (Wheeler, 2005:24). Researchers are concerned with people's lived experiences, how they make sense of these experiences (Bruscia, 2005:84; Willig, 2001:8) and the meanings assigned to events rather than with causality itself (Willig, 2001:8).

Ansdell and Pavlicevic (2001:135) note that qualitative research is process-centred rather than outcome focused. Usually, the aim is not to prove or disprove a stated hypothesis but to increase understanding about an issue or phenomenon (Ansdell & Pavlicevic, 2001:135,136; Hays & Singh, 2012:5). Furthermore, qualitative research is both explorative and descriptive in nature (Ansdell & Pavlicevic, 2001:137). This is true for the current study, which seeks to explore interpretations rather than beginning with a hypothesis.

Qualitative methodology is suited to investigate "meanings, emotions, and practices that emerge through the interactions and interdependencies between people" (Hogan, Dolan & Donnelly, 2009:2). Case studies, interviews, the examination of the researcher's own participation and experience are typical means through which information may be gathered within a qualitative approach (Hogan et al., 2009:2-4). The current study made use of all three approaches. Furthermore, the researcher is often directly involved in the study (Ansdell & Pavlicevic, 2001:136; Hays & Singh, 2012:7). Reflexivity is thus an important factor in qualitative research (Ansdell & Pavlicevic, 2001:140) and will be discussed further in the section on research quality.

3.3 Research Questions

It is pertinent to review the research questions in this section as the design of the study is guided by the questions. The primary research question investigated in the study is:

How can techniques in music therapy sessions with children who have ASD be transferred collaboratively by a music therapy student and parent(s) into musical activities that can be facilitated by parents in the home?

The two sub-questions are as follows:

1. How do a music therapy student's interpretations of video recordings of sessions with children with ASD compare to the interpretations of the children's parents?
2. How can these interpretations collaboratively inform the development of musical activities to be facilitated in the home by the parents?

3.4 Design of the study

An exploratory case study design was employed. This involves in-depth examination of cases over a specified duration to generate data that is extensive, detailed (Lindegger, 2006:460,461; Neuman, 2007:20) and often qualitative (Neuman, 2007:20). Case studies can produce context-dependent knowledge of experience (Flyvbjerg, 2006:223). This aligns with the ontology of the study, as interpretivist research privileges such knowledge (Chen, Shek & Bu, 2011:129; Matthews & Ross, 2010:28; Terre Blanche & Durrheim, 2006:6). Furthermore, Aldridge (2005:11) indicates that the contextual nature of case study research is of value to music therapy. A case study is exploratory in nature when the situation under investigation is novel and provides few guidelines to the researcher (Robson, 1993:149). The research design was thus apt for the purposes of this study.

I initially intended to investigate two cases. Unfortunately, the process of investigation could only be completed in one case due to ethical considerations. One caregiver was unable to attend an interview after sessions with her child had been completed. This will be discussed further when examining ethical considerations in section 3.9.

A limitation in case study design is that generalising to a wider population is difficult (Lindegger, 2006:461). However, Flyvbjerg (2006:227) asserts that formal generalisation of knowledge is not an absolute condition of value and legitimacy in scientific enquiry. Knowledge need not be generalisable to be admitted to the body of accumulated knowledge, and it may still inform future research and theory (Flyvbjerg, 2006:228). Case study research can lead to explanations and information that could apply to future cases (Willig, 2008:86) and may generate ideas or hypotheses that inform future research (Aldridge, 2005:25; Lindegger, 2006:461).

3.5 Sample

Purposive sampling was used for this study. This is typical of qualitative research, and involves selecting information-rich cases displaying the characteristics under investigation (Hays & Singh, 2012:6; Hogan et al., 2009:5). It is appropriate for small, in-depth studies focussing on exploring and interpreting experiences and perceptions (Matthews & Ross, 2010:167).

In an exploratory case study design, sampling criteria may be emergent or broad (Robson, 1993:157). The overall sampling criteria for the proposed study was defined. Cases involved a child diagnosed with ASD and attending Alpha School, and that child's parent/guardian. Children were not excluded from receiving other forms of therapy concurrently as the long-term effect of music therapy itself was not under investigation. Confounding factors such as co-therapies were therefore not a concern. Interviewing the children's parent(s) in order to investigate the parents' interpretations of excerpts from music therapy sessions was central to the study. A restriction was therefore that the parents speak and understand English. I did not feel confident engaging with parents on this interpretive level in a language other than English. Selection of the cases depended upon parent availability and interest in participation due to the need to interview them.

Sample size in qualitative research is smaller than in quantitative research (Hays & Singh, 2012:6; Hogan et al., 2009:5; Willig, 2001:17) as in-depth investigation typical of qualitative research makes large sample size impractical (Willig, 2001:17). Although Endacott and Botti (2005:54) advocate for a saturation-based selection of cases, the limitations of time involved in this study precluded this as the research had to be completed as part of a Master's degree. Furthermore, each case was intended to involve music therapy sessions, analysis and interpretation of sessions, interviewing parents, and the development of a home-based activity for each participating child. I therefore focussed on two cases due to feasibility. As mentioned, I was only able to complete one case in full.

Letters informing parents of the study and inviting participation were sent home by the school (Appendix A). This letter clearly explained that the study could unfortunately only accommodate music therapy sessions with two children. Five caregivers responded to indicate their interest in participating. The first two responses were provided with further information (Appendix B) and constituted the two cases once they had completed and returned an informed consent form (see Appendix C). The two cases both involved a male child, aged eight, and his primary caregiver. The remaining three respondents were thanked

for their interest and provided with contact details of practicing music therapists should they wish to investigate music therapy further.

Considering that letters inviting participation were sent to approximately 80 parents, very few parents responded. This may have been due to a number of factors. First, a letter was sent home with each child and parents may not have received the letters. This factor was unavoidable as sending information home with children is the standard way that the school communicates with caregivers. It would not have been ethical for the school to provide me with the personal contact details of parents, nor would it have been appropriate for me to solicit participation in that manner as this may have been seen as an invasion of privacy or led to parents feeling pressurised into participating. Second, parents may have been unable to commit to attending the interview at the end of the music therapy process. Third, they may not have had a good understanding of what music therapy entails and this may have affected their interest in participating.

3.6 Data collection

Data collection involved a number of stages. Preliminary data was gathered through a questionnaire in order to inform the planning of music therapy sessions with the children. One-on-one music therapy sessions were then held with each child and audiovisual recordings of these sessions were made to facilitate the interpretation of sessions and the collaborative development of activities. It was envisaged that each child would participate in ten sessions but this was not possible due to absenteeism from school. Once the music therapy process with each child was complete, I selected a number of short excerpts from collected footage through a process of supervision. I recorded my own interpretations of these excerpts to later be compared with caregivers' interpretations. Excerpts were then shown to the relevant caregiver during an interview. As mentioned, one caregiver was unable to attend her interview. In line with the ethical concept of justice (discussed in section 3.9 below), the interview with the remaining caregiver will be conducted at a later stage (should she wish to continue) in order to complete the process and allow for the collaborative creation of a music activity. Should she prefer to terminate participation, a brief summary of the music therapy process will be provided to her (number of sessions completed, goals for the music therapy process with the child, and examples of activities that took place). An interview was conducted with the first child's parents, consisting of two parts. The caregiver's interpretations of excerpts was explored in part one of the interview and my interpretations were then used to address sub-question one of the proposed study. Part two of the interview

sought to address sub-question two. Going forward, I will only refer to the completed case. Using pseudonyms, the child will be referred to as Philip, and the parent as Helen.

3.6.1 Preliminary data collection

Helen was asked to complete a brief questionnaire (see Appendix D) to provide background information that was then used to inform the music therapy sessions with Philip. The information also affected the selection of areas of focus within the audiovisual material as well as the subsequent collaborative creation of music activities by creating a lens through which these activities were viewed.

Twice-weekly one-on-one music therapy sessions were conducted with Philip. The frequency of sessions was necessary because of the duration of the school term. Overall, Philip took part in eight sessions. His mother was informed of this during our interview. As mentioned previously, my approach was based on the creative music therapy mode, which emphasises active music making (Finnigan, 2010:323). Sessions usually involved the use of composed/improvised songs or rhymes, music activities, movement activities, and shared improvisation on instruments. Each session was designed specifically with Philip in mind based upon goals I derived for him and the developing music therapy process.

A single fixed camera positioned on a tripod was used to capture audiovisual footage of music therapy sessions. Video recordings can constitute a wealth of data for qualitative research (Bottorff, 1994:245). Permanence and density are distinct advantages of audiovisual recordings (Knoblauch, Tuma & Schnettler, 2014:444). Permanence allows multiple reviewings over time, and viewing can be in real time, slow motion, or frame by frame (Bottorff, 1994:246,247). Comparisons of similar material occurring at different times can be made (Bottorff, 1994:246). The density of data captured through the use of this format is greater than that of any other recording method (Bottorff, 1994:246). However, audiovisual recordings do have limitations (Bottorff, 1994:245). An audiovisual recording is not a complete record of events (Bottorff, 1994:246; Sparrman, 2006:249). Selected behaviours are recorded whilst others are not due to mechanical limitations (Bottorff, 1994:246; Sparrman, 2005:249). Subjective content and historical context may not be captured (Bottorff, 1994:246), or a constructed context may be imposed (Sparrman, 2005:241,250). Since I was a participant observer in the music therapy sessions, the issue of subjective content and historical context may be somewhat mitigated. However, it may be that this influenced my interpretations and Helen's differently since participating in the sessions, particularly as a music therapy student, constituted a different experience than that

of watching excerpts as a parent. There were also some difficulties involved in capturing footage of the sessions. Due to operator error, only half (15 minutes) of the first session was captured. Session three was lost due to camera error. Furthermore, the camera position and angle sometimes prevented the capture of visually suitable material, with Philip having his back to the camera or moving out of range. At times, messages would be broadcast over the intercom and this obscured the sound in the recorded footage.

Through a process of supervision, I selected four excerpts from the available and suitable audiovisual recordings of the music therapy sessions to be shown in part one of the interview. The excerpts related to the goals set for the music therapy process with each individual. Five additional excerpts were selected for further discussion during the interview, if considered appropriate. I sought to include excerpts that captured different aspects of interactions or activities discussed in part one. A key aspect of the excerpts was my interpretation of the excerpts' potential offer a parent insight into how musical activities could be relevant and useful for their child.

3.6.2 Data source A: My interpretations of audiovisual excerpts

I viewed the selected excerpts a number of times and wrote descriptive observations and interpretations of what I, as the music therapy student, perceived in relation to the goals set for Philip and the information that Helen provided in the initial questionnaires. These observations and interpretations were documented under the following headings: my feelings; interaction between myself and Philip; reported behaviour at home (where relevant); myself as music therapy student; Philip; Philip's movement; the music itself; other. These headings corresponded to those used in my session notes as they assist me to employ a level of reflexivity as part of standard music therapy practice. The interpretations were created prior to the interview to avoid my interpretations being influenced by the feedback given by Helen. These interpretations were later compared with Helen's interpretations.

Thick descriptions of the excerpts from music therapy sessions were written and have been included for purposes of transparency (please see appendices E, F, G, H, I, J, K, L, M). Thick description involves an interplay between description and interpretation in which context is vital (Stige, 2002:266,267). It does not merely involve amassing detail (Hays & Singh, 2012:8; Ponterotto, 2006:540), but refers to context, meaning, and possible participant intentions (Ponterotto, 2006:540). Four aspects of thick description are that it provides context, it clarifies intentions and meanings that shape what is being described, it

describes the process of development that occurs in the act, and it presents the act as text for (further) interpretation (Hays & Singh, 2012:213).

3.6.3 Data source B: In-depth interview with Helen as parent (two parts)

I conducted a semi-structured interview with Helen. The interview consisted of two parts. The interview schedule is attached (Appendix N), but it should be noted that the use of the probes was flexible depending upon what was being discussed and the excerpts that were shown.

Part one of the interview included general questions about Helen's understandings of what music therapy entails in order to provide context for her interpretations. I then showed her four video excerpts from sessions and asked for her interpretations of what occurred during each excerpt. Each excerpt was discussed after viewing, before moving on to the next. Helen offered her interpretations on each of these excerpts after which we then watched the excerpts again and I offered some of my interpretations. This process was followed in order to try to avoid influencing Helen's interpretations. Helen's interpretations were later compared with my own interpretations of excerpts to address sub-question one of the proposed study. In part two of the interview, further excerpts were viewed to further the richness of the discussion about potential activities that could be developed in the home context. I did not explicitly elicit Helen's interpretations of these excerpts but where they were spontaneously offered, these were then coded later on in the process (provided the information did not seem to follow a leading comment from myself). After viewing and discussing the excerpts we explored how music therapy activities in the excerpts could be translated into musical activities within the home. This involved a collaborative discussion between Helen and myself in which a music activity was formulated and refined to address sub-question two. The multiple roles that I assumed during this process will be discussed further momentarily.

Interviewing is a primary strategy for data collection in qualitative social research (Nunokoosing, 2005:698; Suzuki, Ahluwalia, Arora & Mattis, 2007:308). An interpretive approach seeks to determine the interviewee's subjective experience of an event (Kelly, 2006:297). As such, this method is an appropriate form of data collection for the current study. A semi-structured approach allows exploration of the interviewees' answers (Suzuki et al., 2007:311). The interview was conducted face-to-face as Helen needed to view selected excerpts. An audio recording was made of the interview for later transcription.

Interviews may be seen as social encounters involving active construction of knowledge (Holstein & Gubrium, 2004:140; Kvale, 2007:21). Kvale (2007:21) describes the process as an “inter-view, an inter-change of views between two persons”. Given that part two of the interview comprised a two-way discussion between Helen and myself with the intention of collaboratively formulating knowledge, the interview in the current study is explicitly situated as a site for knowledge construction between researcher and participant.

Since I held multiple roles during music therapy sessions and interviews, I employed a reflexive and relational stance (Aigen, 2008:254; Suzuki et al., 2007:297). This is not uncommon in music therapy research, where the researcher is often also the therapist (Aigen, 2008:254). This dual role may have affected my analysis of the music therapy process, as Ansdell and Pavlicevic (2001:103) note that the therapist may feel pressurised to perform well and that a dual role is complicating to both roles. However, qualities employed by a therapist (such as insight, intuition, and emotional/intellectual processing) may also enhance and guide the research process (Ansdell & Pavlicevic, 2001:103-102). Furthermore, reflexivity is commonly used within music therapy practice (Stige, Ansdell, Elefant & Pavlicevic (2010:283-284). Such reflexivity is important when considering the music therapist's influence on the music therapy process (Delany, 2015:71). Supervision helped to address potential complications arising from this dual role, and to entrench reflexivity. In selecting the excerpts for viewing I sought to create a balance between those moments that presented me as a 'successful' music therapy student and those that may have presented me as 'unsuccessful' in terms of my performance. A dual role may also have resulted in Helen feeling unwilling to share negative interpretations of the music therapy process (Suzuki et al., 2007:300). The inclusion of potentially 'unsuccessful' interactions in excerpts was intended to mitigate this to some extent. Furthermore, Nunkoosing (2005:699) indicates that power dynamics constantly shift between interviewer (with a position of authority) and interviewee (possessed of privileged knowledge), rendering an equal power relationship difficult. Henning, Van Rensburg, and Smit (2004:67) suggest that explicitly involving the interviewee as a participant in knowledge-creation may address this power asymmetry somewhat. Part two of the interview is specifically situated as a site of co-construction and it is my hope that this created a more balanced sharing of power. The hierarchical structure in interviews may be challenged if the interviewer does not privilege a removed, neutral stance (Fontana & Frey, 2000:658).

3.7 Data preparation

Durrheim (2006:189) indicates that raw data must be prepared so that it is in a form that can then be analysed. Care should be taken in preparing data to avoid affecting data analysis negatively (McLellan, MacQueen & Neidig, 2003:63) by including interpretations at this stage of the process or by including or disqualifying data through selection bias. In this section I discuss how data was prepared prior to being analysed.

3.7.1 Data source A: My interpretations as music therapy student

My interpretations and observations were created as part of the data collection stage. These interpretations and observations were transferred to a table to facilitate the later process of coding and comparison with Helen's interpretations. This involved splitting the text into smaller portions centred around one key idea in the text. I then read and re-read my interpretations and highlighted key phrases. These key phrases constituted the units to be coded at a later stage.

3.7.2 Data source B: Transcription of interviews

The audio recording of the interview with Helen was transcribed. Recordings and transcriptions may provide more detail and accuracy than field notes although it should be noted that recordings and transcriptions do not provide objective texts that reproduce reality (Hammersley, 2010:555). While transcription may be viewed as an act of creation or construction (Hammersley, 2010:556; Oliver, Serovich, & Mason, 2005:1286), I attempted to represent Helen's intended meaning as closely as possible and transcribed the interview verbatim. Helen was given the opportunity to review the transcript and indicate whether she was satisfied with the representation. The transcriptions then allowed for qualitative content analysis and comparative analysis of the texts with a view to addressing the research questions.

3.8 Analysis

Reducing data to manageable elements is a key feature of qualitative data analysis (Cohen, Manion & Morrison, 2007:475). Qualitative data analysis involves interpreting data to reflect meanings or representations in or of the material (Flick, 2014:5; Thorne, 2000:68). In this section, qualitative content analysis and comparative analysis processes are explored.

Qualitative content analysis is used to examine content or context in text (Hsieh & Shannon, 2005:1278). It allows the researcher to distil a large amount of text data into categories by

classifying it into representations of similar meaning (Cohen et al., 2007:475; Hsieh & Shannon, 2005:1278). This produces a comprehensive overview of the text (Wilkinson, 2004:182).

Qualitative content analysis involves coding and categorising data (Ansdell & Pavlicevic, 2001:150; Cohen et al., 2007:476, Hsieh & Shannon, 2005:1278; Saldaña, 2009:8). Coding entails analytic labelling of aspects of the text that are relevant to the research question (Ansdell & Pavlicevic, 2001:150). Coding usually involves simplifying *and* complicating data in that it reduces data to common elements whilst potentially allowing for more extensive analysis through transforming the data (Coffey & Atkinson, 1996:29,30). As such, I needed to review and recode the data a number of times, as per Saldaña's (2009:8,10) recommendations. Saldaña (2009:4) states that coding may be seen as "the transitional process between data collection and more extensive data analysis". Codes may be data-driven and/or concept-driven (Gibbs, 2007:46). Data-driven codes are derived from the text, and coding is begun without an explicit set of codes from which to draw (Gibbs, 2007:45). Concept-driven coding draws upon a pre-determined list of key ideas that may be revised during the process of analysis (Gibbs, 2007:45,46). The current study made use of data-driven codes. After coding, categorising can occur (Ansdell & Pavlicevic, 2001:151; Saldaña, 2009:8). Coded data units were grouped or linked into sub-categories according to similarities (Ansdell & Pavlicevic, 2001:151; Coffey & Atkinson, 1996:27; Saldaña, 2009:8). After this, sub-categories were grouped into categories. A category should create a mutually exclusive class (Ansdell & Pavlicevic, 2001:151; Graneheim & Lundman, 2004:107). Categories were then grouped into sub-themes and themes to allow for further abstraction and a deeper level of interpretation (Joffe & Yardley, 2004:62). It should be noted that this final stage (grouping into themes and sub-themes) did not involve exclusive classes. Some sub-categories and categories were linked to multiple sub-themes. This will be justified and explained further in section 4.5.

Qualitative content analysis does not produce objective, value-free data but the data exist as texts and can thus be examined for quality purposes (Cohen et al., 2007:475,476). Texts have multiple meanings and are open to different interpretations (Graneheim & Lundman, 2004:106). This aligns with the ontological and epistemological grounding of the proposed study. Reflexivity and transparency were employed to lend credibility to my interpretation as one of many possible interpretations. This will be discussed in the section on research quality.

Qualitative content analysis was used to examine my own interpretations and Helen's interpretations of the excerpts. This was done in order to allow for the investigation of sub-question one through the comparison of sub-themes and themes. The interpretations were refined into units for coding, after which these codes were grouped under sub-categories and categories. Sub-themes and themes were then derived through further investigation of the data.

In order to investigate how Helen's interpretations of music therapy excerpts differed from my own, codes and categories identified during qualitative content analysis of my interpretations and the interview transcriptions were arranged into a code hierarchy. This involved grouping codes about similar things under the same general code (or 'parent') (Gibbs, 2007:3). Code hierarchies allow relationships between codes to become apparent, and prevent code duplication (Gibbs, 2007:75). Codes were then placed into tables in order to facilitate comparison and/or association across datasets (Gibbs, 2007:78). Qualitative tables are often used to allow cross-case comparison (Gibbs, 2007:80).

Part two of the interview involved Helen and myself collaboratively creating a music activity to be used in the home environment. Any interpretations spontaneously offered about additional excerpts were included for coding to address sub-question one. Further data analysis was not required for the rest of the material generated in this part of the interview. A description of the activity that was collaboratively created was sufficient to address the research question.

3.9 Research quality

Researchers using qualitative methodology privilege subjective interpretation and context but must still show that their research is credible (Golafshani, 2003:600). Adopting the position that a researcher's subjective experience cannot be substantiated could lead to uncritical acceptance of value-laden conclusions (Silverman, 2006:221). To ensure quality in my research, I draw on the concept of trustworthiness. Quantitative research quality is largely determined by the validity and reliability of the instrument (Bergman & Coxon, 2005:4; Golafshani, 2003:600; Silverman, 2006:225), but most qualitative researchers do not find these measures appropriate because they rely on and entrench positivistic ontology (Golafshani, 2003:600). Instead, the concept of trustworthiness is used (Bruscia, 1995:425). Trustworthiness is comprised of four characteristics: credibility, applicability, consistency, and neutrality (Bruscia, 1995:425).

Credibility refers to the study being conducted in a methodologically appropriate manner (Bruscia, 1995:425). Performing member checks is the most important technique to establish credibility (Lincoln & Guba, 1985:315). I therefore asked Helen to review the transcription of her interview to ensure it reflected what she wanted to convey. She confirmed that it did. Applicability refers to whether the findings can be transferred to another research setting (Bruscia, 1995:425). The current study relies on individuals' subjective interpretations of context-bound material so it is not possible to achieve exactly the same outcome in a different research setting. However, as noted in section 3.3, generated knowledge may still inform future research, even if formal generalisation is not possible (Flyvbjerg, 2006:227). Consistency and neutrality are encompassed by how dependable the findings and data are, and whether the findings can be confirmed by others analysing the data (Bruscia, 1995:425).

Flick (2007:66) emphasises the need for transparency in qualitative research. This involves documenting explicit explanations of the process that was followed by the researcher, as well as how findings were made and conclusions drawn (Flick, 2007:66). I have included material in appendices that will allow others to track my analysis process. Please see appendix N for the interview transcript, appendices E-M for the descriptions of audiovisual excerpts used during the interview, the initial table of interpretations in appendix P, list of codes, categories and sub-categories in appendix Q, and appendix R for the creation of sub-themes and themes.

Selective observation may occur when a qualitative researcher inadvertently selects data that fits his/her preconception of the phenomenon under investigation (Neuman, 2007:6; Silverman, 2006:223). Here, the researcher's subjectivity may cause him/her to draw erroneous conclusions (Silverman, 2006:223). While I acknowledge that I selected excerpts of recorded footage based on my interpretation of the music therapy sessions, this feature is built into the research design. Excerpts related to goals set for the music therapy process with Philip and were selected through a process of supervision. I explicitly intended to compare Helen's interpretations of the footage with my own in my capacity as researcher and music therapy student. Furthermore, the current study does not seek to address a specific theory through the selection of material for purposes of analysis.

Reflexivity is important when the researcher is the primary research instrument and is representing the experiences of others (Simons, 2009:91). Reflexivity should be present in the researcher's reflections on his/her role in and reactions to the process (Simons, 2009:91). This involves the researcher critically examining the ways in which his/her

assumptions, behaviour, background, and roles co-construct meaning in the research process (Finlay & Gough, 2008:ix). In addition, the researcher should remain cognisant of dual relationships that occur when he/she is also actively involved as a participant in his/her research (Aigen, 2008:256). As researcher, music therapy student, and interviewer I will carry multiple roles during the proposed study. Supervision will assist in allowing me to remain aware of these roles. As noted previously, reflexivity is also employed within music therapy practice (Stige, Ansdell, Elefant & Pavlicevic, 2010:283-284). Delaney (2015:71) indicates that reflexivity is necessary in order for the practitioner to gain insight and awareness. Barry and O'Callaghan (2008:57) suggest the use of reflection through journal writing. Although not constituting a journal per se, I wrote reflections on each music therapy session as part of standard music therapy practice.

3.10 Ethical considerations

Four philosophical principles are widely accepted as hallmarks for ethical research: autonomy and respect for the dignity of persons; nonmaleficence; beneficence; justice (Wassenaar, 2006:67). These principles guided the ethical considerations of the current study.

Informed consent and voluntary participation addressed autonomy and respect for the dignity of persons (Wassenaar, 2006:67). Voluntary participation was a feature of the current study due to the participant selection process. Informed consent was sought from the parents for their participation as well as for the children participating in music therapy sessions as they are minors and have developmental delays. Parents were given participation information forms (Appendix B) that explained what the study would entail. Consent forms (Appendix C) were used to gain informed consent from parents for their child to participate in music therapy sessions as well as their consent for participation in the interviews. The consent form noted the option to withdraw from participation at any stage. An assent form was used to gain assent from the participating children (Appendix S). Although the children could not interact directly with or primarily through the format of the assent form, I made use of a third-party who had more experience in terms of the child's modes of communication. This third party was the respective child's class teacher. The children were taken through the process of dissent, where they were able to point to a picture of a stop sign by the door, and say stop. The children were able to explore the instruments in the presence of the teacher who assisted in determining whether the child was comfortable proceeding and whether they understood they could signal their wish to stop the sessions. Both teachers determined that the children had given assent and were comfortable

proceeding. The inclusion of such a third party is highly valuable during the process of gaining assent (or dissent) with individuals who communicate in non-normative ways (Lester & Barouch, 2013:76-77). Lester and Barouch (2013:73) and Cocks (2006:258) note that with this client population all behaviour is potentially meaningful and communicative and may signify assent (or dissent). At the beginning of each session I went through the process of dissenting again with each child. Consent to conduct the study was also obtained from the principal of the school (Appendix T) and permission was granted by the Western Cape Department of Education to conduct the study. The principle of nonmaleficence requires that participants not be harmed or wronged through direct or indirect consequences of the study (Wassenaar, 2006:67). To uphold this principle I informed parents of the research process and performed a member check regarding the transcript of the interview that occurred. All collected data was safely stored and no material was released to parties other than my supervisor. I endeavoured to ensure that the children participating in music therapy sessions were safe from harm at all times. As mentioned, one caregiver was not able to attend the interview for personal reasons. I made it clear to her that she was under no pressure to do so. Beneficence requires the researcher to attempt to maximise benefits for participants (Wassenaar, 2006:67). It is hoped that the proposed study will be beneficial to the children participating in music therapy sessions. It is also hoped that the study offered new insights into translating activities in the music therapy sessions into the home for the parent who completed the interview. The interview will be completed with the remaining caregiver at a future date when she is able to participate. This also satisfies the principle of justice. The principle of justice requires that participants receive fair treatment and benefits due to them, and that the selection of participants offers equal opportunity to participate (Wassenaar, 2006:68). Parents/guardians were given the opportunity to express interest in participating and selection of two cases was then dependent on who responded first. As noted, this was explained to parents in the invitation letter so that selection could be perceived to be fair.

The researcher has an ethical duty to ensure that data remains confidential and that anonymity of persons is upheld (Farrant, Pavlicevic & Tsiris, 2014:53,54). All participant names have been replaced by pseudonyms in all documents and data will not be used in any other study without first gaining the relevant participant's consent. Data will be archived at the University of Pretoria for 15 years. These factors were noted in the participant information form sent to parents.

3.11 Conclusion

This chapter has offered an overview of the research methodology employed for the current study. The paradigm informing the study was identified as interpretivist and the methodology as qualitative. The research questions were then reviewed. A case study framework was discussed and the sampling criteria for a purposive sampling technique was described. Data collection methods involving preliminary data (questionnaire, music therapy sessions, selection of audiovisual excerpts), and primary data sources (my interpretations and the parent's interpretations of audiovisual excerpts) were explored. The process of preparing data and analysing data by means of content analysis was examined. I noted that the quality of data and findings would be ensured through the use of reflexivity, transparency, and supervision. Finally, I discussed the ethical principles of dignity of persons, nonmaleficence, beneficence, and justice and noted how these were upheld in the current study.

The following chapter will discuss the process of data collection, preparation, and analysis in more detail. A description of coding and categorising the data will be presented. Themes derived from the data will be explored, along with a description of each theme. Finally, the music activity that was created through collaboration between myself and Helen will be presented.

Chapter Four: Data Collection and Analysis Methods

4.1 Introduction

This chapter presents a deeper discussion of data collection and analysis methods involved in the study. I begin by describing how data were collected and prepared. Given that the investigation of case B was not completed because the caregiver was unable to attend the interview, only data from case A (Helen and Philip) will be discussed. This is followed by an explanation of the processes involved in coding and categorising the two main data sources. Finally, the themes drawn from the categories are discussed briefly. Figure 1 provides a visual overview of the data collection and analysis process. Although the analysis of data is presented as linear, it should be noted that analysis is an iterative or recursive process and involves constantly moving back and forward between the entire data set, the coded extracts of data being analysed, and the analysis of the data being produced (Braun & Clarke, 2006:86).

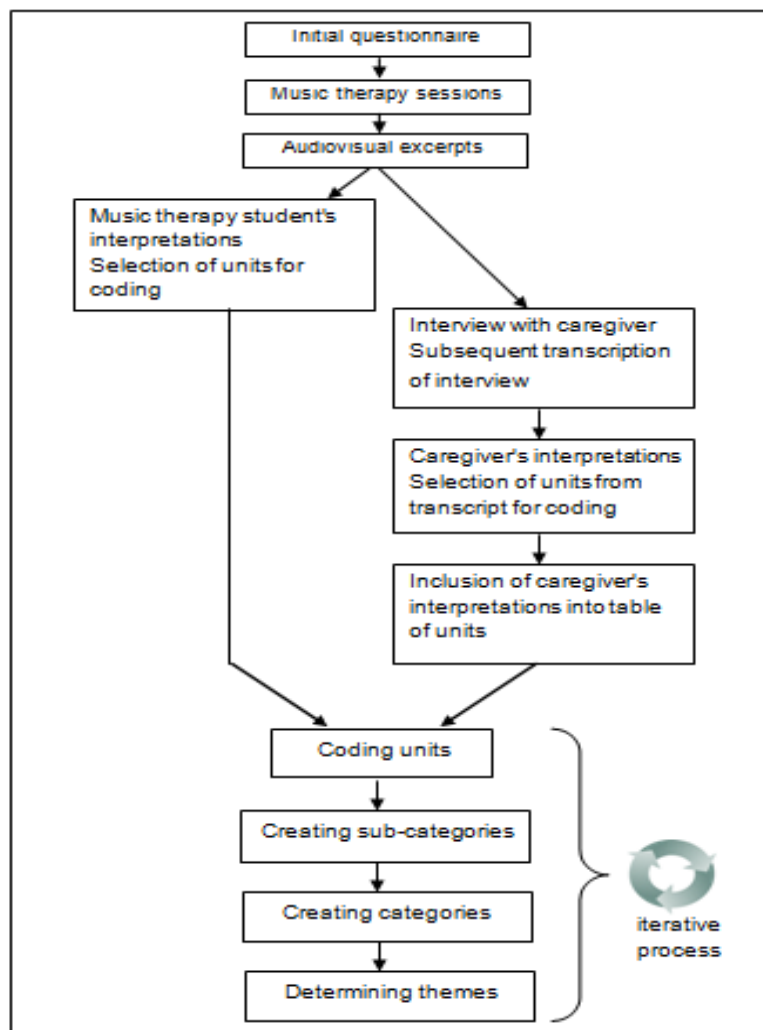


Figure 1: Visual overview of data collection and analysis

4.2 Data collection and preparation

As noted previously, data collection involved a number of stages. In this section I will begin by discussing data collection and preparation of preliminary data after which I will move on to data source A and data source B. Preliminary data were necessary to facilitate the collection and preparation of data source A and data source B. Data source A and data source B were used to answer sub-question one and two of the primary research question.

4.2.1 Preliminary data

I collected preliminary data through a questionnaire (see Appendix D), the music therapy process itself, and the selected audiovisual excerpts. Preliminary data informed or facilitated the later creation of my interpretations and Helen's interpretations of audiovisual excerpts from music therapy sessions with Philip.

4.2.1.1 Questionnaire

Through the use of open-ended questions, information about Helen's perspectives on Philip's behaviour at home was sought. This information centred around interaction, relationship, strengths and challenges, and response to music. A further question addressed Helen's expectations of or hopes for the music therapy process. Helen was also invited to provide information she felt I should be aware of whilst conducting music therapy sessions, and to add anything further she wished to express.

Completion of the questionnaire was not compulsory, however it was requested that the short biographical section be completed in full. For all other sections, it was noted that Helen was free to leave items blank if she wished to do so. This was clearly explained in the questionnaire. It was also noted that there were no right or wrong answers to the open-ended items. Helen completed the questionnaire in full. The information provided was used to plan initial music therapy sessions, assessment points, and possible goals for the music therapy process.

Helen included some personal details in her responses to the questionnaire. As such it is not suitable to include the completed questionnaire as an appendix as this would constitute a breach of privacy. However, the questionnaire template is available as Appendix D. A summary of information that informed initial session planning and goals (where deemed suitable for inclusion) appears as Appendix U.

4.2.1.2 Music therapy process

Bi-weekly one-on-one music therapy sessions took place on the school premises during the second term. As mentioned in the literature review, the school environment may be considered a natural environment, and is often more appropriate than conducting home-based intervention with this client population (Thompson, 2012:109,110). Sessions were conducted during school hours with approval from the school principal. Philip's teacher provided suggestions of appropriate times when sessions could take place. Conducting therapeutic sessions during school hours is common practice at the school, and students have the opportunity to take part in equine-assisted-therapy, art therapy, and occupational therapy where appropriate.

Philip took part in eight sessions. The majority of sessions were between 25 and 30 minutes long. Two sessions were approximately 20 minutes due to interruptions that were out of my control.

All but one session took place in the school hall. It was an expansive space and this seemed to have a slightly distancing effect on the client-therapist relationship and interactions at times. Students passing by the hall or yelling could be heard. Sessions were sometimes interrupted by people rattling the door handle or trying to enter the hall. At times, messages were broadcast over the intercom and this would sometimes interrupt interaction. A closed curtain cut a stage off from view and a piano was situated in the corner of the room. The only accessible plug point was at the other corner of the room, which made the use of pre-recorded music somewhat awkward. A camera was positioned to capture approximately one third of the hall, where the majority of the sessions took place. Please refer to section 3.5.1 for a more detailed discussion of the audiovisual recording of sessions. The following diagram shows the layout typically used for sessions.

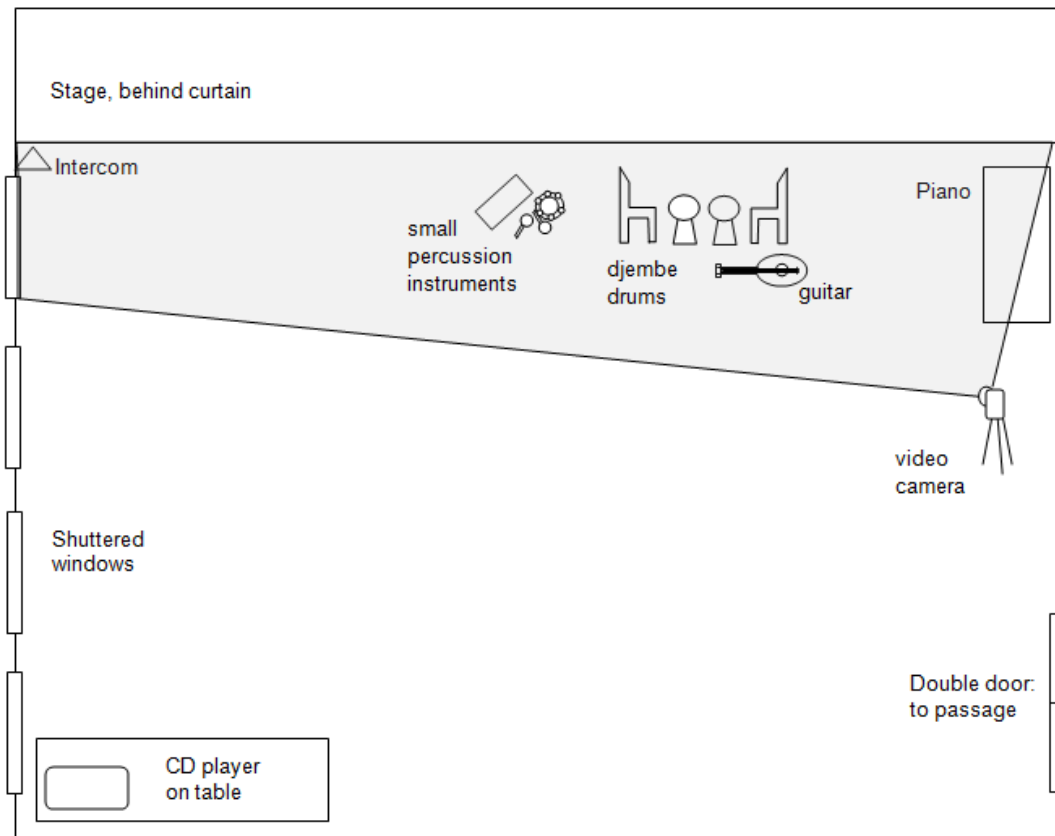


Figure 2: Layout of the hall for the majority of sessions

The remaining session took place in a small passageway outside of a classroom. The space available in the passageway was minimal and we were cramped, just able to be seated between the wall and a large table. Nevertheless, this seemed to be the session where Philip was the most interactive, both relationally and musically. Perhaps the smaller space created a feeling of safety and intimacy.

As mentioned previously, my approach to music therapy in sessions emphasised active music making, as based on the creative music therapy model (Finnigan, 2010:323). Pre-recorded music was used at times to facilitate movement activities but the majority of activities focused on instrumental and vocal improvisation, the use of known songs and rhymes, turn-taking, and joint improvisation. The guitar was used in all sessions, and the piano in all but the one in the passageway. Sessions typically also involved the use of one or two *djembe* drums and other hand percussion instruments (usually shakers, tambourines, bells, and at times a *mbira* and small diatonic xylophone with a one octave range).

Sessions always began and ended with a greeting song. Both of these songs were established early on in the process. Apart from the session being bounded by these musical-relational activities, the session structure was relatively flexible.

An assessment phase took place during the first two sessions based on information gained from the completed questionnaire and my own understanding of typical features of ASD. From this assessment phase, the following goals were set: to provide opportunities for practising social skills such as turn-taking; to increase freedom of movement; and to decrease isolation by encouraging intermusical participation with myself as music therapy student.

4.2.1.3 Audiovisual excerpts from sessions

Audiovisual excerpts were selected from recordings of the music therapy sessions. As discussed in chapter three, not all material was available for selection. This was due to challenges involving camera operator error in session one, camera malfunction in session three, and instances where Philip had his back to the camera or was out of frame. In addition, there were times when messages broadcast over the intercom obscured the audio in the recording. Selecting excerpts therefore involved ascertaining what material was visually appropriate and audible from the available recordings.

Excerpts were selected through a process of supervision. The excerpts were considered to have the potential to offer Helen insight into how musical activities could be relevant and useful for Philip in the home environment. Excerpts related to the goals set for the music therapy process and featured specific interactions such as turn-taking, joint improvisation, movement, or the greeting song.

The selected excerpts were used to create my interpretations and observations for later comparison with Helen's. Four primary excerpts were selected for use in part one of the interview with the view to gaining Helen's interpretations. Five additional excerpts were selected to be shown if Helen was interested in seeing further excerpts and if they seemed appropriate to the conversation occurring in the interview. The primary excerpts seemed to show the clearest examples of interactions between Philip and myself as linked to the music therapy goals and potential insight into activity creation. The additional excerpts captured different aspects of the interactions or activities shown in the primary excerpts and I considered them to be examples of 'less successful' interactions than in the primary excerpts. During the interview all nine excerpts were shown and discussed. The excerpts were not used to present a linear development of the music therapy process. As such,

excerpts were not presented chronological order. A brief descriptive summary of each excerpt follows. For full thick descriptions of excerpts please refer to Appendices E, F, G, H, I, J, K, L, M.

4.2.1.3.1 Excerpt One

The first excerpt was taken from the seventh music therapy session with Philip and is 1'53" in length. The session took place in a small passage outside a classroom rather than in the hall where the other sessions were conducted. I had been working on trying to decrease Philip's isolation by trying to encourage musical engagement. We had been practising some social skills like turn-taking. Some musical and social cues were becoming more established and familiar. The excerpt features vocal turn-taking and co-musicking, which had not taken place before.

At the beginning of the excerpt, Philip was strumming the guitar and I was playing the *djembe* and singing a song that he knew from outside of the session (*These are the sounds that the animals make*). Philip seemed to withdraw slightly from the interaction. In response I then put my drum aside and said "Kerryn's turn?". Philip looked at me and continued strumming softly. I initiated a "four, three, two, one, stop" cue. Philip stopped playing. I offered affirmation and then took the guitar, which he relinquished freely. As I positioned the guitar, Philip mirrored my movement of crossing one leg over the other knee. I commented on this and then made a movement that Philip tended to make when preparing to play piano. Philip mirrored what I was doing. We moved into vocal turn-taking and this developed into joint improvisation and co-musicking. The interaction ended when Philip initiated a "one two three four stop" cue. The excerpt then ends.

4.2.1.3.2 Excerpt Two

The second excerpt is taken from session six. It is 1'24" in length and presents a movement-and-music activity. I had tried to include some movement in each session. This session used an excerpt of *Doo-be do* by Freshly Ground.

I put on the music and said we would do some dancing. Philip moved toward the piano so I followed him, encouraging him to dance. I held out my hands and he took them, moving with me away from the piano. I modelled the movement, also verbally indicating what the movement was. Philip responded with movement that was less energetic and less coordinated than mine. At times his movement was somewhat jerky and restricted. As we continued the activity I offered verbal encouragement and affirmation. The excerpt ends when the activity ends and Philip moves back toward the piano.

4.2.1.3.3 Excerpt Three

Excerpt three is taken from the beginning of session six and is 1'25" in length. The excerpt begins with Philip and I moving into the greeting song. After the greeting song, a turn-taking exchange on a *djembe* is shown.

At the beginning of the session Philip moved toward the guitar, which was positioned to the side of the space where the greeting song took place. I encouraged Philip to leave the guitar and move toward the drum. He began drumming a brief syncopated rhythmic fragment which I then mirror vocally as I moved the drum closer. Philip then stopped playing. We began the greeting song on two drums. Philip beat his drum and also responded by saying my name in the greeting song as I pointed to myself. At the end of the greeting song I moved one drum away so that was a single one between us. I initiated a turn-taking on the drum, singing "Kerryn's turn and Philip's turn" and tilting the drum to the respective person. Philip echoed my rhythmic pattern (three beats + one pause) when it was his turn to play. The turn-taking pattern was established after roughly four phrases. I stopped tilting the drum and the turn-taking exchange continued for approximately four phrases before Philip moved out of the structure. The exchange moves into short rolls played at the same time. The excerpt then ends.

4.2.1.3.4 Excerpt Four

This excerpt is taken from the beginning of session seven and is 2'24" in length. As mentioned previously, session seven took place in a small passage rather than in the hall. Philip did not appear to be distressed by the change in routine.

As I turned on the camera Philip looked into it and said "video". I echoed this and he then said "say cheese" and smiled. I moved to sit with him and asked if he was ready to play. As I sat he said "stop!", moving his hands in a cutting type gesture. He then reached over to the *djembe* and began beating the drum. I moved forward and positioned the drum closer between us. We began the greeting song, with both of us beating the drum. Philip responded verbally during the greeting song, saying "hello Kerryn" after the phrase "say hello". As I continued I asked him to sing with me and he responded by saying "Hello Kerryn". Once we had finished the greeting song I said "Kerryn's turn". He began vocalising at the same time (*ai-ya*). I paused and said "hey?". He vocalised "*ai-yan*". I reflected this vocalisation and beat the drum. He then vocalised some more along with my singing but he stopped shortly thereafter. I continued with the turn-taking interaction, singing Kerryn's turn and Philip's turn and tilting the drum toward the relevant person. He often beat the drum the same number of times that I had. After roughly twelve phrases I stopped tilting the drum and

tried to continue the turn-taking exchange, singing the melody to *Lord of the Dance*. The turn-taking exchange ended and Philip began playing at the same time as me. The excerpt ends at this point.

4.2.1.3.5 Excerpt Five

This excerpt is taken from session four, toward the beginning of the session. It is 2'35" in length and shows an exchange on the drum. Philip still showed more interest in the guitar during sessions and this tended to distract him. For this session I moved the guitar so that it was out of his line of sight at the beginning of the session. Before the excerpt we had sung the greeting song and were playing drums together. I had initiated a movement to which he responded with jerky motions. He is making this movement when the excerpt begins.

