How did the Key Competencies of the New Zealand Curriculum Feature in Student Music Therapy Practice for Children with Autism Spectrum Disorder?

BY

Emmett William Sutherland

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Abstract

This study aimed to discover how the key competencies featured in student music therapy with three children who have autism spectrum disorder. Individual music therapy was carried out in the natural environment of a primary school and clinical notes were developed to record events and reflections on the sessions. This data was then retrospectively analysed in a process known as secondary analysis which used inductive and deductive techniques. A process of thematically analysing data revealed that the three children with autism spectrum disorder demonstrated the key competencies in diverse ways in music therapy, such as through letting their personalities shine (*managing self)* and relating from shared histories and relationships (*relating to others)*, and that I assisted the development of the key competencies for children in equally diverse ways, such as, by being well-being focused, giving openly and making music therapy child-led. A clinical vignette is used to illustrate the findings. Additionally, it is suggested that the unique ways in which the key competencies are used in arts education and music therapy could be considered to a greater extent in the New Zealand Curriculum definitions of the competencies.

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1. Introduction

1.1. The research

This qualitative research uses clinical notes recorded during my second year placement as a student music therapist in a primary school. The clinical data has been re-analysed to determine how the key competencies of the New Zealand Curriculum featured in my practice.

1.2. Personal therapeutic stance

Through my placement experiences and learning thus far I understand that my theoretical stance is humanistic. Music therapy has often been allied with humanistic theory (Nordoff & Robbins, 1977; Bunt & Hoskyns, 2002) which highlights the potential for human development when people are supported by unconditional positive regard, empathy, and a person-centred approach (Rogers, 1980; McFerran, 2010). Therapists with a humanistic stance believe that "all persons have innate capacities for actualizing their own unique potentials for health and well-being, *given conditions that can serve adequately as opportunities for change*" [emphasis my own] (Abrams, 2016, p. 148). I believe music therapy can provide these conditions when done in an appropriate way. Roger's (1980) person-centred approach is grounded in humanistic theory, which puts value on the person, including their choices, life experiences and relationships.

Supporting neurodiversity (Perrykkad & Hohwy, 2018; Conn, 2018) is important to me, and I believe this came through in my work in the way I helped the children I worked with to thrive as children with autism. Similarly, my approach to therapy includes ipsative assessment[1], an approach which focuses on the progress of the individual and aims not to measure the person against external norms, but to develop within their own potential and aptitudes (Hughes, 2017). While aligning with ipsative assessment

[1] **Ipsative assessment** is an **assessment** based on a learner's previous work rather than based on performance against external criteria and standards. Learners work towards a personal best rather than always competing against other students. (Hughes, 2017)

and neurodiversity, I feel it is equally important to be knowledgeable of usual development and neurotypical pathways.

My interest in exploring behavioural techniques around rewards, the use of visual structure and having clear expectations in the therapy room arose from observing the teacher assistants' work with children in the wider classroom and taking on advice from my clinical liaison. Abrams (2016) describes techniques such as these as "conditions that can serve adequately as opportunities for change" (p. 148).

I draw on the concepts of the New Zealand Disability Strategy (NZDS, 2016) in my practice. The NZDS aims to makes sure people who are disabled live good lives and in particular, states that it is important for people who are disabled to participate; have presence in the community; partnership; equal opportunity; employment; choices; self-determination; recognition of the importance of relationships and interdependence; and equity (Ministry of Social Development, 2016). In my practice I also looked to address Kincaid's (1995) five accomplishments which are considered "essential to a disabled person's quality of life" (Ministry of Education, 2009, p. 36). The five accomplishments resemble the key competencies (see pp. 9 – 10) in many ways. They are: "being present and participating in community life; gaining and maintaining satisfying relationships; expressing preferences and making choices in everyday life; having opportunities to fulfil respected roles and to live with dignity; and being able to continue to develop personal competencies" (Kincaid, 1996, cited in Ministry of Education, 2009, p. 36).

I am passionate about the ways in which the next generation are situated in relation to their environment. Ecological music therapy is concerned with the connections between all things, which in the therapeutic domain manifests in the connections between people, instruments and spaces (Kenny, 2007; Ansdell & Di Nora, 2014). Bronfenbrenner (1979) explains ecological approaches as comprising of concentric elements gradually encompassing society and beginning with the individual. It was meaningful for me to expand my practice beyond what is currently considered the widest level (society) to incorporate the natural world. Music therapy for children with more severe autism often addresses global skills in the hope that these skills will be used later in life. I believe that environmental consciousness for the next generation

can be addressed in a similar way, by encouraging children's appreciation and respect for the ecosystem of instruments in the music therapy room and the sensitive ecosystem of sounds that develop between people in music, in this way laying a foundation for broader engagement with environmental issues.

1.3. The setting

My placement this year was located within a special education unit attached to a primary school in New Zealand. The students I worked with in my practice were mainly children with autism. The learning programme in the special education unit is founded in Individual Education Plans (IEPs) and the key competencies, as is true for children with learning support needs throughout New Zealand (MOE, 2011).

The school's core values are: courage, inclusion, perseverance, honesty, empathy and respect. The school's vision is one of learning and growing together. In the classroom this means supporting students to *learn* the traditional subjects of reading, writing and maths, and to *grow* through participation in sports or cultural activities.

A prized part of the school community is the Learning Support Unit for children who have additional learning needs. Many of the children have severe, multiple or profound disabilities and most have been diagnosed with autism. In the classroom there are a number of teachers' assistants who contribute to a strong team, many of whom have been at the school for over 10 years. Their role is to facilitate the children's learning and assist activities of daily living. Music therapy in the unit has always been highly valued. The unit has previously employed a music therapist and had student input in the past.

1.4. The key competencies

The key competencies were developed in response to an Organisation for Economic Cooperation and Development (OECD) project 'Definition and Selection of Competencies' which looked to determine what is needed in education for graduates to live a successful life in a well-functioning society (Hipkins, 2018). Teachers using

the key competencies hope to equip learners with the skills to manage themselves, actively contribute to the community, think critically, meaningfully relate to others and demonstrate relative mastery over communication through language, symbols and texts. What is more, these skill sets should be readily able to be used by the learner in the present (MOE, 2007). It is also observed that mastery of these five key skill areas by the student leads to increased well-being and to successful and meaningful contribution to the community later in life (MOE, 2017). Perhaps most importantly, the key competencies are intended to guide teachers toward using their own subject-specific knowledge in conjunction with the curriculum to enrich the lives of young people (Atkin, 2011). The Key Competencies Pathway (KCP) provided by the KCP Curriculum Group (2012) outlines what is expected of learners at level one of the curriculum, which is the level at which many of the students I worked with are placed. The key competencies for learners at level one are listed below:

Thinking: Students can "understand that learning makes sense of our world and exploring it in different ways is rewarding." Students can also "learn how to learn and to apply this learning in a variety