At the beginning of the excerpt we were each playing on a *djembe* drum and I was singing the melody to *My bonny lies over the ocean*. Philip played with a scattered movement and limp hand. His jerking body movements seem somewhat uncontrolled. Philip then laughed and began beating the drum rapidly without any reference to my singing or playing. I reached forward and beat Philip's drum with force. I then start beating my drum with a strong, steady beat and saying "one, two, three, four" as I hit the drum. This gained Philip's attention and he began beating more steadily with me. As he later became bit perseverative in his playing I slowed the tempo and start singing the melody of *Scotland the Brave*. He began playing faster, almost like a roll and I played a roll with him. I then indicated that we should play slowly and Philip stopped beating the drum. He looked around the room and asked about the guitar, saying "do you see guitar?" I responded that we would play a little bit later. We continued drumming for a little while longer before the excerpt ends.

4.2.1.3.6 Excerpt Six

Excerpt six is taken from session four and is 1'34" in length. It shows a movement and music activity which was perhaps less effective than the activity presented in excerpt two. Prior to the activity, Philip had been strumming the guitar and singing about dancing.

I turned on the pre-recorded music (an excerpt from *Doo be do* by Freshly Ground) and invited Philip to dance with me. I gave him two shakers and I played a tambourine. Philip began moving the shakers side to side in a style reminiscent of flamenco dancing. I tried to mirror some of his movement. I then tried to encourage him to expand his range of movement by stretching upward and then bending to touch the ground. Philip did not really respond. My movements are accompanied by verbal directions. Philip began to become more absorbed by the shakers and seemed to withdraw somewhat from the interaction. I

then put down the tambourine and took Philip's shakers. I took Philip's hands and directed his movement.

4.2.1.3.7 Excerpt Seven

This excerpt is taken from session two and is 1'47" in length. Prior to the excerpt, Philip had been playing guitar for some time and was not interacting with me. It was very difficult to draw his attention from the guitar in order to initiate engagement. The excerpt shows my attempt to establish boundaries in the form of taking turns with the guitar. Philip's back is to the camera and it is a bit difficult to see what he is doing. When presenting this clip to Helen, I described his actions briefly.

The excerpt begins with Philip strumming strongly and singing something similar in contour and vocal construction to *Ring a ring a roses*. I affirmed Philip's playing and singing and clapped in time to his strumming. I then indicated that it was my turn to play guitar but Philip continued playing. At the end of a phrase I took the guitar and played a chord progression, singing *Four little monkeys*. Philip tried to take the guitar from me and I responded by saying "my turn" and looking at him. He pulled the guitar again and I reiterated that it was my turn. He then echoed "my turn" and I pointed to myself, saying "my turn, Kerry". He responded by saying "my turn" Philip. I shook my head and said "no". I continued playing and asked Philip to sing with me. I played with a flexible beat, including pauses to encourage Philip to join in with the singing. He responded occasionally by completing phrases of the song.

4.2.1.3.8 Excerpt Eight

This excerpt is taken from session four and presents my attempt at initiating turn-taking on two *djembe* drums. The excerpt is 1'07" in length. We had not made many dedicated attempts at turn-taking as an activity before this although we had played together on instruments in previous sessions.

The excerpt begins with Philip and I both sitting at a drum. Philip was tapping on his drum in a somewhat erratic fashion. I attempted to explain the turn-taking activity verbally and gestured when it was time for Philip to play and when it was time for him to stop playing. I also gestured when it was my turn to play. My gestures were not very varied. There was not much support musically. Philip continued to play when it was my turn. Eventually I responded to his playing by trying to fit in brief bursts of playing in between his. Philip then began vocalising with sounds almost like braying. I ended the exchange by using a 'four, three, two, one, stop' cue.

4.2.1.3.9 Excerpt Nine

Excerpt nine is taken from session seven and is 1'26" in length. It presents an attempt on my part to initiate vocal turn-taking with Philip because he seemed to be moving toward isolation. We had engaged in such turn-taking earlier in the session.

At the beginning of the excerpt, I am playing a major chord progression on guitar and Philip is playing on a small *mbira*. The music seems sluggish. I began singing a commentary about us making music together. Initially, Philip's playing was in time to the beat of my playing but he then fell out of this beat. I tried to initiate a vocal turn-taking exchange but Philip continued playing the *mbira* without engaging with me. I reached out to touch him to encourage him to sing and I then continued trying to initiate the turn-taking pattern. Philip stopped playing and held out his hand, saying "Kerry, it's sore". I asked if he wanted to try the shakers instead. He continued playing the *mbira* briefly before moving on to the shakers. As Philip began playing the shakers energetically I responded by playing an upbeat strumming pattern. The excerpt ends at this point.

4.2.2 Data source A: My interpretations of audiovisual excerpts

Data source A involved the creation of my own interpretations of the audiovisual excerpts from the music therapy sessions with Philip.

4.2.2.1 Data preparation procedure for my interpretations as music therapy student

I began by watching the first selected excerpt a number of times and writing down my observations and interpretations of the excerpts in as much detail as possible. This was repeated for each excerpt. The text was organised under general headings which I make use of when writing session notes, namely: how do you feel?; interaction (between music therapy student and child); music therapy student; child; child's movement; the music itself; other. Figure three shows the template I used when creating my interpretations, as well as possible questions that could be used to reflexively direct my focus when considering material in the excerpts.

General heading	Possible questions
How do I feel?	What are my own feelings? What are my feelings in relation to Philip? What are my feelings about my actions and interventions?
Interaction	How am I responding to Philip? How is Philip responding to me? What relationship is being enacted or created?
Myself as music therapy student	What am I doing? What clinical methods am I employing? Are my actions clinically effective or not? Why am I doing what I'm doing?
Philip	What is Philip doing?
Philip's movement	How is Philip moving? What is the quality of Philip's movements?
Music itself	What is happening in the music? What is the effect of the music? Why does the music have this effect?
Other	What is the potential of this activity? What was the goal of this activity? How could this activity be made more effective?

Fig 3: Template for own interpretations with possible prompts

I also added a further heading to represent information provided in the questionnaire about behaviour at home in relation to the material under examination. These headings corresponded to the basic questions and probes in part one of the interview to be conducted with Helen. This was done in order to be able to compare my interpretations with Helen's at a later stage with the view to addressing sub-question one.

To facilitate the later process of coding I transferred my written observations and interpretations to a table, retaining the various general headings and splitting the text into smaller portions. It should be noted that some portions of text were included under different headings, having been amended slightly to reflect the focus of that heading. For example, material involving an occurrence where I responded to a specific movement of Philip's might

be included as text for 'music therapy student' and for 'child's movement'. This was done because it was not possible to assign all material to a single heading, nor was it deemed appropriate since such assignments would be fairly arbitrary and would not reflect the complex social and musical interactions occurring in the excerpts. Furthermore, restricting an interpretation or observation to a single heading would possibly reduce the quality of available data in that eventual comparisons of my interpretations and Helen's interpretations may not reflect links that would otherwise be appreciable. Figure four shows an example of interpretations of the same material as formulated under different headings.

Music therapy student	As I take the guitar I cross my legs. P mirrors this and I verbally comment with affirmation. I interpret this action as possibly indicating a deepening relationship between P and myself.
Philip's movement	Crosses leg after I do. Perhaps a sign of developing relationship and trust rather than simply mimicking.

Figure 4: Example of text for the same material falling under more than one section heading.

4.2.2.2 Selecting units for coding from my own interpretations as music therapy student

I began by reading and re-reading my own interpretations of the audiovisual excerpts, highlighting what I determined to be the key phrases of each portion of text. This selection of key phrases occurred prior to the interview with the caregiver. By doing so I intended to avoid my interpretations and determination of central points being influenced by the Helen's since sub-question one of the research questions involves comparing our interpretations of the excerpts. The key phrases were reviewed and split if they appeared to contain too many ideas. The key phrases then constituted the units to be coded. Prior to the interview, the interpretations were sent to my supervisor for review. Figure five shows phrases selected from my interpretations to form initial units, along with an example of how these were split into final units.

Excerpt One		
	Initial selection	Final unit
How do you feel?	I enjoy watching the interactions. I am pleased that P showed understanding of the '1234 stop' cue and feel that this indicates some form of development, socially or relationally within the music therapy sessions.	I enjoy watching the interactions
		I am pleased that P showed understanding of the '1234 stop' cue and feel that this indicates some form of development, socially or relationally within the music therapy sessions.
	I felt surprised and happy when the vocal turn-taking exchange developed. I was somewhat disappointed when P ended the exchange	I felt surprised and happy when the vocal turn-taking exchange developed.
		I was somewhat disappointed when P ended the exchange
	P was engaged and responded relationally and musically during the interaction.	P was engaged and responded relationally and musically during the interaction.

Figure 5 : Selecting key phrases for units. My interpretations appear in purple.

It is important to note that some interpretations were mixed with observations, and some text that might be considered to be purely observation was included. These are the elements of the audiovisual material that stood out to me and were thus considered important. For a full list of final units please see Appendix P which includes assigned codes.

4.2.3 Data source B: In-depth interview with caregiver (two parts)

As discussed in chapter three a two-part, semi-structured interview was conducted with Helen in order to elicit her interpretations of audiovisual excerpts from the music therapy sessions with her child; and collaboratively construct a music activity with her for use in the home with Philip. The interview was two hours long. Four primary excerpts were shown in part one of the interview. An additional five excerpts were shown in part two. The excerpts are discussed in section 4.2.1.3.

Once the interview had been conducted the audio recording was transcribed verbatim in order to try to represent Helen's intended meaning as closely as possible.

4.2.3.2 Selecting units from Helen's interpretations as primary caregiver

Once the interview was transcribed, I began a process of reading and rereading the transcript in order to become familiar with the material. I then began highlighting portions of text that referred to Helen's interpretations of excerpts one to four. At times, it was easy to identify these interpretations as they corresponded directly with a probe relating to the topic. At other times I had to question whether the material was relevant to the research questions and whether or not Helen's response had been influenced by a leading question. I attempted to refrain from adding my own explicit interpretations when selecting material but I acknowledge that some form of cross-over is inevitable. My aim, however, was to represent Helen's meaning as closely as possible. Portions of text referring to excerpts five to nine were also treated in this manner. Since these interpretations were offered as part of a discussion incorporating my own interpretations I only included those that were not potentially influenced by my own interpretations, and those where Helen specifically disagreed with something I said.

The portions of text that were meaningful in relation to the research question became the units that were later coded. Figure six shows part of the interview transcript with portions of text selected as Helen's interpretations appearing in blue. The full transcript of the interview is available as Appendix N.

Excerpt 1	
T	OK, d'you want to watch it again, or speak first?
C	[laughing] I ju, I, I have some questions,
T	Mm
C	It is um, is he singing from what you guys used to sing? 'Cause I saw towards the end he was continuing on his own without waiting for your cue, is it because he knows what's following or is he coming up his own ideas? OK, because I also heard him, um, singing something that, ah, when he said 'ya ya ya' it's, it's um, it comes from TV, there's a programme that he's... So, I also find at home if, if he hears a certain word
	[intercom, pause]
C	it triggers
T	Mm
C	a certain song
T	Mm
C	in him, 'cause he would suddenly think of a certain word or I would say a certain word and then he would start singing

T	Mm
C	about that 'cause now this as w, this here also seems, he seems to be doing the same, kind of like triggered something [clicks fingers]
T	Mm
C	and then he derailed a bit.

Figure 6 : Selecting key phrases from transcript for units.

Once portions of text were selected, these were added to the existing interpretations/units table. I aligned portions of text from my interpretations and Helen's interpretations as these related to the same musical material in the video excerpt. Figure seven provides an example of the alignment of interpretations that refer to the same material.

	Music therapy student's interpretations	Caregiver's interpretations
Child	I believe that self expression and creativity was enacted through improvisation.	Is it because he knows what's following or is it because he's coming up with his own ideas?
		I also heard him singing something that, when he said 'ya ya ya' it comes from TV.
		I find at home if he hears a certain word it triggers a certain song in him... he seems to be doing the same...
	At one point began making quacking sounds and looking away, which seemed to indicate he was moving toward isolation and perseveration.	He derailed a bit

Figure 7: Aligning units in the interpretations/units table

4.3 Coding

Once units had been selected and placed into the interpretations/units table, each row was numbered. I then began to allocate codes to the portions of text. Codes relating to my interpretations as the music therapy student were numbered as such: T 'row number'. Those belonging to Helen as the caregiver were numbered C 'row number'. If a corresponding code for the other party was present for the same material, this was indicated in the code. This allowed for easy location and comparison of codes when required at a later stage.

Coding involves assigning an analytic label to aspects of the text that are relevant to the research question (Ansdell & Pavlicevic, 2001:150). Although the units themselves fell under specific headings, as described in section 4.2.2.1, I attempted to let the codes emerge from the data. This is considered to be inductive coding, where the raw information itself gives rise to the codes (Joffe & Yardley, 2004:57). However, Gibbs (2007:46) and Braun and Clarke (2006:84) note that it is not possible to approach the analysis of data in a vacuum. Factors influencing the researcher's thinking (such as approach, epistemological considerations, and theoretical underpinnings) will always exact at least some influence on the process of analysis (Braun & Clarke, 2006:84). I acknowledge that this is the case and that my analysis of data constitutes only one possible interpretation of material.

It is important to note that the headings were only used to arrange interpretations contextually in order to later provide possible comparative points and highlight similarities or differences in interpretations surrounding the same or similar context. The headings were not used when moving on to create sub-categories or categories themselves. Braun and Clarke (2006:85-86) note that the use of existing questions as asked of interviewees to create categories, for example, does not constitute analysis, merely repetition.

Once the initial coding process had been completed, all codes were sent to my supervisor for review. Some codes were then adjusted to more clearly describe the relevant unit. The below table provides examples of codes that were assigned to their related units. As mentioned, please see Appendix P for a full list of codes as assigned to interpretations.

Heading	Music therapy student's interpretation	Code	Caregiver's interpretation	Code	Line
Philip	P responds vocally, copying and also offering new material. Sometimes he	T30/C30 P responds vocally: echoes and offers material	Is he singing from what you guys used to sing? Because I saw towards the end	C30/T30 P continues singing independently	30

	responds quickly and at other times there is a slight pause as I indicate to him		he was continuing on his own without waiting for your cue		
	There is a level of expression and engagement not previously seen in sessions.	T31/C31 High level of expression and engagement	He was smiling and he was enjoying himself	C31/T31 P's enjoyment	31
	Exercises choice by using ' 1 2 3 4 stop' cue. Uses shared cue rather than simply stopping or trying to take the guitar.	T32 Exercises choice: use of cue			32
		T33 Shared meaning: cue			33

Figure 8: Example of codes assigned to units

4.4 Creating sub-categories and categories

4.4.1 Sub-categories

Once the process of coding my interpretations and Helen's interpretations was complete, all codes were sorted into groups of sub-categories. As mentioned in chapter three, this involves grouping coded data units together according to similarities (Ansdell & Pavlicevic, 2001:151; Coffey & Atkinson, 1996:27; Saldaña, 2009:8). Each sub-category constituted a mutually exclusive class and codes were not allocated to more than one.

To begin the process of sorting the codes into groups of sub-categories, I printed out the entire table of codes and examined it multiple times until initial sub-categories were identified. I then followed a process whereby I focused on one possible emerging sub-category and inspected the codes again, marking potentially relevant ones with a symbol allocated to that sub-category. This process of inspecting and marking codes was repeated whenever a possible sub-category was identified.

Once each code had been marked with a symbol I then wrote out all codes belonging to a sub-category on a single page, repeating the process for each set of codes. With all the codes grouped under possible sub-categories, I then compared and scrutinised the grouping

to determine whether any codes were inappropriately positioned or whether sub-categories should be further refined or collapsed.

This process allowed for an intuitive emergence of sub-categories from the data that nevertheless bore relevance to observations provided in the initial questionnaire, goals from the music therapy process, clinical observations of the sessions, the caregiver's experiences outside of sessions, and possible relevance to developing activities collaboratively.

The initial list of sub-categories and codes was then sent to my supervisor for review. At this stage some inconsistencies were discussed, such as sub-categories being too broad or codes appearing to fit into more than one sub-category. This resulted in some of the sub-categories and groupings being amended. A total of 45 sub-categories were crystallised by the end of the process. Figure nine shows all 45 sub-categories.

Interest in interaction	Misinterpretation	P's vocal expression	P participates in turn-taking
Enjoyment	P experiences enjoyment	Quality of P's movement	Co-musicking
Uncertainty: P's behaviour	P's general affect	Quality of P's music	P interacting musically with MTS
Uncertainty: own behaviour	P experiences confusion	Physical space affects engagement	MTS responds to P in music
Expectation	P experiences frustration	Structure affects engagement	P's interacting with movement
C interprets P's actions as problematic	P is curious	P responds in greeting song	MTS responds to P with movement
MTS expresses disappointment	Source of expression for song	P does not respond in greeting song	MTS offers affirmation
MTS expresses discomfort	Source of expression for movement	MTS tries to establish turn-taking	P tests boundaries
Signs of developing relationship	P maintains focus	Increasing focus	Demands on P's attention

Decreasing isolation	Therapist's verbal communication	Cues	P displays compliance
P displays isolation	P loses focus	P's focus is elsewhere	Commentary on music
Commentary on movement			

Figure 9: Table showing all 45 sub-categories into which codes were sorted.

It should be noted that corresponding therapist/parent codes did not necessarily fall into the same sub-category. The different content and focus of our respective interpretations resulted in different codes being allocated to interpretations referring to the same or similar material. For example, a number of codes derived from my interpretations and observations of Philip's movement were grouped under the sub-category 'Quality of P's movement' whereas the codes derived from the caregiver's interpretations of the same material were grouped variously under 'P displays compliance', 'C interprets P's actions as problematic', 'P tests boundaries', and 'Source of expression: movement'. Figure 10 shows an example of codes organised under the sub-category "quality of P's movement". The column on the far right provides information about corresponding codes, where an interpretation about the same material existed but the resulting code was placed into a different sub-category. The corresponding code is numbered and labelled and the sub-category appears in bold.

	T line #	T code	C line #	C code	Corresponding code and sub-category if placed in a different sub-category
Quality of P's movement	T81	Movement seemed unnatural			<i>(no corresponding code)</i>
			C85	Displays rigid movement	<i>(no corresponding code)</i>
			C86	Dances freely when interested	<i>(no corresponding code)</i>
			C101	Displays rigidity when uninterested	T101-MT's affirmation important to encourage movement; MT offers affirmation
	T105	Movement: low body tone			<i>(no corresponding code)</i>

T106	Movement: lack of co-ordination especially feet	C106	Movement: stiff	
T109	Movement: shuffling feet			<i>(no corresponding code)</i>
T120	Movement restricted especially feet			<i>(no corresponding code)</i>
T165	P plays with low body tone			C165-P displays compliance; P displays compliance
T173	P beats drum with limp hand			<i>(no corresponding code)</i>
T179	Reduced muscle tone: movement activities			C179-Drumming initially displays compliance; P displays compliance
T266	P sometimes alternates hands when drumming			C266-Interprets changing hands as a signal of discomfort when drumming; C interprets P's actions as problematic
T288	Plays in swiping/fluttering motion			C288-Similar to behaviour when P wants to throw a tantrum but can't (oos); P tests boundaries
T290	P plays shakers in flamenco style			C290-Source of movement: media; Source of expression for movement
T291	P's movement is stiff and restricted	C291	Sometimes stiff at home when dancing	

Figure 10: Example of codes organised under the sub-category "quality of P's movement with corresponding codes that did not fit into the same sub-category

At this point it is pertinent to explain why some sub-categories were not collapsed further. Certain sub-categories, such as 'P interacting musically with MT' and 'MT responds to P in music', for example, may appear to be very similar or even to overlap. These sub-categories were not collapsed further (under a term such as 'interacting musically') because they each offered different nuanced information when considering sub-question one of the research question.

The sub-categories 'P responds in greeting song' and 'P does not respond in greeting song' could potentially have been collated into a single sub-category along with 'P's vocal expression'. However, the decision was made to retain these as separate sub-categories because Philip's caregiver specifically mentioned his manner of greeting in the preliminary questionnaire. This led to a focus on the possibility of practising social skills inherent in the greeting song during the music therapy process. Furthermore, the codes seemed to reflect a different overall quality to those describing his vocal expression. This was borne out when collating sub-categories into higher order categories.

The sub-categories 'MTS tries to establish turn-taking' and 'P participates in turn-taking' could possibly have been collapsed into a single sub-category named 'turn-taking'. There is, though, a difference in focus when considering the person to whom the codes refer (i.e., music therapy student versus Philip) within these two sub-categories. Since the interview sought to elicit interpretations about what I was doing and also what Philip was doing, it was deemed more suitable to maintain this separation within the sub-categories.

'P's interacting with movement' and 'MTS responds to P with movement' could also have been presented as a single category, but the distinction was maintained for the same reasons.

4.4.2 Categories

After codes had been organised under sub-categories, the sub-categories were then grouped under higher order categories. All sub-categories were written on a page and then examined until higher order categories began to emerge. Once sub-categories had been grouped into higher order categories, these were sent to my supervisor for review. As with the sub-categories, some clarification was required and some revisions were necessary to make these higher order categories clearer.

A table of all higher order categories and sub-categories included therein follows:

Higher order category	Sub-category
Reflection on own feelings and thoughts while watching clips	Interest in interaction
	Enjoyment
	Uncertainty: P's behaviour
	Uncertainty: own behaviour
	Expectation
	C interprets P's actions as problematic

	MT expresses disappointment
	MT expresses discomfort
	Misinterpretation
Emotional/psychological experiences attributed to P	P experiences enjoyment
	P's general affect
	P experiences confusion
	P experiences frustration
	P is curious
P's expression and creativity	Source of expression for song
	Source of expression for movement
	P's vocal expression
	Quality of P's movement
	Quality of P's music
	Physical space affects engagement
	Structure affects engagement
Relationship	P responds in greeting song
	P does not respond in greeting song
	MT tries to establish turn-taking
	P participates in turn-taking
	Co-musicking
	P interacting musically with MT
	MT responds to P in music
	P's interacting with movement
	MT responds to P with movement
	MT offers affirmation
	P tests boundaries
	Signs of developing relationship
	P maintains focus
	Increasing focus
	Demands on P's attention
	Decreasing isolation
	Therapist's verbal communication
	Cues
Potential resistance to connection	P displays compliance
	P displays isolation
	P loses focus
	P's focus is elsewhere

Commentary on music and movement	Commentary on music
	Commentary on movement

Figure 11: Table showing final categories and sub-categories

The category 'reflection on own feelings and thoughts while watching clips' encompassed sub-categories related directly to Helen's personal experiences whilst watching the excerpts, as well as my own personal experiences.

'Emotional/psychological experiences attributed to P' included interpretations and observations about Philip's experiences that are speculative. Helen and I both made assumptions about Philip's personal experiences. These were included under this category.

'P's expression and creativity' specifically refers to interpretations dealing with the quality of Philip's expressions (musical and in terms of movement), the ways in which environment and structure affected his expression, the source of his vocal and physical expressions, and the creative expressions themselves, particularly his vocalisations.

The category 'relationship' includes sub-categories referring to the development of a musical and interpersonal relationship between Philip and myself within a therapeutic context.

'Potential resistance to connection' makes reference to potential barriers to the developing therapeutic relationship such as Philip's isolation, compliance, and loss of focus. This draws on Nordoff and Robbins (2007) concept of resistiveness (Gardstrom & Hiller, 2016:3). The relationship between a client's participation and resistance is considered to be inverse. Gardstom and Hiller (2016:4) note that the therapist must consider context and not merely assume that resistances are operating as other factors may result in disengagement on the part of the client rather than resistance.

The category 'commentary on music and movement' refers to the consideration of the music itself in relation to activities shown in the excerpts as well as to possible aims for the use of music or movement.

A full list of codes and corresponding sub-categories and categories is available as Appendix Q.

4.5 Determining themes

In this section I will give a brief overview of the process of developing themes from the data, as well as a summary of those themes. Themes will be discussed in more detail in chapter five.

To begin with, I printed out the table of codes, sub-categories, and categories in its entirety. I then reviewed it and began to make notes on the differences and similarities between my interpretations and Helen's. Different colours were used for notes referring to myself, Helen, observations of commonalities, observations of differences, and ideas about the relevance of higher order and sub-categories when considering connections between our interpretations. I also began to explore questions such as: 'why are these similarities/differences present?'; 'what are possible reasons for this grouping as it occurs in the data?'; and 'how is this grouping affected by the views of the participant (either myself or Helen)'. In effect, I was seeking deeper underlying threads running through the data. This was necessary in order to address my research question. As such, it would not have been appropriate to simply group categories into overarching themes as this would not allow for comparison between my interpretations and those of the caregiver. Figure 12 shows a portion of the table of codes, sub-categories, and categories with my notes.

MTS contextual lens

Categories	Mini-categories	Code	Music therapy student
<p style="color: purple; font-size: small;">MTS REFLEXIVITY own feelings</p> <p>Reflection on own feelings and thoughts while watching the clips.</p> <p style="color: purple;">MTS: enjoyment ↓ wider range of feelings → why? - more viewings - subject in excerpts (active participant) - context - relationship built in music therapy.</p> <p style="color: green;">VS. C: discomfort sharing? - fewer viewings? - more interested directly in P's actions? map self-reflection</p> <p style="color: green; border: 1px solid green; border-radius: 50%; padding: 2px;">Uncertainty: P's behaviour</p> <p style="color: green;">Both experience uncertainty about P's behaviour. D: MTS: more varied C: mimicry. uncertainty re mimicry is shared</p>	Interest in interaction		
	Enjoyment	T1	Enjoys interaction
		T2	Enjoys shared meaning
		T4	Enjoys turn-taking
		T200	Enjoyment and surprise: P mentions camera
		T205	Feels warmly toward P
		T215	Finds interaction humorous
		T157	MTS's excitement at P's greeting derails song
		T129	MTS is excited and loses structure when acknowledging P
		T48	Uncertainty: motivation behind mimicry (trust)

Figure 12: Table of codes, sub-categories, and categories with written notes

As I reviewed the codes, sub-categories, and higher-order categories in light of the questions mentioned in the previous paragraph I noted the areas of intersection and difference between my interpretations and those of the caregiver. As the music therapy student I approached my interpretations using a particular contextual lens. Helen also developed her interpretations on the basis of her own contextual lens. These form the two broadest, themes. Within these, other sub-themes can be found: reflexivity of music therapy student; caregiver's pride in her child; highlighting developing relationship; valuing offerings as musical; focus on clinical musical features; focusing on successful interactions; and noticing musical interactions. Some of the sub-themes relate more to myself as music therapy student and others relate more to the caregiver. The sub-themes themselves do not represent distinct, exclusive realms. Each sub-theme influences and is influenced by the other sub-themes. As such, some categories and sub-categories may be included in more

than one sub-theme. The below diagram shows a visual representation of two main themes, the sub-themes, and their relationship to one another.

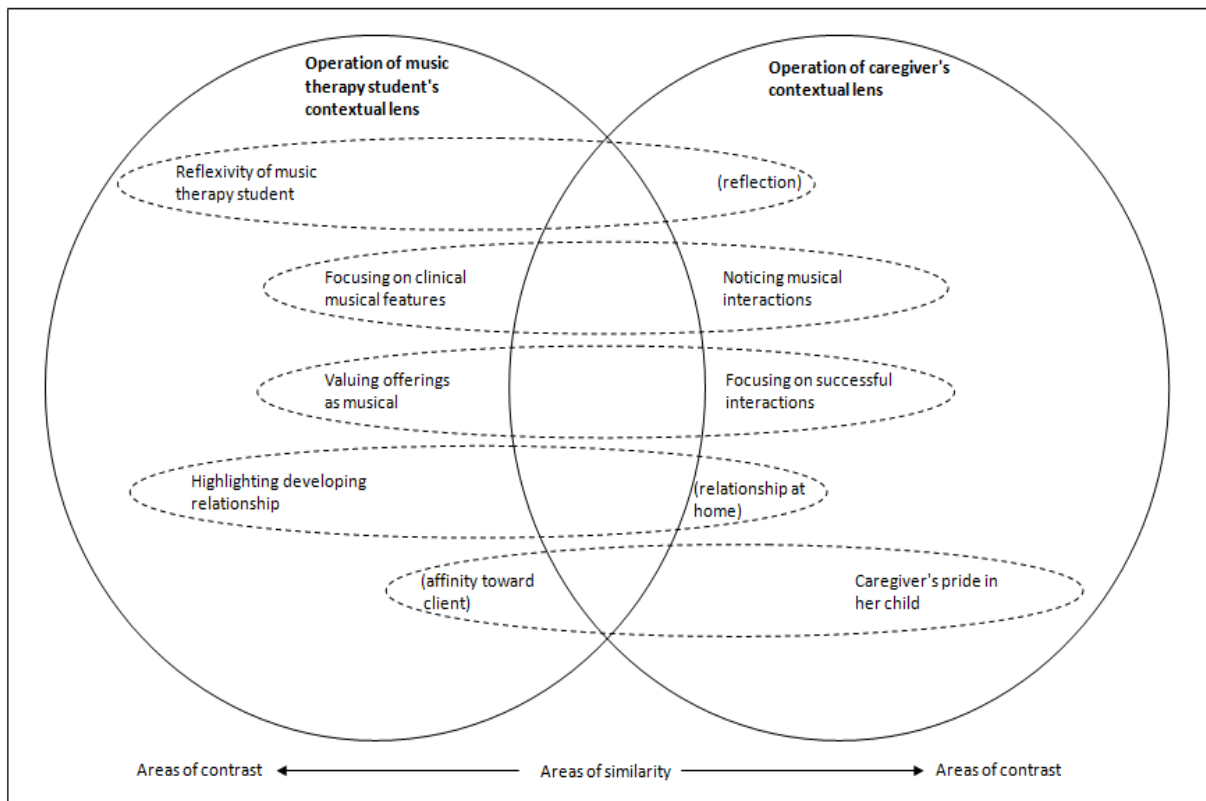


Figure 13: Visual representation of themes and their relationship to one another

For the remainder of this section I will provide an explanation of the two overarching themes, each sub-theme, as well as a further explanation of how these were developed.

4.5.1 Theme one: Operation of music therapy student's contextual lens

The contextual lens through which I viewed the material affected my interpretations of the excerpts. At a macro level, the dual role of music therapy student and researcher could be considered to be primary influences upon my interpretations of excerpts. Reflexivity, important to the role of researcher, has been examined previously and will be discussed as a sub-theme momentarily.

My position as an active participant in the material being viewed could be thought of as a meso level of this contextual lens. Being an active participant provided contextual information about the excerpts that the caregiver did not have and also increased my level of observance in terms of what actions I was taking. I tended to focus on interaction between

myself and Philip, myself as music therapy student, developing relationship between myself and Philip, the music and movements being experienced and created, and Philip's musical and interpersonal expressions. Helen, on the other hand, seemed to focus more on Philip himself as her primary area of interest. This will be discussed further in reference to her own contextual lens.

At a micro level, I was influenced by information provided in the preliminary questionnaire, my initial assessment of Philip, the goals that I developed for the music therapy process, the music therapy process itself, and consideration of possible activities that might be created in collaboration with the caregiver.

The overall external context in which I am positioned would also implicitly affect the operation of my contextual lens. It is beyond the scope of this discussion to examine these features but they would include aspects such as: school environment as premises for the music therapy intervention; present and historical political and cultural climate; construction of race and gender and my position as a white female; the fact that I don't have experience of the identity of parent; and my economic status.

The below diagram offers a schematic representation of my contextual lens.

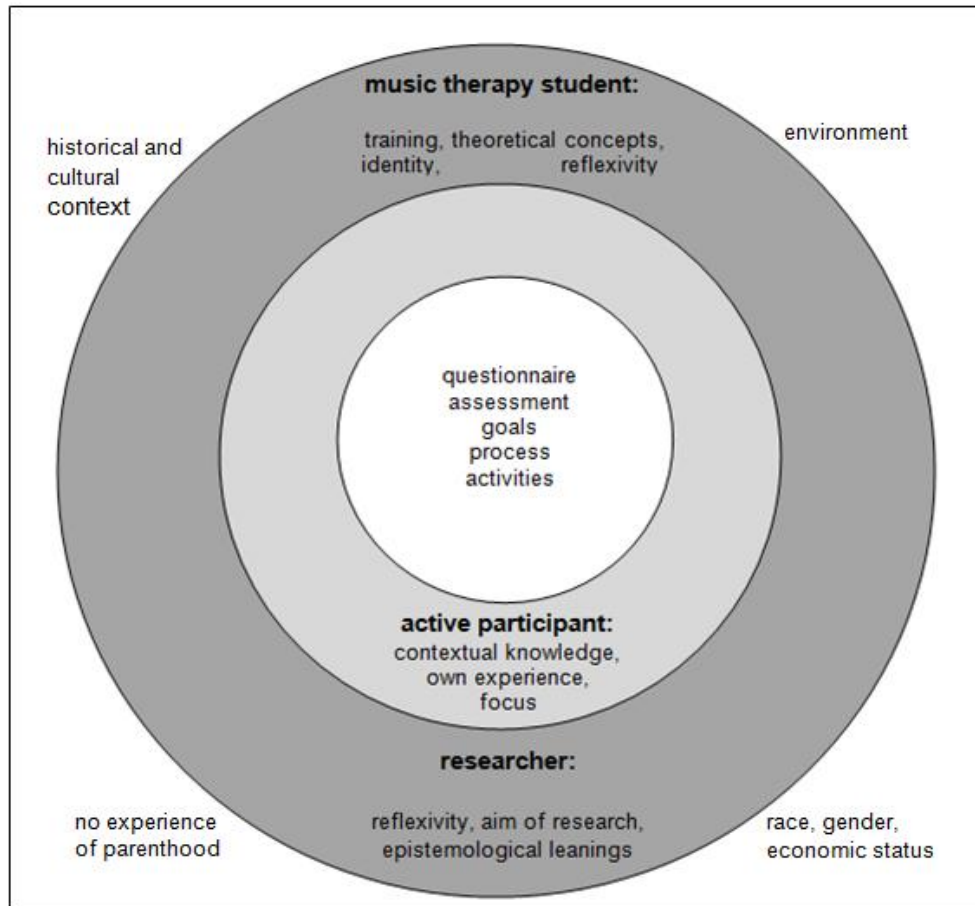


Figure 14: Representation of my contextual lens as music therapy student

My contextual lens also engendered disparate views to those of the caregiver when considering certain features and actions presented by Philip. This will be discussed further in the next chapter.

4.5.2 Theme two: Operation of caregiver's contextual lens

As with my own interpretations, the operation of a contextual lens appeared to have affected the ways in which Helen viewed the excerpts and created her own interpretations. Although I am not privy to the various influences on her identity, her role as caregiver, experiences in the home environment, and relationship with Philip would necessarily impact her interpretations. These aspects were of importance when we collaborated to create an activity for use in the home environment. They represented knowledge specifically situated within her frame of reference to which I had no access without her input. An example of this was Helen's knowledge about the source of expression for some of Philip's vocalisations or movements, where I did not know that Philip's expressions were related to an extra-musical source or where I was uncertain about the expression.

The below diagram offers a schematic representation of Helen's contextual lens, bearing in mind that I have restricted access to information about Helen and the aspects that may affect her contextual lens.

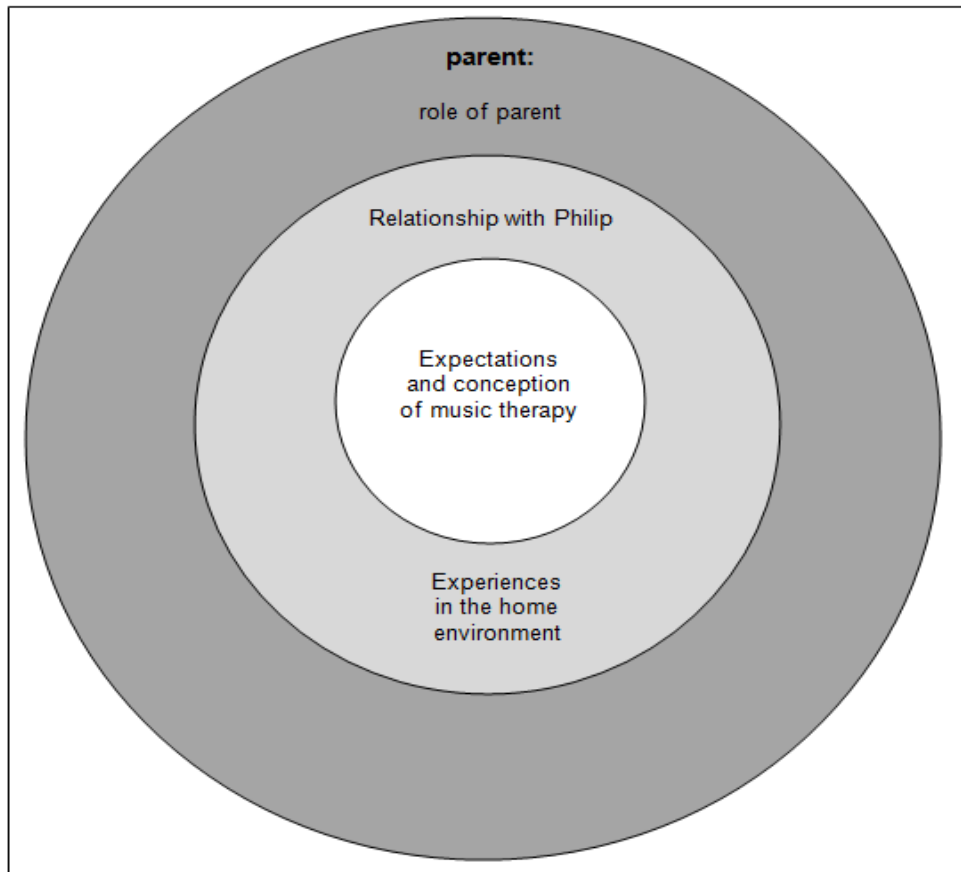


Figure 15: Representation of Helen's contextual lens as parent

As mentioned previously, the operation of Helen's contextual lens resulted in some areas where her interpretations differed to mine. She seemed to have some resistance to some of my interpretations that differed from her own. Helen also tended to attribute emotional/psychological experiences to Philip feelings without necessarily relating them directly to the relationship with myself as music therapy student or the musicking.

Helen did not see the operation of music as much as I did and did not often comment on it. Although not trained to focus on clinical musical features Helen still noticed aspects of musical interaction such as turn-taking and co-musicking. She also focused on 'successful interactions', which will be discussed further momentarily as a sub-theme.

Figure 16 offers examples of contrasting interpretations of the same material, where I interpreted the material in one way and Helen interpreted it differently as influenced by the operation of our contextual lenses.

Music therapy student's interpretation	Code	Sub-category (MTS)	Caregiver's interpretation	Sub-category (C)
P often plays with what seems like reduced muscle tone. His wrist is often limp as he rolls his hand on the drum rather than beating it with a stiffer hand... It may be that directed movement activities are important for P to potentially increase his sense of control and stability.	T179 Reduced muscle tone: movement activities	Quality of P's movement	C179 In the beginning he is tapping along just to tap for the sake of tapping.	P displays compliance
P did respond to all movements, although he required some prompting at times. I speculate that this behaviour may be an extension of his restricted range of movement.	T79 Restricted participation reflects restricted movement	P interacting with movement	C79 He is busy wanting to be on the piano. He wants to be there and you're trying to engage him in the song.	P's focus is elsewhere
			C80 He's just doing it because you're telling him to do it	P displays compliance
At the end of the activity I say "Yeah! Good job." I feel that encouraging and affirming P is important, particularly since he does not seem to move freely with ease.	T101 MTS's affirmation important to encourage movement	MTS offers affirmation	At home sometimes I do take him and I say "Let's dance" and he is a bit rigid. It's when he doesn't want to be engaging.	Quality of P's movement

<p>At the beginning of the excerpt P is bent over the guitar, with it on his lap. As I play he kneels close to the guitar. He tries to pull the guitar to himself, leaning closer and kneeling higher (his pulling of the guitar is not visible as his back is to the camera). When he seems to accept that he cannot take the guitar back he sits down but leans toward the guitar and strums gently.</p>	<p>T307 P continues touching guitar but does not take it</p>	<p>P tests boundaries</p>	<p>C307 Now you have taken it and he sees the way that it sounds the way when you play with it and the way it sounds when he plays with it and how can he do what you're doing</p>	<p>P is curious</p>
			<p>the strings are more interesting to him than him figuring out this music thing, this is the song that you guys are trying to engage in.</p>	<p>P is curious</p>
<p>Since he has shakers it may be that there are too many demands on his attention. He has to deal with my directions on top of playing the instrument, along with pre-recorded music.</p>	<p>T299 Possibly too many demands on his attention</p>	<p>Demands on P's attention</p>	<p>I think after the way he was playing with the shakers he kinda got a bit curious, 'what's inside here' 'cause he's observing 'can I open this and see what's making this noise in here'</p>	<p>P is curious</p>
			<p>I don't actually think that it was too much, I just feel like his mind got too curious about what's making this noise inside this thing, I want to see what's inside these'</p>	<p>Demands on P's attention</p>
			<p>sometimes there's a lot that's going on and he's still able to pick up everything that is happening.</p>	<p>Demands on P's attention</p>

Figure 16: Examples of contrasting interpretations as influenced by the operation of contextual lenses

Our different contextual lenses intersected at points, as can be seen in figure 13. This created areas of similarity in our interpretations. In other instances, areas of divergence resulted in different interpretations as has been mentioned above. This will be discussed further in chapter five.

4.5.3 Sub-theme one: Reflexivity

The sub-theme of reflexivity was a feature of my interpretations. This is perhaps unsurprising since I was committed to employing reflexivity both in my role as researcher and as music therapy student. I attempted to employ critical reflection during the music therapy process with Philip in the form of post-session reflection notes. I also tried to remain reflexive when selecting the excerpts that were to be viewed by Helen, choosing not only moments that showed 'successful therapy' but also those that could be considered somehow 'unsuccessful' yet still able to offer insight into the collaborative creation of an activity. In addition, the possibility for reflexive questioning was inherent in the format of the template I used in constructing my interpretations of excerpts (please refer to figure three above).

Responses concerning my own feelings and thoughts whilst watching the excerpts represented a conscious effort to examine my involvement as an active participant in the music therapy process. Philip's behaviour was not located in a vacuum. It was part of a process involving interaction between Philip, myself, and the music.

I suggest that the theme of reflexivity encompasses reflections on my own feelings as indicated by the following: enjoyment, uncertainty about Philip's behaviour, uncertainty about my own behaviour, disappointment, discomfort, and misinterpretation. Further, my interpretations involving what I was doing - musically, relationally, socially, interpersonally - also involve a level of clinical self-reflection. Figure 17 provides examples of my feelings as identified in my interpretations.

Music therapy student's interpretations	Code	Sub-category	Category
I enjoy watching the interactions.	T1 / -- Therapist: enjoys interaction	Enjoyment	Reflection on own feelings and thoughts while watching the clips.
Watching the clip I feel warmly toward P	T205 Feels warmly towards P		

I chuckled because I found P's interaction humorous.	T215 MTS: finds interaction humorous		
I was somewhat disappointed when P ended the exchange because this is the first time that such an exchange occurred	T5 / -- Therapist disappointed at ending	MTS expresses disappointment	
I wonder if I had lowered my expectations of P too much. Perhaps he could understand a lot more than I initially thought.	T201 MTS: possible lowered expectations of P	Expectation	
I wonder why I simply echoed though, rather than affirming in another way.	T214 Uncertainty: why MTS echoing	Uncertainty: own behaviour	
... concerned that P's use of 'stop' was an indication that he did not want to continue with the session. In retrospect I believe that it was a review of the assent/dissent process that we went over every session.	T216 MTS initially interpreted P's actions as wanting to stop	Misinterpretation	
... I then prompted him to say hello to me and after he did so I felt concern that I did not clearly acknowledge his greeting.	T128/-- MTS concerned that P's greeting not acknowledged	MTS expresses discomfort	

Figure 17: Examples of music therapy student's feelings in interpretations

Reflexivity was also present when considering aspects of the therapeutic relationship between Philip, myself, and the music. This was apparent in the sub-themes of 'highlighting developing relationship', 'focusing on clinical musical features', and 'valuing offerings as musical'. These sub-themes will be discussed momentarily. Figure 18 provides examples of reflexivity as shown in my interpretations that is not related specifically to my personal feelings or experiences whilst watching the excerpts.

Music therapy student's interpretations	Code	Sub-category	Category
	T153/--	MT offers	Relationship

<p>... I vocally reflect this rhythm and then say "nice, nice, good job" and play it on the drum. My reflection of the material he plays is an attempt to allow him to feel heard.</p>	<p>MT reflects material to indicate P is heard</p>	<p>affirmation</p>	
<p>I positively reinforce and affirm P's actions when establishing the activity. I am trying to encourage him in his musical offerings.</p>	<p>T15/ -- Therapist affirms musical offerings</p>		
<p>I often encourage and affirm P in his actions. I think that this is important, however... it should perhaps also not be over-used as this might result in P needing affirmation habitually.</p>	<p>T199/-- Affirmation important as encouragement but should not be overused</p>		
<p>I link my hands and stretch them out in a movement that P sometimes makes, saying "shall we get ready?" Since P mirrored my action, crossing his legs, I wanted to reciprocate by using an action he had often used in previous sessions.</p>	<p>T19/ -- Therapist matches movement: response to client's mimicry</p>	<p>MT responds to P with movement</p>	
<p>... I play a quick roll to change the pattern and when it is his turn he also plays a quick roll. I think that my quick roll was an attempt to fit in my turn before P played again in order to preserve the turn-taking pattern. After this, the turn-taking pattern did not continue.</p>	<p>T169/-- MT's roll: attempt to preserve turn-taking pattern</p>	<p>MT tries to establish turn-taking</p>	
<p>...P repeats something similar and then I begin singing something similar as I beat the drum. I also add 'wol-fen'tai' as</p>	<p>T224 MT assumes P is following song from previous session</p>	<p>MT responds to P in music</p>	

he often sings this after singing 'ai ai ai'. This was an assumption on my part but based on previous interactions... I speculate that my attempt to initiate a turn-taking exchange at this point may have interrupted P's musical flow.	T227 Uncertainty: actions interrupted flow		
... Another possible reason is that my comments are verbal.	T93/C92 Therapist communicates verbally	Therapist's verbal communication	
	T94/-- Therapist's verbal directions possibly less effective		
I start singing the melody to <i>Lord of the dance</i> as I stop tilting the drum. The melody is busier than the one I have been singing in the commentary turn-taking song. I feel that it has a melody with a strong forward motion, and can easily be portioned into small segments for different turns.	T275 MT: feels melody is appropriate for turn-taking	Commentary on music	

Figure 18: Reflexivity in my interpretations as music therapy student

Helen also demonstrated some insight into her own feelings and thoughts. This will be discussed further in the next chapter. Figure 19 provides examples of self-reflection as presented in Helen's interpretations.

Caregiver's interpretation	Code	Sub-category	Category
The time when both of you were tapping I don't know what was happening there or if it's like towards the end of the song or what.	C256/T256 Uncertainty: what is happening in activity	Uncertainty: own behaviour	Reflection on own feelings and thoughts while watching the clips.
I don't know why [he seems to be struggling on drum], maybe I didn't observe him well.	C167/T165 Uncertainty: own level of observation		
Sometimes I don't see much	C178 C does not see		

when he does the activity but I see it when he comes home and then he will translate that into something	much in activity but sees when translated at home		
--	---	--	--

Figure 19: Helen's reflections on own feelings and thoughts

4.5.4 Sub-theme two: Highlighting developing relationship

Decreasing Philip's isolation through encouraging musical contact with myself as music therapy student was one of my stated goals for the music therapy process. This goal included notions of relationship development both in terms of musical relationship and interpersonal relationship. Here, musical relationship and interpersonal relationship are linked. Musical relationship referred to the development of a dynamic two-way musical interaction. Interpersonal relationship referred to communication within and outside of musical interaction. The theme of highlighting relationship was present in the majority of my interpretations, where aspects such as Philip's response in the greeting song, my attempt to establish turn-taking, Philip's participation in turn-taking, and co-musicking were considered to be pertinent

A sub-category relating specifically to signs of developing relationship was developed through the process of coding and categorising interpretations. These interpretations did not necessarily relate to musical relationship.

Music therapy student's interpretation	Code	Sub-category (MTS)	Caregiver's interpretation	Sub-category (C)
I am pleased that P showed understanding of the '1234 stop' cue and feel that this indicates some form of development, socially or relationally within the music therapy sessions.	T3 Shared meaning: social or relational development	Signs of developing relationship	C3 P is very observant like when he is in the presence of somebody... I notice he was crossing his legs because you've crossed your legs and he's very much like that.	P's interacting with movement
P was engaged and responded relationally and musically during the Interaction.	T8 Engagement: relational and musical			

Seems to be a gentle rapport between us	T9 Relationship: rapport			
As I take the guitar I cross my legs. P mirrors this and I verbally comment with affirmation. I interpret this action as possibly indicating a deepening relationship between P and myself.	T16 Mimicry: deepening relationship			
He takes my hands as I hold them out to him and we then move to a space in order to dance. This might indicate trust and willingness to participate, or may be compliance.	T103 Taking hands: trust		When I want him to do it and then he will just do like this "ok you want me to do it, fine, I'll do it".	P displays compliance
The interaction seems to be quite flowing. There seems to be a good connection between P and myself.	T138 Good connection between MT and P			
There seems to be a rapport between P and myself, particularly at the beginning of the greeting song, and then again when the turn-taking activity is occurring	T210 Rapport between MT and P			

Fig 20: Examples of my interpretations of developing relationship and Helen's corresponding interpretations

As can be seen from the above, the caregiver did not express many interpretations relating to the development or relationship. The interpretations she did offer were usually related to other sub-categories. It is possible that the caregiver did not assign as much overt importance to this because she already has a long-standing (albeit different) relationship

with Philip. Her focus was not necessarily on the short-term relationship between client and therapist but rather on the client himself. For more examples please refer to Appendix R.

Other aspects of my interpretations referred to barriers to the formation of relationship and fall under the category 'potential resistance to connection'. These include the following sub-categories: Philip displays compliance; Philip displays isolation; Philip loses focus; and Philip's focus is elsewhere.

4.5.5 Sub-theme three: Focusing on clinical musical features

As a student music therapy student, clinical musical features are prevalent in my mind during planning, conducting, and reviewing sessions. I paid attention to why and how the music 'worked', actual features of the music, aspects such as meeting, matching, and reflecting, and instances of turn-taking and co-musicking and what that might signify. Figure 21 provides examples of these aspects in my interpretations.

Music therapy student's interpretations	Code	Sub-category	Category
Co-creation of music toward end of activity through vocal improvisation by both parties	T11/ -- Vocal improvisation: co-musicking	Co-musicking	Relationship
Seems to be a musical and relational connection, particularly during the vocal turn-taking	T12/-- Vocal Turn-taking: connection established	P participates in turn-taking	
I try to match P's vocalisation musically.	T24/ -- MTS matches P musically	MTS responds to P in music	
I speculate that there is a level of social awareness, evidenced by the understanding of and use of '1234 stop' cue, turn-taking, joint creation of music.	T36/C36 Social awareness: co-creation of music	Co-musicking	
Brief contrapuntal exchange for about 14 bars.	T61/C61 Contrapuntal exchange develops	Co-musicking	
As P reaches to a drum and beats a rhythm I vocally reflect	T153/-- MTS reflects material to indicate	MTS offers affirmation	

<p>this rhythm and then say "nice, nice, good job" and play it on the drum. My reflection of the material he plays is an attempt to allow him to feel heard.</p>	<p>P is heard</p>		
<p>I was also trying to 'capture' this rhythm as it was the most complex rhythm he had played..</p>	<p>T154/-- MT attempts to capture P's complex rhythm</p>	<p>MTS responds to P in music</p>	
<p>When I place the drum on the floor and stop tilting it he leans toward the drum slightly when it is his turn. He remains within the turn-taking pattern for 6 4-bar phrases until he reaches forward during my turn to beat with me. I play a quick roll to change the pattern and when it is his turn he also plays a quick roll. I think that my quick roll was an attempt to fit in my turn before P played again in order to preserve the turn-taking pattern. After this, the turn-taking pattern did not continue.</p>	<p>T169/-- MT's roll: attempt to preserve turn-taking pattern</p>	<p>MT tries to establish turn-taking</p>	
<p>On a single drum, a turn-taking activity develops.</p>	<p>T188/C188 Turn-taking develops on drum</p>	<p>P participates in turn-taking</p>	
<p>At the end of the greeting song P begins to vocalise (unclear, sounds like ay-ay). I try to echo this, leaning toward P and then say "hey?". P repeats something similar and then I begin singing something similar as I beat the drum. I also add 'wol-fen'tai' as he often sings this after singing 'ai ai ai'. This was an assumption on my part but based on previous interactions. I was hoping to create a shared vocalisation using his musical offerings. While I do this I tilt the drum to initiate turn-taking. This</p>	<p>T223 MT tries to echo P's vocalisation</p>	<p>MT responds to P in music</p>	

<p>results in P missing the drum at times, still trying to beat when I have already pulled the drum away. It seemed that P was trying to continue playing the drum and vocalising at this point so I stopped tilting the drum. however, P stopped vocalising and then became distracted. I speculate that my attempt to initiate a turn-taking exchange at this point may have interrupted P's musical flow.</p>	<p>T225 MT tries to initiate turn-taking</p>	<p>MT tries to establish turn-taking</p>	
	<p>T227 Uncertainty: actions interrupted flow</p>	<p>Uncertainty: own behaviour</p>	<p>Reflection on own feelings and thoughts while watching the clips.</p>
<p>As I finish the greeting song P vocalises but his words are unclear. I reflect the melody and sounds and begin playing the drum with the vocalisation. P continues to vocalise but it is still unclear. Sounds like "<i>ai ai ai, wol-fen-dai</i>".</p>	<p>T271 P vocalises and MT reflects melody</p>	<p>MT responds to P in music</p>	<p>Relationship</p>

Figure 21: Aspects of clinical musical features in my interpretations as music therapy student

Although Helen did not focus on this aspect specifically, she did notice some musical interactions between Philip and I. The sub-theme of noticing musical interactions will be discussed in section 4.5.7.

4.5.6 Sub-theme four: Valuing offerings as musical

This sub-theme captured my tendency to view most of Philip's vocal or instrumental actions as musical offerings rather than random noise. I imbued these musical offerings with meaning in terms of the music therapy process. Codes dealing with Philip's musicking, musical interaction, quality of music, and the like, were largely taken from my own interpretations and were not present in Helen's. Figure 22 presents examples of my interpretations of Philip's offerings as musical.

Music therapy student's interpretations	Code	Sub-category	Category
Reported to sometimes be creative in singing and changing melodies. I think that P's extended vocal improvisation reflects this.	T13/-- Vocal improvisation: creativity and expression	P's vocal expression	P's expression and creativity
I believe that self expression and creativity was enacted through improvisation.	T37/C37 Improvisation: self expression and creativity		
P changes the pattern, singing rising tones with intensity at the end of a four bar phrase. Vocalisations still relate to the music.	T60/C60 P changes vocal pattern, still relating to music		
P vocalises something from previous sessions ' <i>wol-fan-da</i> ' and music becomes more lively, strumming faster and continuous.	T62/C62 P vocalises from previous sessions and music becomes more lively		
...P began to sing along with me, his musical offerings becoming more complex and could be thought of as becoming more explorative and individualised	T66/-- Complex musical offerings: heightened expression		
P responds vocally, copying and also offering new material. Sometimes he responds quickly and at other times there is a slight pause as I indicate to him	T30/c30 P responds vocally: echoes and offers material		
P's vocalisations relate to my own initially.	T59/C59 Vocalisations relate to MT's		
I positively reinforce and affirm P's actions when establishing the activity. I am trying to encourage him in his musical offerings.	T15/ -- Therapist affirms musical offerings	MT offers affirmation	Relationship

As P reaches to a drum and beats a rhythm I vocally reflect this rhythm and then say "nice, nice, good job" and play it on the drum. My reflection of the material he plays is an attempt to allow him to feel heard.	T153/-- MT reflects material to indicate P is heard		
I try to match P's vocalisation musically.	T24/ -- MT matches P musically	MT responds to P in music	
I was also trying to 'capture' this rhythm as it was the most complex rhythm he had played..	T154/-- MT attempts to capture P's complex rhythm		
As I finish the greeting song P vocalises but his words are unclear. I reflect the melody and sounds and begin playing the drum with the vocalisation. P continues to vocalise but it is still unclear. Sounds like " <i>ai ai ai, wol-fen-dai</i> ".	T271 P vocalises and MT reflects melody	MT responds to P in music	
P begins beating the drum and I move into the greeting song. There is one drum.	T268 P beats drum and MT starts greeting song	P interacting musically with MTS	
P readily greeted me during the hello song. Although he did not sing the greeting he spoke in the pause between my phrases after I greeted him, which was musically appropriate.	T283 P's greeting was musically appropriate		
P's beating is focused and he is playing with energy. His beating vacillates between being slightly off beat to being on the beat with me.	T269 P plays with energy	Quality of P's music	

Figure 22: Examples of my interpretations of Philip's offerings as musical

It should be noted that there were occasions when I interpreted Philip's utterances and interaction with instruments as constituting 'sounds' rather than music. This was based on my understanding of contextual factors. There were also occasions where I considered Philip's interactions to be musically restricted. Figure 23 provides examples of my interpretations of Philip's interactions as musically restricted and of instances where I considered his interactions to consist of sound rather than being musical as such.

Music therapy student's interpretations	Code	Sub-category	Category
... For the most part P does not respond to changes in dynamics, continuing to play with force throughout the activity.	T274 P does not respond to changes in dynamics	P interacting musically with MT	Relationship
I quickly interrupt P when he begins making quacking sounds... I believe his behaviour reflected a shift toward isolation and potential perseveration which is why I intervened quickly and strongly.	T25/ -- Loss of focus: quick intervention	P loses focus	Potential resistance to connection
I suspect that P knew something was expected or required of him but he did not understand what this was because I was not communicating effectively with him. I speculate that his jerky movements and subsequent 'braying' sounds may have been in reaction to the demands placed on him and his feeling of possible confusion due to my ineffective communication.	T312/C312 P's responses possibly indicate confusion	P experiences confusion	Emotional/ psychological experiences attributed to P
	T313/C313 P knew something was required	P experiences frustration	

Figure 23: Examples of interpretations of sounds by music therapy student

4.5.7 Sub-theme five: Caregiver's pride in her child

It is difficult to pinpoint specific instances that would incontrovertibly constitute Helen's pride in her child. This sub-theme relies more strongly on my perceptions of the ways in which she shared her interpretations, and the ways in which she spoke about Philip. During the interview she often referred to his strengths, particularly in relation to his musicality. When she spoke of Philip's actions this was often accompanied by a connotation of strength. For example, where Helen referred to Philip's tendency to mirror people's movements she spoke of this in terms of him being very observant. Figure 24 provides examples of instances that seem to suggest Helen's pride in Philip. Here, the context of her interpretations helps to situate the sub-theme of 'caregiver's pride in her child'.

Caregiver's interpretations	Code	Sub-category	Category
P is very observant like when he is in the presence of somebody... I notice he was crossing his legs because you've crossed your legs and he's very much like that.	C16/T16 P copies others' movement	P's interacting with movement	Relationship
he knows what is expected of him, he knows what to do,	C45/T45 P knows what is expected of him	Signs of developing relationship	
When he was younger I used to think that he didn't know a lot because he doesn't maintain eye contact or sometimes he's doing his own things but I've noticed that even when he's doing his own things his ears are everywhere, he picks up a lot. When you think he's not looking at you he's actually looking at you and he picks up things that you do.	C142 P is paying attention even when seemingly uninterested	P maintains focus	
he does the tapping twice, and then he does that well	C253/T253 P succeeds at reflecting MT's beating	P participates in turn-taking	
He susses us out. 'Can I get away with that, ok she's not noticing, she's not insisting on me dancing, I'll continue doing it this way'	C293 P will test person's requirements	P tests boundaries	

I don't actually think that it was too much, I just feel like his mind got too curious about what's making this noise inside this thing, I want to see what's inside these'	C300 C: Does not think there were too many demands on his attention	Demands on P's attention	
sometimes there's a lot that's going on and he's still able to pick up everything that is happening.	C301 P can pick up a lot even with multiple stimuli (outside of session)		
When he wants to dance and he's in the mood then he dances and then he shakes and he moves and he says "Mommy shake, turn, turn, stomp".	C86 Dances freely when interested (outside of session)	Quality of P's movement	
I don't know how to put it to words. I'm enjoying it.	C134 C: enjoys interaction	Enjoyment	Reflection on own feelings and thoughts while watching the clips
I like the fact that he's experimenting in different instruments	C135 C: likes P's exploration of instruments		
I like the fact that he was paying attention because right at the end when you did the double tap [roll] he did the double tap.	C191/T191 Likes P's attention: echoing of MT's roll	Interest in interaction	

Figure 24: Examples of Helen's interpretations constituting pride in her child

4.5.8 Sub-theme six: Noticing musical interactions

As mentioned previously, Helen made reference to musical interactions in her interpretations. These involved a more aesthetically based extra-therapeutic view of what constitutes music than the approach mentioned in section 4.5.4 but a key element to her observations seemed to be interaction as a feature. Figure 25 provides examples where Helen noticed musical interactions.

Caregiver's interpretations	Code	Sub-category	Category
I notice that you're doing turn-taking in the singing and that you lead and then you want him to	C22/T22 P follows therapist at times	P interacting musically with MTS	Relationship

follow and sometimes he does that			
...towards the end of the clip it's when the two of you sing together because he starts leading and then you decide to incorporate what he's doing into what you're doing and kind of like jam together.	C26/ -- Matching leads to co-musicking	Co-musicking	
... kind of like jam together	C36/T36 Co-creation of music		
And then he got better, he kind of like knew, ok fine, this is how you actually want me to do this.	C168/T165 P's comfort with turn-taking pattern increases	P participates in turn-taking	
you had a certain idea of what you wanna do, you have that, but even though I see him there on the small scale that there is still a bit of turn-taking happening and he is picking up a lot in what you want him to do but it's much more fast-paced and there's not proper breaks but you guys are in synch like you, I mean he's picking up on what you want.	C309/T309 Turn-taking happening on the small scale		
Is he singing from what you guys used to sing? Because I saw towards the end he was continuing on his own without waiting for your cue	C30/t30 P continues singing independently	P's vocal expression	P's expression and creativity
I like the fact that he was paying attention because right at the end when you did the double tap [roll] he did the double tap.	C191/T191 Likes P's attention: echoing of MT's roll	Interest in interaction	Reflection on own feelings and thoughts while watching clips

Figure 25: Examples of Helen's interpretations where the theme of noticing musical interactions is present.

4.5.9 Sub-theme seven: Focusing on successful interactions

Upon reviewing Helen's coded and categorised interpretations, her focus on successful interactions emerged as a sub-theme. The quality of 'success' appears to be defined by Helen according to Philip's interactions, musically and socially. Such a tendency may be

linked to the view of ASD as deficit-based but this is not necessarily the case. During the interview the caregiver indicated that Philip was musical and she tended to speak of Philip's strengths. The preponderance of the caregiver's interpretations involved instances that she considered to constitute success, achievement, or competency on the part of Philip.

I speculate that this, in conjunction with the sub-theme of 'Helen's pride in her child' and contextual comments in the interview, suggests that this sub-theme is related more to a strength-based conception of her child and his abilities rather than a construction of disability. This, of course, remains supposition on my part. At times, she noted instances where she felt Philip was not successful in the interaction. Figure 26 provides examples of interpretations where this sub-theme is present.

Caregiver's interpretations	Code	Sub-category	Category
I notice that you're doing turn-taking in the singing and that you lead and then you want him to follow and sometimes he does that	C22/T22 P follows therapist at times	Interacting musically with MTS	Relationship
he knows what is expected of him, he knows what to do,	C45/T45 P knows what is expected of him	Signs of developing relationship	
you had a certain idea of what you wanna do, you have that, but even though I see him there on the small scale that there is still a bit of turn-taking happening and he is picking up a lot in what you want him to do but it's much more fast-paced and there's not proper breaks but you guys are in synch like you, I mean he's picking up on what you want.	C311/T309 P picks up on what MT wants		
And then he got better, he kind of like knew, ok fine, this is how you actually want me to do this.	C168/T165 P's comfort with turn-taking pattern increases	P participates in turn-taking	
Later on he understood that you guys needed to take turns	C188/T188 P later understands turn-taking		
he does the tapping twice, and then he does that well	C253/T253 P succeeds at reflecting MT's		

	beating		
When you moved back to tapping once and then he would tap once	C255 P succeeds at reflecting MT's beating		
he's able to express himself and he's more relaxed.	T46/C46 P can express himself	P's vocal expression	P's expression and creativity
I like the fact that he was paying attention because right at the end when you did the double tap [roll] he did the double tap.	C191/T191 Likes P's attention: echoing of MT's roll	Interest in interaction	Reflection on own feelings and thoughts while watching clips
I would have thought that he would have just continued doing the one hand tapping, which was good	C192/T191 Expectation: lack of response to change in drumming	Expectation	

Figure 26: Examples of Helen's interpretations where the theme of focusing on successful interactions is present.

4.6 Collaborative creation of music activity

During part two of the interview, Helen and I collaboratively created a music activity for use in the home environment. The aim of the activity was determined through a process of negotiation. After discussion, Helen requested that we focus on creating a sleeping routine for Philip. This would involve two parts: packing away electronic devices such as cell phones and tablets, and interacting with Helen and/or Philip's grandmother before going to sleep. Helen's initial focus seemed to be on successful task completion in part one whilst I suggested the inclusion of part two to promote the development of relationship between Helen and Philip.

Part one of the activity included a simple packing away song to signal that electronic devices should be put away before moving to the bedroom to prepare for sleep. Part two of the activity involved a musical interaction based on turn-taking and co-musicking on a drum or the singing of a 'goodnight song' depending on what Helen thought was more effective or appropriate. The interaction would occur between Philip and Helen and/or Philip's grandmother.

It was determined that part two of the activity should be initiated first, possibly without removing electronic devices initially. Once Philip was familiar with part two, Helen would move on to part one, the packing away song.

After creating the activity, Helen and I discussed possible pitfalls that she should be aware of such as increased anxiety, the development of habits such as hand-flapping or rocking, and the formation of further rigid expectations.

Figure 27 presents a visual overview of the activity.

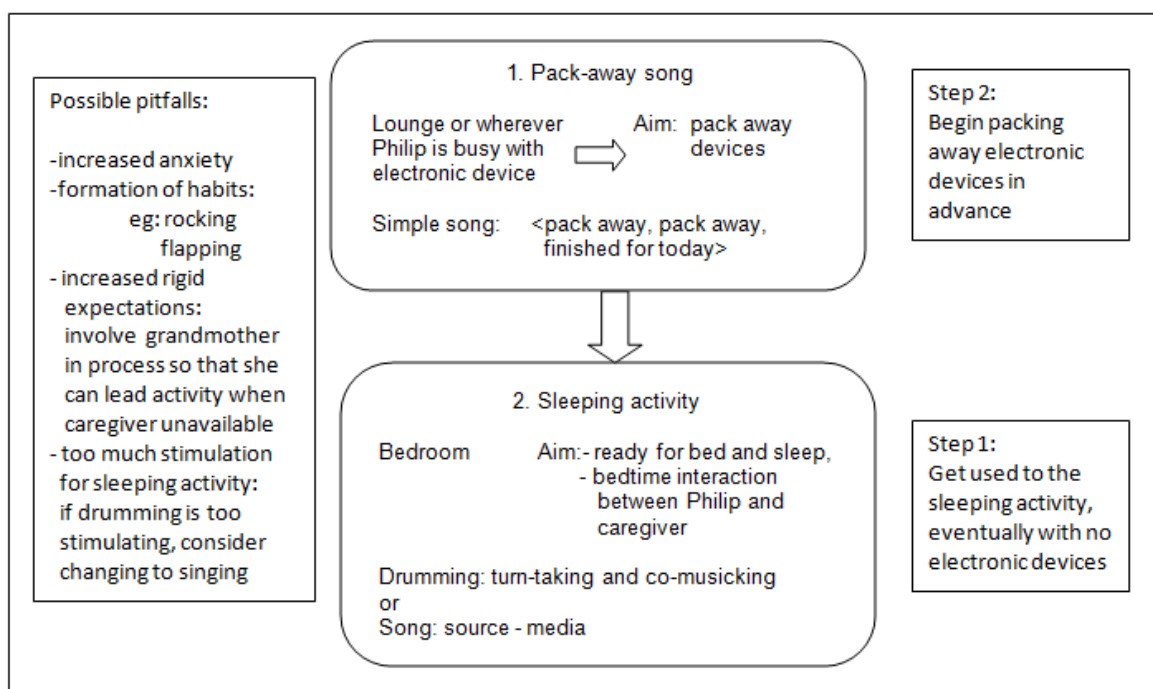


Figure 27: Representation of activity created through collaborative process between myself and Helen

4.7 Conclusion

This chapter presents an in-depth discussion of the data collection and analysis process that I followed during this study. First, I discussed how preliminary data was captured and how audiovisual excerpts were selected for use in the creation of interpretations. I then examined how my interpretations Helen's interpretations were created and how this data was prepared. The process of coding and categorising data was then presented. Themes and sub-themes that developed from investigating the categorised data were then presented. Finally, I discussed the collaborative creation of an activity for use in the home environment.

Braun and Clarke (2006:80) note that researchers need to clearly present the actual process followed during analysis, and that this is often neglected. It was my intention in this chapter to clearly set out the steps involved in the analysis process.

In the following chapter I will discuss these themes in more detail, including theory where appropriate. The research question will be addressed through the discussion of these themes

Chapter Five: Discussion

5.1 Introduction

In this chapter I will address sub-questions one and two of the current study, namely:

1. How do a music therapy student's interpretations of video recordings of sessions with children with ASD compare to the interpretations of the child's parent(s)?
2. How can these interpretations collaboratively inform the development of musical activities to be facilitated in the home by the parent(s)?

I will compare my interpretations and Helen's interpretations by discussing the intersection and divergence of our two contextual lenses, noting how this created points of similarity and contrast as linked to the themes examined in chapter four. This will address sub-question one of the research question.

I will then seek to explore the collaborative creation of a musical activity by Helen and myself with the view to investigating how our various interpretations facilitated this activity. I will note how themes and sub-themes identified through the data analysis process informed the creation of this activity.

Through this process of discussion, I intend to address the overall research question. I will draw on relevant literature from the literature review and examples of text from my interpretations and Helen's where appropriate.

5.2 Comparing interpretations

As mentioned in the previous chapter, contextual lenses influenced how Helen and I viewed and interpreted material in the selected excerpts from music therapy sessions with Philip. The overarching themes identified in the previous chapter ('operation of music therapy student's contextual lens' and 'operation of caregiver's contextual lens') encompassed sub-themes that were present in the interpretations. These sub-themes informed and were informed by the contextual lenses. The sub-themes also informed one another. The lenses intersected in areas to create similarities in our interpretations. In other areas the lenses diverged and areas of contrast resulted.

The themes and sub-themes have been examined in chapter four. Examples were provided from the analysed interpretations, codes, sub-categories, and categories for purposes of situating and describing the sub-themes. I turn now to a discussion of the similarities my

interpretations and Helen's in relation to the themes and sub-themes that were developed through the process of analysis. I will then consider contrasting interpretations.

5.2.1 Areas of intersection and similarity

A primary influence on my contextual lens was my identity as music therapy student. According to Préfontaine (2006:2), becoming a music therapist involves synthesising the concepts of music and therapy in such a profound manner that a new gestalt emerges. He states that music and therapy must become the same thing (Préfontaine, 2006:2). Helen, on the other hand, was influenced by her role as primary caregiver to Philip. Her interpretations centred largely on Philip himself rather than on the therapeutic frame or therapeutic interaction in the excerpts. Despite the different influences on the contextual lenses, the lenses intersected at points. We both had some experience of relationship and interaction with Philip, albeit from different perspectives. This involvement with Philip was the main point of connection between us.

A number of my interpretations displayed the sub-theme of reflexivity. As noted by Stige, Ansdell, Elefant, and Pavlicevic (2010:283-284), there is a strong tradition of clinical reflection involved in conventional music therapy practice. Reflexivity was also employed in my role as researcher, as explained previously. As such, the theme of reflexivity is an appropriate extension or result of my contextual lens and the influence of my identity as music therapy student and researcher. Delaney (2015:71) indicates that reflexivity is a key element in capturing a holistic understanding of music therapy practice and that it helps the practitioner to build insight and self-awareness. As indicated earlier, this reflexivity was represented by a conscious effort on my part to examine my own actions, thoughts, and feelings in the selected audiovisual excerpts and whilst watching the material. Examination of my feelings offered insight into my own experiences and allowed me to consider the effect that these experiences had on the music therapy process. A reflexive stance also allowed me to speculate about possible alternatives to my actions that could have a bearing on creating a music activity. Another advantage of reflexivity is to "allow new or revised insights to emerge" (Barry & O'Callaghan, 2008:57). Such an outcome was of benefit when attempting to co-create a music activity with Helen. Reflexive examination of what I was doing and why offered the potential to highlight approaches, actions, and activities that were useful or effective in achieving a desired purpose. It also revealed those that were not. Delaney (2015:72) suggests the practice of reflexivity enhances "an ability to appreciate significant moments, possibilities and drawbacks in clinical practice".

While the theme of reflexivity related primarily to my contextual lens, Helen also had insight into her own feelings and thoughts and was aware of them. She expressed feelings such as interest in the interaction and uncertainty at Philip's behaviour at times, both in the excerpt she was viewing and at home. She also conveyed some uncertainty as to her own level of observation and/or understanding of what was happening in the excerpt. It could be that her interpretations contained fewer self reflections because she was more interested in observing Philip in the audiovisual excerpts, or that she did not feel comfortable expressing her feelings to me. As indicated in chapter three, a dual role such as I played (as researcher and music therapy student) may also have resulted in Helen feeling unwilling to share negative interpretations of the music therapy process (Suzuki et al., 2007:300).

In their discussion on reflection through journal writing, Barry and O'Callaghan (2008:57) note that the practice can offer music therapy students the means to connect thought, feeling, and action, as well as being a vehicle for the deepening of self-awareness. Although not constituting a journal I would argue that the use of reflexivity in the creation of my interpretations afforded me similar opportunities. As described in chapter four, the possibility for reflexivity was inherent in the design of the template I used to create my interpretations. This had a bearing on the majority of my interpretations, leading to the presence of sub-themes such as the focus on developing relationship and focus on clinical musical features.

The theme of highlighting the developing relationship between Philip and myself can also be linked to my contextual lens, specifically my training as music therapy student. Préfontaine (2006:2) indicates that a music therapist's approach to clinical practice is largely based on his/her training and formal education. It also affects how they conceive of music therapy itself. My consideration of relationship in this context referred to the interpersonal relationship between Philip and myself, as well as the development of a musical relationship. Bruscia (2014:42) indicates that the client's relationship to the therapist and to the music are key areas of importance in the therapeutic process. Common musical experience as clinically facilitated by the therapist allows a therapeutic client-therapist relationship to emerge (Ruud, 2012:25). To quote Pavlicevic (1997:1), "Music is the basis on which therapeutic relationships are developed". As such, I considered a developing musical relationship - moving from isolation in music to co-musicking - to be an indicator of developing interpersonal relationship between Philip and myself. As mentioned in the previous chapter, one of my stated goals for the music therapy process with Philip was to encourage musical contact between us with the view to decreasing his isolation. Wigram, Pedersen and Bonde (2002:219) indicate that music-making within the context of music

therapy can afford people with autism the means with which to experience connection and relationship with others.

As described in the previous chapter, Helen rarely focused on the developing relationship between Philip and myself in her interpretations. In my analysis I suggested that she may not have assigned much importance to this aspect because it constituted a short-term relationship in contrast to her already established long-standing relationship with Philip. However, she did make mention of Philip's behaviour at home. This could be considered to link to her own relationship with Philip in the home environment. This will be discussed further in the next section.

The theme of 'focusing on clinical musical features' was prevalent in my interpretations, whereas 'noticing musical interactions' was linked to Helen's interpretations. Once again, the influence of differing contextual lenses affected the ways in which we viewed and interpreted material. These sub-themes were related in that they both involved interpretations of musical interactions. However, there was an inherent difference in the way that this material was interpreted as well as the amount of attention paid to the musical interactions themselves. Although there is an area of intersection here, with musical interactions being the common factor, I will discuss these sub-themes in more detail in the next section due to the differences described above. The sub-themes of 'valuing offerings as musical', 'focusing on successful interactions' and 'caregiver's pride in her child' also offered some areas of intersection but will be discussed in the next section as I consider them to relate more to areas of divergence.

5.2.2 Areas of divergence and contrast

While my contextual lens and Helen's contextual lens featured areas of intersection, there were also areas of divergence which gave rise to contrasts in our interpretations. This has been touched upon in chapter four and will be examined further in this section.

At times I experienced some resistance to Helen's differing interpretations, particularly when considering the quality of Philip's movement and his attention level in relation to multiple stimuli. Here, Helen's interpretations were in strong contrast to my own analysis relating to what I had experienced with Philip in music therapy sessions. Where I interpreted Philip's movement as restricted or uncoordinated, Helen viewed this as a sign of compliance in the face of disinterest. Where I speculated that there were too many demands on Philip's attention, resulting in isolation or withdrawal, Helen felt that there were not too many stimuli and that Philip picked up on everything even when he seemed not to be paying attention.

Through the conscious use of reflexivity during the interview, I was aware of experiencing this disjunction between my resistance to her interpretations and my determination to value her input. I was thus able to avoid creating an explicit hierarchy of power during the interview that would position me as 'expert therapist'. I did not insist that my interpretations were correct or that Helen was mistaken.

Perhaps relating to her experience as parent/caregiver, Helen did not seem to notice Philip's responses during the greeting song, and at times commented that he did not respond when, in my view, he did. In the initial questionnaire she mentioned that Philip had stopped greeting her unless she greeted first. Her interpretations here could be related to her investment in this experience.

As mentioned, I consider the sub-theme of my 'focus on clinical musical features' and the sub-theme of 'noticing musical interactions' that was linked to Helen's interpretations to feature more contrasting material than similarities. I subscribe to Pavlicevic's (1997:25) statement that music therapists employ therapeutic listening. She states that music therapists listen "not quite to music as music, not to structure as structure, but to the person portrayed in the spontaneous music-making" (Pavlicevic, 1997:25). Focus on clinical music features is reflected in my interpretations that identify aspects such as matching, reflecting, and co-musicking. Relating to the sub-theme of focus on relationship, Brown and Pavlicevic (1997:398) indicate that music therapists making use of improvisation as a therapeutic vehicle for change utilise clinical skills with a view to developing a musical and interpersonal client-therapist relationship. This does not involve simply playing music with the client. As Wigram, Pedersen and Bonde (2002:97) mention, music therapists often consider music to be analogous to the client's pathology or personality. As an example, a restriction in self-expression may be reflected in a lack of variation in musical elements such as dynamics and tempo etc (Wigram, Pedersen & Bonde, 2002:99). This concept of music as analogy reflects a psychodynamic approach to the meaning of music within music therapy practice. As noted by Pavlicevic (1997:118), there is often a distortion of a client's innate musical ability as affected by the underlying condition. In contrast, Helen did not focus specifically on the quality of the interaction or the possible underlying implications thereof within a therapeutic frame. Noticing musical interactions is linked to the sub-theme of 'focusing on successful interactions', as present in her interpretations.

One of the areas that Helen focused on in her interpretations was the success of Philip's actions. As mentioned in the previous chapter, this sub-theme referred to her child's competence in musical and social interactions but was more strongly aligned with a

competency approach than the conception of ASD as deficit. As an example, during a turn-taking activity Philip responded by changing his number of drum beats to match the number I had played. Helen interpreted this as a successful interaction. When he seemed to understand the meaning or intention of an activity Helen viewed this as Philip 'getting it'.

I consider the sub-theme of 'focusing on successful interactions' to be in contrast to the sub-theme of 'valuing offerings as musical'. Here, my focus was not on whether Philip was *successful* in musical interactions according to an extra-therapeutic conception of what music should be. The synthesis of music and therapy, and the importance of music as a vehicle for developing relationship, have been discussed in the previous section. These concepts have a bearing on how I conceived of music and what I considered to be musical. Bruscia (2014:113) indicates that music therapists operate using different notions of 'music' to those existing outside of the therapeutic field. A wide range of the client's expressions may be considered to be 'artistic' and the expectation that the client should produce something judged as 'good' is removed (Karkou & Sanderson, 2006:50). Bruscia (2014:113-114) notes that a music therapist should try to value the client's expression without assigning an aesthetic value judgment to the expression. Wigram, Pedersen and Bonde (2002:36) explain that music therapists consider music to be a means of communication and self-expression rather than an abstract aesthetic object divorced from the context of its creation. In line with this thinking, I did not require Philip's musicking to comply with conventional extra-therapeutic musical aesthetics or organisation in order for it to be considered as musical. Pavlicevic (1997:100) describes the inherent tendency to seek optimal interaction and communication as a human quality which is inborn and *musical*. "What is exciting for music therapists", she states, "is that the nature of this capacity to engage with the world has a musical basis" (Pavlicevic, 1997:100). Musical elements such as tempo, rhythm, contour, and patterning can be considered to be part of the human experience from infancy although Pavlicevic (1997:118) cautions against a simple transposition of the concept of communicative musicality onto the client-therapist musical relationship.

The sub-theme of 'caregiver's pride in her child' was inherent in many of Helen's interpretations. Although she did not explicitly state that she was proud of Philip, the contextual nuances of Helen's interpretations suggested that she took pleasure in what she considered to be Philip's achievements and strengths. Her interpretations indicated that she enjoyed viewing what she perceived to be Philip's successful interactions. When she spoke of Philip being able to test people's boundaries in terms of their requirements of him Helen seemed to convey a sense of satisfaction that he was able to do so. Differences in our interpretations relating to Philip's movements and his ability to handle multiple stimuli have

already been discussed. The sub-theme of 'caregiver's pride in her child' may have strongly affected interpretations such as these. While this sub-theme was not related to my interpretations I did experience an affinity toward Philip. Bruscia (2014:39-40) notes that being able to effectively serve a client and his/her needs is predicated on the therapist caring for and about the client.

5.2.3 Comparing and combining interpretations

I speculate that the process of sharing our interpretations laid the foundation for Helen and I to collaborate and negotiate during part two of the interview. Smith (2010:171) notes that a rapport between healthcare professionals and family members should be established through interaction in order to then facilitate collaboration.

Combining our interpretations and views allowed for the amalgamation of two different knowledge spheres as related to the operation of our different contextual lenses. This then created the opportunity for Helen and I to construct an activity that was potentially more beneficial for Philip and the family as a whole than if we had not combined our knowledge. My knowledge centred around my training as a music therapist and could be used to enhance the therapeutic value of the activity. Helen's knowledge was directly related to her position as Philip's mother and her understanding of Philip and his needs in the home environment. Since the activity was going to be led by Helen, her experiences at home and in her relationship with Philip were necessary to ensure that the activity was meaningful and contextually appropriate. Attfield and Morgan (2007:50) indicate that primary caregivers of children with ASD want practitioners to acknowledge that they, as caregivers, have a unique understanding of their child and his/her needs. Areas of similarity in our interpretations engendered a feeling of commonality and an affirmation of the interpretations themselves. Contrasting interpretations allowed for the consideration of alternate viewpoints.

5.3 Collaborative creation of music activity

I turn now to an exploration of the ways in which my interpretations and Helen's were used to collaboratively construct a music therapy activity for use in the home environment. Collaboration between family members and health professionals is required for effective family-centred care (Corlett & Twycross, 2006:1309; Thompson, 2012:109). As discussed in chapter four, the end result of the collaborative process was the creation of a sleeping routine for Philip. Research suggests that many children with ASD experience difficulty initiating sleep as well as disrupted sleep patterns which in turn leads to the exacerbation of parental or caregiver stress (Bonis & Sawin, 2016:3). The sleeping routine consisted of two

parts: a song to signal the packing away of electronic devices such as cell phones and tablets rather than taking them to bed; and an interactive musical exchange involving Helen and Philip in order to facilitate interpersonal connection before Philip went to sleep.

5.3.1 Negotiating an aim

The aim of the activity was determined through a process of negotiation. Health care professionals are in a position of power and can control whether or not such negotiation occurs (Corlett & Twycross, 2006:1313). It is important to actively employ negotiation when seeking to advance collaboration (Smith, 2010:171). Initial ideas about aims were strongly influenced by the operation of our different contextual lenses. As discussed previously, Helen and I had contrasting interpretations when it came to Philip's movements. In order for a collaborative process to occur, practitioners need to value the input and perspectives of primary caregivers even when this is in conflict with their own (Attfield & Morgan, 2007:52; Corlett & Twycross, 2006:1309). Prior to the interview, I had considered the development of a music-and-movement activity for the home environment. My interpretations of Philip's movements as restricted, uncoordinated, and shuffling led me to believe that encouraging co-movement would be beneficial. Such an activity may have afforded Philip a sense of confidence and coordination that could positively engender a stronger sense of self and of others (Emck, 2014:220). However, given that Helen had a strong contrasting interpretation of Philip's movements and a different experience of how Philip danced in the home environment I did not pursue this activity.

I suggested that an activity centred on the management of tantrums might be appropriate. Helen had mentioned in the questionnaire that Philip displayed temper tantrums that were very difficult to deal with. Research suggests that temper tantrums are a common stressor for family members of children with ASD (Ludlow et al., 2011:709). Since my contextual lens was influenced on the micro level by the initial questionnaire I thought that Helen may want to explore such an aim even though I had not observed this behaviour in sessions. When suggesting this to Helen as a possible aim she explained that Philip no longer displayed such tantrums so this goal was discarded:

MTS: ...the activity is generally for a specific goal and that can be anything from like a learning thing to a social thing so, um. It sort of depends on what you would like to try and work on. You've mentioned um engaging with him, in the questionnaire you mentioned tantrums but I couldn't work on that because he never presented that to me, um,

maybe because he didn't know me well enough yet...

(Interview transcript, lines 939-944)

C: ...he doesn't have many melt downs or irritations as he used to.

(Interview transcript, lines 956)

C: Um, so I mean we haven't had, we have not been having tantrums this term.

(Interview transcript, lines 983-984)

Whilst sharing her interpretations during the beginning of the interview, Helen mentioned that she thought music therapy had encouraged Philip's verbal acuity. Research has found that music therapy can have a beneficial effect on verbal communicative skills of children with ASD (Geretsegger et al. 2014:23). I resonated Helen's suggestion that music therapy had possibly encouraged Philip in his verbalisations outside of the sessions. The concept of 'music child' or 'music person' suggests that there is an innate responsiveness to music within each person that is able to surpass any barriers of pathology that the person experienced to 'normal' communication (Wigram, Pedersen & Bonde, 2002:126). Essentially, then, "the power of music [could] enable self-expression and communication" (Wigram, Pedersen & Bonde, 2002:126).

My speculation that music in therapy sessions could encourage Philip's speech outside of sessions was linked to the sub-theme of focusing on clinical musical features present in my interpretations. Helen had also spoken about somewhat restricted interactions between Philip and herself. The lack of conventional displays of emotional and social interaction is often displayed by children with ASD and can be a strong source of stress for caregivers (Bloch & Weinstein, 2009:34). As discussed previously, the sub-theme of highlighting developing relationships was prevalent in my interpretations. I felt that the client-therapist relationship had grown through the use of music and I thought that this could be valuable in terms of interaction between Philip and Helen. As found by Geretsegger et al. (2014:23), music therapy can improve the quality of parent-child relationships. I suggested that Helen may want to consider an activity involving vocalisation or encouraging interaction between her and Philip.

Helen then began suggesting ideas involving successful task completion. Here, the sub-theme of noticing musical interactions was present, as was the sub-theme of focusing on successful interactions. She indicated that she, Philip, and Philip's grandmother often sang

whilst they were busy with tasks, although they did not do so together and the music was not used with a specific aim. After viewing the excerpts it seemed that she became more aware of the potential of the music to impact the task specifically, rather than it being incidental. The following quote from the interview transcript shows Helen's consideration of using songs for the aim of task completion and interaction:

C: Ja, and, and maybe something to learn more about his body or dressing up, or activities around the kitchen.

(Interview transcript, lines 1031-1032)

C So if I can find ways maybe for with music, because she [Philip's grandmother] loves, Philip and I singing, just in general whenever [laughs] we do tasks or doing washing she'd be like singing some song and then she cleaning [...] so maybe if it's something they can do together, they can sing the song together, they can have the task.

(Interview transcript, lines 1073-1077)

C And ja, do a task together, 'cause I think it will make him calm down and let him get through the whole process of doing this thing without it being mundane.

(Interview transcript, lines 983-984)

After this, she expressed an interest in creating a sleeping routine and an idea for an activity began to crystallise:

C: And sleeping routine as well, um, if before he goes to bed he could just get rid of TV, tablets, phone, everything. Because I am reading this articles at home and advice and if you want him to have a long night's sleep he mustn't have any of those...

(Interview transcript, lines 1085-1088)

Once again, the sub-theme of focusing on successful interactions as linked to Helen's interpretations seems to be present in her desire to create a task-related activity. In line with my focus on developing relationship, I suggested that the activity include a component that would create the possibility for interaction and development of relationship between Helen and Philip.

5.3.2 Considering practical aspects of the activity

Once the aim of the activity had been negotiated, we began discussing contextual matters. We moved into a discussion about what instruments and/or songs might be appropriate, and where the activity should take place. Helen began offering suggestions whereby the use of instruments could constitute both reward and cue. As discussed in the literature review, the use of music as a reward is generally situated within the behavioural music therapy model. Here, music is offered as a reward if desired behaviour is initiated, or undesired behaviour is terminated (Wigram, Pedersen & Bonde, 2002:134-135). Music may also be used as a cue to stimulate or initiate certain behaviour (Wigram, Pedersen & Bonde, 2002:134-135). I had discussed the use of the 'one, two, three, four, stop' cue with Helen and had offered my interpretations on its efficacy and the shared meaning it engendered between Philip and myself during sessions. The below quote from the interview transcript shows Helen's consideration of music as a reward and cue.

C: We've got all sorts, he's got a piano as well, small piano but, I don't know if those things. Or maybe he can play them when he doesn't watch TV at the table and then he knows thereafter ...

(Interview transcript, lines 1104-1106)

When offering her interpretations on excerpts, Helen noted that the use of reward and structure were effective methods with which to set boundaries for Philip.

C: and when he sees that ok there are rewards and there are times of certain things to done then he will do that because he knows ok, we're going to move on, were' not going to get stuck doing this. So he responds well...

(Interview transcript, lines 814-817)

Consideration of the use of cues led to a discussion drawing on similarities with cues displayed in the excerpts, particularly the greeting song as a means to situate activities. I considered the greeting song to be an important part of the structure of the music therapy sessions. As Wigram, Pedersen and Bonde (2002:179) note, the use of a specific melody can create structure and establish a stable routine. They refer to greeting songs as an example. The below quote shows the link between greeting song as a means to create structure and a cue, and the proposed 'sleeping song':

MTS: Ja, so like the greeting song.

C: Mm

MTS: And then he knows after the greeting song it's ... so maybe this can be like the sleeping song or the going to bed song... um. So I think it would take some work to, especially in the beginning, to have him understand the routine, ok now it's the sleeping song, now it's the bed time. So you know, it could even be part of the sleeping song to pack away.

C: Mm

MTS: Pack away the tablet.

(Interview transcript, lines 1107-1115)

This led into a discussion about the creation of a specific song to signal the packing away of electronic items. I noted that the song could be very simple and I later noted that this would draw upon the family's affinity for singing.

MTS: but like you said you always sing, and always you know. So it's not something that's beyond what you can do, you'll be able to.

(Interview transcript, lines 1176-1177)

Here, I tried to encourage Helen by affirming her ability to take part in the musical activity. At the beginning of the interview, she had noted that she did not interact with Philip on his instruments because she could not play them and was not a musician. I thus felt it was important to emphasise that she would be able to participate in the activity.

The second part of the activity - the goodnight song - would occur after electronic items had been packed away. More clinical aspects of activity design were discussed at this stage when considering the process of initiating the use of the activity. As mentioned, this portion of the activity would be a means to build or strengthen the relationship between Helen, Philip, and his grandmother (depending upon whether Helen was leading the activity or whether Philip's grandmother was doing so, or if they were both participating). The activity was initially considered to be a short drumming exchange based on turn-taking, with the inclusion of the 'one, two, three, four, stop' cue. I then drew upon the Helen's interpretations and observations that Philip would 'suss out' boundaries that were in place to see whether the activity would be consistently pursued by Helen and/or his grandmother. The following portion of text revolves around our discussion about cues and consistency:

MTS: So that's his special cue, right. Um. But then it would have to, I think it would have to be done like every time. Otherwise he's going to know, ok well like you said he can sort of suss out, he has little ways to [laughs]

C: [Laughs] OK, I won't go because she doesn't, that's the thing.
(Interview transcript, lines 1139-1143)

MTS: And I think what would be important is you mentioned, um, the routine. Right? So to keep doing this as a routine would be important but also the song itself mustn't change every time. And it doesn't have to be a very long complicated song like you heard it can just be a short thing that you repeat a few times or, you know, and granny as well, the same song. So it would take a little bit of practice for you two to...

C: [laughs]
(Interview transcript, lines 1169-1175)

5.3.3 Building relationship

As mentioned, a further feature of the 'goodnight song' that Helen and I developed would be to offer a strengthening of relationship between caregiver and child. Helen seemed to particularly like this aspect of the activity as it would afford her the opportunity to engage with Philip in the evenings, something that she did not do before bedtime. She spoke of their current bedtime routine and referred to a time when she used to interact more with Philip before he went to sleep:

C: And it would also engage us.

T: ja and that I think it would be nice

C: Because I don't think we have much of an engagement just before he goes to bed because Philip, he baths, then he eats and then he watches TV and thereafter he goes to bed. So with me it's just more observation. Whereas during the day because ... At 5 o' clock I used to be at home and then ... at time ok I had to read this book and it became easier with time. And then I don't know what happened, at the time I was travelling and then kind of and we never continued...

(Interview transcript, lines 1329-1337)

C: Yes [laughs] Ja we have. No I was quite excited when they told me that he was going to be part of this training discovery ... I thought this is nice I'm looking forward to it, um, because it's Philip's area of strength and enjoyment. So the fact that now we're able to integrate this into the home and being able to do it together 'cause you know that this things, I sing on my own, and granny sings on her own, but being able to do this it's as a family that's going to be pretty nice and be able to use something that he loves to teach him other things.

(Interview transcript, lines 1390-1397)

As discussed earlier, issues surrounding the expression and development of relationship with children with ASD can be very stressful for caregivers (Bloch & Weinstein, 2009:34) and music therapy has been found to improve the quality of these relationships (Geretsegger et al., 2014:23).

5.3.4 Musical features

Helen also offered suggestions of material that could possibly be used during the 'goodnight song'. The primary source of material was from a television programme that Philip enjoyed. I encouraged her in this but also noted that she may have to determine whether the song was triggering something other than an understanding that it was bed time - perhaps like the desire to watch television.

We also discussed that the activity should not be too stimulating and that Helen would need to modify the activity should this seem to be the case. As mentioned, literature indicates that sensory over-stimulation in children with ASD can lead to heightened levels of anxiety and distress, hypervigilance, and tantrums (Boris & Sawin, 2016:np; Case-Smith, Weaver & Fridsat, 2015:132). Such over-stimulation would not be beneficial to Philip. It would also be likely to increase the stress experienced by Helen (Ludlow et al., 2011:709), and would be contrary to the goals of the activity.

5.3.5 Considering pitfalls

As part of ethical practice, I needed to include a discussion on possible pitfalls or responses that Philip may have as directly related to ASD. We mentioned possibilities such as increased anxiety, further formations of increased expectations that were rigid, and development of behaviour such as rocking or hand flapping. Helen indicated that she thought it unlikely that behaviour such as rocking or hand flapping would occur as Philip did not tend to display such behaviour. Helen's primary concern was that Philip might form rigid

expectations about the activity and would then not go to sleep if she was not there to initiate the activity. We had already discussed involving Philip's grandmother so that she could lead the activity at times. This was re-iterated in relation to Helen's concerns. I also indicated that I would follow up with Helen six weeks after the interview to check whether she had any concerns or queries. This did not form part of the current study but I considered it to be part of ethical practice.

5.4 Conclusion

This chapter has presented a discussion on the ways in which my interpretations of selected excerpts from music therapy sessions with Philip compared and contrasted with Helen's. It has also examined the ways in which these interpretations implicitly informed the collaborative creation of an activity for use in the home environment.

It should be noted that a more experienced researcher may have drawn out additional interpretations from Helen. I was concerned about influencing her interpretations by using leading questions or prompting her to provide interpretations to satisfy my queries rather than these interpretations being generated by herself. This can be linked to multiple instances of verbal fillers in my speech during the interview. I was also attempting to avoid creating a power imbalance by using jargon. This possibly influenced the interaction in a way that restricted Helen in her interpretations. Furthermore, a more experienced music therapist or researcher may have drawn explicitly on interpretations and increased the collaborative engagement during the second part of the interview.

It can be seen that our contextual lenses influence the ways in which we perceived material in the excerpts, and how we created interpretations of the same. The theme of contextual lens was present for myself and also for Helen, and the lenses seemed to influence and be influenced by the other themes that emerged.

Were I to have created an activity for use in the home environment by myself I would have considered the goal of tantrum reduction or movement enhancement to be appropriate. Such an activity would not have met the needs of the family at that point. Here, Helen's contextual lens was of great value in informing the creation of the activity.

Helen noticed that they sang a lot at home when busy with tasks. After viewing the excerpts and discussion our interpretations she began to consider if music could play more of a role in task completion. I considered the existence of singing in the home to an aspect that could be capitalised on and thus built it into the activity. The focus on clinical music features became valuable when considering the developing relationship and interaction between the caregiver

and child during the goodnight activity. Helen appreciated the relational aspect of this activity and seemed to look forward to its implementation.

Initially, Helen's consideration of possible aims for an activity centred on the sub-theme of 'focusing on successful interactions' (such as task completion). As mentioned above, this then grew to include a relational aspect to the activity.

If not for the process of collaboration in the creation of the activity, the result would not have held as much potential or meaning for Philip or Helen in terms of the context of the home environment.

In the following chapter I will present a summary of the study, making mention of possible shortcomings as well as suggestions for future research.

Chapter Six: Conclusion

6.1 Introduction

In this final chapter I will present a summary of the findings of the current study. I will then discuss some limitations of the study. Finally, recommendations for future research will be suggested.

6.2 Summary of findings

This study explored how music therapy techniques in sessions with a child diagnosed with ASD could be transferred collaboratively by a music therapy student and his mother into an activity that could be facilitated by the caregivers in the home. This was investigated by comparing the parent's and music therapy student's interpretations of selected audiovisual excerpts from music therapy sessions with the child. These interpretations were then examined in relation to the ways in which they informed the collaborative creation of a music activity.

Analysis of the data revealed that the operation of the my contextual lens as music therapy student, and that of Helen's as parent, strongly informed and situated our respective interpretations of audiovisual excerpts as well as the collaborative creation of the music therapy activity. At points, these contextual lenses intersected, creating areas of similarity in our interpretations. Sub-themes of reflexivity, focus on developing relationship, focus on clinical musical features, and valuing offerings as musical were linked with the overarching theme of the operation of my contextual lens. This being said, related features of the sub-themes were seen in Helen's interpretations (self-reflection, relationship at home, focus on musical interactions, focus on successful interactions). The sub-themes of Helen's pride in her child, focusing on successful interactions, and noticing musical interactions were linked to the operation of Helen's contextual lens as Philip's parent. Here, some features of these sub-themes were present in my own interpretations (affinity for client, focus on clinical musical features, valuing offerings as musical).

Our collaboration, as implicitly influenced by our interpretations, resulted in the creation of a two-part bedtime routine for Philip. This included a 'packing away song' that would act as a cue for Philip to pack away electronic devices such as cell phones and tablets, and a 'sleeping song' which involved a musical interaction between Helen and Philip (and potentially Philip's grandmother, depending upon who was leading the activity at that time).

6.3 Limitations of study

A lack of experience in interviewing potentially resulted in some concepts being under-explored. A more experienced interviewer may have drawn richer and more detailed interpretations from the parent. A broader range of interpretations may also have been elicited. This would have impacted the comparison between my interpretations and Helen's as areas of intersection or divergence may have been more apparent.

A further limitation was that the study included only one case. More cases would have resulted in more in-depth information and the possibility of cross-case analysis. As mentioned, the study initially intended to focus on two cases but one case could not be completed.

The nature of the interaction between the music therapy student and the parent meant that the parent viewed selected audiovisual excerpts from sessions a maximum of two times per excerpt. This is in contrast to the music therapy student's multiple viewings of the same. This difference may have resulted in some of the contrasts in interpretations as found during the analysis process.

6.4 Recommendations for future research

Future research might include a comparison of interpretations across different cases to explore whether there are common themes present in the interpretations of caregivers. Such an investigation would be useful in considering a model of family-centred music therapy with children with ASD that does not require full participation in sessions by the caregivers. This would be of value in South Africa, where caregiver's resources may be limited.

The comparison of interpretations could be extended to include therapists from other fields (such as psychology, speech therapy, occupational therapy, and the other creative arts therapies). The viewing of audiovisual excerpts by members of an interdisciplinary team could allow for a broader understanding of behaviour and interaction in context. This may allow for a collaborative endeavour towards offering a more holistic intervention.

The concept of an interdisciplinary team collaboration could potentially be extended to include the involvement of the parent as part of the collaboration. As noted, Helen's contributions as parent were of great importance to the creation of an activity that was appropriate and meaningful in context. However, it would be important to consider that

strong contrasts in interpretations between members of the interdisciplinary team may have a destabilising effect on the collaboration and may increase the difficulties inherent in balancing power dynamics.

Further research into the use of this approach with different client populations may be warranted. Sharing of interpretations and a collaborative approach may be beneficial in areas such as Alzheimer's/dementia care, ADHD, intellectual disability, and cerebral palsy for example.

The potential for providing ongoing support for families should also be explored. The study could be extended by conducting a follow up session (or a number of follow up sessions) with the parent/guardian. Suggested areas of discussion would be: how the activity has been developed and initiated at home; benefits of using the activity; difficulties encountered initiating or using the activity; and ways to modify the activity so that it has more relevance in the home context. Ideally, the follow up session(s) would be conducted in person. In this way, the parent/caregiver would be able to demonstrate what was happening at home during the activity and the music therapist would be able to model possible changes to the activity. An intervention over a longer term than the current study could build the family's resources by strengthening the parent-child relationship and providing insight into ways in which to increase communication at home.

6.5 Conclusion

During this study, interpretations of selected audiovisual excerpts from sessions with an eight year-old boy with ASD were created by the music therapy student involved in the sessions, and the child's parent. These interpretations were shared during a semi-structured interview, intended to provide a platform for the collaborative creation of a music activity for use in the home environment. The interpretations then implicitly influenced the creation of the activity.

Comparison of the interpretations and subsequent examination of the creation of the music activity revealed that the music therapy student and the caregiver both brought valuable knowledge to the exchange, as situated within their respective contextual lenses. The sharing of this knowledge resulted in the creation of an activity that had relevance in the context of the home environment.

8. Reference List

- Aigen, K. 2008. An analysis of qualitative music therapy research reports 1987–2006: Articles and book chapters. *The Arts in Psychotherapy*, 35(4), 251–261.
- Aldridge, D. 2005. A story told from practice: the reflective inquirer in an ecology of ideas. *Case study designs in music therapy*. London: Jessica Kingsley. 9-30
- Aldridge, D. 2012. Foreword. In P. Kern & M. Humpal (Eds.). *Early childhood music therapy and autism spectrum disorders*. London : Jessica Kingsley Publishers. 13–16.
- Allgood, N. 2005. Parents' perceptions of family-based group music therapy for children with Autism Spectrum Disorders. *Music Therapy Perspectives*, 23(2), 92–99.
- Altieri, M. & von Kluge, S. 2009. Searching for acceptance: Challenges encountered while raising a child with autism. *Journal of Intellectual and Developmental Disability*, 34(2), 142–152.
- American Psychiatric Association. 2013a. Diagnostic and statistical manual of mental disorders: DSM-V, Washington, American Psychiatric Association.
- American Psychiatric Association. 2013b. DSM-5 Autism spectrum disorder fact sheet. <http://www.dsm5.org/Documents/Autism%20Spectrum%20Disorder%20Fact%20Sheet.pdf>
- Ansdell, G. & Pavlicevic, M. 2001. *Beginning research in the arts therapies: a practical guide*. London: Jessica Kingsley Publishers.
- Attfield, E. & Morgan, H. 2007. *Living with autistic spectrum disorders: guidance for parents, caregivers and siblings*. London: Paul Chapman Publishers.
- Barry, P. & O'Callaghan, C. 2008. Reflexive journal writing: a tool for music therapy student clinical practice development. *Nordic Journal of Music Therapy* 17(1), 55-66.
- Bateman, C. 2013. Autism – mitigating a global epidemic. *South African Medical Journal*, 103(5), 276–278.

Bergman, M. & Coxon, A. 2005. The quality in qualitative methods. *Forum: Qualitative Social Research*, 6(2), Art. 34, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0502344>.

Bloch, J. & Weinstein, J. 2009. Families of young children with autism. *Social Work in Mental Health*, 8(1), 23–40.

Bonis, S. & Sawin, K. 2016. Risk and protective factors for stress self-management in parents of children with autism spectrum disorder: an integrated review of the literature. *Journal of Pediatric Nursing*, In Press. np. Available from: <http://www.sciencedirect.com.uplib.idm.oclc.org/science/article/pii/S0882596316302603> [Accessed 17 November 2016].

Boso, M., Emanuele, E., Minazzi, V., Abbamonte, M. & Politi, P. 2007. Effect of long-term interactive music therapy on behavior profile and musical skills in young adults with severe autism. *The Journal of Alternative and Complementary Medicine*, 13(7), 709–712.

Bottorff, J. 1994. Using videotaped recordings in qualitative research. In J. Morse. (Ed.). *Critical issues in qualitative research methods*. Thousand Oaks: Sage Publications. 244–261

Bruscia, K. 1995. The process of doing qualitative research: Part II. In B. Wheeler (Ed.). *Music therapy research: Quantitative and qualitative perspectives*. Gilsum: Barcelona. 401–427.

Bruscia, K. 2014. *Defining music therapy*. 3rd ed. Gilsum: Barcelona Publishers.

Bruscia, K. 2005. Research topics and questions in music therapy. In B. Wheeler (Ed.). *Music therapy research*. (2nd ed.). Gilsum: Barcelona. 81–93.

Case-Smith, J., Weaver, L. & Fristad, M. 2015. A systematic review of sensory processing interventions for children with autism spectrum disorders. *Autism*, 19(2). 133-148.

Chen, Y., Shek, D. & Bu, F. 2011. Applications of interpretive and constructionist research methods in adolescent research: Philosophy, principles and examples. *International Journal of Adolescent Mental Health*, 23(2), 129–139.

Cocks, A. J. 2006. The Ethical maze: Finding an inclusive path towards gaining children's agreement to research participation. *Childhood*, 13(2), 247-266.

- Coffey, A. & Atkinson, P. 1996. *Making sense of qualitative data: complementary research strategies*. Thousand Oaks: Sage.
- Cohen, L, Manion, L. & Morrison, K. 2007. *Research methods in education*. (6th ed.). Florence, KY, USA: Routledge.
- Corlett, J. & Twycross, A. 2006. Negotiation of parental roles within family-centred care: a review of the research. *Journal of clinical nursing*, 15(10). 1306-1316.
- Delaney, A. The intimate simplicity of group singing: a reflection of practice. 2015. *The Australian Journal of Music Therapy*, 26, 74-86.
- Dimitriadis, T., & Smeijsters, H. 2011. Autistic spectrum disorder and music therapy: theory underpinning practice. *Nordic Journal of Music Therapy*, 20(2), 108–122.
- Durrheim, K. 2006. Research design. In M. Terre Blanche, K. Durrheim & D. Painter (Eds.). *Research in Practice*. (2nd ed.). Cape Town: University of Cape Town. 33–59.
- Edwards, J. 1999. Considering the paradigmatic frame: Social science research approaches relevant to research in music therapy. *The Arts in Psychotherapy*, 26(2), 73–80.
- Elsabbagh, M., Divan, G., Koh, Y.-J., Kim, Y.S., Kauchali, S., Marcín, C., Montiel-Nava, C., Patel, V., Paula, C.S., Wang, C., Yasamy, M.T. & Fombonne, E. 2012. Global prevalence of autism and other pervasive developmental disorders. *Autism Research*, 5(3), 160–179.
- Emck, C. 2014. Double trouble? Movement behaviour and psychiatric conditions in children: an opportunity for treatment and development. *The arts in psychotherapy*, 41. 214-222.
- Endacott, R. & Botti, M. 2005. Clinical research 3: Sample selection. *Intensive and Critical Care Nursing*, 21(1), 51–55.
- Farrant, C., Pavlicevic, M., & Tsiris, G. 2014. A guide to research ethics for arts therapists and arts & health practitioners. London: Jessica Kingsley.
- Finlay, L. & Gough. B. 2003. Prologue. In L. Finlay & B. Gough (Eds.). *Reflexivity*. Malden, MA: Blackwell Science. ix–xi.

- Finnigan, E., & Starr, E. 2010. Increasing social responsiveness in a child with autism: A comparison of music and non-music interventions. *Autism*, 14(4), 321–348.
- Flick, U. 2007a. *Designing Qualitative Research*. London: Sage.
- Flick, U. 2014. Mapping the field. In U. Flick (Ed.). *The SAGE handbook of qualitative data analysis*. London: Sage. 3–19.
- Flyvberg, B. 2006. Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245.
- Fontana, A. & Frey, J. 2000. The interview: From structured questions to negotiated text. In N. Denzin & Y. Lincoln (Eds.). *Handbook of qualitative research*. (2nd ed.). Thousand Oaks: Sage. 645– 672.
- Frye, R. 2010. Autism. In P. Carney & J. Geyer (Eds.). *Pediatric practice: Neurology*. New York: McGraw-Hill. 348–361.
- Gardstrom, S. & Hiller, J. 2016. Resistances in group music therapy with women and men with substance use disorders. *Voices: a world forum for music therapy*, 16(3). np. Available at: <<https://voices.no/index.php/voices/article/view/880/736>>. Date accessed: 30 January. 2017.
- Geretsegger, M., Holk, U. & Gold, C. 2012. Randomised controlled trial of improvisational music therapy's effectiveness for children with autism spectrum disorders (TIME-A): Study protocol. *BMC Pediatrics*, 12(1):2. Retrieved from: www.biomedcentral.com/1471-2431/12/2
- Geretsegger, M., Elefant, C., Mössler, K. & Gold, C. 2014. Music therapy for people with autism spectrum disorder. *Cochrane database of systematic reviews 2014*, Issue 6. CD004381.pub3.
- Gibbs, G. 2007. *Analyzing qualitative data*. London: Sage.
- Golafshani, I. 2003. Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597–607.

Goldson, E. & Reynolds, A. 2012. Child development and behaviour. In W. Hay, M. Levin, R. Deterding & A. Abzug (Eds.). *Current Diagnosis and treatment paediatrics*. (21st ed.). New York: McGraw-Hill. 73–112.

Goin-Kochel, R. P., Myers, B. J., & Mackintosh, V. H. 2007. Parental reports on the use of treatments and therapies for children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 1(3), 195–209.

Graneheim, U. & Lundman, B. 2004. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112.

Gray, D. 2004. *Doing research in the real world*. London: Sage.

Grbich, C. 2004. *New approaches in social research*. London: Sage.

Guba E. & Lincoln. Y. 1994. Competing paradigms in qualitative research. In N.K. Denzin & Y. Lincoln (Eds.). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications. 105–117.

Hays, D. & Singh, A. 2012. *Qualitative inquiry in clinical and educational settings*. New York: Guilford Press.

Hammersley, M. 2010. Reproducing or constructing? Some questions about transcription in social research. *Qualitative Research*, 10(5), 553–569.

Henning, E., Van Rensburg, W. & Smit, B. 2004. *Finding your way in qualitative research*. Pretoria: Van Schaik.

Hillier, A., Greher, G., Poto, N. & Dougherty, M. 2011. Positive outcomes following participation in a music intervention for adolescents and young adults on the autism spectrum. *Psychology of Music*, 40(2), 201–215.

Hogan, J., Dolan, P. & Donnelly, P. 2009. *Approaches to qualitative research: Theory and its practical application*. Cork: Oak Tree Press.

- Holstein, J. & Gubrium, J. 2004. The active interview. In D. Silverman (Ed.). *Qualitative research*. (2nd ed.). London: Sage Publications. 140–161.
- Hsieh, H. & Shannon, S. 2005. Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- James, R., Sigafoos, J., Green, V., Lancioni, G., O'Reilly, M., Lang, R.,... Marschik, P. 2014. Music therapy for individuals with autism spectrum disorder: A systematic review. *Review Journal of Autism and Developmental Disorders*, 2(1), 39–54.
- Joffe, H. & Yardley, L. 2004. Content and thematic analysis. In D. Marks & L. Yardley (Eds.). *Research methods for clinical and health psychology*. London: Sage. 56–68.
- Karkou, V. & Sanderson, P. 2006. *Arts therapies: a research-based map of the field*. Edinburgh: Elsevier Churchill Livingstone.
- Karst, J. & Van Hecke, A. V. 2012. Parent and family impact of autism spectrum disorders: a review and proposed model for intervention evaluation. *Clinical Child and Family Psychology Review*, 15(3), 247–277.
- Kelly, K. 2006. From encounter to text: Collecting data in qualitative research. In M, Terre Blanche, K. Durrheim & D. Painter (Eds.). *Research in Practice*. (2nd ed.). Cape Town: University of Cape Town. 285–319.
- Kern, P. & Aldridge, D. 2006. Using embedded music therapy interventions to support outdoor play of young children with autism in an inclusive community-based child care program. *Journal of Music Therapy*, 43(4), 270–294.
- Kim, J., Wigram, T. & Gold, C. 2008. The effects of improvisational music therapy on joint attention behaviours in autistic children: A randomized controlled study. *Journal of Autism and Developmental Disorders*, 38(9), 1758–1766.
- Kim, J., Wigram, T. & Gold, C. 2009. Emotional, motivational and interpersonal responsiveness of children with autism in improvisational music therapy. *Autism*, 13(4), 389–409.

Knoblauch, H., Tuma, R. & Schnettler, B. 2014. Video analysis and videography. In U. Flick (Ed.). *The SAGE handbook of qualitative data analysis*. London: Sage. 435—449.

Kvale, S. 2007. *Doing interviews*. London: Sage.

LaGasse, A. 2014. Effects of a music therapy group intervention on enhancing social skills in children with autism. *Journal of Music Therapy*, 51(3), 250–275.

Lester, J.N. & Barouch, A. 2013. Inviting the assent of children described as functionally non-verbal. In I. Paoletti, M. I. Tomás & F Menéndez (Eds.). *Practices of ethics: An empirical approach to ethics in social sciences research*. Newcastle upon Tyne: Cambridge Scholars Publishing. 65-83.

Lincoln, Y & Guba, E. 1985. *Naturalistic Inquiry*. California: Sage.

Lindegger, G. 2006. Research methods in clinical research. In M. Terre Blanche, K. Durrheim & D. Painter (Eds.). *Research in Practice*. (2nd ed.). Cape Town: University of Cape Town. 455–475.

Ludlow, A., Skelly, C. & Rohleder, P. 2011. Challenges faced by parents of children diagnosed with autism spectrum disorder. *Journal of Health Psychology*, 17(5), 702–711.

Matthews, B. & Ross, L. 2010. *Research methods: A practical guide for the social sciences*. Essex: Pearson Education Limited.

McConachie, H., & Diggle, T. 2007. Parent implemented early intervention for young children with autism spectrum disorder: A systematic review. *Journal of Evaluation in Clinical Practice*, 13(1), 120–129.

McLellan, E., MacQueen, K. & Neidig, J. 2003. Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, 15:63–84.

Neuman, W. 2007. *Basics of social research: Qualitative and quantitative approaches*. Boston: Allyn and Bacon.

- Nealy, C., O'Hare, L., Powers, J. & Swick, D. 2012. The impact of autism spectrum disorders on the family: A qualitative study of mothers' perspectives. *Journal of Family Social Work*, 15(3), 187–201.
- Nunokoosing, K. 2005. The problem with interviews. *Qualitative Health Research*, 15(5), 698–706.
- Oliver, D., Serovich, J. & Mason, T. 2005. Constraints and opportunities with interview transcription: Towards reflection in qualitative research. *Social Forces*, 84(2), 1273–1289.
- Papalia, D. & Feldman, R. 2011. *A child's world: infancy through adolescence*. (12th ed.). New York: McGraw-Hill.
- Pavlicevic, M. 1997. *Music therapy in context: music, meaning and relationships*. London: Jessica Kingsley.
- Ponterotto, J.G. 2006. Brief note on the origins, evolution, and meaning of the qualitative research concept "Thick Description". *The Qualitative Report*, 11(3), 538–549.
- Préfontaine, J. 2006. On becoming a music therapist. *Voices: a world forum for music therapy*, 6(2). np. Available at:
<<https://www.voices.no/index.php/voices/article/view/255/199>>. Date accessed: 11 June. 2016.
- Raglio, A., Traficante, D. & Oasi, O. 2011. Autism and music therapy: Intersubjective approach and music therapy assessment. *Nordic Journal of Music Therapy*, 20(2), 123–141.
- Robson, C. 1993. *Real world research: A resource for social scientists and practitioner-researchers*. Great Britain: T.J. Press.
- Ruud, E. 2010. *Music therapy: a perspective from the humanities*. Gilsum: Barcelona.
- Saldaña, J. 2009. *The coding manual for qualitative researchers*. Los Angeles: Sage.
- Schertz, H. H., Baker, C., Hurwitz, S., & Benner, L. 2010. Principles of early intervention reflected in toddler research in autism spectrum disorders. *Topics in Early Childhood Special Education*, 31(1), 4–21.

- Silverman, D. 2006. *Interpreting qualitative data: Methods for analyzing talk, text and interaction*. (3rd ed.). London: Sage.
- Simons, H. 2009. *Case study research in practice*. London: Sage.
- Simpson, K. & Keen, D. 2011. Music interventions for children with autism: narrative review of the literature. *Journal of Autism and Developmental Disorder*, 41(11), 1507–1514.
- Smith, L. 2010. Negotiation of care. In L. Smith & V Coleman (Eds.). *Child and family-centred healthcare: concept, theory and practice* (2nd Ed.). England: Palgrave Macmillan. 166-187.
- Sparrman, A. 2005. Video recording as interaction: Participant observation of children's everyday life. *Qualitative Research in Psychology*, 2(3), 241–255.
- Stige, B. 2002. *Culture-centered music therapy*. Barcelona: Gilsum.
- Stige, B., Ansdell, G., Elefant, C. & Pavlicevic, M. 2010. (Eds.). Conclusion: When things take shape in relation to music: towards an ecological perspective on music's help. In *Where music helps: Community music therapy in action and reflection*. Ashgate, England. 277-308.
- Sue, D., Sue, D.W. & Sue, S. 2010. *Understanding Abnormal Behaviour*. Wadsworth, Cengage Learning, Boston.
- Suzuki, L., Ahluwalia, M., Arora, A. & Mattis, J. 2007. The pond you fish in determines the fish you catch: Exploring strategies for qualitative data collection. *The Counseling Psychologist*, 35(2), 295–327.
- Terre Blanche, M. & Durrheim, K. 2006. Histories of the present: social science research in context. In M. Terre Blanche, K. Durrheim & D. Painter (Eds.). *Research in Practice*. (2nd ed.). Cape Town: University of Cape Town. 1–17.
- Terre Blanche, M., Kelly, K. & Durrheim, K. 2006. Why qualitative research? In M. Terre Blanche, K. Durrheim & D. Painter (Eds.). *Research in Practice*. (2nd ed.). Cape Town: University of Cape Town. 271–284.

Thompson, G. 2012. Family-centred music therapy in the home environment: Promoting interpersonal engagement between children with Autism Spectrum Disorder and their parents. *Music Therapy Perspectives*, 30(2), 109–116.

Thompson, G., McFerran, K. & Gold, C. 2014. Family-centred music therapy to promote social engagement in young children with severe autism spectrum disorder: A randomized controlled study. *Child: Care, Health and Development*, 40(6), 840–852.

Thorne, S. 2000. Data analysis in qualitative research. *Evidence Based Nursing*, 3(3), 68–70.

Trevarthen, C. 2002. Autism, sympathy of motives and music therapy. *Enfance*, 54(1), 86–99.

Vaiouli, P., Grimmet, K. & Ruich, L. 2013. “Bill is now singing”: Joint engagement and the emergence of social communication of three young children with autism. *Autism*, 19(1), 73–83.

Walworth, D. 2012. Family-centred practice: integrating music into home routines. In: P. Kern & M. Humpal. (Eds.). *Early childhood music therapy and autism spectrum disorders: developing potential in young children and their families*. London: Jessica Kingsley Publishers. 233–244.

Wassenaar, D. 2006. Ethical issues in social science research. In M. Terre Blanche, K. Durrheim & D. Painter (Eds.). *Research in Practice*. (2nd ed.). Cape Town: University of Cape Town. 60–79.

Wheeler, B. (Ed.). 2005. *Music therapy research*. (2nd ed.). Gilsum: Barcelona.

Wigram, T., Pedersen, I. & Bonde, L. 2002. *A comprehensive guide to music therapy: theory, clinical practice, research and training*. London: Jessica Kingsley Publishers.

Wigram, T & Gold, C. 2006. Music therapy in the assessment and treatment of autistic spectrum disorder: clinical application and research evidence. *Child: Care, Health and Development*, 32(5):535–542.

Wilkinson, S. 2004. In D. Silverman (Ed.). *Qualitative research*. (2nd ed.). London: Sage Publications. 177–199.

Willig, C. 2008. *Introducing qualitative research in psychology: Adventures in theory and method* (2nd ed). Buckingham: Open University Press.

Appendix A: Invitation to parents to participate in research study



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Invitation to parents to participate in research study

Title: Collaborations between music therapist and parents to transfer music therapy activities into the home context for children with Autism Spectrum Disorder

Dear parents,

I am a music therapy student currently doing my Master's degree through the University of Pretoria.

I am seeking two children and their parent(s) to participate in a research study to investigate how a music therapy student and parents of a child with Autism Spectrum Disorder (ASD) can collaborate to create individualised music therapy-based activities for use in the home environment. Unfortunately I am only able to accommodate two children and their parent(s) due to time restrictions. An interview with the child's parent(s) will be part of the process so please note that parents should be able to understand and speak English for this purpose.

As part of the study, I will do ten one-on-one music therapy sessions with two children. These sessions will take place at Alpha School, during the normal school day. Where possible, sessions will take place weekly (except in the case of school breaks or illness).

Before beginning music therapy sessions, parents will be asked to complete a brief questionnaire so that I can plan individualised sessions for their child. After the ten sessions have been completed, I will show the respective parent(s) three short excerpts from the sessions with their child. We will then discuss ways in which music therapy activities might be used to create music activities for use in the home with their child. Video recordings of music therapy sessions and of the interview will be made.

Participation in this study is voluntary and you may withdraw at any time. I will not use your names or any identifying information in my written dissertation.

If your child has a diagnosis of Autism Spectrum Disorder, and you are interested in participating in the study, please let me know and I will give you further information. The first

two indications of interest, along with completed consent forms, will be included in the study. To allow time for parents to receive this invitation, responses will be accepted from dd/mm/yyyy. Please indicate your interest by dd/mm/yyyy by emailing or phoning me.

Please contact me should you have any questions or concerns.

Kerryn Tracey

Andeline dos Santos

Researcher/Student

Supervisor

kerryn@kerryn.com

Andeline@keysmusictherapy.co.za

082 393 5653

Appendix B: Participant information form



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Participant information form

Title: Collaborations between music therapist and parents to transfer music therapy activities into the home context for children with Autism Spectrum Disorder

Dear _____

I am a music therapy student conducting a research study on parents' interpretations of events within one-on-one music therapy sessions with their child with autism spectrum disorder. The aim of the study is to investigate how these events or activities can be transferred into the home environment through collaboration with the therapist and parents.

Your child will be attending ten one-on-one music therapy sessions with me. These sessions will occur weekly and will take place at Alpha School during the course of the normal school day. Video recordings of the sessions will be made.

Prior to the music therapy sessions I would ask that you complete a questionnaire in order to provide information that will guide the planning of the music therapy sessions with your child. At the completion of the music therapy sessions with your child I will then conduct an interview with you. During this interview I will show you three short excerpts of moments that took place during the music therapy sessions. We will discuss what you think about the excerpts and this will then help us to jointly create music activities specifically for your child that could be used in the home environment.

By participating in the study, you will have the opportunity to be involved in creating music therapy-based activities that are specific to your child for use at home. and your child will have the opportunity to participate in one-on-one music therapy sessions. The research from this study will add to knowledge about including parents and their expertise when developing music therapy interventions for children with ASD.

Your participation is entirely voluntary, and you may withdraw from the process at any time. All personal information will remain confidential and anonymity is ensured. All collected data will be stored securely at the University of Pretoria for 15 years. Should you choose to withdraw from the study, all data linked to you and your child's participation will be destroyed. Should you wish to access the dissertation, it will be made available through the University of Pretoria.

Please do not hesitate to contact me for further information if required.
Your participation in this process is greatly appreciated.

Many thanks,
Kerryn Tracey

MMus (Music therapy) student/researcher
Email: kerryn@kerryn.com

Supervisor: Andeline dos Santos
Email: andeline@keysmusictherapy.co.za

Appendix C: Participant consent form



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Participant consent form

Date: _____

Title: Collaborations between music therapist and parents to transfer music therapy activities into the home context for children with Autism Spectrum Disorder

I _____ hereby give / do not give my consent for my child [child's name] _____ to participate in this research study by attending one-on-one music therapy sessions with Kerryn Tracey (music therapy student/researcher) at Alpha School.

I understand that these music therapy sessions will be video recorded for further analysis by the researcher. I do / do not give permission for these sessions to be recorded.

As part of the process, a questionnaire requesting background information will be used. I understand that any information I provide may be used to guide the planning of one-on-one music therapy sessions with my child.

Furthermore, I give / do not give my consent to participate in an interview with the researcher once the music therapy sessions with my child are concluded. I also do / do not grant permission for this interview to be video recorded.

I have been informed that all data gathered will remain anonymous, and that I may withdraw from the process at any time with no penalty. I understand that my participation in this research is voluntary.

With full acknowledgement of the above, I agree to participate in this study on

this _____(day) of this _____(month) and this
_____(year).

Participant details:

Participant name (parent): _____ Signature: _____

Contact number: _____ Date: _____

Child's name: _____

Researcher and Supervisor:

Researcher name: _____

Researcher signature: _____ Date: _____

Supervisor name: _____

Supervisor signature: _____ Date: _____

Appendix D: Questionnaire for completion by parent(s) of child taking part in music therapy sessions.

Thank you for your interest in taking part in this research process. This questionnaire is designed to gain basic background information about your child. This information will be used to plan the one-on-one music therapy sessions with your child.

The questionnaire is divided into four sections:

1. Biographical information
2. Interactions at home
3. Music activities
4. Additional comments

Section 1 includes questions concerning biographical information. This information will remain confidential and will not be shared with anyone but the researcher and the researcher's supervisor. The information is required in order to allow the researcher to contact you if necessary and to allow the researcher to construct a background profile of your child prior to beginning music therapy sessions.

Sections 2 and 3 contain open-ended questions. These questions involve your own observations and perceptions of your child's behaviour at home. There are therefore no right or wrong answers. Please give detailed responses where possible but note that you are free to leave items blank if you wish to do so.

Section 4 includes space for any additional comments you would like to provide.

Music therapy sessions are due to begin on _____.

Please return the questionnaire via email to kerryn@kerryn.com by _____ in order to allow for planning of the music therapy sessions.

Alternatively, please put the completed questionnaire in a sealed envelope with the following information on the front: **Confidential. For collection by Kerryn Tracey** kerryn@kerryn.com. Kindly leave this with the receptionist at Alpha School and I will collect it.

Section 1: Biographical Information

Contact details:

Parent's name:	
Phone number:	
Email address:	
If both parents will be attending the interview at the end of the music therapy process please include details for second parent:	
Parent's name:	
Phone number:	
Email address:	

Details of child participating in music therapy sessions:

Child's name:			
Child's age:			
Child's class at school:			
Diagnosis:			
Has your child previously attended music therapy sessions?	YES	NO	
If yes, when did these sessions occur? (Please mark appropriate box with x to indicate your response)			
<input type="checkbox"/>	Within the last 6 months		
<input type="checkbox"/>	More than 6 months ago but within the last year		
<input type="checkbox"/>	More than a year ago but within the last 4 years		
<input type="checkbox"/>	More than 4 years ago		
Other (please specify): _____			

Siblings:

Does your child have any brothers or sisters?	YES	NO
If yes, do the brothers and/or sisters live at home?	YES	NO
If yes, do the siblings also display ASD related behaviours?	YES	NO

Section 2: Interactions at home

Please describe how your child interacts with you at home:
How would you describe your relationship with your child?
Please describe how your child reacts to changes in routine:
Please describe behaviour that you feel your child displays at home that you find challenging or difficult:
Please describe any strengths you feel your child displays:

--

Section 3: Music activities

What is your child's behaviour like if/when he/she hears music at home?

Does your child become involved in music activities at home	YES	NO
---	-----	----

If yes, please indicate what sort of music play/activities your child spends time on:

Does your child seem to have any favourite songs or music that he/she enjoys?	YES	NO
---	-----	----

If yes, please indicate favourite songs/music here:

Section 4: Additional comments

Is there anything else you feel I should be aware of whilst conducting music therapy sessions with your child?

Is there anything else you would like to add?

How do you hope that music therapy will benefit your child?

Thank you for taking the time to complete this questionnaire.

The information you have provided will be used to help plan music therapy sessions with your child.

Kind regards,
Kerryn Tracey
082 393 5653

Appendix E: Thick Description of Excerpt One

Session Seven 1'43"

This excerpt is taken from the middle of session seven. The session took place in a passage outside of a classroom.

Philip is playing guitar, looking down at it. He is strumming with an even pulse, around 120 bpm. I am playing with him on *djembe* drum, beating a crotchet to his quaver pulse. I am singing a known song that Philip previously spontaneously sang in sessions (*Sounds of Animals song* Flickbox Kids Songs and Rhymes, YouTube). Philip begins to play slower and with less energy. My singing becomes softer as Philip begins to stop playing guitar, the intensity of my voice matching his dwindling playing. Philip suddenly stops playing and looks at the neck of the guitar. I also stop playing, put down the drum and say "Kerryn's turn?". As I do this, Philip looks at me and starts strumming again, this time with less energy and intensity. I initiate a 'one, two, three, four, stop' cue to which he responds, looking up at me and beginning to pass me the guitar. I encourage Philip when he responds to the 'one, two, three, four, stop' cue, saying "Nice Philip, good job".

I take the guitar. As I take the guitar I cross my legs and strum. Philip also crosses his legs. I stop strumming and say "Ja, see, sitting like that, hey?" as I move my leg, noting that Philip has mirrored my posture. I smile and say "Shall we get ready?", linking my hands and stretching them outward in a gesture that Philip usually makes when pausing and preparing to play.

I then ask Philip to sing with me. Philip reaches forward to strum the guitar and I put my hand out saying "wait, Kerryn's turn". I point to myself and say "I sing", then begin to initiate a vocal turn-taking activity. I sing *la* in a clearly enunciated manner. The notes are accented and I sing three crotchets on the supertonic as I strum along to my singing. I then stop strumming point to Philip, saying "and you?" He responds, vocalising on *la* and singing three notes. As he responds I nod my head, vocalising "*mmhmm*". This pattern continues with me singing on the mediant. When it is Philip's turn I continue to point to him and lean slightly toward him, nodding my head in time to the music. The pattern is repeated. At times he responds quickly when it is his turn, at other times there is a slight pause as I indicate to him. The intensity of Philip's vocalising wanes and his rhythm becomes a bit disjointed. As the activity progresses I begin to move my body and/or shoulders side to side with the rhythm of

the music. Suddenly Philip changes the pattern, singing rising tones with intensity. This is musically fitting and comes at the end of four four-bar phrases. I reflect his phrase and he continues improvising. We move into a brief contrapuntal exchange lasting for about 14 bars. Philip then vocalises something repeatedly that he has in previous sessions, sounding like "*wol-fan-da*". He looks up at me, maintaining eye contact. He begins to tap his hands in time to the beat. As he does this the music becomes more lively, my strumming now faster and continuous.

The intensity of Philip's vocalising wanes and I try to match the energy of Philip's vocalisation musically. His rhythm becomes a little bit disjointed. He then looks away and begins making soft quacking sounds, with a somewhat strangled tone. I quickly interrupt and start singing the theme and he looks back at me, no longer making quacking sounds. Philip sings a phrase and repeats it. Initially his enunciation is not clear but the second time it turns out to be the '1234 stop' cue. He drops his hands and sits back in his chair, looking at me and smiling faintly. I stop playing and say "Stop" in a high pitched and soft voice.

Appendix F: Thick Description of Excerpt Two

Session Six 1'24"

The excerpt is from the last third of session six. The session took place in the hall.

The excerpt opens with me off-camera, moving to put on the music. I say "Philip, we're going to dance" as he has moved to the (on camera) piano and is sitting down there. The music is pre-recorded, *Doo be do* by Freshly ground. It is in a major key in 4/4 time. It is approximately 90bpm. The music is upbeat and light-hearted. Instrumentation includes female vocals, acoustic guitar, drum kit, keyboard, sustained strings, penny whistle. It is playing at moderate volume.

I close the piano lid and hold out my hands to Philip. He takes them and I then lead him to the open space in order to move. We stand and begin moving. I model the movement, also verbally indicating what the movement is.

We start by holding hands. Philip allows me to move his arms back and forth. I then let go of his hands and say "Let's clap", modelling the clapping and doing so in time to the music. He does begin to clap but his clapping is not really in time to the music and his movements are quite relaxed, almost as though he has low body tone.

I then ask him to move his feet as I do so, tapping one in front of the other and stepping side to side in time to the beat. He then looks away. He looks back as I call his name and say "move feet" again. He moves his feet in a manner that is related to what I am doing but is slightly restricted. I affirm his movement by saying "yes". I then lift my arms and say "stretch up, stretch up, stretch up, stretch, stretch, stretch, stretch, stretch" in a slightly strained voice as though I am putting a lot of effort into stretching. He does lift his arms up but is not really stretching. I then bend over and say "and touch the floor". He touches the floor a little after I do so. I say "nice" as he touches the floor. I then say "move feet" again and this time tap alternating feet, one in front of the other. Philip does move his feet, following my movement, although his movement is a little 'shuffling', once again almost relaxed. I then move on and say "Philip, shoulders." I move my shoulders and Philip responds, not moving his shoulders but rather tilting his head side to side. The movement looks quite a lot like what I am doing but is not quite the same as he is essentially keeping his shoulders still. As he moves I say "Ja". We then move back to clapping hands and I say "nice".

I then say "turn around" and begin doing so myself. He pauses and watches me as I then turn around and he does so too after a moment. I say "Good job" and then say "the other way". I turn in the other direction and he turns again but in the same direction as before. I say good job again. I say "and touch the sky" and stretch upward. He reaches his hands upward. I say "yeah" as he does so. I then say "touch the floor" and once again say "yeah" as he does so.

At the end of the activity I say "Yeah! Good job" and he begins directing his body toward the piano.

Appendix G: Thick Description of Excerpt Three

Session Six 1'25"

The excerpt starts at the beginning of session six. The session took place in the hall.

At the beginning of the excerpt I begin the session by letting Philip know that we will start with drums. Philip is vocalising something in a gruff, croaky voice as he begins to pick up the guitar. I move toward him to take the guitar and reiterate that we will first be playing drums and doing the hello song. As I take the guitar and move to the chair he holds out his hand as if to take mine. I guide him to the chairs and the drums, saying that we will first play drums and say hello before moving to the guitar and I point to a drum.

When directed to the drum he beats a brief rhythmic fragment that I then I vocally reflect. I say "nice, nice, good job" and play the rhythmic fragment on the drum. He does not play the rhythmic fragment again but tenses his body and taps the drum quickly and softly, with a floppy hand. I then beat single crotchet beats for the greeting song and Philip plays single beats as well. As I sing the greeting song he looks at me. I leave space vocally for Philip to say my name in greeting. I point to myself and say "and me?". He responds by saying "Hello Kerryn" after prompting, muttering my name almost inaudibly. I nod. When it is next time to greet me in the song I point to myself multiple times and when Philip responds with my name I say "yes!" excitedly and play a quick, soft roll on the drum.

At the end of the song Philip's playing is rapid and a bit scattered. I reach over and beat his drum three times, saying '*boem, boem, boem*'. His playing remains scattered. I pause and say "Let's play together". I raise my hand in an exaggerated manner, breathing in loudly, and then bring it down onto the drum and say '*boem!*'. I continue beating on the drum, saying "one, two, three, four", with the first and third beat accented. Philip continues playing in a scattered manner. I then move one drum away and move closer to Philip.

I initiate a turn-taking exchange on the remaining drum, tilting the drum to myself and then to Philip, depending upon whose turn it is to play. I sing "Kerryn's turn and Philip's turn", beating the drum three times and pausing on the fourth crotchet, then tilting the drum to Philip. Philip plays the same thing when it is his turn after pausing a little. He is not quite within the structure of the rhythm. When it is my turn to play I lean back in my chair, when it is Philip's turn I lean forward toward him with the drum. He now plays squarely within the

beat. I tilt the drum for eight phrases of four bars each. I then stop tilting the drum, leaving it on the floor between us. Once I stop tilting the drum the turn-taking pattern continues. For four phrases I point to myself when it is my turn. When it is his turn to play, Philip leans toward the drum slightly. As I then stop pointing to myself Philip comes in a little faster than before and then plays with me when it is next my turn. I play a short roll, which Philip mirrors before he begins playing along with me.

Appendix H: Thick Description of Excerpt Four

Session Seven 2'22"

This excerpt is taken from the beginning of session seven. The session took place in a small passage outside of a classroom.

At the beginning of the excerpt, I am setting up the camera. Philip seems engaged and says "video", looking into the camera. I respond by echoing "video". Philip then smiles, tilts his head, and says "say cheese". I then move toward the drum and ask if Philip is ready. He vocalises "mmm". Philip says "stop", moving his hands outward in a cutting motion. I question this and then Philip begins beating the drum. I say "drums" and I move into the greeting song, beating on the same drum as Philip is using. There is one drum. Philip's beating is focused and he is playing with energy. His beating vacillates between being slightly off beat to being on the beat with me. As I sing Philip says "hello Kerryn" when it is my turn to be greeted. I respond "Hello Philip", still maintaining the beat on the drum. I then continue singing. I ask Philip to sing with me and he responds by saying hello again. As I finish the greeting song Philip vocalises but his words are unclear. It sounds like "ay-ay". I reflect the melody and sounds, leaning toward Philip. I then say "hey?". Philip repeats something similar and I begin singing in a similar manner as I beat the drum. I also sing "wol-fen-ta" as this is something he often sings with this vocable. While I do this I begin tilting the drum to initiate turn-taking. This results in Philip missing the drum at times, still trying to beat when I have already pulled the drum away. It seemed that Philip was trying to continue playing the drum and vocalising at this point so I stopped tilting the drum. However, Philip stopped vocalising and then became distracted. As Philip starts looking away he makes soft, high-pitched sounds. I say "Ok, we go" and start tilting the drum with more emphasis in my movement to initiate a turn-taking interaction as an intervention. I sing a commentary song "Kerryn's turn and Philip's turn" as I tilt the drum to myself and then to Philip. When I play my movement is somewhat exaggerated or expansive. I vary the number of beats that I play and Philip copies the number of beats for the most part. I often interject with "nice" when Philip plays, especially when he plays the same number of beats as I have just played. I change the intensity of my playing to produce different dynamics. For the most part Philip does not respond to the changes in dynamics, continuing to play with force throughout the activity.

I start singing the melody to *Lord of the dance* as I stop tilting the drum, attempting to continue the turn-taking interaction without the need to tilt the drum. The melody is busier than the one I have been singing in the commentary turn-taking song. Turn-taking continues briefly. When it is Philip's turn I sit straight and back a little, nodding to him. As Philip begins to play outside of his turn with a steady and strong beat I begin to play with him and sing with more intensity and a higher dynamic level.

Appendix I: Thick Description of Excerpt Five

Session Four 2'35"

This excerpt is from session 4, toward the beginning of the session. The session took place in the hall. For this session I moved the guitar so that it was out of line of sight at the beginning of the session because the guitar tended to distract Philip. The excerpt begins after we had sung the greeting song. We were each playing a *djembe*. I had initiated a movement that Philip had responded to with jerky movements.

As the excerpt begins I am playing a strong crotchet beat on the *djembe* and singing the melody to *My Bonny*, 3/4 time, moderate tempo. Philip is beating the drum rapidly not in relation to my beat. Philip plays in a scattered manner, jerking his body in a slightly uncontrolled way as he sits on the chair. His playing looks like he is swiping or stroking the drum quickly, or perhaps fluttering or flapping his hand on the drum. It is almost accented in manner. He is smiling and he chuckles. I play a strong beat on Philip's drum, vocalising "boem" as I do so, on the first beat of a bar. Philip's playing becomes slightly less frenetic but is still scattered and light, with a brushing quality. He looks away from me toward the curtains. I begin beating strongly and saying "and one, two, three, four" as I beat in time to my counting, nodding my head on each beat. Philip looks back at me as I begin counting. Philip begins beating with me in a more directed manner. I continue counting and Philip's playing is slightly before the beat. With prompting he plays with his other hand and falls in with my beat again. Philip then plays quavers and I mirror this, still counting. I stop counting and begin singing the melody to *Lord of the dance*. He begins stroking the drum with alternating hands as I sing *Lord of the dance*, losing the beat slightly as we progress and jerking slightly occasionally. He is almost playing semi-quavers so I play semi-quavers. As he becomes a bit scattered and loses the beat I say "let's play fast" and we play a short roll on the drum. I then say we should play slowly and I reduce my tempo over the next phrase. I stop playing at the end of the phrase, with a sighing quality to my voice and an exaggerated heaviness to my playing.

Philip plays briefly and then stops. I call his name. He says something (not audible) in a high-pitched, squeaky voice and begins to look down at the drum, moving it with his feet and then turning it around with his fingers on the rim. He asks if I see the guitar. I say we will play a little later but that now we are playing the drums. As I say we will play a little later he says "yes?". Although Philip indicates that he does not want to play the drums I ask again if we can continue. I say "Let's play a little bit, hey? Come, let's play loud". Philip responds "yes!"

with quite a lot of energy. I beat the drum and Philip plays as well but without force. I sing "we're playing loudly together, we're playing softly together", changing the dynamics and quality of my playing to match the commentary. Philip alternates between playing according to the dynamics and rhythm and not playing in relation to my commentary or music. During the soft section I slowly sing softer and softer and I crouch over toward the drum. I am eventually almost whispering the commentary song. Philip jerks his body and I sit back suddenly, jerking my own a little bit as well. The excerpt ends on a loud section. I indicate this by inhaling audibly and moving my body as though I am visibly breathing in. I lift my hands quite high whilst saying "and we're" with some force before beating loudly and singing that we are playing loudly. As I move to the next loud section he plays the first beat as though he is launching himself into the playing along with me.

Appendix J: Thick Description of Excerpt Six

Session Four 1'34"

This excerpt is taken from session four, towards the middle of the session. The session took place in the hall.

The pre-recorded music (*Doo be do* by Freshly Ground) is playing as the excerpt opens. It is in a major key in 4/4 time, approximately 90bpm. It is upbeat and light-hearted.

Instrumentation includes female vocals, acoustic guitar, drum kit, keyboard, sustained strings, penny whistle, violin. It is playing at moderate volume. I give Philip two shakers and I play the tambourine. Philip begins to play the shakers in a manner that almost seems reminiscent of flamenco dancing, one side and then the other side of his body, often over his head. I tap the tambourine and move to the beat of the music. As Philip moves his shakers side to side I try to mirror some of his side to side movement. I then lift my arms and say "Let's touch the sky Philip, touch the sky". Philip does not really respond. I then bend down and tap the floor saying "touch the floor". Philip begins to bend slightly as I remain bent over and touching the floor. I then reach up and back down again, giving verbal directions to the movements. He follows the actions and his movement is slightly more expansive than before.

Philip then seems to become more absorbed in shaking the shakers and seems to withdraw a bit from the interaction. His movements become smaller and he looks at the shakers. I put down the tambourine and take Philip's shakers, saying "let's clap hands". He begins to do so slowly, without much directed effort. He looks away.

I take Philip's hands and direct his movement, swinging his arms and moving my feet. He allows me to move with him but he does not move his feet and seems quite still. It seems almost as though I am manipulating a puppet, moving him rather than us moving together. First I swing arms side to side and then forward and back. Philip alternates between looking at me and looking around.

Aside from shifting his foot once, Philip kept his feet still throughout the entire activity. The interaction seems mostly one-sided and somewhat restricted. A lot of the time Philip does not make eye contact.

Appendix K: Thick Description of Excerpt Seven

Session Two 1'47"

This excerpt is taken from session two, approximately a third of the way through the session. The session took place in the hall. The excerpt begins with Philip strumming strongly and singing something similar in contour and sound to *ring a ring a roses*, strumming on each crotchet beat. He looks down at the instrument, his vocalisations not quite audible. I clap my hands in time to what Philip is playing and say "nice". I try to take the guitar, saying "my turn". There is an interruption with someone at the door and Philip repeats his playing and singing. I wait until the end of the phrase and then gently but firmly take the guitar from him. He does not resist me taking the guitar.

I then play a major progression and sing *Four little monkeys*. Philip kneels in front of me, his back toward the camera. He reaches to the guitar and trying to pull it toward him. I say firmly but calmly "my turn", looking at him. He continues pulling the guitar again and I repeat "my turn". He then responds verbally, saying "my turn", continuing to pull the guitar. I gesture to myself and say "my turn, Kerry". Philip then says "my turn, Philip" and I respond by shaking my head briefly, saying no. He sits back, although still leaning close to the guitar. He continues touching it but no longer pulls it toward himself. I ask that Philip sings with me as I continue playing. The music is flexible in that it contains *ritardandi* and pauses where I leave space for Philip to fill in words. He sings during the pauses, his voice quiet. The tempo is moderate and my playing is *mezzo forte*.

Appendix L: Thick Description of Excerpt Eight

Session Four 1'07"

The excerpt is taken from session four, toward the beginning of the session, shortly after the greeting song. It opens with Philip tapping on a drum somewhat erratically. I have another drum in front of me. The session took place in the hall.

I explain verbally that we are going to take turns. I say that I will play and then Philip will play. Philip continues playing and I reach toward him, saying "stop". I point to myself and say "OK, now my turn". Philip echoes "my turn" so I point to myself and say "Kerryn's turn". He quickly says "Kerryn's turn" very quietly. I beat the drum and Philip begins to beat as well. His movements look jerky and somewhat uncontrolled. He laughs briefly and continues to play, leaning to the drum. I then point to him with both hands and say "and then Philip's turn". I reach out my hands to him, pausing and then saying "shhhh" softly. Philip continues playing. I then gesture to myself again and say "Kerryn's turn". I reach to him again saying "and then Philip's turn". I then gesture to myself again and say "and then" but I stop and try to fit in brief bursts of playing in between Philip's bursts of playing. I reflect Philip's playing briefly, playing short fast rolls after his somewhat erratic, frenetic playing.

At one point I sing "Philip's turn". Then I say "and Kerryn's" turn again, reaching to Philip and saying "shhh" then saying again "Kerryn's turn". I then seem to abandon the attempt as my body language becomes a bit resigned.

As Philip begins making sounds (almost like braying) I say "OK" and end the exchange, beating the drum and initiating a 'four, three, two, one, stop' cue. He then stops playing. I ask him to put his drum to the side and he does so.

Appendix M: Thick Description of Excerpt Nine

Session Seven 1'26"

This excerpt is taken from towards the end of session seven. The session took place in a passage outside of a classroom.

As the excerpts begins I am playing a major chord progression on guitar. The music, my playing, and the quality of my singing seems somehow sluggish. I watch Philip as I strum, singing "We are making music, Philip and Kerryn, we are making music together". Philip is bent over the mbira held in his lap. He plucks the tines, looking down at the instrument. He seems to be somewhat isolated, absorbed in investigating and playing the instrument. His playing is initially on the beat of my music but he falls out of this rhythm, simply plucking various notes.

I then sing "la, la, la", pausing after that. I reach forward to tap Philip. He looks up briefly once but then returns to looking at the mbira. I lift my head in an exaggerated manner and sing again "I sing la, la, la", my voice becoming more directed and the notes on "la la la" being accented. I stop playing for about a bar, then singing "and Philip sings?". This is followed by a pause in my singing after which I sing "la, la, la". It seems as though my music is not influencing Philip's playing at all. There does not seem to be much interaction, either relationally or socially. I then repeat the pattern. When it is my turn I point to myself quite vigorously. The music then stops as Philip stops playing. He sits up and holds out his hand to me saying "Kerryn, it's sore". I reach to Philip asking if we should stop the mbira. He says "one, two, three, four, stop", moving to put down the mbira. I then offer him the shakers. He plays on the mbira a little more before taking the shakers. As he begins shaking them energetically I play using an upbeat strumming pattern.

Appendix N: Transcript: Interview with caregiver

T: music therapy student

C: caregiver

T	Thank you very much for being willing to participate in the whole process and the interview as well. Um.	1 2
	So as you've been informed, the interview's going to be recorded, the audio of it. Um, And any information gathered from the interview will be kept anonymous, so that means, um, no records of the interview will be kept with your name attached to it, um, and your name isn't going to appear in conjunction with any data in the produced research, so it will all be by a code.	3 4 5 6 7
C	OK	8
T	OK. Um, so if you're comfortable with that and you're comfortable with the audio recording then we can continue.	9 10
C	Alright	11
T	OK, great.	12
	So, what's going to happen is, first I'm just going to ask you a little bit about your basic thoughts of the music therapy, you know, how, how, how you think, what you think it's about. Um, because this is really, you know I've got my own perspective as the person doing the music therapy as a student with Philip and then you as his mom have your own, um, set of interpretations and perspectives. So you know him in one way and I know him in a different way. And you've got all this, um, experience of him that I can't kind of have access to. You know like how he is at home and how he is with you, etc, etc. So it's really about getting <i>your</i> interpretations from <i>your</i> perspective of what's going on in the clips that I'm going to show you, um	13 14 15 16 17 18 19 20 21 22
C	OK	23
T	and then we going to discuss together using what we've seen and what we've already discussed to try and together with your expertise and my different set of skills to make an activity that you can maybe use for some purpose at home with Philip. OK, great.	24 25 26 27 28
	So for part one, (just going to move this a bit, um) and just also to remember there's no, there's no right or wrong because it's your own perspectives. OK great.	29 30 31
	So firstly if you could give me your basic understanding of what music therapy might be about. Um. And, and what might happen in the sessions, just your own kind of...	32 33 34
C	In this session?	35
T	In the whole process...	36

C	...or in general	37
T	Ja, with Philip	38
C	[Chuckles]	39
	Um. because Philip already is a child that loves, um, singing and music and dancing I felt that this was something that would, uh, that he would enjoy immensely, um, and it might help him to open up and to relate in a different way and maybe um, bring about a set of skills within him or be able to identify or help him to become better at something. Um.	40 41 42 43 44
T	Mm, mm.	45
C	Even, um, I've noticed as well as he has, in, in growing up, he has become, he's very good at picking up notes.	46 47
T	Mm	48
C	And being able to, you know, erm, the different waves of the song, like he's able to interpret that and,	49 50
T	Mm, mm	51
C	And it's quite amazing because I would have thought that for a child with autism, that those would not be things that, that he would pay attention to because generally they don't necessarily pay attention to people or things and, but, yes, with Philip it's like he, it's been amazing so I've kinda like, hoped that the sessions would, would um bring that side of him and he, it would let him be able to enjoy something	52 53 54 55 56 57
T	Mm	58
C	that he feels,	59
T	Mm	60
C	um, that like feels comfortable and natural.	61
T	Mm, mm, ok. Great. Ja, I think... Um. I did, did see him interacting musically and, and that, that he has got some sort of music going on in him	62 63
C	Mmm	64
T	And that the contour of the thing as well	65
C	Mmm	66
T	I could see that as well, so ja. And so you've basically answered my next question as well	67 68
C	[laughs]	69
T	about "how do you think he might respond to the music therapy". Um. And then you mentioned briefly in the questionnaire already about how he does do	70 71

	music at home and he's got his keyboard and, um, Have you ever specifically used music activities with him? Like, um, you know specifically for an aim or for, you know, to do, or do you just let him...	72 73 74
C	Um, uh, because I don't play any instruments or what I, I've never really engaged with him I've just always bought him music instruments like a drums and a piano, but, but um, when, when I was pregnant with Philip one of the things that I'd read in the, these books, pregnancy books was that children, um, who listen to classical music	75 76 77 78 79
T	Mm	80
C	it stimulates their brain	81
T	Mm	82
C	and intelligence and all that	83
T	Mm	84
C	so I used to always love playing music for him and um, when, if for instance when we were doing the alphabets and doing counting when he was younger I would try to put it in a, in a song and I will always play rhymes with him.	85 86 87
T	Mm	88
C	Only in that sense	89
T	Ok	90
C	but we have never like played in an educational way for him to try to learn something even though I, I already have seen that he does love music	91 92
T	Mm, mm	93
C	but I have noticed that he has done that by himself	94
T	Mm	95
C	because [laughs] there are things at home like he would, he would take a sentence or he would be communicating with us and he would decide that he was going to sing it along or he would change a certain song that used to sound a certain way and then he would convert it into a different style,	96 97 98 99
T	Mm, mm	100
C	so like, "jeez dude can you do that",	101
T	[laughs]	102
C	like, 'cause I wouldn't have thought that like you know you would do that so he does things like that, um, just on his own without, you know, like self-taught really,	103 104 105
T	Mm, mm	106

C	and it's been quite amazing,	107
T	Ja	108
C	like, "Ok..." [laughs].	109
T	OK, ok, great, ok. Um, and so you, you think that you would like to incorporate after, you know, seeing the process, uh, maybe something more at home, and we'll discuss	110 111 112
C	Yes, definitely, definitely, because he really enjoys the music so I think he would respond well to anything if I were to incorporate music, he would learn much better and be more responsive because I do find that um when it comes to writing and, and reading sometimes he, he gets bored easily, but, um, but if he's learning on his own or if he has music or singing he bec, he is much more engaged.	113 114 115 116 117 118
T	OK, he's better engaged, all right, great.	119
	So just to summarise my process with Philip and Philip's process with me, the music therapy process, um, so as you know we had eight sessions in total, and we had them twice a week, so that was, um, for as long as we were able to fit them in in the previous term. Um, and during this, during these sessions we did different activities like playing the piano and playing other instruments, drums, guitar, shakers, we had like a small little xylophone as well, um, also singing, and also dancing, movement. Um, and the activities are each designed with a specific goal in mind, so it's not necessarily, um, purely kind of learning in a sort of 'school ABC' etc, etc sense, it's also things like, um, social skills, um taking turns,	120 121 122 123 124 125 126 127 128 129
C	Mm,	130
T	things like that. Um, and so with each child with each person it's developed specifically with them in mind	131 132
C	OK	133
T	so it's very individualised process, um, so I developed the goals from what I saw happening in the sessions and also keeping in mind what you had told me in, in the questionnaire, um.	134 135 136
C	OK.	137
T	So, what landed up happening in the sessions, what I started working on as the main goals with Philip, um, was to give opportunities to provide, um, to provide opportunities for practicing um skills like social skills, like turn taking, um, sharing, things, things like that. Um. To also to increase his freedom of movement because the idea there is maybe if, if the person is a little, so he moves, but if he's a little bit sort of restricted then if he can become a little bit freer it might sort of transfer into other areas of expression because the body is a very kind of, um, you know it it's a very key part of our expression	138 139 140 141 142 143 144 145
C	Yes	146
T	and our self. Um, and also, so he did really enjoy the music but sometimes he became quite sort of...	147 148

C's cell phone rings... pause

T	Um sometimes he, he became very, very absorbed, um, in the activity, almost so that he was kind of isolating himself a bit, I couldn't kind of communicate because he was so focussed on the activity,	149 150 151
C	Mm	152
T	so I tried to, um, give opportunities for him to almost come out of the music world so that we could share it together,	153 154
C	Mm, mm um,	155
T	and communicate in that way, so. Um, not to be alone with the music	156
C	Mm	157
T	but to kind of <i>share</i> with each other.	158
C	Mm, yes.	159

intercom... pause

T	[laughs]. That will happen. Um, OK, so. With that in mind there's just a <i>little</i> bit of context, um, and I'm going to give you an idea of the sort of, of things I want to find out about what you, what you think about the clips. So I'm going to, the basic thing is 'what do you see and hear is happening?', so you know, things like 'how do you feel when you watch that',	160 161 162 163 164 165
C	OK	166
T	Um, 'do you notice anything about how we are interacting together',	167
C	OK	168
T	Um, 'is it similar or different to what takes place at home',	169
C	All right	170
T	You know, 'if it is something that happens at home, what would you maybe usually do um if it, if it occurred at home', um 'do you notice anything about his physical behaviour, you know the way he moves, um, things like that, and 'do you notice anything about me' um, and what I'm doing, and then 'does anything about the music stand out to you'. OK, so, the umbrella is 'what do you see and hear and feel'.	171 172 173 174 175 176
C	OK	177
T	Um, ja. And, you know, we can watch them more than once if you, if you feel that you would like to. So I'm going to show first four clips. I'll show them and then we'll discuss and then I'll show the next one and then we'll discuss.	178 179 180

C	OK	181
T	OK. great So. The first one that I'm going to show you um it's taken from the middle of session seven, so it's toward the end of the process,	182 183
C	OK	184
T	Um, and like, like I said we usually had the sessions in the hall	185
C	Mm hmm	186
T	but because it was raining we suddenly had to move because the, it was break time for the older children,	187 188
C	all right	189
T	so they needed the hall so we had to suddenly move and it was in a small passage	190 191
C	OK	192
T	outside a classroom, um, and before the clip that you're going to see Philip was quite engaged overall, um, sometimes he responded to cues, other times he didn't, other times he was more focussed on his instrument, um, and just before what you will see he was strumming on the guitar	193 194 195 196
C	OK	197
T	and I, I was singing some of the, the vocal sounds that he made from earlier in the session,	198 199
C	OK	200
T	um, and then we were interrupted by a, a child walking through so, so we kind of lost a little bit of focus, and now this is where we're going to come in.	201 202
C	All right,	203
T	OK... Thanks. Let's make sure you can see. All right, volume, it's up, good.	204
	<i>intercom, pause</i>	
T	Whenever that happens we'll just pause.	205
	Excerpt one	
T	OK, d'you want to watch it again, or speak first?	206
C	[laughing] I ju, I, I have some questions,	207
T	Mm	208
C	It is um, is he singing from what you guys used to sing? Coz I saw towards the end he was continuing on his own without waiting for your cue, is it because he knows what's following or is he coming up his own ideas? OK, because I	209 210 211

	also heard him, um, singing something that, ah, when he said 'ya ya ya' it's, it's	212
	um, it comes from TV, there's a programme that he's... So, I also find at home	213
	if, if he hears a certain word	214
	<i>intercom, pause</i>	
T	it triggers	215
T	Mm	216
C	a certain song	217
T	Mm	218
C	in him, 'cause he would suddenly think of a certain word or I would say a	219
	certain word and then he would start singing	220
T	Mm	221
C	about that 'cause now this as w, this here also seems, he seems to be doing	222
	the same, kind of like triggered something [clicks fingers]	223
T	Mm	224
C	and then he derailed a bit.	225
T	Mmhm, OK, do you, so the other... do you feel anything about what's	226
	happening? Um, I noticed you smiling and laughing a bit there...	227
C	[Laughs] I... Philip is very observant like when he is in the presence of	228
	somebody like um, I, I notice he was crossing his legs because you've crossed	229
	your legs,	230
T	Mm	231
C	and he's very much like that. Um, I think he was three and there are certain	232
	things that you don't pay attention to as individuals,	233
T	Mm	234
C	And, and he was sitting next to his gran and the way, her posture, the way she	235
	was sitting and everything, he suddenly just imitated	236
T	Mm	237
C	everything about the way she was doing it and I was like, this is the first time	238
	that I've actually noticed that she sits like that because he was imitating her	239
	and, and I'm surprised that he decided to do that	240
T	mm	241
C	with you and, and I don't know when does he feel that he needs to do such,	242
T	Mm	243

C	but or maybe he thinks that it's also part of the music scene if,	244
T	Mm, mm, mm	245
C	this is, you know, [laughs] um, but ja it was quite interesting to see him. Ah, And then he was smiling and he was enjoying himself	246 247
T	Mm, mm	248
C	so.	249
T	Um, do you, Do you notice anything about what I'm doing? Our	250
C	Like I'm noticing that you're doing turn-taking in, in the singing and that um, you lead and then you want him to follow, and sometimes he does that, and then also, um, towards the end of the clip it's when the two of you sing together 'cause he starts leading and then you decide to incorporate what he's	251 252 253 254 255
T	Mm, mm	256
C	doing into what you're doing, and kind of like, jam together.	257
T	Ja, ja. Um. OK, so you've spoken a little bit about, um, how he is at home and that, that it's sometimes something triggers a song, um, that could also be, 'does anything about the music stand out to you'. Anything... is there anything more about the music. I mean I'm not, I'm not, not looking for a specific answer, I'm just,	258 259 260 261 262
C	in general	263
T	just in general, wondering [laughs]	264
C	No nothing that I can think of now.	265
T	Mmm. Mm. OK. OK great. So, we're then going to move on to clip two, unless you would like to watch it again. And then once we've seen all the four clips then we'll watch them again and I'll give some of my feedback.	266 267 268
C	OK	269
T	OK, all right. So, clip number two, um, this is from session six, um and I'd been trying to include some movement activities in each session. Um, for this session you'll hear that I used recorded music, I used, um, <i>Doo be do</i> by Freshly Ground.	270 271 272 273
C	OK	274
T	We'd used this music twice before. The first time we did some similar movements, um, and then the second time he decided 'no this is not happening' [laughs]. Um, so this is the third time that we've tried this particular song with some of the similar movements.	275 276 277 278
C	OK	279
T	Um. OK.	280

Excerpt two

T	Would you like to watch it again, or,	281
C	[laughs]	282
T	have some feedback?	283
C	[Laughs] Uh, This is, um, this is nice for exercise and listening up, um. Before watching this clip I kind of like knew that Philip is a bit stiff but it was, I was not focussed on it, um. And he is, 'cause at home sometimes I do take him and I say let's dance,	284 285 286 287
T	Mm, mm	288
C	and he is a bit rigid. It's when he doesn't want to be engaging,	289
T	Mm, [laughs]	290
C	and then when he wants to dance and he's in the mood and then he dances,	292
T	Mm	292
C	and then he shakes and he moves, and he says 'mommy shake, turn, turn, stamp' you know, and then he's that's when he's in the lead and he's interested,	293 294 295
T	Mmm	296
C	but then when I want him to do it and then he will just do like this,	297
T	[Laughs]	298
C	'ok you want me to do it, fine, I'll do it'.	299
T	Ah	300
C	And even the, the, the stamping and, and things 'cause like, um, there's um, Disney Junior Mickey Mouse, there's um, and and and Goofy, they have a song that they do when the, when the programme starts, and Philip is always engaging, and he laughs and he does the dance with them, you know,	301 302 303 304
T	Hm	305
C	um, ja, and, and also [laughs] he dances on his own but as soon as I wanna engage, it's like no, ok, I'm not doing it anymore,	306 307
T	Ah	308
C	you wanna be part of this, ai.	309
T	Mm	310
C	He likes doing things on his own but as soon as you show interest then it's like ok bye,	311 312

T	Mm	313
C	I've moved on	314
T	Mm	315
C	I'm not interested.	316
T	Mm, [laughs] OK, um... OK. Um. Do you notice anything about what I'm doing in particular, um... nothing?	317 318
C	Like you're engaging him in dance, and you, you're wanting him to share with you in the music. um. And, ja, he is busy wanting to be on the computer... piano sorry. [laughs].	319 320 321
T	[laughs]	322
C	[laughing] Like the computer...Um Ja, he wants to be there and you're trying to engage him in the song. And he knows the song,	323 324
T	Mm, mm	325
C	'cause I thought he would have been, he would have enjoyed it, I thought he would have wanted to dance to the song,	326 327
T	Mm, mm	328
C	or sing, you know sing along with it. But, ja, he's just doing it because you're telling him to do it.	329 330
T	Ja, ja. OK. OK. [Laughs] So the next clip	331
C	He seems to be somewhere in his own zone	332
T	Mm	333
C	in his own moment. And he's not wanting to come out of that,	334
T	Mm	335
C	out of it. It's like something is preoccupying his mind.	336
T	Mmm. Does that happen quite a bit at home?	337
C	Mm. He does that. He does that.	338
T	OK. Um. All right. So , The next clip. The next clip is uh. OK. So clip three, um, it's from also session six, but it's <i>right</i> at the beginning of session six, um, you can see now again it's in the hall and not in that little passage. Um. Every single session began with what we call the greeting song. Um, and when we first began the, the music therapy sessions Philip didn't want to leave the guitar alone.	339 340 341 342 343
C	Mm	344

T	At all.	345
C	Mm	346
T	Um. And so because of this I changed to the greeting song to, 'cause I started originally with me playing the guitar,	347 348
C	OK	349
T	so then I changed it so that we started off with something different with drums. Um. So you'll see the greeting song and then after the greeting song you'll see um that we tried some, some turn-taking but on the drums this time.	350 351 352
C	OK	353
T	OK. Let's look at the brightness here. That's better. Good.	354

Excerpt three

T	Would you like to watch it again, or are you happy to comment now?	355
C	I'm happy . Um... At first Philip is just like, tapping along just to tap for the sake of tapping. Um, and later on he understood that you guys needed to take turns and I like the fact that he was paying attention because right at the end when you did the double tap	356 357 358 359
T	Mm	360
C	he did the double tap. I would have thought that he would have just continued doing the	361 362
T	mm	363
C	one hand tapping um, um, which was good. Um, when you greeted, I was trying to see, 'cause I, I didn't hear him greeting back, um, or singing, I couldn't really see if his mouth was moving at all. Um, uh, behind the drum music, and...	364 365 366 367
T	I'm wondering, I've got some external speakers as well,	368
C	OK	369
T	if we can maybe, if I can put them on because it is a little difficult to hear him but it might help with the speakers. Oops [laughs]. OK. OK, let's have another listen. So that you can hear. OK. Let's see if it's loud enough.	370 371 372

Replay first part of excerpt three

C	OK. <i>Ja</i> .	373
T	And then I must also just point out, <i>right</i> in the beginning because I also missed it myself even in the session.	374
C	Mm	375

T	Right at the beginning he says hello of his own, without, you know.	376
C	OK	377
T	And then he says hello again when you hear him and he says a third time when I come.	378 379
C	Yes I heard that. [laughs]. Ja he comes in. I saw him coming in towards the guitar. It's like,	380 381
T	Mm	382
C	'let's just go for the guitar' [laughs]. Um. So what do you wanna know? [laughs]	383
T	Um. OK, do you feel anything when you watch it, how do you feel about what's happening, um.	384 385
C	Mm. [laughs]. Ah, I don't know how to put it to words. Um. I'm kind, I'm, I'm enjoying it. Um. I like the fact that he's, like, experimenting in different instruments, um, I do find that he is struggling on this, on the drum, I don't know why, but maybe I didn't observe him well because I remember at home sometimes he would come home and start tapping on the table	386 387 388 389 390
T	Mm	391
C	so I, maybe it was coming from the sessions that you guys had	392
T	Mm	393
C	because I didn't know like what you were doing that week. Um, so, he, and the strange thing about Philip sometimes, early on when he was younger I used to think that he didn't know a lot	394 395 396
T	Mm	397
C	because he doesn't um maintain eye contact or sometimes, um, he's doing his own things but I've noticed much later	398 399
T	Mm	400
C	that even when he's busy doing his own things his ears are everywhere, he picks up a lot, and when you think he's not looking at you he's actually looking	401 402
T	Mm	403
C	at you and he picks up things that you do. And he will do it at a ... at a later stage when you not, when you don't expect him to or when you don't necessarily want him to and then he will go on	404 405 406
T	Mm, mm	407
C	and he does that. And he does that as well with things that he's learned from class. He will come home and he will start, you know, repeating it or engaging me in it	408 409 410

T	Mm	411
C	'mommy you must say this', 'mommy you must say that',	412
T	[laughs]	413
C	um, you know 'you must sing like this', 'no it's not like that', um, and he starts educating us at home as well and I also find him, the way he uses his tone of voice	414 415 416
T	Mm	417
C	you can pick up if it's a teacher that's talking or if it's a child, or.	418
T	OK	419
C	So he, sometimes he does not tell me this is what he did, he just acts it out, like whether through speech or whatever,	420 421
T	Mm, mm	422
C	you know, um, ja, then he would be engaging.	423
T	Mm	424
C	So, sometimes I don't see much when he does the activity but I see it when he comes home	425 426
T	Mm, mm	427
C	and then he will translate that	428
T	Mm	429
C	into, into something.	430
T	OK, OK. That's interesting. Ja.	431
C	Coz once I taught him Monday to Sunday	432
T	Mm	433
C	He wasn't paying attention, he wasn't interested. I left it. Following morning he took the calendar to his granny 'granny look what is this, it's Monday, its Tuesday' and I was surprised it was so cool that he actually picked up the whole week. And she then said to me, no he doesn't, he said [inaudible] but he treats me like a school child. And he whenever he comes home he's always teaching me whatever he's, whatever you were teaching him. And just, I don't know if maybe he thinks that I'm maybe in his age level, or whatever, he engages with me differently. And yes his granny, he doesn't listen to her much when she instructs him to do things, he listens to me but he communicates more with her than he does with me. He uses more <i>language</i> with her.	434 435 436 437 438 439 440 441 442 443
T	Oh, OK, more language. OK. That's interesting, all right. OK. Great thanks.	444

- Um. Then the next clip we're going to look at, um, it's also a greeting and turn-taking, um it's from the beginning of session seven now, um and as I've mentioned previously it wasn't the usual place it was now in that little passage, um, and so you'll see a greeting song, and then again we'll move into turn-taking on the drum.
- C OK
There's an expression.

Excerpt four

- C [laughs] [mxm].
Um, he hasn't learned the, um, the feel of the drum that, [laugh] when you hit, 'cause I see that his hands are getting sore so he's taking turns because he's hitting on the edge of the drum, um, Sometimes I pick up that he picks up what you're doing and then other times he misses it, um, he does the tapping twice, and then he does that well, but when you were tapping three times he was still tapping twice, and then when you moved back to tapping once and then he would tap once, and then um the time when both of you were tapping I don't know what was happening there or if it's like towards the end of the song or what. Um, I also noticed he wasn't, when he did the hello song he didn't really greet or say your name. He wasn't singing much there, he was just doing the tapping. Ja. Ja.
- T OK. OK, all right. So for now all those are the clips we will look at, we're going to look at more now-now but I just wanna go through them and give my own feedback as well. [clip]

Excerpt one

- T So for me, um, this '1234 stop' thing, it's something that we'd sort of done little bit previously, um, but in this session he seemed to really clearly get it and so for me, um, it might be sort of a useful thing to have these little cues because not only did he pick up the cue when I said it he also then used it himself, so it was like a nice little shared communication thing, a shared meaning,
- C Yes
- T ja, and he also, you know he did it a little bit unclearly and it's kind of almost like he realised ok I have to be more clear, 'cause you know at the end [slightly inaudible on purpose] and I didn't quite understand that that's what he was saying and then he did it clearly and, like ok, now we stop. Um. and the taking turns vocally. This is now the first time we had sung together before but this is actually the first time I tried this I sing and you sing.
- C Oh ok
- T And that's because he seemed a lot freer in the beginning of the session. I don't know if it was the smaller space or, you know, what the story was. Um, and it was actually a made up song in the moment
- C Oh ok
- T that he very, kind of, easily responded to.

C	Mm	485
T	And, like you commented on he starts making up his own thing. But it's still musical. It's still like musically, you know, and so for me we were kind of sharing in the creating of the music. Um, and it wasn't just sort of him singing his own little thing and me my own thing, we were really kind of singing together. Um. And I think as well anything sort of, with vocalisation, for Philip is useful because sometimes he's vocal and sometimes you know like you said he doesn't speak you know, much. So you know for self-expression and for creativity and for engagement.	486 487 488 489 490 491 492 493
C	Mm	494
T	Um. Let me just see if this is off. It seems to be on. But ok. Um. There we go [laughs]. All right.	495 496
C	Probably, um, 'cause I, when you, when you came here, 'cause this is his first year, you see. And last year he was in [programme] and that was his first year in a long time to be in an environment where other children are, and I used to worry about his speech, but it seemed to have improved drastically and especially from the second term and I thought is it because he's get, he's more comfortable, is he picking up a lot from the other children, but now I'm thinking it's possible that it's also the music because the music is letting him know he needs to make a sound. And maybe through that has given him more confidence to speak out more.	497 498 499 500 501 502 503 504 505
T	OK	506
C	Because he, because every week when he comes home you find out like he is using more sentences more words and more expressions and he's understanding the fact that um, he's understanding the fact that he needs to use words to express himself. Um. I thought he would, lose a bit of that, but no it's gotten better and better.	507 508 509 510 511
T	Um, ja, um. I think vocalising is useful for him, like you said. I think it's a useful thing to have in the back pocket to try and, um, ok. the second one.	512 513

Excerpt two

T	So. Now you mentioned that it really depends on if he feels like doing it. So for me what I saw was like his movement is a bit restricted but it could be more an engagement thing than, ok well he just wants to play piano and he's just doing it to kind of make me happy [laughs] so, so for me what I tried to concentrate on whenever I did the movement was, was to get a bit of the feet kind of going because it seems like his feet are a little bit sort of, and again it might just be an engagement thing.	514 515 516 517 518 519 520
C	Mm	521
T	Um, and also I tried to not stay with one movement too long 'cause I didn't want it to become like a repetitive thing. I didn't really pick up like he's got any sort of hand flapping or anything like that but I didn't want to now cause something that he kind of gets stuck in, in doing the same thing over and over again, so that's why I kind of tried to change quite, you know, quite a bit.	522 523 524 525 526

- C Oh, ok. 527
- T Mm. Ok. Then the next... 528

Excerpt three

- T So for me, even though he moved for the guitar, he was able to then just leave it and come to, when, the beginning of the process that wouldn't have happened because you know he really, so I don't know if he, he got to understand that this was part of the process and he would still get a turn, or if he started trusting more, uh maybe me or that, you know, this was going to happen musically. 529
530
531
532
533
534
- C Uh, I think it's a combination of both. Trusting you and knowing that um, he will be able to play with the piano later. And also um, the fact that you have a routine, this is how things led to going for him to be able to accept the fact that you are the adult or you are the leader in this engagement and this is how things need to work. Coz when he doesn't know you he tends to be a bit resistant and 'I wanna do this, who are you to tell me what I need to do' and when he later realises ok this person is not going anywhere this is what we're going to do 'ok cool, this is what we're going to do' 535
536
537
538
539
540
541
542
- T Mm, ja, so, so then you also saw him move into the greeting song like you mentioned. So the greeting song is an example of an activity to bring awareness that ok now this is going to happen next. And it's quite effective to set the scene and bring understanding of, of the routine. So even though we didn't stick to exactly the same thing in the session after the greeting song we had the hello, we had some things happening, and then we had the goodbye so it was very kind of clear beginning - [clicks] end. Ja, ok. Um. And it also, the way that it's designed does encourage this sort of direct participation. Um. He freely said hello, and then I prompted him the second time, and I got a little bit over excited [laughing] because he said hello again and I was like 'yay' um, ja. So. And then I had those two drums and I realised that it's going to be difficult to do the turn-taking because I can't properly show him, uh, how. If I've got a drum and he's got a drum. Kind of. So ja that's why I moved it. 543
544
545
546
547
548
549
550
551
552
553
554
555
- C And then he got better, he kind of like knew, ok fine, this is how you actually want me to do this, and ja. 556
557
- T Mm, mm, mm. 558
- Um, ok. the fourth one. It's the other greeting. 559

Excerpt four, part thereof

- And you mentioned he would surprise you sometimes. I wouldn't have thought that he was 'ok this is video and I pose for it and I say cheese' and I was like 'wow, I think I underestimated him in that' you know? 560
561
562

Excerpt 4, part thereof

- C Mm [laughs] 563

T and there where he says stop, I was in that moment I was a bit worried that he wanted to stop but actually what we did at the beginning of each session is go through um a reminder of if he wants to leave he points to the stop sign and he says stop. And um, we didn't have it there but I think he was still kind of showing me, yes, stop, this is, you know, this is what we do at the beginning of each session. Because then he immediately went into playing drums and I realised ok he doesn't actually want to stop he's just showing me that he knows stop if he needs to stop you know.

Excerpt 4, part thereof

T Now you mentioned that he doesn't get to three, watch, he realised this but I've already taken the drum away so then he stops with the three so it could have been that I, you know, stopped the, you know [laughs]

C mm

T Ja, so you know, it could be that he realised ok it's supposed to be three

C mm

T and he reached for it but I'd already taken it away so he's like ok maybe I must stick with two. For me it's its' it's a lot about me trying to find a way to communicate with him that he can understand um, because a lot of the thing was sort of trial and error, um, ok, two drums isn't going to work because I'm not being clear enough. Um, or when he starts singing a little bit I know that he's singing something and I'm trying to also sing and I'm not quite getting it.

C Getting it, ja

Intercom, pause

T So, so, ja, um. And the one session he was, the first few sessions he was singing something and I couldn't quite figure out what it was. and I got the idea to look on YouTube, and then OK, he's been trying to sing this for me and with me and I haven't quite sort of cottoned on to what it is and then I finally figured it out, you know

C mm

T and then I could access what he was trying to bring to the session. And, um. ja. OK so that's the beginning, that's the end of part one.

C So how was he once you figured out what, how was his reaction.

T Um, he didn't have an explicit reaction but we were able to kind of continue playing together a bit more in that um, and when I figured out that he was singing ring a ring a roses but it was a slightly different version 'oh now this is what he's singing' then we could, you know, then, then it's like he understood that I got it.

C You got it, yes

T And we moved around, you know, for the *Ring a ring a roses*, and you know, um, we all fall down, and he falls down on the floor and, then he gets up again,

	and then, you know. A lot of it was also trying to access what he was bringing.	602
C	Mm, mm. I, I notice with him, like he used to do that with me, or come home and he would expect me whatever he was learning from, in class, that I should know. That I had to make an initiative every time to ask what was happening in class so that I could be engaging 'cause he would come back to me and like expects me to know, so as soon as I would know and I would sing he would beam, you would see how glad he was, and, or even if he sings something from television, and then he sings it and then he looks at me like 'come on now, you must sing along' and I'm thinking but I don't know that song, so I had to learn that song and like he would be so chuffed that he would sing and wait for me to sing, and then he would sing again and then, so, I had to start learning all these things and know what he's doing and what he's, you know	603 604 605 606 607 608 609 610 611 612 613
T	ja	614
C	he would be so pleased about that stuff, really.	615
T	ja, I	616
C	you could see it in his eyes and in his face.	617
T	Ja. I really think, so from my perspective for him it's, ja, it's sharing, and to try and sort of connect with what he's sharing. Like, when he got that '1234 stop' thing and you saw it in the clip there in the passage, there was a small expression on his face like 'I'm using this and I'm using it on purpose and you are understanding me and we're now stopping' you know there was like a small little smile.	618 619 620 621 622 623
C	Yeah, a little smile. In session 8, most of session 8 he's very happy and he's like, he knows what is expected of him, he knows what to do, and he's able to express himself and get he's more relaxed really, ja, that's that's the one thing that I saw.	624 625 626 627
T	Mm. I was also wondering if, um, and I didn't get a chance to use that passage again 'cause it's not ideal 'cause it's a thoroughfare so it's, you know, from the outside into a class,	628 629 630
C	OK	631
T	uh, but I also wondered if maybe the hall was a little bit too big	632
C	Yes, yes, big	633
T	and expansive for him because of all the kind of	634
C	there's too many, too many things happening in the room	635
T	ja and there's not enough, sort of like, sort of boundaries, and, and ja, like it's just this huge space like he's kind of in [laughs]	636 637
C	ja	638
T	um, so if there was a smaller space it might have been a nicer, kind of idea. But , ja, you now one learns these things as you go.	639 670
C	Yes [laughs].	671

- T Um, ok so. There are two options, it depends on how much time you have, because it's now five past eleven so we can move straight into a discussion about an activity or we can if you have more, a bit more time we can do the discussion of the activity with me showing you a little bit, um, more of some of the clips that maybe didn't work so well because I still had to figure out how to structure things. 672
673
674
675
676
677
- C No we can do it. 678
- T OK. All right. Great. Ok, so this is um, this one is from session four so it's kind of like the middle of the process towards the beginning of the session and he still showed quite a bit of interest in the guitar at this point and sometimes it was a bit distracting um, so I tried to move the guitar behind the curtain but I didn't realise now, that's the guitar case 679
680
681
682
683
- [laughs, pointing to the guitar case visible on the screen] 684
- C mm 685
- T so he still was, you know. Um. [laughs] 686
- C [laughs] 687
- T We had sung the greeting song and we were playing drums together, so, I tried to bring in a, a, a movement with the drums, so basically you raise your hand and then you got to *boem!* 688
689
690
- C mm 691
- T um, and he kind of responded to it with this jerky motion that you'll see that he's doing now. Um. 692
693

Excerpt five

- C is he making a hissing sound? 694
- T Um, not really, not, it's like 'tch' 695
- C I think, um, when he doesn't wanna do something that he's forced to do and then trying to throw a tantrum but he knows he can't [inaudible] and he's like I think he was, he was trying to throw a tantrum to get the guitar and the fact that I don't want to be doing this the drum thing, and I don't want to touch it but ok that's what you want me to do, 'cause, that's like, ja. And he [...] he does that at home when he doesn't want to do something. 696
697
698
699
700
701
- T Oh, ok. 702
- C But also, you know, he's bouncing and he's moving around. at first he was like laughing and but later on he's like it's not funny anymore, I don't want to do this. Let me... 703
704
705

Excerpt five, replay

- T You see now as well that we... 'do you see guitar?' 706
- C [laughs] 707

T	So I kind of was able to get his attention back again for like a little while just to extend it a little bit,	708 709
C	Mm, mm	710
	and in terms of kind of, oh we will get there and he kind of 'ok well, I'll kind of bear with you'	711 712
C	Mm	713
T	[laughs] Um, but ja. Um, and also for me what was quite interesting is that the music did manage to get his attention for a little while when I started doing the	714 715
C	Yes, yes	716
T	'1 2 3 4' then he kind of managed to be focused. Um, and then again when the drumming went louder I kind of also tried to express to him physically like, now we're going loud, you know um. Ja. And then after this we continued a little while and then we stopped and then we got the guitar. [laughs]	717 718 719 720
C	OK	721
T	Um. All right. So here we, uh, another movement one in session 4 as well. Um, and this was the, for session three we didn't do movement so he'd had a little bit of a break from the movement as well so kind of was a bit, sort of reticent, um.	722 723 724 725

Excerpt six

T	He likes to play the shakers like that.	726
C	Oh, I'm sure it must be from a TV show, ja.	727
T	It almost reminds me of like that [...] flamenco dancing. ja.	728
	Mm. So I don't know if you've got any observations [laughs]	729
C	Um. I think after the way he was playing with the shakers he kinda got a bit curious, 'what's inside here' 'cause he was like observing 'can I open this and see what's making this noise in here' and, um, and the way he's dancing, sometimes he's stiff at home he does that. And I'm like Philip 'why can't you just like, you know loosen up' you know. Um, the thing like he didn't want to go down, like, I would have showed him, bend, bend, bend. You see, it's like he's like 'ok I'm just going to do it like this, and like ok you don't want me to really do it so [...] OK, fine, I have to fall and touch the floor. Um. [laughs]	730 731 732 733 734 735 736 737
T	You know the tricks	738
C	[Laughs] Yes I know him very well. And he susses us out. 'Can I get away with that, ok she's not noticing, she's not insisting on me dancing, I'll continue doing it this way'. Um, ja, but 'cause you just remind me of it when I wanna dance with him then, 'can't you like loosen up you know, why must you be so stiff' and then, like, I would move him around like this, sometimes when he wants to distract us from something he will do that he will come to me and say 'mommy	739 740 741 742 743 744

	let's dance' and then I will hold his hands and then he would do this and it would be like me moving his hands,	745 746
T	yes, and that's exactly what I felt, like I'm moving him	747
C	he's not moving himself, yes [laughs]	748
T	Ja, ja. So for me as well it was kind of like ok, how do I think about doing this differently um, and like you said sort of like being more kind of um expressive in what I kind of expect from him.	749 750 751
C	Mm	752
T	Um, and I also thought well maybe I've given him too much with the shakers and now I want him to dance like in a very specific way so I kind of thought well, ja maybe there's too much going on, like you said he's getting interested in the shakers, I've given him the shakers and now I want him to do something else, so it was about trying to find a way to present the activity for me.	753 754 755 756 757
C	I don't actually think that it was too much, I just feel like he, his mind got too curious about 'what's making this noise inside this thing, I want to see what's inside these'. Ja.	758 759 760
T	All right. Um. No that's interesting, ja. um. And that	761
C	Coz sometimes there's a lot that's going on and he's still able to pick up everything that is happening.	762 763
T	Mmm, mm, mm. And I like that piece of information that he susses out [laugh]	764
C	He's very cunning, he's very clever.	765
T	Um, ok. So the next little clip it's from session two so quite early on.	766
C	Mmhmm	767
T	Um, and here he'd been playing guitar for quite a long time and I was trying to, you know, move on a bit. Um and when I did take the guitar in session one he would pull	768 769 770
C	pull	771
T	pull it back to him. He didn't wanna let it go. Um, so here his back is to the camera for quite a lot of it so I'm just going to explain what he's doing it's a bit difficult to see. When he kneels, um, he actually reaches for the guitar again and he tries to pull it away from me towards himself so I'm using the clip to more show my own interaction and my own response to what he's doing.	772 773 774 775 776
C	Mm	777
Excerpt seven		
T	This turned out to be ring a ring a roses (hums tune). We got interrupted a bit there. It's like slightly different words.	778

C	Did you teach him this song?	779
T	No, I think it was in class.	780
C	Oh	781
T	He says 'My turn Philip' [laughs]	782
C	[laughs]	783
	Here I see he's very curious about how are those strings making sound. And if,	784
	if I'm tapping in a different place it makes a different sound. Now you [laughs]	785
	have taken it and he sees the way that it sounds the way when you play with it	786
	and the way it sounds when he plays with it and how can he do what you're	787
	doing and that the strings are more interesting to him	788
T	Mm	789
C	than him figuring out this music thing, this, the song that you guys are trying to,	790
	to engage in.	791
T	Mm, ok. This is um, I think the first time I managed to him kind of stop trying to	792
	take the guitar and just sort of ok, continue the way ... and at first when I said	793
	my turn, and then he said my turn, I wasn't sure if he was just echoing	794
	because I didn't know him yet, I didn't know if he was just echoing what I was	795
	saying but then when I said my turn Kerry, and he said my turn Philip, and I	796
	was like, 'oh you know'.	797
C	Mm, mm	798
T	You know what's happening here, no it's my turn. And I was like, ah, ok. so	799
	[laughs]	800
C	[laughs]	801
	Ja, there he was like seeing what are your boundaries as well.	802
T	Mm, mm	803
C	You know, that now it must be my turn, now it must be your turn, what are you	804
	going to do about it,	805
T	Mm, mm, mm	806
C	Are you going to insist that it's your turn or am I going to get away with it? And	807
	he does that a lot, especially if you are new with Philip he tends to be a bit	808
	stubborn and resistant, um, and then when he sees that oh, ok fine you are	809
	the adult, you're the teacher, you're the instructor, this is what you want to be	810
	done now. Otherwise he can easily operate in his own way and do whatever	811
	that he wants to do	812
T	Ja	813
C	if you let him do what he wants to do. And when he sees that ok there are	814
	rewards and there are times of certain things to done then he will do that	815

	because he knows ok, we're going to move on, were' not going to get stuck doing this.	816 817
T	[Laughs]	818
C	So he responds well. And ja, I notice when he meets people for the first time, first he doesn't pay attention to your face, he doesn't pay attention to your voice, he doesn't,	819 820 821
T	Mm, mm	822
C	he will just zoom in to whatever it is that he wants, if it's your phone or it's your keys that's what will fascinate him, but with time when he gets to know you then he starts responding better, like your name. Like at first he wouldn't greet people you know, this, Philip say hello to <i>sisi</i> , now he knows without even being prompted that he needs to greet and now he's even gone further when she asks how are you he says I'm fine and then she will ask like how was school and he will say school is nice and like, [...] you know like the conversation is getting better, like in every time, you getting there, you're now engaging you're understanding the, the question and you're able to respond appropriately.	823 824 825 826 827 828 829 830 831 832
T	mm, mm. Ja, as well in the beginning when I was still trying to, sort of, figure him out a little bit and what we could do and couldn't do I didn't know how much I could push, um, what he was understanding, or not understanding, and again it was about sort of trying to find a way that I could communicate and he would respond and understand. And then I did sort of realise hmm, he's', like especially with the camera, he's really picking up a lot more maybe than people kind of originally sort of realise because he kind of keeps to himself a bit,	833 834 835 836 837 838 839 840
C	Mm	841
T	um, ja. ok. So ja, so for me as well here it was about being kind of like you said setting boundaries, being firm but also calm but just saying, it's my turn, ja. And he did respond to that.	842 843 844
	So here is right in the beginning, well, of session four, this is where I was trying to establish turn taking. but for me it wasn't it didn't work very well. And I'll speak a bit more after.	845 846 847

Excerpt eight

T	So for me, when I went and watched this, um, as someone who's learning music therapy there are a lot of things that I picked up that I could have done differently. So I think it's useful when we're thinking about an activity to kind of think about these things. So first I kind of thought well I'm using two drums and I can't, I can't show him what I'm expecting or what I'm trying to do, um, and I think that he knows that something's expected. For me I think he's kind of like becoming a bit sort of uncomfortable because something's expected but I'm not being clear enough I'm talking a lot and when I wanted to stop I do this and wanted to play I do this and it's all the same and [laughs], also as someone doing music therapy we are taught ok we must have the music there to kind of support and there's no music I'm just saying 'my turn' then 'your turn' then 'my turn' and there's no, there's no, even kind of proper beat or anything. So if you	848 849 850 851 852 853 854 855 856 857 858 859
---	--	--

	think about this one compared to the other turn taking ones, it's very, very different. Um. ja, so I don't know if you've got any input.	860 861
C	Mm. I'm just show, something.	862
Excerpt eight, partial replay		
C	[...] that's what I noticed, I noticed that even you may, because you had, you had a certain idea of what you wanna do, to have happen, but even though I see him there on the small scale that there is still a bit of turn-taking happening and he is picking up a lot in what you want him to do but it's much more fast-paced and there's not, uh, proper breaks but you guys are in synch like you, I mean he's picking up on what you want.	863 864 865 866 867 868
T	Yes, ja, so. So what I took from this is really that I had to kind of change the way I was communicating if I wanted it to be a kind of clear sort of, not that he was not able to understand, just that I was kind of like a bit all over the place, you know [laughs] too many kind of, too many unclear signals, so I mean ja there is and he does come in with the 1 2 3 4 stop, he's there, he knows what it is, ja, um.	869 870 871 872 873 874
C	Ja	875
T	Ja, so.	876
C	You know, even though there was a time when he was, I remember, he was frustrated but he went back to being his happy self, he was laughing enjoying [...]	877 878 879
T	OK, so the last one. Um, and you again, you may have a completely different sort of take on this which is perfectly fine. Um. This is from session 7 again, it's toward the end of the session so this is the one where he pointed out the video camera and with the la la la la la la that kind of turn taking,	880 881 882 883
C	Ok	884
T	ja. um. and the turn taking on the drum as well. So here, um, he'd already participated in the vocal turn taking and then just before this he'd been playing the little thumb piano, the mbira,	885 886 887
C	Mm	888
T	for quite a while.	889
C	Mm	900
T	So I wanted to try and kind of get in there, you know, because he was quite focused on this now and I felt like I was	901 902
C	he was shutting you out	903
T	yes, [laughs], ja um, so I really wanted to try and make it a two way thing again.	904 905

Excerpt nine

T	So, for me what I kind of thought that Philip is very focused on the mbira and if I wanted to do the turn taking thing then maybe I shouldn't have so many other things you know, because like you said he's very interested and now he's you know. Ja, so it was also learning about	906 907 908 909
C	What it the first time that he had this instrument	910
T	Um, it wasn't, he had that before, um, but I can't think of if he had it the session before, I actually can't tell you. Um. Every now and then you know we played it and, um, but ja it's the first time I kind of tried to do the singing along with it, um, ja. So, for me, it was also about how much I am expecting him to do, not that he can't do it or doesn't understand or pick up what's going on, but now he's interested in that	911 912 913 914 915 916
C	ja, he was more fascinated in that than the singing, he was not taking his turns, he was not picking up your cues, or anything like that, he was more to his own music and this thing.	917 918 919
T	Mm	920
C	And I wonder if really his hand was sore because ...	921
T	[Laughs]	922
C	or if he did it just to distract you from whatever.	923
T	Mm, mm	924
C	Sometimes he does that . Because I mean if it was really sore he would have like put it down and. like, massaged his fingers but he took it right back. So.	925 926
T	Mm, ja that's interesting. [laughs]	927
C	[Laughs]	928
T	and the one time we were playing drums and he also stopped and he said 'Kerryn, blow'.	929 930
C	[Laughs]	931
T	I was like, oh ok. It was, ja [laughs]. So, ja. so that's, that's the last clip that I have, um. So ja.	932 933
C	Ok	934
T	Now, we'll move into discussing an activity. And you know we can, we can, I've got this to, to, to write on or to however, however you'd like to do it. Um. So like as a brainstorm kind of...	935 936 937
C	OK	938
T	Um. Yes. So, like I mentioned, kind of like the activity is generally for a specific goal and that can be anything from like a learning thing to a social thing so,	939 940

	um. It sort of depends on what you would like to try and work on. You've mentioned um engaging with him, in the questionnaire you mentioned tantrums but I couldn't work on that because he never presented that to me, um, maybe because he didn't know me well enough yet to be kind of, you know, only five weeks, and maybe I didn't sort of like push him, you know I was still also, um	941 942 943 944 945 946
C	Mm	947
T	Ja. so. And you also mentioned tasks, um, so we could design an activity around any of those sort of things, whichever you...	948 949
C	I don't know what changed this term.	950
T	Mm	951
C	Last term [teacher] said um because of one of the children that was in the transport it was affecting Philip and another pupil, but they are still in the very same transport this term,	952 953 954
T	Mm	955
C	yet he doesn't have many melt downs or irritations as he used to.	956
T	Mm	957
C	So I really don't know what's happening. Um, but one of the things that we did was [teacher] was, she said she lets him work up steam,	958 959
T	Mm	960
C	so she said if you can do it on the stair case, so when he gets frustrated (?) or about to have a melt down or something, we take him down the stairs, you know, just to jump down and jump up and then jump down	961 962 963
T	OK	964
C	and I don't know if it's a combination of that that has actually calmed him down. And we don't, he hardly makes noise, he he's a lot content this term than he was last term and I did say to [teacher] even though it was in the middle of hopelessness but I kind of like thought I can't always remove him from situations that are irritating him he has to learn to deal and handle them, you know, because these things will come up, and, but I don't know how to make him cope with it but he just needs to find a way to cope with it.	965 966 967 968 969 970 971
T	Mm, mm	972
C	But also the child that used to do, have these melt downs in the, in the car, the granny says he's much calmer, you don't find him making the noise as he used to last term. So I don't know what has changed with him um	973 974 975
T	Mm, mm	976
C	from last term to this term. So things have been a bit different, and, and, so I don't know what they're doing 'cause they said they introduced OT and they're	977 978

	doing one on ones now so I don't know if that is also helping him	979
T	Mm, mm	980
C	'cause we do try look at his diet, is it this, is it that, cut out TV, you know. But on Tuesdays when he comes home he's very tired. He likes the trampoline so he does tend to do that anyway. Um, so I mean we haven't had, we have not been having tantrums this term.	981 982 983 984
T	OK	985
C	And also, I gave um, teacher Natasha a puzzle. Philip, I don't know, he has a set of four puzzles, one is farm animals, the other one is the bathroom, and I think the other one is the kitchen and then there's one that is just purely fruit but it's not whole fruit, they're all cut in the middles like this,	986 987 988 989
T	OK	990
C	and for whatever reason it freaks him out and he's never wanted to play with that, with those puzzles	991 992
T	Mm	993
C	even if he saw the box he would not enter the room so I don't know why his granny thought it would be a good idea 'cause sometimes we used to shout Philip I'm going to give you a hiding and then it would make him even more angry and then we thought ok so shouting mm,	994 995 996 997
T	Does not work	998
C	Mm-mm, it doesn't work, so. And he's not listening to us. So one day she said out of frustration, 'Philip do you want the puzzle'. and he said no. Then she said 'well you better do your homework' or 'you better read' or 'you better do whatever' and then she got more response out of him so it seemed to be the one thing that would make him listen to us and stop whatever he was doing so, and then Natasha was telling me that he's making noise, he's not concentrating, all transition and whatever, and I asked her, you know, don't you wanna try the puzzle. Don't show it to him, it will freak him out.	999 1000 1001 1002 1003 1004 1005 1006
T	Mm, mm	1007
C	But as long as he knows it's there he's fine. But if he sees it he will not even enter the room. So he must not see it.	1008 1009
T	Mm	1010
C	So we gave it to her but we wrapped it up and said he must not see you taking it out of his bag because he's going to always think that it's in the bag so but as soon as he knew that there was the puzzle in Natasha's drawer he was, he does everything that is expected of him. Even in his extra class when I take him on Tuesday he will always try to find a way to go to the bathroom and it was always to avoid whatever he needs to do.	1011 1012 1013 1014 1015 1016
T	Mm	1017

C	And then she asked me, does he have a weak bladder or something I said "no Philip is taking a chance" [laughs].	1018 1019
T	[Laughs]	1020
C	You know, so like, seriously. So I said let him go when he comes in, after that say you're going to put the puzzle behind the door. Put the puzzle behind the door, close the door, after that Philip will not bother you again. And Philip has been an angel ever since, nobody's complaining about anything, he just does whatever that he needs to do. Even though now he knows the puzzle is, doesn't matter that the puzzle's not there but he assumes that the puzzles there.	1021 1022 1023 1024 1025 1206 1027
T	OK, so, so, that doesn't seem to be an issue, um, maybe, I mean maybe you want to think about continuing things like vocalisation or, um, interaction with you?	1028 1029 1030
C	Ja, and, and maybe something to learn more about his body or dressing up, or activities around the kitchen.	1031 1032
T	OK	1033
C	Like. He used to wash his own plate,	1034
T	Mm,	1035
C	which he has now stopped and he refuses to do and he does that, he does that a lot with his gran, 'cause somehow I feel sometimes it's easier for her just to do things and then when she insists and then he doesn't want to she just lets him.	1036 1037 1038 1039
T	Mm	1040
C	And then she says 'no this child only does things when you want him to' I said 'no its because he has learned that he can get away with it for you, whereas with me he doesn't get away with it'. Like the one thing that he now doesn't like, he, he never used to eat green beans, which we, we accepted that, but he used to eat peas and he used to eat mielies, 'cause you get these mixed vegetables.	1041 1042 1043 1044 1045 1046
T	Yes,	1047
C	Now he doesn't eat peas, anything that's green he doesn't want. Now he doesn't want to eat the mielies in the, in the mixed vegetables. Now so the only thing that he eats in there is just the carrots. And I said, he is, and, and when I insist with him she says 'well you know you don't like certain things as well and when you don't like them you don't eat them'. I said but when I was a child I didn't have a choice	1048 1049 1050 1051 1052 1053
T	Mm	1054
C	I ate all my vegetables,	1055
T	Mm	1056
C	and because of that I am able to enjoy a wide variety of vegetables because I	1057

	got to really taste them	1058
T	Mm	1059
C	and accept them.	1060
T	Mm	1061
C	If you, when you say Philip doesn't like this and you stop and Philip doesn't like this and you stop, how many things, exactly he's going to have a limited things that he enjoys	1062 1063 1064
T	Ja	1065
C	eating.	1066
T	Mm	1067
C	And he doesn't like, and she says, "no just leave it" and I said "you're making an excuse". Philip will gag because he doesn't want to but when he knows he can get away with it he eventually finds a way to navigate around it. Then she says to me no you will do it when you're here but I can't always be with Philip 24/7 just to monitor that he's doing this. And besides he's going to do it with me but he's not going to do it with her. So if I can find ways maybe for with music, because she loves, Philip and I singing, just in general whenever [laughs] we do tasks or doing washing she'd be like singing some song and then she cleaning [...] so maybe if it's something they can do together, they can sing the song together, they can have the task.	1068 1069 1070 1071 1072 1073 1074 1075 1076 1077
T	Nice, ok	1078
C	And ja, do a task together, 'cause I think it will make him calm down and let him get through the whole process of doing this thing without it being mundane.	1079 1080
T	Mm, ok, all right. OK. So should we focus then on, on things like washing his dishes or.	1081 1082
C	Mm, mm.	1083
T	All right, so.	1084
C	I also wanna take out, um. And sleeping routine as well, um, if before he goes to bed he could just get rid of TV, tablets, phone, everything. Because I am reading this articles at home and advice and if you want him to have a long night's sleep he mustn't have any of those,	1085 1086 1087 1088
T	screens	1089
C	ja, and it seems to be quite a bit of a challenge right now to get him to sleep without. Coz she says, she says to me 'but it's easy, Philip he stays in bed, if I give him a tablet he will stay in bed eventually he will fall asleep but he will fall asleep with the thing on.	1090 1091 1092 1093
T	Hmm	1094

C	He will not put it on the side and sleep. He has not learned to sleep on his own without having a gadget with him. But he will sleep, and it will contain him, it will keep him in the bed but he doesn't want to go there without...	1095 1096 1097
T	OK, so how about we work on the sleeping routine then, ok. And obviously I mean the activity's not going to like, "fix him" you know,	1098 1099
C	Mm	1100
T	We're trying to work on his strengths and what he likes in order to try to hopefully change some behaviour. OK. So. Maybe, um, so you've said you've got a drum, um, maybe we can think about a drum...	1101 1102 1103
C	We've got all sorts, he's got a piano as well, small piano but, I don't know if those things. Or maybe he can play them when he doesn't watch TV at the table and then he knows thereafter ...	1104 1105 1106
T	ja so like the greeting song.	1107
C	Mm	1108
T	And then he knows after the greeting song it's ... so maybe this can be like the sleeping song or the going to bed song... um. So I think it would take some work to, especially in the beginning, to have him understand the routine, ok now it's the sleeping song, now it's the bed time. So you know, it could even be part of the sleeping song to pack away.	1109 1110 1111 1112 1113
C	Mm	1114
T	Pack away the tablet.	1115
C	Mm	1116
T	So, it could just be like a simple, um [sings: pack away, pack away, finished for today] that kind of very simple, and then to try and, you know, switch off the things, um. It might also be an idea to build an activity, so, and then he could get used to one part of it and then build on to it, you know what I mean, rather than us like trying to give him this big activity to get used to right in the beginning. So I mean, maybe. We could do it this way <drawing>. If he's, here's our goal, sleep with no tablet. OK. Then we're thinking maybe a song or, maybe because we've got a drum, ok. Maybe you can start over here. Right? And he can have the tablet for the first however often. How'd you feel about that and then he gets used this bit.	1117 1118 1119 1120 1121 1122 1123 1124 1125 1126
C	Mm.	1127
T	And then move on to the sort of packing away tablet. OK. So like this would be step one, this would be step two where he gets rid of that. Um. Ja. OK. So, you could have. How do you feel about having like an interaction, definitely it would take some work I think, but an interaction with the drum, I mean it does, it doesn't, it's not something that you have to be a musician to play. You saw that he does do the turn-taking. You could even end maybe with that cue that he understands, that '1234 stop'.	1128 1129 1130 1131 1132 1133 1134

C	Mm	1135
T	Because it's quite a definite cue. He does understand it. I don't know, you thoughts?	1136 1137
C	Yes, that should be good.	1138
T	So that's his special cue, right. Um. But then it would have to, I think it would have to be done like every time. Otherwise he's going to know, ok well like you said he can sort of suss out, he has little ways to [laughs]	1139 1140 1141 1142
C	[Laughs] OK, I won't go because she doesn't, that's the thing.	1143
T	So maybe, maybe this stage, when do you think this should happen? In what room do you think this should already be in the bedroom?	1144 1145
C	Mm, yes.	1146
T	Bedroom. And then when we add this, the aim is to get this away so maybe this could be in a different room and you could lead from here into the bedroom.	1147 1148 1149
C	OK, so maybe, you're saying we'll start where then. Are we starting here?	1150
T	Well, no this is going to be stage one, to get used to this?	1151
C	OK, so where would he be doing this one then?	1152
T	So this is step one in terms of just getting him used to this bit, so this, just this bit	1153 1154
C	OK, getting used to it.	1155
T	So even if he has the tablet at this stage, just while he's getting used to it. I think. Because I don't know if you're going to be able to go all the way from the beginning, getting rid of the tablet, do the drum, do the stop, he might kind of manage to wiggle out of it.	1156 1157 1158 1159
C	Mm	1160
T	So here wherever he starts off with the tablet, wherever he is um it might work to have this packing away song. That he knows.	1161 1165
C	Oh	1163
T	So once he's used to this, then you add another layer. So this happens first	1164
C	OK	1165
T	in the activity, but you only sort of start doing it once he's used to this. Does that make sense?	1166 1167
C	Yes, OK.	1168

T	So, and I think what would be important is you mentioned, um, the routine.	1169
	Right? So to keep doing this as a routine would be important but also the song	1170
	itself mustn't change every time. And it doesn't have to be a very long	1171
	complicated song like you heard it can just be a short thing that you repeat a	1172
	few times or, you know, and granny as well, the same song. So it would take a	1173
	little bit of practice for you two to...	1174
C	[laughs]	1175
T	but like you said you always sing, and always you know. So it's not something	1176
	that's beyond what you can do, you'll be able to.	1177
C	Ja	1178
T	You think so?	1179
C	Mm hmm	1180
T	Ja. So how do you feel about that? It's a little bit sort of vague still.	1181
C	Mm, ja, a little bit. Yes.	1182
T	So I think, I think this is quite an important part. [indicates cue]	1183
C	Yes,	1184
T	Because we got a lot done with this a lot. A lot. [laughs]	1185
C	Laughs	1186
T	We got finishing activities, we got changing instruments, all sorts of, you know,	1187
	ja	1188
C	[Laughs]	1189
T	[Laughs]	1190
C	He will be surprised, like, 'you know that?'	1191
T	And just a very clear like '1234 stop'.	1192
C	Philip's like very [...]	1193
T	And so um what do you think we should be doing, what do you think you're	1194
	comfortable doing with the drum, I think as a kind of shared goodnight?	1195
C	Mm, shared activity. Ja, that sounds good.	1196
T	So, I mean I don't know. Do you feel maybe comfortable sort of. I don't know	1197
	how big his drum is but sort of doing the sort of same thing 'mommy's turn and	1198
	Philip's turn'	1199
C	mm hmm	1200
T	and now we're playing together	1201

C	Mm	1202
T	and 1234 stop.	1203
C	Ja, that, that would do.	1204
T	Ja, I mean. Something he's familiar with. Um, ja, it's something that you can share as well, which is nice. And you can build that into it.	1205 1206
C	Mm	1207
T	I think as long as it doesn't become too exciting.	1208
C	Yes, that's the other thing I'm thinking, don't stimulate too much.	1209
T	So he's lying down, maybe the drum doesn't work, maybe you can decide ok let's not stick with the drum, let's make it another song. You know. Um.	1210 1211
C	There's this, um, <i>Doctor... Doctor McStuffin? Doc McStuffin</i> , ja that girl with the plush toys. She has this toy. She has this song, um, a sleeping song that Philip knows.	1212 1213 1214
T	And he knows it? OK.	1215
C	I know the song too, but there are certain parts that I don't know yet. And but he understands it's a sleeping song. But. I've tried to use that song, like in the day, during the day, 'cause sometimes I find that he does get tired	1216 1217 1218
T	Mm, mm	1219
C	but Philip refuses to sleep. Um, in the day. And I wish he would. because he does get, when he hasn't had a good night's sleep and then I want him to sleep in the afternoon. There was only one person who's not here anymore who used to, um, get Philip to sleep, that's because he was stern.	1220 1221 1222 1223
T	Oh	1224
C	He was like, Philip you sleep at school at one o'clock so at home you go sleep. And at eight o'clock he just would say it's eight o'clock, go to bed. And at first he tried, Philip tried getting out of it but then he kind of got used to it, ooh I can't get away with it let me just go do it. And he'd like walk straight into bed. Sleep mode. But [laughs] it seems that he's never been able to listen to us and to get him to sleep in the day. But as it would get him to be so much, but he's granny worries that if he sleeps in the day then he's going to want to sleep late.	1225 1226 1227 1228 1229 1230 1231 1232
T	OK	1233
C	When he does usually sleep in the day, she'll say 'ooh ah-ah, he's going to keep me at night, he's going to keep me awake' because they, they sleep together, she, he sometimes refuses to go to bed [...]. But every time as he slept, [...] if it's completely dark, if it's pitch black then he could sleep. But if it's not completely dark, when there's a crack of light, I don't know what happens, it changes the way things look and he used to be scared so he'd cover himself	1234 1235 1236 1237 1238 1239

	so he can stay there but nowadays he doesn't. I'm going to have to sit there	1240
	and do this with him but like the other day we tried to do something now go to	1241
	bed I'm going to tuck you in [...] so I guess it's about doing it, doing an activity	1242
	a couple of times and then he	1243
T	ja, like you saw I had to try a few times and I had to kind of change a few little	1244
	things in the beginning but I couldn't change too much 'cause you know we've	1245
	got to try and do it over, um. But you know you might find that maybe singing	1246
	the <i>McStuffin</i> song with the drum will work or you might find ok actually the	1247
	drum's not going to work with this. Or you might find actually you know what	1248
	this <i>McStuffin</i> song makes him want to be awake and watch TV.	1249
C	Mmm, ja that's the other thing it could, now I'm thinking it could be triggering a	1250
T	ja, something else	1251
C	[laughs]	1252
T	so you're going to have to sort of find little ways, you know, um. Ja. So. All	1253
	right. So we've got a good idea of there, I think.	1254
C	Mmhmm	1255
T	Now here. Are you happy to, you know, sit with granny and make up just a	1256
	short song like <pack away, pack away, finished for today>. I actually packed	1257
	away instruments with him using that kind of thing once or twice.	1258
C	Mm	1259
T	And he got the idea	1260
C	He knew it was pack away time.	1261
T	Mm, mm, or you know.	1262
C	At home sometimes [laughs] it's, you know, packing away like sometimes he	1263
	wants to pack away things but because he's not ready to do it yet then one	1264
	thing, [laughs, inaudible through laughing]	1265
T	[laughs]	1266
	OK	1267
	And so you also just got to, um, things to be careful of. And I think you already	1268
	have a good kind of idea of this. So we want to avoid things that like, and	1269
	because this is like a routine and a sleeping time song we don't really want to	1270
	do it at other times in the day. So I'm not sure what would your feeling be let's	1271
	say he cottons on to this song and he starts doing it at other times in the day.	1272
	What would you think is best to then do. Because I don't know if you're going	1273
	to be able to be like, shhh don't do that.	1274
	[Laughs]	1275
C	[Laughs]	1276
	Um, from what I understand..	1277

	I think I will distract him with something else, like maybe reading a book or I'll change the song [...]	1278 1279
T	Ok that sounds good. And um, we would also want to be careful of something that clearly causes distress. And you're his mom so you've got an idea of that, you know what rather than this being a good healthy thing it's actually kind of something is not working it's making him more kind of anxious or more tense or whatever. So obviously I'm not going to be there so I can't see ah well let's try something different. But you're his mom like, like you've given me so much input from your perspective and sort of said ja no he's kind of taking you for a ride and there he's kind of, you know. So you've got all this other knowledge that I don't have access to. Um. And I don't think this would happen but we also don't want to want to have, like, this whole kind of developing specific repetitive actions, hand flapping or you know, rocking or...	1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290
C	Habits	1291
T	habits ja. I didn't see that myself.	1292
C	He doesn't generally flap. When he was young there was a time, he was like three, and there's a lot of things that he's not doing anymore but he would do that. Like this walking on toes, he was very young. There are a lot of things he lost along the way very quickly.	1293 1294 1295 1296
T	OK	1297
C	The only thing it's the echolalia that he does a lot with words now, instead of just mumbling. That's all that has kind of like stayed. Coz sometimes like I say I forget that even Philip has autism and then he does something that is autistic and then I'm like 'ok'. [laughs]	1298 1299 1300 1301
T	[laughs]. Ah, ok. All right so how do you feel, what do you feel about this do you want to work on it more. Do you have any further input, any questions, any concerns. Further ideas.	1302 1303 1304
C	No, first, you know. Any habits are, because even this he was sleeping with the tablet just the tablet came just a few months ago and it's not something that he had before. And before that he had, but also he used to just go to bed I don't know what used to happen. But he never used to use these things as crutches like always needing it to go to bed.	1305 1306 1307 1308 1309
T	So now it's something that's...	1310
C	Oh, now that I think about it he used to have a motorbike, a toy motorbike that he would go to bed with and play with it and then put it next to the bed. I don't know when it happened. I think it was his granny 'cause she was tired and then he was making noise so it was easier for her to give him a game to play and then so that he doesn't go and switch on the TV and wake up the whole house. So she would just stay there and play until he fell asleep so I think it was easier to have the tablet.	1311 1312 1313 1314 1315 1316 1317
T	So you want to kind of like nip it in the bud	1318
C	Yes.	1319

T	Coz we don't want him not to stay awake even longer and longer and longer.	1320
C	Yes, that's what I said to her that these things are going to make him stay awake longer but she said 'but it keeps him quiet and it keeps him in bed, he doesn't disturb me, like if you notice he doesn't go around the rooms now and switching on the TV and making the whole house noisy, he understands that I'm sleeping and he doesn't disturb me. And I say to her but that's a crutch. He needs to know to fall asleep at this time without a crutch.	1321 1322 1323 1324 1325 1326
T	Well what can we. Ja maybe this we can try and shift things but again it's not a magic cure it would have to be something like...	1327 1328
C	And it would also engage us.	1329
T	ja and that I think it would be nice	1330
C	Because I don't think we have much of an engagement just before he goes to bed because Philip, he baths, then he eats and then he watches TV and thereafter he goes to bed. So with me it's just more observation. Whereas during the day because ... At 5 'o clock I used to be at home and then ... at time ok I had to read this book and it became easier with time. And then I don't know what happened, at the time I was travelling and then kind of and we never continued. And also he, then granny ... he is not, he doesn't want to do it with her. He doesn't mind doing it with me but he tells her no so it's like ja that's the thing that I need to also now make sure that I'm consistent like if we do something I know that I just ... I won't be there to do those things. And her being that she has to be firm as well.	1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341
T	Ja. And I mean it might be worthwhile to you know sometimes do it together with her, and sometimes she does it and sometimes you do it. So that together he knows that she's getting into it	1342 1343 1344
C	Ja	1345
T	but he also gets used to either you or her doing it so he doesn't now think ok granny's only doing it so therefore... or, you know mommy's only doing it so therefore it's not.	1346 1347 1348
C	Ja I think that's going to definitely help. [...] bonding session. it is ... focus on the [...] and the two of them together and I mean Philip really loves sport, they tend to watch a lot of sport and I don't get that. And he's everything, every channels what's playing what's ... what's repeating so he goes "Mommy, Supersport four". And I can't be playing repeats now again. [...] You understand.	1349 1350 1351 1352 1353 1354
T	I'm also not a sports fan. I think maybe it would be a good thing, because obviously I'm not there and it's your thing, your activity now. We can maybe, not as part of the research but just to maybe touch base in maybe six weeks just to see how you feel about it what's going on, you know, if you've got any concerns. That would be my main kind of thing because you're free to kind of like see ok, well this is not really working and this	1355 1356 1357 1358 1359 1360
C	Ja, ja.	1361

T	this is, ja. You're free to do that, this is, you know. Um, but I definitely want to be in touch if you've got any concerns or any- 'cause it must be beneficial, it mustn't be something that causes more anxiety.	1362 1363 1364
C	Ja no, definitely. I'll do it, I'll keep you posted.	1365
T	OK cool. Let me just write this again [...] So shall we say 'sleeping routine'. and then so you know here, 'get used to this first'. Then... OK. To be careful of: um, what did we say? We said 'causing extra distress, so if you see...	1366 1367 1368
C	Or forming a habit - things like I can't sleep without you singing the sleeping song, or you know, or now mommy's not here to sing so I'm not going to sleep...	1369 1370
T	So let's say forming further expectations that are rigid.	1371
C	Yes	1372
T	OK. And this one I can't think it will do but I'm just going to put it as well. And we also said want to be something that happens, um, not sort of on and off	1373 1374
C	Mm	1375
T	to be consistent	1376
C	yes	1377
T	And, not develop , I can't see how this would do this but we're just going to put it, like rocking, flapping. If you see somehow it's causing some,	1378 1379
C	Mm	1380
T	ja.	1381
C	OK	1382
T	Ja, and then ... it works nicely and his strength of music and has this nice kind of family interaction in, great. Excellent. Well thank you very, very much for coming to the interview and for all your time, um, especially since we did run over by half an hour	1383 1384 1385 1386
C	[laughs]	1387
T	but I hope that you found it interesting, I certainly did, ... so is there anything you wanna add at all, I mean we discussed quite a lot I think	1388 1389
C	Yes [laughs] Ja we have. No I was quite excited when they told me that he was going to be part of this training discovery ... I thought this is nice I'm looking forward to it, um, because it's Philip's area of strength and enjoyment. So the fact that now we're able to integrate this into the home and being able to do it together 'cause you know that this things, I sing on my own, and granny sings on her own, but being able to do this it's as a family that's going to be pretty nice and be able to use something that he loves to teach him other things.	1390 1391 1392 1393 1394 1395 1396

- | | | |
|---|---|----------------------|
| T | Mm. Great. So thank you, ja. Thank you again. for sharing all your interpretations and you insight, it really, really thank you very much, ja and for discussing the actives and the. Ja. | 1397
1398
1399 |
| C | It was fun. I'm going to hang this on the wall so that I can see | 1400 |
| T | Ooh, I should have written neater! [laughs] | 1401 |
| C | [laughs] | 1402 |

Appendix O: Interview Guide:

Thank you for being willing to participate in this interview.

As you have been informed, the interview will be recorded on video. Any information gathered from the interview will be kept anonymous- in other words, no records of the interview will be kept with your name attached to them and your name will not appear in conjunction with data appearing in the produced research.

If you are comfortable with this procedure and the video-recording of the interview then we will begin.

Interview questions:

Part One:

1. Firstly, could you give me your understanding of what music therapy is, and what takes place in music therapy sessions?

Probes:

- How do you think your child might respond to music therapy?

2. Have you ever used musical activities in the home with your child?

Probes:

- If so, in what way?

- If not, how do you think you may like to incorporate musical activities in the home?

After viewing first video extract from music therapy session:

3. What do you see and hear in this excerpt?

Probes:

-How do you feel about what is happening?

- Did you notice anything about [child's name]'s interaction with me in this video clip?
- Is it similar or different to what takes place in the home environment?
- What do you usually do in these situations?
- Do you notice anything about the [child's physical behaviour] way that [child's name] moves?

Question 3 and relevant probes will be repeated if appropriate after viewing the second and third extract.

Part Two:

Possible questions to move into collaborative discussion/creation of music activities to be transferred to the home environment:

4. Do you think that the activities that you saw in the extracts may be used somehow in the home?

Probes:

- Do you think similar activities could be developed that could be used in the home environment?
- Do you have any ideas for such activities?

A discussion between myself and the parents would follow. Potential activities for the home environment would be formulated and refined through a collaborative process. This would draw on information presented by parents during the interview, as well as my previous analysis. Activities would therefore be specific to the child in question.

Concluding remarks:

6. Before we end, is there anything you would like to add?

Thank you for being part of this process and for sharing your interpretations and perspectives about music therapy activities with me, and for discussing how activities may be developed and used in the home environment.

Appendix P: Table of interpretations and codes

Text in purple indicates final unit of my interpretations as music therapy student if this does not include all text in the cell.

Text in blue in indicates final unit of Helen's interpretations as caregiver if this does not include all text in the cell.

Codes of my interpretations as music therapy student are labelled Txx.

Codes of Helen's interpretations as caregiver are labelled Cxx.

If a corresponding code from the other party is present relating to the same material of the code in question, this is indicated in the label, for example T22/C22 indicates that Helen expressed an interpretation relating to the same material for which I expressed an interpretation.

Excerpt one					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line
How do you feel?	I enjoy watching the interactions.	T1 / -- Therapist: enjoys interaction			1
	I am pleased that P showed understanding of the '1234 stop' cue and feel that this indicates some form of development, socially or relationally within the music therapy sessions.	T2 / -- Therapist: enjoys shared meaning			2
		T3 / -- Shared meaning: social or relational development			3
	I felt surprised and happy when the vocal turn-taking exchange developed.	T4 / -- Therapist: enjoys turn-taking			4
	I was somewhat disappointed when P ended the exchange because this is the first time that such an exchange occurred	T5 / -- Therapist disappointed at ending			5

			.. it was quite interesting to see him [crossing legs after therapist]	C6 / -- Caregiver: interested in child mimicking movement	6
Interaction	P level of shared meaning and communication seems to be indicated through use of '1 2 3 4 stop' cue.	T7 / -- Shared meaning: cue			7
	P was engaged and responded relationally and musically during the Interaction.	T8 / -- Engagement: relational and musical			8
	Seems to be a gentle rapport between us	T9 / -- Relationship: rapport			9
	Vocal turn-taking established	T10/ -- Vocal turn-taking established			10
	Co-creation of music toward end of activity through vocal improvisation by both parties	T11/ -- Vocal improvisation: co- musicking			11
	Seems to be a musical and relational connection, particularly during the vocal turn-taking	T12/-- Vocal Turn-taking: connection established			12
Reported behaviour at home	Reported to sometimes be creative in singing and changing melodies. I think that P's extended vocal improvisation	T13/-- Vocal improvisation: creativity and			13

	reflects this. No report about specific activity or turn-taking.	expression			
			I also find at home if he hears a certain word it triggers a certain song in him. He would suddenly think of a certain word or I would say a certain word and then he'd start singing about that. This here also seems, he seems to be doing the same.	C14/-- Trigger for song: words	14
Music therapy student	I positively reinforce and affirm P's actions when establishing the activity. I am trying to encourage him in his musical offerings.	T15/ -- Therapist affirms musical offerings			15
	As I take the guitar I cross my legs. P mirrors this and I verbally comment with affirmation. I interpret this action as possibly indicating a deepening relationship between P and myself.	T16/C16 Mimicry: deepening relationship	P is very observant like when he is in the presence of somebody... I notice he was crossing his legs because you've crossed your legs and he's very much like that.	C16/T16 P copies others' movement	16
			I'm surprised that he decided to do that [mimic crossing legs] with you	C17/T16 Uncertainty: motivation behind mimicry	17
			I don't know when he feels that he needs to do such... maybe he thinks that it's part of the music scene.	C18/T16 Uncertainty: motivation behind mimicry	18
	I link my hands and stretch them out in a movement that P sometimes makes, saying "shall we get ready?" Since P	T19/ -- Therapist matches movement:			19

	mirrored my action, crossing his legs, I wanted to reciprocate by using an action he had often used in previous sessions.	response to client's mimicry			
	I ask if P will sing with me. P reaches to strum the guitar and I put my hand out saying "wait, Kerry's turn". I gesture to myself as I begin initiating a vocal turn-taking exchange. I speculate that P may have been responding to "with me" when he stretched out to play guitar.	T20/ -- Possible misunderstanding: words			20
	He stopped playing when I asked him to wait.	T21/ -- P Waits when asked			21
	I continue to gesture to the person whose turn it is, leaning slightly toward P when it is his turn and nodding my head. My gestures and head nodding are intended to clearly indicate whose turn it is and to assist in communicating the expectation in the turn-taking activity.	T22/C22 Therapist's gestures support turn-taking	I notice that you're doing turn-taking in the singing and that you lead and then you want him to follow and sometimes he does that	C22/T22 P follows therapist at times	22
	I move my body side to side in time with the music.	T23/ -- MT moves body to beat			23
	I try to match P's vocalisation musically.	T24/ -- MT matches P musically			24
	I quickly interrupt P when he begins making quacking sounds and start singing the initial melody. I believe his behaviour	T25/ -- Loss of focus: quick intervention			25

	reflected a shift toward isolation and potential perseveration which is why I intervened quickly and strongly.				
			...towards the end of the clip it's when the two of you sing together because he starts leading and then you decide to incorporate what he's doing into what you're doing and kind of like jam together.	C26/ -- Matching leads to co-musicking	26
	When P initiates a '1234 stop' cue I suddenly sit back in my chair and stop playing, imitating surprise.	T27/ -- MT imitates surprise when P initiates stop			27
Philip	P seems comfortable ending his turn and giving me the guitar when I initiate a '1234 stop' cue.	T28/ -- Shared meaning: cue			28
		T29/ -- P comfortable with ending turn			29
	P responds vocally, copying and also offering new material. Sometimes he responds quickly and at other times there is a slight pause as I indicate to him	T30/C30 P responds vocally: echoes and offers material	Is he singing from what you guys used to sing? Because I saw towards the end he was continuing on his own without waiting for your cue	C30/T30 P continues singing independently	30
	There is a level of expression and engagement not previously seen in sessions.	T31/C31 High level of expression and engagement	He was smiling and he was enjoying himself	C31/T31 P's enjoyment	31

	Exercises choice by using ' 1 2 3 4 stop' cue. Uses shared cue rather than simply stopping or trying to take the guitar.	T32/ -- Exercises choice: use of cue			32
		T33/ -- Shared meaning: cue			33
	Stretches forward to strum guitar when I say "you going to sing with me?" but then stops, watches, and continues the activity by vocalising. Stretching may have been in response to "with me" but P continued with vocalising and turn-taking after modelling and encouragement	T34/ -- Possible misunderstanding: words			34
		T35/ -- Continues turn-taking after modelling and encouragement			35
	I speculate that there is a level of social awareness, evidenced by the understanding of and use of '1234 stop' cue, turn-taking, joint creation of music.	T36/C36 Social awareness: co-creation of music	... kind of like jam together	C36/T36 Co-creation of music	36
	I believe that self expression and creativity was enacted through improvisation.	T37/C37 Improvisation: self expression and creativity	Is it because he knows what's following or is it because he's coming up with his own ideas?	C37/T37 Uncertainty: motivation behind expression	37
			I also heard him singing something that , when he said 'ya ya ya' it comes from tv.	C38/ -- Source of expression: media	38

			I find at home if he hears a certain word it triggers a certain song in him... he seems to be doing the same...	C39/-- Source of expression: words	39
			He derails a bit.	C40/-- Loss of focus	40
	At one point began making quacking sounds and looking away, which seemed to indicate he was moving toward isolation and perseveration.	T41/C41 Loss of focus	He derails a bit	C41/T41 Loss of focus	41
	Stopped quacking and looked back, continuing to participate when I intervened. I speculate that I interrupted his withdrawal through my intervention.	T42/ --- Loss of focus: intervention regains P's focus			42
	Sits back and smiles faintly after initiating '1234 stop' cue. Perhaps there is some pleasure for P in his use of the cue due to his ability to exercise will and choice, or in response to the shared meaning in the cue.	T43/C43 Pleasure in shared meaning	Yeah, a little smile.	C43/T43 P smiles	43
Most of [the session] he's very happy			C44/T43 P is happy in the session	44	
T45/C45 Pleasure in exercising choice		he knows what is expected of him, he knows what to do,	C45/T45 P knows what is expected of him	45	
		he's able to express himself and he's more relaxed.	C46/T45 P can express himself	46	
		T47/--			47

Philip's movement	Movements seem slightly compact or limited when playing guitar. Perhaps due to small space.	Small space: possibly restrictive			
	Crosses leg after I do. Perhaps a sign of developing relationship and trust rather than simply mimicking.	T48/C48 Uncertainty: motivation behind mimicry (trust)	P is very observant like when he is in the presence of somebody... I notice he was crossing his legs because you've crossed your legs and he's very much like that.	C48/T48 P copies others' movement	48
			I'm surprised that he decided to do that [mimic crossing legs] with you	C49/T48 Uncertainty: motivation behind mimicry	49
			I don't know when he feels that he needs to do such... maybe he thinks that it's part of the music scene.	C50/T48 Uncertainty: motivation behind mimicry	50
	Rocks in relation to music. Rocking is not something he usually does. Possibly a sign of his engagement with me and the music.	T51/-- Uncertainty: rocking as sign of engagement			51
	Makes a lot of eye contact, especially when he becomes more energetic in his singing. Looks away when beginning to make quacking sounds, looks back when I intervene. It may be that P's eye contact is related to his level of involvement and engagement.	T52/-- Uncertainty: eye contact as sign of engagement			52
Begins to tap his hands with more energy as the music becomes more energetic.	T53/-- Taps hands energetically as music becomes			53	

		more energetic			
Music	P is strumming with an even pulse, around 120 beats per minute s I play on the <i>djembe</i> , beating a crotchet to his quaver pulse	T54/-- P strums evenly at 120 bpm			54
	My singing becomes softer as P begins to stop playing guitar, <i>the intensity of my voice matching his dwindling playing.</i>	T55/-- MT matches playing vocally			55
	I sing a known song that P previously sang <i>Sounds of animals song</i>	T56/-- MT sings what P sang in earlier sessions			56
	P stops playing and I then do as well.	T57/-- P stops playing and MT then stops			57
	I play guitar in a major key and vocal turn-taking is established. We both sing using the vocable <i>la</i> .	T58/-- Vocalise together on <i>la</i>			58
	P's vocalisations relate to my own initially.	T59/C59 Vocalisations relate to MT's	I'm noticing that you're doing turn-taking in the singing and that <i>you lead and then you want him to follow and sometimes he does that</i>	C59/T59 P follows therapist at times	59
	P changes the pattern, singing rising tones with intensity at the end of a four bar phrase. Vocalisations still relate to the	T60/C60 P changes vocal pattern, still relating to music	<i>Towards the end of the clip it's when the two of you sing together because he starts leading</i>	C60/T60 Turn-taking leading into co-singing	60

music.				
Brief contrapuntal exchange for about 14 bars.	T61/C61 Contrapuntal exchange develops	And you decide to incorporate what he's doing into what you're doing and kind of like jam together	C61/T61 Matching promoted co-musicking	61
P vocalises something from previous sessions 'wol-fan-da' and music becomes more lively, strumming faster and continuous.	T62/C62 P vocalises from previous sessions and music becomes more lively	I heard him singing something that comes from tv [ay ay ay]	C62/T62 Source of expression: media	62
P makes quacking noises briefly.	T63/C63 P makes quacking noises: loss of focus	He derailed a bit	C63/T63 Loss of focus	63
I sing a variation of the melody from the beginning of the activity.	T64/-- MT's singing refers to beginning of activity			64
P sings a phrase and repeats it - a '1234 stop' cue. Music stops	T65/-- P initiates '1234 stop' cue			65
as we progressed, P began to sing along with me, his musical offerings becoming more complex and could be thought of as becoming more explorative and individualised	T66/-- Complex musical offerings: heightened expression			66
Sense of joint musical creation	T67/C67 Co-musicking	Then you decide to incorporate what he's	C67/T67 Matching promoted	67

			doing in to what you're doing, and kind of like jam together	co-musicking	
Other	P had sung in previous sessions but it was usually in a more isolated manner, often stopping when I tried to reflect or mirror his musical offerings or not really reacting to my attempts to make contact	T68/-- Refers to previous sessions. Parent did not have this information: not coded			68
	I speculate that positive reinforcement and affirmation helps to encourage P and let him know about expectations.	T69/-- MT's Affirmation: communicates expectations			69
	P's openness during this session could possibly be a reflection of the more intimate space in which the session occurred. Another possibility is that I was feeling less rigidly structured since I had needed to improvise or amend a lot of my activities because of the change in venue. Perhaps he was picking up on this - although I felt some anxiety I was forced to be more flexible and 'go with the flow' a lot more. Perhaps this freed him up to be more creative and expressive because the expectations inherent in more structured activities were relaxed. It could	T70/C70 Small space: possible openness	There's too many things happening in the room [in reference to the large hall]	C70/T70 Large space: too stimulating	70
		T71/-- Less rigid structure: possible openness			71

	also have reflected a growing comfort and a deepening relationship within the sessions.	T72/-- Growing relationship: possible openness			72
	The turn-taking activity relates directly to the goal of offering opportunities for practicing social skills. It also offered a means for self expression and creative expression. Vocalisation can be regarded as having the potential to further social skills.	T73/C73 Turn-taking: practicing social skills	...I used to worry about his speech but it seemed to have improved drastically and especially from the second term... now I'm thinking it's possible that it's also the music because the music is letting him know he needs to make a sound. And maybe through that has given him more confidence to speak out more... he's understanding the fact that he needs to use words to express himself.	C73/T73/T74 Music creates expectation of verbal expression	73
		T74/C73 Vocalisation: practicing social skills			74
	Establishing cues may be a way of decreasing isolation through the creation of shared meaning.	T75/-- Shared meaning decreases isolation			75

Excerpt Two					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	
How do	I felt a little awkward and unnatural as well	T76 /-- Therapist feels			76

you feel?	as quite restricted in my movements. I had to be quite directive to try to encourage P's movement. I also wonder if this was counter transference, from P possibly feeling awkward or restricted with his movements.	awkward and unnatural			
Interaction	The interaction was largely directive as I chose, modelled and verbalised movements that we taking place. This is because I was specifically trying to offer opportunities for P to extend his physical range of experience.	T77/C77 Therapist was directive	You're engaging him in dance, you're wanting him to share with you in the music.	C77/T77 Therapist engages client in dance	77
		T78/C78 MT attempts to extend physical experience		C78/78 Therapist: invites client to share in music	78
	P did respond to all movements, although he required some prompting at times. I speculate that this behaviour may be an extension of his restricted range of movement.	T79/C79+C80 Restricted participation reflects restricted movement	He is busy wanting to be on the piano. He wants to be there and you're trying to engage him in the song.	C79/T79 Focus is elsewhere	79
				C80/T79 Displays compliance	80
P needed to watch what I was doing for some of the movements, and would then try to mimic my movement. The movements did not seem to come 'naturally' to him initially.	T81/-- Movement seemed unnatural			81	

	I think that moving in conjunction with someone else could be valuable to P in terms of socialisation.	T82/C82 Co-movement: socialisation	He likes doing things on his own but as soon as you show interest it's like "ok bye, I've moved on, I'm not interested"	C82/T82/T83/T84 Rejects co-movement (outside of session)	82
	He may also need to focus on the other person's movements.	T83/C82 Co-movement may be important		83	
	It may be that practicing this helps him to become more able to understand or become attentive to the physical communication of others.	T84/C82 Co-movement: helps understanding of other's movement		84	
Reported behaviour at home	P reportedly does dance to music. Whether he does so with more or less freedom is not established.		At home sometimes I do take him and I say "Let's dance" and he is a bit rigid.	C85 Displays rigid movement (outside of session)	85
			When he wants to dance and he's in the mood then he dances and then he shakes and he moves and he says "Mommy shake, turn, turn, stomp".	C86 Dances freely when interested (outside of session)	86
				C87 Engages in dance when interested (outside of session)	87
			When he's in the lead and he's interested [that's when he dances]	C88 Dances freely when leading (outside of session)	88
			He does that [seems to be in his own zone in his.. not wanting to come out of that]	C89 Withdraws to isolation	89

Music therapy student	I did not spend too much time on a single movement to avoid repetitive and perseverative behaviour and to provide possibilities for P to gain a wider experience of his body .	T90/-- Therapist: changes movements to avoid perseveration			90
		T91/-- Therapist offers variety of movements			91
	I move to put on the music (off-camera) and say "P, we're going to dance" as he has moved to the piano and is sitting down there. I move to the piano and say "no, not yet" as P is opening the piano. I need to encourage P and guide him to participate in the movement activity, possibly because this holds less interest for him or because his movements are usually quite restricted. Another possible reason is that my comments are verbal.	T92/C92 Focus is elsewhere	It's when he doesn't want to be engaging	C92/T92/T93 Focus is elsewhere	92
		T93/C92 Therapist communicates verbally			93
		T94/-- Therapist's verbal directions possibly less effective			94
I close the piano lid and hold out my hands to P. He takes them and I then lead him to the open space in order to move. We stand and begin moving. I model the movement, also verbally indicating what the movement is. Modelling the movement is important because P often doesn't respond to purely verbal direction/requests.	T95/-- Modelling is necessary for communication			95	

	<p>We start by holding hands. I am moving P's arms. <i>It almost seems as though I am moving for him.</i></p>	<p>T96/-- Therapist moves for client</p>			96
	<p>I let go and say "Let's clap", modelling the clapping and doing so in time to the music. I then ask him to move his feet as I do so, tapping one in front of the other and stepping side to side in time to the beat. He looks away and I say his name. <i>It seems like his attention waned here and I hoped to gain his attention by calling his name.</i> I then say "move feet" again. As he does so I say "yes". <i>I am trying to be affirming.</i> I then lift my arms and say "stretch up, stretch up, stretch up, stretch, stretch, stretch, stretch" in a slightly strained voice <i>as though I am putting a lot of effort into stretching.</i> I then bend down and say quickly "and down, touch the floor" as I touch the floor. I say "nice" as he touches the floor <i>once again affirming his participation and movement.</i> I then say "move feet" again and this time tap alternating feet, one in front of the other. I then move on and say "P, shoulders.". As he moves I say "Ja". We then move back to clapping hands and I say "nice".</p>	<p>T97/-- Focus is elsewhere</p>			97
		<p>T98/-- Therapist affirms client's movements</p>			98
		<p>T91/-- Therapist's voice reflects movement</p>			99
	<p>I say "turn around" and begin doing so - he follows this action. I say "Good job" and then "the other way" as I turn in the other direction He turns again but in the</p>	<p>T100/-- Therapist affirms client's movements</p>			100

	same direction as before. I say good job again to provide affirmation and encouragement. I say "and touch the sky" and then "touch the floor" and say "yeah" as he does so.				
	At the end of the activity I say "Yeah! Good job." I feel that encouraging and affirming P is important, particularly since he does not seem to move freely with ease.	T101/C101 MT's Affirmation important to encourage movement	At home sometimes I do take him and I say "Let's dance" and he is a bit rigid. It's when he doesn't want to be engaging.	C101/T101 Displays rigidity when uninterested	101
Philip	P begins by moving to the piano, sitting down, and opening the lid as I put on the music and indicate that we are going to dance. P's movement to the piano could be because I moved away to turn on the music, or perhaps because the piano holds more interest for him than dancing.	T102/-- Focus is elsewhere			102
	He takes my hands as I hold them out to him and we then move to a space in order to dance. This might indicate trust and willingness to participate, or may be compliance.	T103/C103 Taking hands: trust	When I want him to do it and then he will just do like this "ok you want me to do it, fine, I'll do it".	C103/T103/T104 displays compliance	103
		T104/C103 Taking hands: compliance			104
	He allows me to move his arms back and forth as we begin and I then let go of his hands and say "let's clap". He does begin to clap but his clapping is not really in time to the music and his movements are quite	T105/-- Movement: low body tone			105

	relaxed almost as though he has low body tone.				
	He then looks away as I move on and ask him to move his feet. He looks back as I call his name and he moves his feet in a manner that is related to what I am doing but is slightly restricted. It seems as though he has difficulty with motor co-ordination, particularly with his feet. As I stretch up and ask him to stretch he does lift his arms up but is not really stretching. He then touches the floor a little after I do so. I speculate that P needs time to process/watch the movement before being able to attempt it himself.	T106/C106 Movement: lack of co-ordination, especially feet	Before watching this clip I kind of like knew that P is a bit stiff but I was not focussed on it. And he is. Even the stamping... there's Disney Junior Mickey Mouse and Goofy, they have a song that they do... and P is always engaging and he laughs and he does the dance with him	C106/T106 Movement: stiff	106
		T107/C107/C108 Movement: watches before attempting		C107/T107 Engages in dancing: media	107
				C108/T107 Stamps feet: media	108
	We move on to moving the feet again. P does move them, following my movement (now a forward/back motion), although his movement is a little 'shuffling', once again almost relaxed. I move my shoulders and P responds, not moving his shoulders but rather tilting his head side to side. The movement looks quite a lot like what I am doing but is not quite the same as he is essentially keeping his shoulders still. We then move back to clapping hands.	T109/-- Movement: shuffling feet			109
		T110/-- Movement: similar but not same			110
	He pauses and watches me as I turn around and he does so too after a	T111/-- P follows MT's movements after			111

	moment. I then indicate that we should turn the other way and he turns again, but the same way as before. He then reaches his hands up and touches the floor as I do these two movements.	watching			
	He then moves toward the piano at the end of the activity.	T112/-- P Moves to piano at end of activity			112
Philip's movement	Movements seem somewhat restricted and uncoordinated at times. I speculate that this may reflect his apparent tendency toward isolation and perhaps his sense of self within the world. Increasing freedom of and comfort with movement may assist with self-expression and creativity. Perhaps encouraging flexibility and movement may transfer to other modalities.	T113/C113 Restricted movement reflects isolation	He dances on his own	C113/T113 Dances on own at home	113
		T114/C114/C115 /C116 Flexibility in movement may transfer to other modalities	He likes doing things on his own but as soon as you show interest it's like "OK, bye, I've moved on, I'm not interested"	C114/T114 Rejects interaction at home	114
			He seems to be somewhere in his own zone in his own moment and he's not wanting to come out of that. It's like something is preoccupying his mind	C115/T114 Focus elsewhere	115
				C116/T114 Displays isolation	116
	Does follow my movements after prompting and encouragement. I speculate that P needs to observe the action first. Perhaps the movement itself is a more effective form of communication at this point.	T117/-- Movement: watches before attempting			117

	<p>Paused at times before making movement, particularly when involving feet. P does not move his feet much, or seems to have difficulty moving them with flexibility. Helping him to practice these movements may allow him to become more aware of and more comfortable with his body and his movements, since restriction here would necessarily affect balance, co-ordination, walking and pace.</p>	<p>T118/-- Practicing movement may lead to physical confidence</p>			118
	<p>Seemed to pick up movements quicker when repeated later in the activity. This might suggest that regular opportunities to expand his range of movements and experience of his body might be beneficial.</p>	<p>T119/-- Practicing movement may be beneficial</p>			119
	<p>P responded to my movement and directions by moving as well. However, his movement was a bit restricted and also seemed a little bit undirected or overly relaxed. This was particularly the case when moving his feet.</p>	<p>T120/-- Movement: restricted, especially feet</p>			120
Music	<p>The music is pre-recorded, Freshly Ground <i>Doo be do</i>. The music is in a major key in 4/4 time, approximately 90bpm. Instrumentation includes female vocals, acoustic guitar, drum kit, keyboard, sustained strings, penny whistle. It is playing at moderate volume. The music seems well-suited to support flexible and controlled movement. It is upbeat but not too fast and includes a</p>	<p>T121/C121 Music: seemed well-suited to activity</p>	<p>I thought he would have enjoyed it, I thought he would have wanted to dance to the song or sing along with it</p>	<p>C121/T121 Music: seemed well-suited to activity</p>	121

	strong rhythmic base providing stability. I feel like it has a warm, easy quality but is not sluggish in terms of quality or pace.				
	During the music I give vocal directions, clap to the beat, sing occasionally. I did not want the music to be merely background to our movement. I hoped that it could assist in the activity by providing a steady beat and melodic/harmonic interest	T122/-- Music: seemed well-suited to activity			122
Other	The activity may provide possibilities for P to gain a wider experience of his body and his physical self.	T123/C123 Practicing movement may lead to physical confidence	This is nice for exercise and listening up	C123/T123 Goal: exercise and listening	123
	The activity relates directly to the goal of increasing freedom of movement.	T124/-- Goal: increase freedom of movement			124
	His teacher mentioned that he has recently begun to 'walk in lines' with his head down. Perhaps movement activities could combat this tendency and prevent it becoming a habit.	Parent does not have access to this information, not coded			125
	Perhaps P would move more freely to well-known music in his home environment.	T126/C126/C127 Known music may be more effective	I thought he would have enjoyed it, I thought he would have wanted to dance to the song or sing along with it	C126/T126 Expectation: P's enjoyment	126

			He knows the song	C127/T126 Music is known	127
--	--	--	-------------------	-----------------------------	-----

Excerpt 3					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line
How do you feel?	I realised after the fact that P had muttered my name softly during the greeting song. I then prompted him to say hello to me and after he did so I felt concern that I did not clearly acknowledge his greeting.	T128/-- MT concerned that P's greeting not acknowledged			128
	When he next said hello to me in the song I was excited and I then acknowledged his greeting a bit too much, losing the structure of the song both vocally and rhythmically.	T129/-- MT is excited and loses structure when acknowledging P			129
	When the turn-taking activity was established I was excited. This was the first time that I had effectively set up a turn-taking activity.	T130/-- MT: excitement at turn-taking			130
	When P continued the turn-taking pattern once I stopped tilting the drum I was pleased and I hoped that this would continue.	T131/-- MT: hope for continued turn-taking			131

	I felt a little disappointed when he did not remain within the pattern for a protracted period.	T132/-- MT: disappointment when turn-taking ends			132
	However, after watching the clip I realise that it was almost as long as the initial pattern where I tilted the drum.	T133/-- Turn-taking continued for as long as initial pattern			133
			I don't know how to put it to words. I'm enjoying it.	C134 C: enjoys interaction	134
			I like the fact that he's experimenting in different instruments	C135 C: likes P's exploration of instruments	135
Interaction	Perhaps P's willingness to give up the guitar reflects a growing sense of trust.	T136/-C136 Relinquishing guitar: sense of trust	Uh, I think it's a combination of both [trust and routine allowing him to relinquish guitar]. Trusting you and knowing that um, he will be able to play with the piano [guitar] later. And also um, the fact that you have a routine C137	C136/T136 Relinquishing guitar: sense of trust	136
	Perhaps P's willingness to give up the guitar reflects a growing understanding about what is involved in the sessions.	T137/C137 Relinquishing guitar: understanding of sessions		C137/T137 Relinquishing guitar: understanding of sessions	137
	The interaction seems to be quite flowing. There seems to be a good connection between P and myself.	T138/-- Good connection between P & MT			138

	When I clearly explain that we will start with drums first and move on to guitar later, P relinquishes the guitar and moves to the drum, playing willingly .	T139/-- P leaves guitar and plays drum willingly			139
	P seems quite attentive , looking mostly at me, sometimes at the drum.	T140/-- P seems attentive: eye contact, focus on drum			140
Reported behaviour at home	P's mother reported that he does greet if greeted first. Turn-taking not reported upon.		I remember at home sometimes he would come and start tapping on the table so maybe it was coming from the sessions you guys had.	C141/-- Possible tapping at home reflecting drumming in sessions	141
			When he was younger I used to think that he didn't know a lot because he doesn't maintain eye contact or sometimes he's doing his own things but I've noticed that even when he's doing his own things his ears are everywhere, he picks up a lot. When you think he's not looking at you he's actually looking at you and he picks up things that you do.	C142/-- P is paying attention even when seemingly uninterested	142
			At a later stage when you don't expect him to or when you don't necessarily want him to then he will go on and he does that [enacting material from past observations]	Refers to contextual information not directly related to interpretations of excerpts. Not coded	143

			He will come home and he will start repeating it [what he has observed or learned] or engaging me in it	Refers to contextual information not directly related to interpretations of excerpts. Not coded	144
			He starts educating us at home [about what he learned and did]	Refers to contextual information not directly related to interpretations of excerpts. Not coded	145
			The way he uses his tone of voice you can pick up if it's a teacher that's talking or if it's a child	Refers to contextual information not directly related to interpretations of excerpts. Not coded	146
			Sometimes he does not tell me this is what he did, he just acts it out, through speech or whatever	Refers to contextual information not directly related to interpretations of excerpts. Not coded	147
			Whenever he comes home he's always teaching me whatever you were teaching him	Refers to contextual information not directly related to interpretations of excerpts. Not coded	148
			I don't know if maybe he thinks that I'm in his age level, he engages with me differently [than he does with his granny]	Refers to contextual information not directly related to interpretations of excerpts. Not coded	149
			He listens to me [when telling him to	Refers to contextual	150

			do things]	information not directly related to interpretations of excerpts. Not coded	
			He communicates more with her [granny] than he does with me. He uses more language with her.	Refers to contextual information not directly related to interpretations of excerpts. Not coded	151
Music therapy student	I begin the session by letting P know that we will start with drums. My intention is to prepare him for the starting and remind him of the greeting song. He moves to the guitar and I guide him to the chairs and the drums, saying that we will first play drums and say hello before moving to the guitar and I point to a drum.	T152/-- MT reminds P about beginning of session			152
	As P reaches to a drum and beats a rhythm I vocally reflect this rhythm and then say "nice, nice, good job" and play it on the drum. My reflection of the material he plays is an attempt to allow him to feel heard.	T153/-- MT reflects material to indicate P is heard			153
	I was also trying to 'capture' this rhythm as it was the most complex rhythm he had played..	T154/-- MT attempts to capture P's complex rhythm			154

	I can't determine whether the rhythm was intentional or if accidental.	T155/-- Uncertainty: rhythm intentional or accidental			155
	I move into the greeting song and begin beating straight crotchets. After greeting P in the song I point to myself and say "and me?". I nod as P greets me in the song. The pointing is intended to assist in communication and my nodding serves as affirmation.	T156/-- MT communicates with body language			156
	When it is next time to greet me in the song I point to myself multiple times and when P responds with my name I say "yes!" excitedly and play a quick, soft roll on the drum. I was really trying to prompt P to say my name and was very excited as he did so. This excitement transferred to my playing in the form of the rapid roll. However, it did derail the flow of the greeting song somewhat.	T157/-- MT's excitement at P's greeting derails song			157
	I reach over and beat P's drum three times, saying 'boem, boem, boem'. As P's playing is a bit scattered I pause then say "Let's play together". I raise my hand in an exaggerated manner, breathing in loudly, and then drop it on to the drum and say "boem". I continue beating on the drum saying "1 2 3 4", with the first and third beat accented. I then move one drum away and move closer. This is an attempt to capture P's attention and focus in the	T158/-- MT: attempts to gain P's attention using exaggerated playing and counting			158

	<p>hopes that P will then be able to experience playing in a more focused manner.</p>				
	<p>I initiate a turn-taking exchange, tilting the drum to myself and then P, depending upon whose turn it is to play. I begin singing a commentary "Kerryn's turn, and P's turn". I beat the drum three times, pausing on the fourth beat to move the drum. When it is my turn to play I lean back in my chair, when it is P's turn I lean forward toward him with the drum. I tilt the drum for 8 phrases (of four bars each). I then stop tilting the drum, leaving it on the floor between us. I continue the turn-taking pattern, initially pointing to myself when it is my turn. As I stop pointing to myself (after 4 phrases) P comes in a little faster than before and then plays with me when it is next my turn. I play a short roll on the drum, which P mirrors when it is his turn. <i>The use of a single drum allowed me to set up the exchange clearly.</i></p>	<p>T159/-- MT uses single drum to establish turn-taking</p>			159
	<p><i>This was then accompanied by singing, the words and the rhythm providing further signals as to whose turn it is and the beat provides stability.</i></p>	<p>T160/-- Turn-taking: Singing and rhythm provide signals</p>			160
	<p><i>When I stopped tilting the drum I continued to use gestures to communicate.</i></p>	<p>T161/-- MT uses gestures to continue turn-taking</p>			161

	When I stopped using gestures P began to fall out of the turn-taking pattern.	T162/-- MT stops gesturing and P stops turn-taking pattern.			162
	P initially moves to pick up the guitar, and makes a low, creaky/grumbling vocalisation as he does so. He begins to pick it up as I move toward him to take the guitar and reiterate that we will first be playing drums and doing the hello song. As I take the guitar and move to the chair he holds out his hand as if to take mine. He relinquishes the guitar easily. We sit down and he begins to play the drum as I point toward it. He plays a rhythm that I then mirror and then taps it quickly, tensing his body. P showed a lot of interest in the guitar and initially (during first few sessions) he did not want to leave the guitar or allow me to have a turn playing. I speculate that P felt comfortable enough to relinquish the guitar - perhaps because of a familiar session structure or because of a growing relationship of trust.	T163/-- Relinquishing guitar: possible sign of trust			163
		T164/-- Relinquishing guitar: possible familiarity of structure in sessions			164
	I move the drum in front of P and he beats quickly and softly and with a 'floppy' hand. He plays a quick pulse of semi-quavers. As I sing the hello song he looks at me. After saying hello to him in the song he mutters "Kerryn" (almost inaudible). I continue the greeting song and he greets	T165/C165 C166/C167 P plays with low body tone	At first he is tapping along just to tap for the sake of tapping.	C165/T165 P displays compliance	165

	me in the song with some prompting. This is repeated.				
	As the greeting song ends he continues to play in an almost perseverative manner, even as I try to intervene with counting and a strong beat. P stops playing as I move my own drum away and shift closer.		I do find that he is struggling on the drum.	C166/T165 P struggling on drum	166
			I don't know why [he seems to be struggling on drum], maybe I didn't observe him well.	C167/T165 Uncertainty: own level of observation	167
	During the turn-taking activity P beats the drum three times in the same way that I do, when I tilt the drum toward him (three crotchet beats and a rest on the fourth). The first time it is his turn he pauses a bit and is not quite within the structure of the rhythm but after that he is squarely within the beat. Perhaps he was initially unsure of the interaction and then became more comfortable with the developing pattern.	T168/C168 P's comfort with turn-taking pattern increases	And then he got better, he kind of like knew, ok fine, this is how you actually want me to do this.	C168/T165 P's comfort with turn-taking pattern increases	168

	When I place the drum on the floor and stop tilting it he leans toward the drum slightly when it is his turn. He remains within the turn-taking pattern for 6 4-bar phrases until he reaches forward during my turn to beat with me. I play a quick roll to change the pattern and when it is his turn he also plays a quick roll. I think that my quick roll was an attempt to fit in my turn before P played again in order to preserve the turn-taking pattern. After this, the turn-taking pattern did not continue.	T169/-- MT's roll: attempt to preserve turn-taking pattern			169
Philip	P moves toward the guitar, making a low grumbling sound.	T170/-- P approaches guitar at beginning of session			170
	P initially moves to pick up the guitar, and makes a low, creaky/grumbling vocalisation as he does so. He begins to pick it up as I move toward him to take the guitar and reiterate that we will first be playing drums and doing the hello song. As I take the guitar and move to the chair he holds out his hand as if to take mine. We sit down and he begins to play the drum as I point to it. He plays a rhythm that I then mirror and then taps it quickly, tensing his body.	T171/-- P moves to guitar and then relinquishes it willingly			171
T172/-- P plays drum readily				172	

	<p>I move the drum in front of P and he beats quickly and softly and with a floppy hand. He plays a quick pulse of semi-quavers. As I sing the hello song he looks at me. After saying hello to him in the song he mutters "Kerryn" (almost inaudible). I continue the greeting song and he greets me in the song with some prompting. This is repeated.</p>	T173/-- P beats drum with limp hand			173
		T174/-- P responds verbally in greeting song			174
		T175/-- P responds in greeting song when prompted			175
	<p>As the greeting song ends he continues to beat in an almost perseverative manner, even as I try to intervene with counting and a strong beat. P stops playing as I move my own drum away and shift closer.</p>	T176/-- Perseveration on drum			176
	<p>During the turn-taking activity P beats the drum three times in the same way that I do, when I tilt the drum toward him (three crotchet beats and a rest on the fourth). The first time it is his turn he pauses a bit and is not quite within the structure of the rhythm but after that he is squarely within the beat. When I place the drum on the floor and stop tilting it he leans toward the drum slightly when it is his turn. He remains within the turn-taking pattern for 6 4-bar phrases until he reaches forward during my turn to beat with me. I play a quick roll to change the pattern and when it is his turn he also plays a quick roll.</p>	T177/-- P echoes MT's structure of beating			177
				C178/--	178

			Sometimes I don't see much when he does the activity but I see it when he comes home and then he will translate that into something	C does not see much in activity but sees when translated at home	
Philip's movement	P often plays with what seems like reduced muscle tone. His wrist is often limp as he rolls his hand on the drum rather than beating it with a stiffer hand. At times he jerks his body slightly, along with his shoulders almost like he is jumping in his chair. This happens briefly just before the greeting song. It may be that directed movement activities are important for P to potentially increase his sense of control and stability.	T179/C179 Reduced muscle tone: movement activities important	In the beginning he is tapping along just to tap for the sake of tapping.	C179/T179 Drumming initially displays compliance	179
	When it is his turn during the turn-taking activity, P leans in toward the drum as he plays. This may suggest more involvement or intent rather than simply positioning of the drum as he could play from where he was without leaning forward.	T180/-- P leans toward drum: possible increased involvement			180
	For the most part, P maintains eye contact or looks at me. He does sometimes look down to the drum but he does not look around the room very much. I believe that P was engaged and focused during the activity.	T181/-- Eye contact: possible sign of engagement			181
Music	P begins by vocalising something in a gruff, croaky voice as he begins to pick up		I saw him coming in towards the guitar. It's like "let's just go for the	C182/-- P focused on guitar	182

	the guitar.		guitar" [laughs]		
	When directed to the drum he beats a rhythm which I then mirror before beating single crotchet beats for the greeting song. This was an attempt to allow P to feel heard and I had hoped that the rhythm might be carried through into the activity but P did not continue the rhythm.	T183/-- MT attempts to continue P's complex rhythm			183
	P continues drumming as the greeting song begins.	T184/-- P drums as greeting song begins			184
	As I sing the greeting song I leave space vocally for P to say my name in greeting, which he does after prompting.	T185/C185 Greeting song: P responds vocally after prompting	Yes, I heard that. Ja, he comes in.	C185/T185 P responds in greeting song	185
	The second time he says my name I play a short roll on the drum.	T186/T186 MT responds to P by playing roll			186
	At the end of the song P's playing is rapid and a bit scattered. I raise my hand in an exaggerated manner and then bring it down onto the drum and say 'boem!'. I begin counting and then move one drum away.	T187/-- MT exaggerates playing and counts when P's playing is scattered			187
	On a single drum, a turn-taking activity develops.	T188/C188 Turn-taking develops on drum	Later on he understood that you guys needed to take turns	C188/T188 P later understands turn-taking	188
		T189/--			189

	I sing "Kerryn's turn and P's turn", beating the drum three times and pausing on the fourth crotchet. P plays the same thing.	P echoes MT's beating of drum			
	Once I stop tilting the drum the turn-taking pattern continues for almost the same period as when the drum was being tilted.	T190/-- Turn-taking after MT stops tilting drum = turn-taking whilst tilting			190
	I end with a roll and P mirrors this before he begins playing along with me.	T191/C191/C192 P echoes MT's roll and then plays with her	I like the fact that he was paying attention because right at the end when you did the double tap [roll] he did the double tap.	C191/T191 Likes P's attention: echoing of MT's roll	191
			I would have thought that he would have just continued doing the one hand tapping, which was good	C192/T191 Expectation: lack of response to change in drumming	192
Other	I speculate that the greeting song encourages direct participation and communication between myself and P, thereby decreasing his isolation.	T193/-- Greeting song: decreases isolation through direct communication			193
	This excerpt addresses the goal of providing opportunities for practising social skills such as turn taking and also decreasing isolation by encouraging musical participation with myself as music therapy student.	T194/-- Goal: practice social skills and decrease isolation			194

	<p>The activity may encourage greater command of movement, although this is not an explicit aim.</p>	<p>T195/-- Encourages increased movement</p>			195
	<p>The greeting song itself is important in that it can set the tone and potentially create connection between us at the beginning of the session as well as introducing P to what is going to follow (the session).</p>	<p>T196/-- Greeting song: sets tone and introduces session</p>			196
	<p>This is the first time that turn-taking was able to be established on the drums. Previously I had used two drums, P on one and me on the other. This was not effective because I could not indicate the structure of the activity in a way that P could appreciate. I relied largely on verbal communication and gestures were a supportive form of communication. Using a single drum allowed me to communicate clearly whose turn it was in a non-verbal manner. My vocalisation also seemed to support the establishment of turn taking, in both rhythm and melodic contour, but it was not the primary mode of communication. It was important to adjust my own communication in order to find a way to demonstrate the concept that P might more easily understand.</p>	<p>T197/-- MT: adjustment to communication required for engagement</p>			197

	<p>The turn taking was not extended for very long after I stopped tilting the drum but this method was a lot more effective than in previous sessions. I believe that it is very important to persevere with P in order to find the mode of communication that works and that he can understand. At the same time, the activity should remain fun and creative to avoid P retreating into isolation. For this activity, clear instructions rhythmically, melodically, and in action were effective.</p>	<p>T198/-- Clear instructions in movement and music were effective at establishing turn-taking</p>			198
	<p>I often encourage and affirm P in his actions. I think that this is important, however the affirmation and/or excitement should preferably not result in too much interruption of the flow of the activity. It should perhaps also not be over-used as this might result in P needing affirmation habitually.</p>	<p>T199/-- Affirmation important as encouragement but should not be overused</p>			199

Excerpt 4					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line
How do you feel?	<p>I enjoyed seeing P mention the camera and I was quite surprised.</p>	<p>T200/-- MT enjoyment and surprise: P mentions camera</p>			200

	I wonder if I had lowered my expectations of P too much. Perhaps he could understand a lot more than I initially thought.	T201/-- MT: possible lowered expectations of P			201
	I was taken aback when he said "stop" and quite relieved as he continued playing the drums.	T202/-- MT: concerned when P said stop			202
	I was initially concerned that he did not want to continue the session [when he said stop].	T203/-- MT concerned that P wanted to stop			203
	I believe that this [saying/indicating stop] was his way of reviewing the assent/dissent process like we usually did at the start of each session.	T204/-- MT: interprets P's actions as reviewing assent process			204
	Watching the clip I feel warmly toward P	T205/-- MT feels warmly towards P			205
	I notice that he seems quite engaged	T206/-- P seems engaged			206
Interaction	The session begins in a playful manner as P engages through the camera.	T207/-- Session begins playfully			207
	As he says "stop" I interpreted this as him indicating he does not want to continue.	T208/-- MT initially interpreted P's actions as wanting to stop			208

	In fact I think he was reviewing the assent/dissent process as we usually did at the beginning of each session.	T209/-- P's actions reviewing assent process			209
	There seems to be a rapport between P and myself, particularly at the beginning of the greeting song, and then again when the turn-taking activity is occurring	T210/-- Rapport between MT and P			210
	P makes a lot of eye contact and seems to maintain focus on me, the activity, and the drum.	T211/-- P maintains focus			211
Reported behaviour at home	P reportedly does greet if greeted first. His mother also reported that he can be creative when singing.	Outside of session, not commented on in interview			
Music therapy student	As I set up the camera P says "video" and I respond by echoing "video". As P says "say cheese" I echo this and chuckle.	T212/-- P interacts with camera and MT echoes			212
	My responses to P were an attempt to provide affirmation.	T213/-- MT: attempts to affirm P			213
	I wonder why I simply echoed though, rather than affirming in another way.	T214/-- Uncertainty: why MT echoing			214
	I chuckled because I found P's interaction	T215/-- MT: finds			215

	humorous.	interaction humorous			
	I then move toward the drum and ask if P is ready. When P says "stop" I question this and then say "drums" as he begins beating the drum. I was somewhat concerned that P's use of 'stop' was an indication that he did not want to continue with the session. In retrospect I believe that it was a review of the assent/dissent process that we went over every session.	T216/-- MT initially interpreted P's actions as wanting to stop			216
		T217/-- P's actions reviewing assent process			217
		T218/-- MT: concerned when P said stop			218
	I begin the greeting song, beating on the same drum as P is using. There was little space for two drums and I also intended to move on to a turn-taking exchange with a single drum.	T219/-- MT uses one drum for greeting song			219
	As P responds by saying "Hello Kerryn" I respond "Hello P", still maintaining the beat on the drum and then continue the singing.	T220/-- Greeting song: P responds verbally and MT continues song			220
	I ask P to sing with me and he responds by saying hello again.	T221/-- P responds verbally to greeting song			221

<p>At the end of the greeting song P begins to vocalise (unclear, sounds like ay-ay). I try to echo this, leaning toward P and then say "hey?". P repeats something similar and then I begin singing something similar as I beat the drum. I also add 'wol-fen'tai' as he often sings this after singing 'ai ai ai'. <i>This was an assumption on my part but based on previous interactions. I was hoping to create a shared vocalisation using his musical offerings.</i> While I do this I tilt the drum to initiate turn-taking. This results in P missing the drum at times, still trying to beat when I have already pulled the drum away. It seemed that P was trying to continue playing the drum and vocalising at this point so I stopped tilting the drum. however, P stopped vocalising and then became distracted. <i>I speculate that my attempt to initiate a turn-taking exchange at this point may have interrupted P's musical flow.</i></p>	<p>T222/-- P vocalises with 'ay ay'</p>			222
	<p>T223/-- MT tries to echo P's vocalisation</p>			223
	<p>T224/-- MT assumes P is following song from previous session</p>			224
	<p>T225/-- MT tries to initiate turn-taking</p>			225
	<p>T226/-- Uncertainty: P tries to continue playing</p>			226
	<p>T227/-- Uncertainty: actions interrupted flow</p>			227
<p>As P starts looking away and making soft, high-pitched sounds <i>which I interpret as moving toward isolation</i>, I say "Ok, we go"</p>	<p>T228/-- P looks away and makes sounds</p>			228

	<p>and start tilting the drum with more emphasis in my movement to initiate a turn-taking interaction as an intervention. I sing a commentary song as tilt it to myself and then to P. When I play my movement is somewhat exaggerated or expansive. <i>This expanded movement is meant to encourage P to play.</i> I often interject with "nice" when P plays, especially when he plays the same number of beats as I have just played. <i>Here I attempt to affirm his playing.</i></p>	T229/-- MT interprets P's sounds as withdrawal			229
		T230/-- MT intervenes to stop withdrawal			230
		T231/-- MT plays drum with expansive movement			231
		T232/-- MT attempts to affirm P			232
	<p>I then stop tilting the drum and begin singing the melody to <i>Lord of the dance</i> which I feel has a flowing, forward motion in the melody and is well-suited to portioning into different segments for turns. I attempt to continue the turn-taking interaction without the need to tilt the drum. When it is P's turn I sit straight and back a little, nodding to him. As P begins to play outside of his turn with a steady and strong beat I begin to play with him and sing with more intensity and a higher dynamic level.</p>	T233/-- MT stops tilting drum			233
		T234/-- MT: melody well-suited to turn-taking			234
Philip	P seems engaged, looking at the camera and saying "video", then tilting his head	T235/C235 P seems engaged	There's an expression	C235/T235/T236 C: notices expression on P's	235

	and posing, saying "cheese". When I ask if he is ready he vocalises "mmm". I interpret this response as signalling readiness and willingness to participate.	T236/C235 MT: interprets P's vocalisation as willingness to begin		face	236
	Says "stop" as I come to sit down. I speculate that this was because we began every session by reviewing the dissent/stopping process. He immediately continues playing the drum.	T237/-- MT: P reviews assent process			237
	During the greeting song his beating is initially outside of the rhythm but he quickly begins to beat in a stable rhythm with me. At first he beats the drum with a relaxed wrist but then plays firmly and with more intensity. I interpret this as P becoming more focused and intentional about his playing. When I say hello to P in the greeting song he responds verbally, quickly "hello Kerryn". When I explicitly ask him to sing with me he says "hello Kerryn" with seemingly less enthusiasm. It seemed as though his spontaneous response was made with more energy than the response after my prompting.	T238/-- P begins to beat in time			238
		T239/-- P begins to beat with strong movement			239
		T240/-- P's strong movement: signals intentionality			240
		T241/C241/C242 P responds to MT's greeting	When he did the hello song he didn't really greet or say your name.	C241/T241 P does not greet during hello song	241

			He wasn't singing much there, he was just doing the tapping.	C242/T241 P was not vocalising	242
		T243/-- P's spontaneous response: more energy			243
	<p>At the end of the greeting song P begins vocalising something that sounds like "ai ai". I began tilting the drum to initiate a turn-taking activity but this seemed to interrupt the flow of his vocalisation so I stopped. However, I continued singing myself and I think that this restricted P's self-expression. He looked away and began making high pitched, soft sounds. I interpreted this as signalling a possible retreat toward isolation, particularly since he turned away, which is why I intervened strongly to engage him and continue the musical and social interaction.</p>	T244/-- P begins vocalising 'ai ai'			244
		T245/-- MT tries to initiate turn-taking			245
		T246/-- Turn-taking attempt seems to interrupt P			246
		T247/-- MT continues singing			247
		T248/-- MT's singing: possibly restricts P			248
		T249/-- P begins making sounds			249

		T250/-- Sounds: may indicate withdrawal			250
		T251/-- MT intervenes to stop P's withdrawal			251
<p>When I initiate a turn-taking sequence he turns back and readily participates, playing during his turn, often with the same number of beats that I have just played. As I move on and stop tilting the drum he quickly falls out of the turn-taking pattern and begins to play with me. His plays with more force, lifting his hand high off the drum and then bringing it down with some intensity.</p>	T252/C252 P participates readily in turn-taking	Sometimes I pick up that he picks up what you're doing and then other times he misses it.	C252/T252 P follows MT at times	252	
	T253/C253 P often reflects number of beats	he does the tapping twice, and then he does that well	C253/T253 P succeeds at reflecting MT's beating	253	
		when you were tapping three times he was still tapping twice	C254/-- P does not succeed at reflecting MT's beating	254	
		When you moved back to tapping once and then he would tap once	C255/-- P succeeds at reflecting MT's beating	255	
	T256/C256 MT stops tilting drum and turn-taking stops	The time when both of you were tapping I don't know what was happening there or if it's like towards the end of the song or what.	C256/T256 Uncertainty: what is happening in activity	256	

Philip's movement	P begins by sitting on the chair, hands in lap. He smiles and tilts his head, looking at the camera when he says "cheese". I interpret P's interaction with/through the camera as him possibly displaying his sense of humour. This was particularly interesting since he usually displays a mostly flat affect and does not smile or laugh often.	T257/-- P's interaction displays humour			257
		T258/-- P usually displays flat affect			258
Philip's movement	As he says "stop" he moves his hand in a cutting motion, then stretches out to beat the drum. We had frequently made the cutting motion when reviewing the assent/dissent process at the beginning of sessions while standing at the stop sign. He looks at me, making eye contact quite a lot. At times he does look away at other points in the room. P begins beating the drum with more force and direction than previously as he vocalises "ai ai a". His wrist is not limp and his hand is held firmly. After vocalising briefly he looks away and makes high-pitched, soft sounds. As I move into a 'formal' turn-taking activity he looks back at me. When it is P's turn he prepares to play, moving	T259/-- P says stop and makes cutting motion			259
		T260/-- P makes eye contact			260
		T261/-- P begins drumming			261
		T262/-- P begins vocalising			262

	slightly toward the drum and lifting his hand. Sometimes he changes hands. At one point I play three beats and he only plays two but then moves to play a third after a pause here I emphasise the word "turn". He alternates between looking at the drum and looking at me.	T263/-- P's drumming becomes more directed			263
		T264/-- P begins making sounds and looking away			264
		T265/-- P follows turn-taking			265
		T266/C266 P sometimes alternates hands when drumming	He hasn't learned the, um, the feel of the drum, I see that his hands are getting sore so he's taking turns because he's hitting on the edge of the drum.	C266/T266 C interprets changing hands as problematic	266
		T267/-- P attempts to follow MT's beating			267
Music	P begins beating the drum and I move into the greeting song. There is one drum.	T268/-- P beats drum and MT starts greeting song			268
	P's beating is focused and he is playing with energy . His beating vacillates between being slightly off beat to being on the beat with me.	T269/-- P plays with energy			269
	As I sing, P says "hello Kerryn" when it is	T270/-- Greeting song:			270

	my turn to be greeted.	P greets verbally			
	As I finish the greeting song P vocalises but his words are unclear. I reflect the melody and sounds and begin playing the drum with the vocalisation. P continues to vocalise but it is still unclear. Sounds like "ai ai ai, wol-fen-dai".	T271/-- P vocalises and MT reflects melody			271
	I begin singing a commentary song on turn-taking "Kerryn's turn and P's turn" and I tilt the drum according to whose turn it is.	T272/-- MT attempts to establish turn-taking on drum			272
	I vary the number of beats that I play and P copies the number of beats for the most part.	T273/-- P follows MT sometimes			273
	I change the intensity of my playing to produce different dynamics. For the most part P does not respond to changes in dynamics, continuing to play with force throughout the activity.	T274/-- P does not respond to changes in dynamics			274
	I start singing the melody to <i>Lord of the dance</i> as I stop tilting the drum. The melody is busier than the one I have been singing in the commentary turn-taking song. I feel that it has a melody with a strong forward motion, and can easily be portioned into small segments for different turns.	T275/-- MT: feels melody is appropriate for turn-taking			275

	Turn-taking continues briefly and then we both play together.	T276/-- Turn-taking moves into playing together			276
Other	This excerpt relates directly to the goal of offering opportunities to practice skills such as turn-taking. It also addresses the goal of increasing musical interaction with me as the music therapy student in order to reduce isolation.	T277/-- Goal: practice social skills and decrease isolation			277
		Other skills that are being practiced could be responding to greetings, following directions (loud and soft), and becoming more aware of self and body movement.	T278/-- Possibly facilitates response to greetings		
	T279/-- Possibly facilitates response to directions				279
	T280/-- Possibly facilitates awareness of self and body				280
	P readily greeted me during the hello song. Although he did not sing the greeting he spoke in the pause between my phrases after I greeted him, which was musically appropriate. This could also indicate that he understood the	T281/-- P greeted during greeting song			
T282/-- P's greeting was spoken					282

	greeting song as more than just a song but as an actual greeting.	T283/-- P's greeting was musically appropriate			283
		T284/-- Uncertainty: P's understanding of greeting song as actual greeting			284

Excerpt 5					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line
Philip	Laughs during activity - perhaps mother will have some insight here	T285/C285/C286 /C287 MT: uncertainty P's laughter	He's bouncing and he's moving around. at first he was like laughing and but later on he's like it's not funny anymore, I don't want to do this	C285/T285 Initially found it funny	285
				C286/T285 Later did not want to participate	286
	P plays in a scattered manner, jerking his body in a slightly uncontrolled way as he sits on the chair. His playing looks like he is swiping or stroking the drum quickly, or perhaps fluttering or flapping his hand on the drum. It is almost accented in manner. He is smiling and he chuckles. He looks		is he making a hissing sound?	C287/T285 Uncertainty: child making sound	287
		T288/C288/C289 Plays in swiping/fluttering motion	I think when he doesn't wanna do something that he's forced to do and then trying to throw a tantrum that he knows he can't [inaudible] and he's like	C288/T288 Similar to behaviour when P wants to throw tantrum but can't	288

	away from me toward the curtains.		.		
			I think he was trying to throw a tantrum to get the guitar and the fact that I don't want to be doing this the drum thing, and I don't want to touch it but let's ok that's what you want me to do	C289/T288 P displays compliance	289

Excerpt 6					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line
Philip's movement	<p>Except for the flamenco type movement, which seems stylised , P's movement seems somewhat stiff and restricted. He does not easily respond to changes in my movements (stretching up and bending down) and also does not easily begin to clap his hands. Aside from shifting his one foot once, he keeps his feet completely still throughout the entire activity. When I take his hands and move with him it almost seems as though I'm manipulating a puppet, moving him rather than us moving together.</p>	T290/C290 P plays shakers in flamenco style	Oh, I'm sure it [the way he moves when shaking the shakers] must be from a TV show	C290/T290 Source of movement: media	290
		T291/C291 P's movement is stiff and restricted	The way he's dancing, sometimes he's stiff at home he does that. And I'm like 'why can't you just loosen up' .	C291/T291 P Sometimes stiff at home when dancing	291
		T292/C292 P did not easily respond to my movements	He didn't want to go down... I would have shown him, bend bend bend.	C292/T292 C: would have persisted with instruction	292

			It's like he's like 'ok I'm just going to do it like this, and like ok you don't want me to really do it so...	C293/-- P will test person's requirements	293
			OK, fine, I have to fall and touch the floor.	C294/-- P shows compliance when person persists	294
			He susses us out. 'Can I get away with that, ok she's not noticing, she's not insisting on me dancing, I'll continue doing it this way'	C295/-- P will test person's requirements	295
			I would move him around like this, sometimes when he wants to distract us from something he will do that he will come through and say 'mommy let's dance' and then I will hold his hands and then he would do this and it would be like me moving his hands	C296/-- P sometimes distracts others with dancing	296
				C297/-- Mother sometimes moves for child (when dancing outside of session)	297
		T298/C298 I am moving for him	he's not moving himself	C298/T298 He is not moving himself	298
Other	Since he has shakers it may be that there are too many demands on his attention. He has to deal with my directions on top of playing the instrument, along with pre-recorded music.	T299/C299 Possibly too many demands on his attention	I think after the way he was playing with the shakers he kinda got a bit curious, 'what's inside here' 'cause he's observing 'can I open this and see what's making this noise in here'	C299/T299 P was curious about how the shakers worked	299

			I don't actually think that it was too much, I just feel like his mind got too curious about what's making this noise inside this thing, I want to see what's inside these'	C300/-- C: Does not think there were too many demands on his attention	300
			sometimes there's a lot that's going on and he's still able to pick up everything that is happening.	C301/-- P can pick up a lot even with multiple stimuli (outside of session)	301

Excerpt 7					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	
Interaction	P tried to take back the guitar a number of times, pulling strongly on the instrument. He challenged me, responding to my assertions by saying it was his turn. I remained calm but firm and I think that this communicated to him that he would not be able to take the guitar back at that point. I feel as though this was an appropriate exchange where boundaries were set.	T302/C302/C303 P tested MT's boundaries	there he was seeing what are your boundaries as well. you know, that now it must be my turn, now it must be your turn, what are you going to do about it, are you going to insist that it's your turn or am I going to get away with it?	C302/T302 P was testing MT's boundaries	302
	Behaviour not reported upon by mother.		And he does that a lot, especially if you are new with Philip he tends to be a bit stubborn and resistant, um, and then when he sees that ok fine you are the adult, you're the teacher, you're the instructor, this is what you want to be done now. Otherwise he can easily operate in	C303/T302 Often tests boundaries with new people (outside of session)	303

			his own way and do whatever that he wants to do		
		T304/C304 Boundaries: successful and appropriate	and when he sees that ok there are rewards and there are times of certain things to done then he will do that because he knows ok, we're going to move on, were' not going to get stuck doing this. so he responds well	C304/T304 P generally responds to structure and reward (outside of session)	304
Philip	As I begin to play he reaches to the guitar and then kneels, trying to pull it toward him. He continues doing so as I say "my turn". He responds saying "my turn" twice. When I say "my turn Kerry" he responds "my turn P". Initially I interpreted this as echoing my speech but when he changed to say "my turn P" I believe he had grasped the concept of whose turn it was on the guitar. When I say "no" again he sits back down although he leans close to the guitar and keeps touching is, just no longer pulling it toward him trying to take it from me.	T305/C305 MT initially interprets verbal response as echoing	Here I see he's very curious about how are those strings making sound. And if I'm tapping in a different place it makes a different sound.	C305/T305 P is interested in how the strings make different sounds	305
	P sings when I leave space in the	T306/C306 P's verbal response	Now you have taken it and he sees the way that it sounds the way	C306/T306 P wonders how to play guitar like MT	306

	song for him to fill in the words. His voice is quiet.	indicates understanding	when you play with it and the way it sounds when he plays with it and how can he do what you're doing and that the strings are more interesting to him than him figuring out this music thing, this is the song that you guys are trying to engage in.		
	At the beginning of the excerpt P is bent over the guitar, with it on his lap. As I play he kneels close to the guitar. He tries to pull the guitar to himself, leaning closer and kneeling higher (his pulling of the guitar is not visible as his back is to the camera). When he seems to accept that he cannot take the guitar back he sits down but leans toward the guitar and strums gently.	T307/C307/C308 P continues touching guitar but does not take it	Now you have taken it and he sees the way that it sounds the way when you play with it and the way it sounds when he plays with it and how can he do what you're doing and that the strings are more interesting to him than him figuring out this music thing, this is the song that you guys are trying to engage in.	C307/T307 P figuring out sound is more interesting than co-musicking	307
			Now you have taken it and he sees the way that it sounds the way when you play with it and the way it sounds when he plays with it and how can he do what you're doing and that the strings are .	C308/T307 P wants to play like MT plays	308

Excerpt 8					
	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line

Philip	As I try to explain that we will be taking turns P beats on the drum. His beating is somewhat erratic. As I say "my turn" he echoes "my turn". I then say "Kerryn's turn" which he echoes as well. However, he continues playing while I am playing, his movements jerky and somewhat uncontrolled. He laughs briefly and continues to play, leaning to the drum. When I reach toward him, saying "shh" and touching his knee or putting my hand on the drum he still plays.	T309/C309 /C310/C311 Turn-taking was not effective	you had a certain idea of what you wanna do, you have that, but even though I see him there on the small scale that there is still a bit of turn-taking happening and he is picking up a lot in what you want him to do but it's much more fast-paced and there's not proper breaks but you guys are in synch like you, I mean he's picking up on what you want.	C309/T309 Turn-taking happening on the small scale	309
		C310/T309 P&MT in synch		310	
		C311/T309 P picks up on what MT wants		311	
Other	I suspect that P knew something was expected or required of him but he did not understand what this was because I was not communicating effectively with him. I speculate that his jerky movements and subsequent 'braying' sounds may have been in reaction to the demands placed on him and his feeling of possible confusion due to my ineffective communication.	T312/C312 P's responses possibly indicate confusion	even though there was a time when he was [inaudible] and he was frustrated but he went back to being his happy self, he was laughing enjoying	C312/T312 P was frustrated	312
		T313/C313 P knew something was required		C313/T313 P became happy	313

Excerpt 9

	My interpretations/observations	Code	Caregiver's interpretations/observations	Code	Line
Interaction	I don't feel as though my music influenced P's musicking. He only responded to me when I sang his name, and then only once. There doesn't seem to be much interaction, either relationally or socially.	T314/C314 Musicking not two-way	he was shutting you out	C314/T314 P shuts out MT	314
Philip	P is bent over the <i>mbira</i> , held in his lap. He plucks the various tines, looking down at the <i>mbira</i> . He seems to be somewhat isolated, absorbed in investigating and playing the instrument. When I say his name "and P sings" he looks up briefly once but does not do so again until he stops playing, sits up and holds out his hand to me saying "Kerryn, it's sore". I ask if he would like to stop playing the <i>mbira</i> and he says '1234 stop', moving to put it down. He briefly takes it again and plays a few more notes before taking the shakers from me.	T315/C315 P seems isolated	ja, he was more fascinated in that than the singing, he was not taking his turns, he was not picking up your cues, or anything like that, he was more to his own music and this thing.	C315/T315 P interested in instrument, not co-musicking	315
	Bent over the <i>mbira</i> , movement seems quite restricted and contained	T316/C316 P absorbed in instrument	I wonder if really his hand was sore because ... just to distract you from whatever. Sometimes he does that . Because I mean if it was really sore he would have like put it down and massaged his fingers but he took it right back.	C316/T316 P distracts MT from task	316

Appendix Q: Table of codes, sub-categories, and categories

Categories	Mini-categories	Code	Music therapy student	Code	Caregiver	Corresponding unit/category	
Reflection on own feelings and thoughts while watching the clips.	Interest in interaction			C6	Interest: P mimicking movement		
				C191	Likes P's attention when echoing roll	T191-P echoes MTS's roll and then plays with her; P interacting musically with MTS	
	Enjoyment	T1	Enjoys interaction				
		T2	Enjoys shared meaning				
		T4	Enjoys turn-taking				
		T200	Enjoyment and surprise: P mentions camera				
		T206	Feels warmly toward P				
		T215	Finds interaction humorous				
		T157	MTS's excitement at P's greeting derails song				
		T129	MTS is excited and loses structure when acknowledging P				
					C134	C enjoys interaction	
				C135	C likes P's exploration of instruments		
	Uncertainty: P's behaviour			C17	Uncertainty: motivation behind mimicry		

			C18	Uncertainty: motivation behind mimicry	
			C37	Uncertainty: motivation behind expression	T37 - Improvisation: self expression and creativity; P's vocal expression
	T48	Uncertainty: motivation behind mimicry (trust)			C48 -P copies others' movements (oos); P's interacting with movement
			C49	Uncertainty: motivation behind mimicry	T48 - Uncertainty: motivation behind mimicry (trust); Uncertainty: P's behaviour
			C50	Uncertainty: motivation behind mimicry	T48 - Uncertainty: motivation behind mimicry (trust); Uncertainty: P's behaviour
	T51	Uncertainty: rocking as sign of engagement			
	T52	Uncertainty: eye contact as sign of engagement			
			C141	Possibly tapping at home reflecting drumming in sessions	
	T155	Uncertainty: rhythm intentional			
	T226	Uncertainty: P tries to continue playing			
	T281	Eye contact: possible sign of engagement			
	T284	Uncertainty: P's understanding of greeting song as actual greeting			
	T285	Uncertainty: P's			C285-P initially found it funny;

		laughter			Emotional/psychological experiences attributed to P
			C287	Uncertainty: P making sounds	
Uncertainty: own behaviour			C256	Uncertainty: what is happening in activity	T256-MTS stops tilting drum and turn-taking stops; MTS responds to P with movement
			C167	Uncertainty: own level of observation	T165-P plays with low body tone; Quality of P's movement
			C178	Does not see much in activity but sees when translated at home	
	T214	Uncertainty: why MTS echoing			
	T227	Uncertainty: actions interrupted flow			
	Expectation			C126	Expectation: P's enjoyment
			C192	Expectation unmet: P's lack of response to change in drumming	T191-P echoes MTS's roll and then plays with her; P interacting musically with MTS
T201		MTS: possibly lowered expectations of P			
C interprets P's actions as problematic			C266	Interprets changing hands as a signal of discomfort when drumming	T266-P sometimes alternates hands when drumming; Quality of P's movement
MTS expresses disappointment	T5	Disappointment at ending			
	T132	Disappointment when turn-taking ends			
MTS expresses discomfort	T76	Feels awkward and unnatural			

		T128	MTS concerned that P's greeting not acknowledged			
	Mis-interpretation	T305	MTS initially interprets verbal response as echoing			C305-P is interested in how the strings make different sounds; Emotional/ psychological experiences attributed to P
		T202	Concerned when P said stop			
		T203	Concerned that P wanted to stop			
		T208	MTS initially interpreted P's actions as dissent			
		T216	MTS initially interpreted P's actions as dissent			
		T218	Concerned when P said stop			
Emotional/ psychological experiences attributed to P	P experiences enjoyment			C285	P initially found it funny	T285-Uncertainty: P's laughter; Uncertainty: P's behaviour
				C31	P's enjoyment	T31 - High level of expression and engagement; P's vocal expression
		T43	Pleasure in shared meaning	C43	P smiles	
				C44	P happy in session	T43 - Pleasure in shared meaning; P experiences enjoyment
		T45	Pleasure in exercising choice			C45 - P knows what is expected of him; Signs of developing relationship
				C235	C notices expression on P's face	T235-P seems engaged; P maintains focus
		T257	P's interaction displays humour			
				C313	P became happy	T313-P knew something was required; P

						experiences frustration
	P's general affect	T258	P usually displays a flat affect			
	P experiences confusion	T312	P's responses possibly indicate confusion			
	P experiences frustration			C312	P was frustrated	
		T313	P knew something was required			
	P is curious			C305	P is interested in how the strings make different sounds	T305-MTS initially interprets verbal response as echoing; Misinterpretation
				C306	P wonders how to play guitar like MTS	T306-P's verbal response indicates understanding; Signs of developing relationship
				C307	P figuring out sound is more interesting than co-musicking	T307-P continues touching guitar but does not take it; P tests boundaries
				C308	P wants to play like MTS plays	T307-P continues touching guitar but does not take it; P tests boundaries
				C299	P was curious about how shakers worked	T299-Possibly too many demands on his attention; Demands on attention
P's expression and creativity	Source of expression for song			C14	Trigger for song: words	
				C38	Source of expression: media	
				C39	Source of expression: words	
				C62	Source of expression: media	T62 -P vocalises from previous sessions and music becomes more lively; P's vocal expression
	Source of expression			C107	Engages in dancing: media (oos)	T107-Movement: watched before attempting; P's interacting with

for movement						movement	
			C108	Stamps feet: media (oos)		T107-Movement: watched before attempting; P's interacting with movement	
			C290	Source of movement: media		T290-P plays shakers in flamenco style; Quality of P's movement	
	P's vocal expression	T13	Vocal improvisation: creativity and expression				
		T30	P responds vocally: echoes and offers material	C30	P continues singing independently		
		T31	High level of expression and engagement				C31 -P's enjoyment; Emotional/ Psychological experiences attributed to P
		T37	Improvisation: self expression and creativity				C37 -Uncertainty: motivation behind expression; Uncertainty: P's behaviour
				C46	P can express himself		T45 -Pleasure in exercising choice; Emotional/psychological experiences attributed to P
		T59	Vocalisations relate to MTS's				C59 -P follows therapist at times; P interacting musically with MTS
		T60	P changes vocal pattern, still relating to MTS's				C60 -Turn-taking leading into co-musicking; Co-musicking
T62		P vocalises from previous sessions and music becomes more lively					
T66		Complex vocal offerings: heightened expression					
		C73	Music creates				

					expectation of verbal expression	
		T222	P vocalises with ai ai			
		T244	P begins vocalising ai ai			
	Quality of P's movement	T81	Movement seemed unnatural			
				C85	Displays rigid movement	
				C86	Dances freely when interested	
				C101	Displays rigidity when uninterested	T101-MTS's affirmation important to encourage movement; MTS offers affirmation
		T105	Movement: low body tone			
		T106	Movement: lack of co-ordination especially feet	C106	Movement: stiff	
		T109	Movement: shuffling feet			
		T120	Movement restricted especially feet			
		T165	P plays with low body tone			C165-P displays compliance; P displays compliance
		T173	P beats drum with limp hand			
		T179	Reduced muscle tone: movement activities			C179-Drumming initially displays compliance; P displays compliance
		T266	P sometimes alternates hands when drumming			C266-Interprets changing hands as a signal of discomfort when drumming; C interprets P's actions as problematic
		T288	Plays in swiping/fluttering motion			C288-Similar to behaviour when P wants to throw a tantrum but cant (oos); P tests boundaries

		T290	P plays shakers in flamenco style			C290-Source of movement: media; Source of expression for movement
		T291	P's movement is stiff and restricted	C291	Sometimes stiff at home when dancing	
Quality of P's music		T53	Taps hands energetically as music becomes more energetic			
		T54	P strums evenly at 120bpm			
				C166	P struggling on drum	T165-P plays with low body tone; Quality of P's movement
		T172	P plays drum readily			
		T240	P's strong movement signals intentionality			
		T243	P's spontaneous response: more energy			
		T263	P's drumming becomes more directed			
		T269	P plays with energy			
	Physical space affects engagement		T47	Small space: possibly physically restrictive		
		T70	Small space: possible openness in engagement	C70	Large space: too stimulating	
Structure affects engagement		T71	Less rigid structure: possible openness			
		T137	Relinquishing guitar: understanding of sessions	C137	Relinquishing guitar: understanding of sessions	
		T196	Greeting song: sets tone and introduces			

			session				
Relationship	P responds in greeting song	T74	Vocalisation: practising social skills			T73 -Music creates expectation of verbal expression; P's vocal expression	
		T174	P responds verbally in greeting song				
		T175	P responds in greeting song when prompted				
		T185	Greeting song: P responds vocally after prompting	C185	P responds in greeting song		
		T220	Greeting song: P responds verbally and MTS continues song				
		T221	P responds verbally to greeting song				
		T241	P responds to MTS's greeting			C241-P does not greet during greeting song; P does not respond in greeting song	
		T270	Greeting song: P greets verbally				
		T281	P greeted during song				
		T282	P's greeting was spoken				
	T283	P's greeting was musically appropriate					
	P does not respond in greeting song				C241	P does not greet during greeting song	T241-P responds to MTS's greeting; P responds in greeting song
					C242	P was not vocalising	T241-P responds to MTS's greeting; P responds in greeting song
	MTS tries to establish turn-taking	T160	Turn-taking: singing and rhythm provide signals				
T169		MTS's roll: attempt to					

			preserve turn-taking pattern			
		T198	Clear instructions and music were effective at establishing turn-taking			
		T225	MTS tries to initiate turn-taking			
		T245	MTS tries to initiate turn-taking			
		T246	Turn-taking attempt seems to interrupt P			
		T272	MTS attempts to establish turn-taking on drum			
		T309	Turn-taking was not effective			C309-Turn-taking happened on the small scale; P participates in turn-taking
	P participates in turn-taking	T10	Vocal turn-taking established			
		T12	Vocal turn-taking: connection established			
		T35	P continues turn-taking after modelling and encouragement			
		T73	Turn-taking: practicing social skills			C73 - Music creates expectation of verbal expression; P's vocal expression
		T162	MTS stops gesturing and P stops turn-taking			
		T168	P: comfort with turn-taking increases	C168	P: comfort with turn-taking increases	
			T188	Turn-taking develops on drum	C188	P later understands turn-taking

		T252	P participates readily in turn-taking			C252-P follows MTS at times; P interacting musically with MTS
		T253	P often reflects number of beats when turn-taking	C253	P succeeds at reflecting MTS's beats when turn-taking	
				C255	P succeeds at reflecting MTS's beats when turn-taking	
		T265	P follows turn-taking			
				C309	Turn-taking happening on the small scale	
	Co-musicking	T11	Vocal improvisation: co-musicking			
				C26	Matching leads to co-musicking	
		T36	Social awareness: co-creation of music	C36	Co-reation of music	
		T58	Vocalise together on la			
				C60	Turn-taking leading into co-singing	
		T61	Contrapuntal exchange develops	C61	Matching promoted co-musicking	
		T67	Co-musicking	C67	Matching promoted co-musicking	
	P interacting musically with MTS	T21	P waits when asked			
				C22	P follows therapist at times	T22 -MTS's gestures support turn-taking; MTS responds to P with movement
		T29	P comfortable ending turn			
		T57	P stops playing and then MTS stops			

				C59	P follows therapist at times	
		T139	P leaves guitar and plays drum willingly			
		T177	P echoes MTS's structure of beating			
		T184	P drums as greeting song begins			
		T189	P echoes MTS's beating of drum			
		T191	P echoes MTSs roll and then plays with her			C191-Likes P's attention when echoing roll; Interest in interaction C192-Expectation unmet: P's lack of response to change in drumming; Expectation
		T238	P begins to beat in time			
		T239	P begins to beat with strong movement			
				C252	P follows MTS at times	
		T262	P begins vocalising			
		T261	P begins drumming			
		T267	P attempts to follow MTS's beating			
		T268	P beats drum and MTS starts greeting song			
		T273	P follows MTS sometimes			
		T274	P does not respond to changes in dynamics			
	MTS responds to P in music	T24	MTS matches P musically			
		T55	MTS matches playing			

			musically			
		T56	MTS sings what P sang earlier in session			
		T64	MTS's singing refers to beginning of activity			
				C78	MTS invites client to share in music	T78 -MTS attempts to extend physical experience; Commentary on movement
		T91	MTS's voice reflects movement			
		T154	MTS attempts to capture P's complex rhythm			
		T183	MTS attempts to continue P's complex rhythm			
		T186	MTS responds to P by playing roll			
		T219	MTS uses one drum for greeting song			
		T223	MTS tries to echo P's vocalisation			
		T224	MTS assumes P is following song from previous session			
		T247	MTS continues singing			
		T248	MTS's singing: possibly restricts P			
		T271	P vocalises and MTS reflects melody			
	P's interacting with movement			C16	P copies others' movements (oos)	
		C48	P copies others' movements	C48	P copies others' movements (oos)	

		T79	Restricted participation reflects restricted movement			C79 -Focus is elsewhere; P's focus is elsewhere C80 - Displays compliance; P displays compliance
				C82	Rejects co-movement (oos)	T82 -Co-movement: socialisation; Commentary on movement
				C87	Engages in dance when interested (oos)	
				C88	Dances freely when leading (oos)	
		T107	Movement: watched before attempting			C107-Engages in dancing: media; source of expression for movement C108-Stamps feet: media; source of expression for movement
		T110	Movement: similar but not same			
		T111	P follows Mt's movements after watching			
		T117	Movement: watches before attempting			
				C133	Dances on own at home	
				C114	Rejects interaction at home	T114-Flexibility in movement may transfer to other modalities; Commentary on movement
		T292	P did not easily respond to my movements			C292-C would have persisted with instruction; P tests boundaries
				C296	P sometimes distracts others with dancing	
				C297	C sometimes moves for P	
	MTS responds to P with	T19	MTS matches movement: response to client's mimicry			

movement	T96	MTS moves for client				
	T158	MTS: attempts to gain P's attention using exaggerated playing and counting				
	T187	MTS exaggerates playing and counts when P's playing is scattered				
	T298	I am moving for him	C298	He is not moving himself		
	T22	MTS's gestures support turn-taking			C22 -P follows therapist at times; P interacting musically with MTS	
	T23	MTS moves body to beat				
	T77	MTS was directive	C77	Therapist engages client in dance		
	T156	MTS communicates with body language				
	T161	MTS uses gestures to continue turn-taking				
	T233	MTS stops tilting drum				
	T231	MTS plays drum with expansive movement				
		T256	MTS stops tilting drum and turn-taking stops			C256-Uncertainty: what is happening in activity; Uncertainty: own behaviour
	MTS offers affirmation	T15	Mt affirms musical offerings			
		T27	MTS imitates surprise when P stops			
		T98	Mt affirms client's movements			
T100		Mt affirms client's movements				

		T153	MTS reflects material to indicate P is heard			
		T213	MTS attempts to affirm P			
		T232	MTS attempts to affirm P			
		T69	MTS's affirmation communicates expectation			
		T101	MTS's affirmation important to encourage movement			C101-Displays rigidity when uninterested; Quality of P's movement
		T199	Affirmation important as encouragement but should not be overused			
	P tests boundaries	T302	P tested MTS's boundaries	C302	P was testing MTS's boundaries	
				C303	P often tests boundaries with new people (oos)	
		T304	Boundaries: successful and appropriate	C304	P generally responds to structure and reward (oos)	
		T307	P continues touching guitar but does not take it			C307-P figuring out sound is more interesting than co-musicking; P is curious C308-P wants to play like MTS plays; P is curious
				C288	Similar to behaviour when P wants to throw a tantrum but can't	T288-Plays in swiping/fluttering motion; Quality of P's movement
				C292	C would have persisted with instruction	T292-P did not easily respond to my movements; P's interacting with movement

				C293	P will test a person's requirements (oos)	
				C295	P will test a person's requirements (oos)	
Signs of developing relationship	T3	Shared meaning: social or relational development				
	T8	Engagement: relational and musical				
	T9	Relationship: rapport				
	T16	Mimicry: deepening relationship				C16 -P copies others' movements (oos); P's interacting with movement
			C45	P knows what is expected of him		T45 -Pleasure in exercising choice; P experiences enjoyment
	T72	Growing relationship: possible openness				
	T103	Taking hands: trust				C103-Displays compliance; P displays compliance
	T136	Relinquishing guitar: sense of trust	C136	Relinquishing guitar: sense of trust		
	T138	Good connection between MTS and P				
	T163	Relinquishing guitar: possible sign of trust				
	T171	P moves to guitar then relinquishes it willingly				
	T210	Rapport between MTS and P				
	T212	P interacts with camera and MTS echoes				
	T236	MTS interprets P's vocalisations as willingness to begin				C235-C notices expression on P's face; P experiences enjoyment

		T306	P's verbal response indicates understanding			C306-P wonders how to play guitar like MTS; P is curious
				C311	P picks up on what MTS wants	T309-Turn-taking was not effective; MTS tries to establish turn-taking
P maintains focus		T140	P seems attentive: eye contact			
				C142	P pays attention even when seems uninterested	
		T180	P leans toward drum: possible increased involvement			
		T206	P seems engaged			
		T235	P seems engaged			C235-C notices expression on P's face; P experiences enjoyment
		T260	P makes eye contact			
Increasing focus		T42	Loss of focus: MTS's intervention regains focus			
		T197	MTS: adjustment to communication required for engagement			
Demands on P's attention		T299	Possibly too many demands on his attention			C299-P was curious about how shakers worked; P is curious
				C300	Not too many demands on his attention	T299-Possibly too many demands on his attention; Demands on P's attention
				C301	P can pick up on a lot even with multiple stimuli (oos)	T299-Possibly too many demands on his attention; Demands on P's attention
Decreasing isolation		T75	Shared meaning decreases isolation			

		T193	Greeting song: decreases isolation through direct communication			
		T194	Goal: practice social skills and decrease isolation			
		T230	MTS intervenes to stop withdrawal			
		T251	MTS intervenes to stop withdrawal			
	Therapist's verbal communication	T20	P possibly misunderstands: words			
		T34	P possibly misunderstands: words			
		T93	MTS communicates verbally			
		T94	MTS's verbal directions possibly less effective			
		T152	MTS reminds P about beginning of session			
	Cues	T7	Shared meaning: cue			
		T28	Shared meaning: cue			
		T32	P exercises choice: use of cue			
		T33	Shared meaning: cue			
		T65	P initiates '1234 stop' cue			
		T204	MTS interprets P's actions as reviewing assent process			

		T209	P reviews assent process change wording of code this code...			
		T217	P reviews assent process			
		T237	MTS: P reviews assent process			
		T259	P simulates dissent cue			
Potential resistance to connection	P displays compliance			C80	Displays compliance	T79 - Restricted participation reflects restricted movement; Quality of P's movement
				C103	Displays compliance	T103-Taking hands: trust; Signs of developing relationship T104-Taking hands: compliance; P displays compliance
		T104	Taking hands: compliance			C103-Displays compliance; P displays compliance
				C165	P displays compliance	T165-P plays with low body tone; Quality of P's movement
				C179	Drumming initially displays compliance	T179- Reduced muscle tone: movement activities; Quality of P's movement
				C289	P displays compliance	T288- Plays in swiping/fluttering motion; Quality of P's movement
				C294	P shows compliance when a person persists	
	P displays isolation			C89	Withdraws to isolation	
		T113	Restricted movement reflects isolation			
				C116	Displays isolation	T114- Flexibility in movement may transfer to other modalities; Commentary on movement
		T176	Perseveration on			

			drum			
		T228	P looks away and makes sounds			
		T 229	MTS interprets sounds as withdrawal			
		T264	P begins making sounds and looking away			
		T314	Musicking not two-way	C314	P shuts out MTS	
		T315	P seems isolated			C315-P interested in instrument, not co-musicking; P' focus is elsewhere
	P loses focus	T25	Loss of focus			
		T41	Loss of focus	C41	Loss of focus	
		T63	P makes quacking noises: loss of focus	C63	Loss of focus	
				C286	Later did not want to participate	T285-Uncertainty: P's laughter; Uncertainty: P's behaviour
	P's focus is elsewhere			C79	Focus is elsewhere	T79 - Restricted participation reflects restricted movement; P's interacting with movement
		T92	Focus is elsewhere	C92	Focus is elsewhere	T93 - Therapist communicates verbally; Therapists' verbal communication
		T97	Focus is elsewhere			
		T102	Focus is elsewhere			
		T112	Moves to piano at end of activity			
				C115	Focus is elsewhere	
		T170	P approaches guitar at beginning of session			
				C182	P focused on guitar	
				C315	P interested in instrument, not co-musicking	T315-P seems isolated; P displays isolation

				C316	P distracts MTS from task	
Commentary on music and movement	Commentary on music	T121	Music: seemed well-suited to activity	C121	Music: seemed well-suited to activity	
		T122	Music: seemed well-suited to activity			
		T126	Known music may be more effective	C127	Music is known	
		T234	Melody well-suited to turn-taking			
		T275	MTS feels melody is appropriate for turn-taking			
		T278	Possibly facilitates response to greetings			
		T279	Possibly facilitates response to directions			
		T280	Possibly facilitates awareness of self and body			
	Commentary on movement	T78	MTS attempts to extend physical experience			C82 -
		T82	Co-movement: socialisation			C82 - Rejects co-movement (oos); P interacting with movement
		T83	Co-movement may be important			C82 - Rejects co-movement (oos); P interacting with movement
		T84	Co-movement helps understanding of others' movements			C82 - Rejects co-movement (oos); P interacting with movement
		T95	Modelling is necessary for communication			
		T114	Flexibility in			C114-Rejects interaction at home; P

			movement may transfer to other modalities			displays isolation
		T118	Practising movement may lead to physical confidence			
		T119	Practising movement may be beneficial			
		T123	Practising movement may lead to physical confidence	C123	Goal: exercising and listening	
		T124	Goal: increase freedom of movement			
		T195	Goal: encourages increased movement			

Appendix R: Table showing creation of sub-themes and themes

Categories	Mini-categories	Code	Music therapy student	Code	Caregiver	Corresponding unit/category	
<p>Reflection on own feelings and thoughts while watching the clips.</p> <p>MTS: enjoyment</p> <p>under range of feelings?</p> <p>Why?</p> <p>more viewings</p> <p>subject in excerpts (capture participant)</p> <p>context</p> <p>relationship built in music therapy</p> <p>C: discomfort</p> <p>sharing: fewer drawings?</p> <p>- more interested directly in P's actions?</p> <p>map self-reflection</p> <p>MTS REFLEXIVITY own feelings</p>	<p>Interest in interaction</p> <p>Enjoyment</p>	T1	Enjoys interaction	C6	Interest: P mimicking movement	T191-P echoes MTS's roll and then plays with her; P interacting musically with MTS	
		T2	Enjoys shared meaning				
		T4	Enjoys turn-taking				
		T200	Enjoyment and surprise: P mentions camera				
		T205	Feels warmly toward P				
		T215	Finds interaction humorous				
		T157	MTS's excitement at P's greeting derails song				
		T129	MTS is excited and loses structure when acknowledging P				
			<p>Uncertainty: P's behaviour</p> <p>Both experience uncertainty about P's behaviour.</p> <p>PMTS: more varied</p> <p>C: mimitory.</p> <p>Uncertainty re mimicry is shared</p>	C17	Uncertainty: motivation behind mimicry		
				C18	Uncertainty: motivation behind mimicry		
		C37	Uncertainty: motivation behind expression			T37 - Improvisation: self expression and creativity; P's vocal expression	
		T48	Uncertainty: motivation behind mimicry (trust)			C48 - P copies others' movements (oos); P's interacting with movement	

MTS contextual lens

Caregiver contextual lens

	<p>Uncertainty: own behaviour</p>			C167	Uncertainty: own level	T165-P plays with low body tone; Quality movement
				C287	Uncertainty: P making sounds	C285-P initially found it funny; Emotional/psychological experiences attributed to P
		T285	Uncertainty: P's laughter			
		T284	Uncertainty: P's understanding of greeting song as actual greeting			
		T281	Eye contact: possible sign of engagement			
		T226	Uncertainty: P tries to continue playing			
		T155	Uncertainty: rhythm intentional			
				C141	Possibly tapping at home reflecting drumming in sessions	
		T52	Uncertainty: eye contact as sign of engagement			
		T51	Uncertainty: rocking as sign of engagement			
				C50	Uncertainty: motivation behind mimicry	T48 - Uncertainty: motivation behind mimicry (trust); Uncertainty: P's behaviour
						T48 - Uncertainty: motivation behind mimicry (trust); Uncertainty: P's behaviour

Both express some uncertainty in own behaviour

Uncertainty: own behaviour

					of observation	of P's movement
			C178		Does not see much in activity but sees when translated at home	
	T214	Uncertainty: why MTS echoing				
	T227	Uncertainty: actions interrupted flow				
Expectation			C126		Expectation: P's enjoyment	T126-Known music may be more effective; Commentary on music
			C192		Expectation unmet: P's lack of response to change in drumming	T191-P echoes MTS's roll and then plays with her; P interacting musically with MTS
	T201	MTS: possibly lowered expectations of P				
C interprets P's actions as problematic			C266		Interprets changing hands as a signal of discomfort when drumming	T266-P sometimes alternates hands when drumming; Quality of P's movement
MTS expresses disappointment	T5	Disappointment at ending				
	T132	Disappointment when turn-taking ends				
MTS expresses discomfort	T76	Feels awkward and unnatural				
	T128	MTS concerned that P's greeting not acknowledged				
Mis-interpretation	T305	MTS initially interprets verbal response as echoing				C305-P is interested in how the strings make different sounds; Emotional/psychological experiences attributed to P

P's expression and creativity	Source of expression for song	T13	Vocal improvisation: creativity and expression	C14	Trigger for song: words	
				C38	Source of expression: media	
P's vocal expression	Source of expression for movement	T30	P responds vocally: echoes and offers material	C30	P continues singing independently	
				C290	Source of movement: media	T290-P plays shakers in flamenco style: Quality of P's movement
				C108	Stamps feet: media (oos)	T107-Movement: watched before attempting; P's interacting with movement
				C107	Engages in dancing: media (oos)	T107-Movement: watched before attempting; P's interacting with movement
				C62	Source of expression: media	T62 -P vocalises from previous sessions and music becomes more lively; P's vocal expression
				C39	Source of expression: words	
				C308	P wants to play like MT plays	T307-P continues touching guitar but does not take it; P tests boundaries
				C299	P was curious about how shakers worked	T299-Possibly too many demands on his attention; Demands on attention
				C307	P figuring out sound is more interesting than co-musicking	T307-P continues touching guitar but does not take it; P tests boundaries
				C306	P wonders how to play guitar like MT	T306-P's verbal response indicates understanding; Signs of developing relationship

information about source of expression
P not describe have access to these elements included?

useful considering activity

C less focus on actual vocalisations → meaningful?

<p>Activity - MT ↳ experienced a</p> <p>P's overall quality of movement own observation - questioning whether caregiver was resistant to this (bias)</p>	<p>Quality of P's movement MT: interprets rigidity as possible ASD sign. C: interprets rigidity as lack of interest/resistance.</p>	2	T31	High level of expression and engagement			C31 - P's enjoyment; Emotional/ Psychological experiences attributed to P
		T59 ²	Vocalisations relate to MT's	C46	P can express himself	T45 - Pleasure in exercising choice; Emotional/psychological experiences attributed to P	
		T60 ²	P changes vocal pattern, still relating to MT's			C59 - P follows therapist at times; P interacting musically with MT	
		T62 ²	P vocalises from previous sessions and music becomes more lively			C60 - Turn-taking leading into co-musicking; Co-musicking	
		T66 ²	Complex vocal offerings: heightened expression				
		T222 ²	P vocalises with ai ai	C73	Music creates expectation of verbal expression		
		T244 ²	P begins vocalising ai ai				
		T81	Movement seemed unnatural	C85	Displays rigid movement		
				C86	Dances freely when interested		
		T105	Movement: low body tone	C101	Displays rigidity when uninterested	T101-MT's affirmation important to encourage movement; MT offers affirmation	

P tests boundaries	T302	should not be overused	C302	P was testing MT's boundaries	
	T304	Boundaries: successful and appropriate	C303	P often tests boundaries with new people (oos)	
T307	P continues touching guitar but does not take it	C288	Similar to behaviour when P wants to throw a tantrum but can't	C307-P figuring out sound is more interesting than co-musicking; P is curious C308-P wants to play like MT plays; P is curious	
		C292	C would have persisted with instruction	T288-Plays in swiping/fluttering motion; Quality of P's movement	
		C293	P will test a person's requirements (oos)	T292-P did not easily respond to my movements; P's interacting with movement	
		C295	P will test a person's requirements (oos)		
Signs of developing relationship	T3	Shared meaning: social or relational development			
	T8	Engagement: relational and musical			
	T9	Relationship: rapport			
	T16	Mimicry: deepening relationship	C45	P knows what is expected of him	C16 -P copies others' movements (oos); P's interacting with movement T45 -Pleasure in exercising choice; P experiences enjoyment

E. appropriate of hand. Unstable but also inspects into her own experience?

Process a lot about developing relationship

			noises: loss of focus	C286	Later did not want to participate	T285-Uncertainty: P's laughter; Uncertainty: P's behaviour
	P's focus is elsewhere			C79	Focus is elsewhere	T79 - Restricted participation reflects restricted movement; P's interacting with movement
		T92	Focus is elsewhere	C92	Focus is elsewhere	T93 - Therapist communicates verbally; Therapists' verbal communication
	Both note loss of focus and focus elsewhere	T97	Focus is elsewhere			
		T102	Focus is elsewhere			
		T112	Moves to piano at end of activity			
		T170	P approaches guitar at beginning of session	C115	Focus is elsewhere	
				C182	P focused on guitar	
				C315	P interested in instrument, not co-musicking	T315-P seems isolated; P displays isolation
				C316	P distracts MT from task	
	Commentary on music	T121	Music: seemed well-suited to activity	C121	Music: seemed well-suited to activity	
	MT focuses on the music itself. How can it be used? How was it used? What effect did it have?	T122	Music: seemed well-suited to activity			
		T126	Known music may be more effective	C127	Music is known	
		T234	Melody well-suited to turn-taking			
		T275	MT feels melody is appropriate for turn-taking			
		T278	Possibly facilitates			

Handwritten notes:
 - "Both note loss of focus and focus elsewhere"
 - "C did not really focus on music"
 - "that a musician"

Appendix S: Assent script and form for child participants

Please note: music therapy sessions are planned according to the individual participant's needs and the overall music therapy process. At times, activities within sessions are improvised in the moment. As such, the form can only represent what may occur in the session generally rather than being a direct indication of sequential activities.

Photo of
researcher

Hello, my name is Kerryn .

I want to ask you whether you will work with me today. If you say yes, these are some of the things we might do:



We may play some musical instruments together like

shakers and drums

[*show actual instruments*].



We might sing some songs.



We might dance.










I will videotape you as you as we play together.



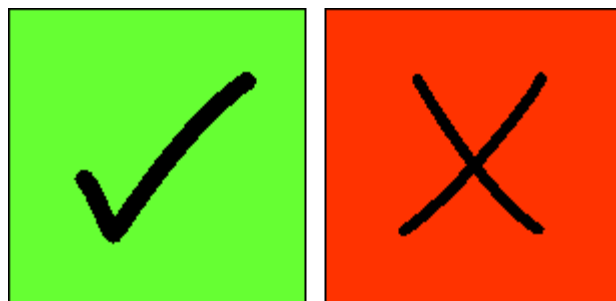
If you want to stop at any time, please tell me or point to this picture of the stop sign and I will take you back to class [*show picture of stop sign on the wall*].

Child Assent Form

	<p>Do you understand everything I explained to you?</p> <p>YES NO</p>
	<p>Do you understand that it is your choice to help me today?</p> <p>YES NO</p>
	<p>Do you understand that you can stop anytime you want to?</p> <p>YES NO</p>

	<p>Do you understand that I will be videotaping you today?</p> <p>YES NO</p>
	<p>Do you have any questions?</p>
	<p>Are you happy with the way your questions were answered?</p> <p>YES NO</p>
	<p>Do you want to work with me today?</p> <p>YES NO</p>

Picture symbols which the potential participant can use to answer



Appendix T: Consent form for Alpha School, Western Cape

Consent form

Date: _____

Title: Collaborations between music therapist and parents to transfer music therapy activities into the home context for children with Autism Spectrum Disorder

I _____ hereby give / do not give my consent for one-on-one music therapy sessions to be held with students of Alpha School, Western Cape on the premises.

Furthermore, I do / do not grant permission for interviews with parents of the participating children to take place on the premises.

I also do/ do not grant permission for these music therapy sessions and interviews to be video recorded.

With full acknowledgement of the above, I agree to participate in this study on this _____(day) of this _____(month) and this _____(year).

Participant details:

Participant name: _____ Signature: _____
Institution: _____ Position: _____
Contact number: _____ Date: _____

Researcher and Supervisor:

Researcher name: _____
Researcher signature: _____ Date: _____
Supervisor name: _____
Supervisor signature: _____ Date: _____

Appendix U: Summary of information provided by Helen in questionnaire

Interactions/relationship	<p>Tries to talk to mother Engages mother in tasks Recognises mother Mother reports close relationship Client no longer greets mother unless she greets first</p>
Challenges/strengths	<p>Generally calm when routine changes Can be confused but won't throw tantrum</p> <p>Mother struggles to calm client when he has a melt down Client becomes very angry and throws items</p> <p>Enjoys sport and music Loves words Good memory, counting, reading</p>
Music activities	<p>Will sing and dance to music Likes all types of music Can be creative, singing stories and changing tunes</p> <p>Music calms him</p>
Additional comments: (can be perceived as expectations/hopes)	<p>See if he can identify tunes, help him learn, other duties</p> <p>Tap into creativity Express himself Calm him</p>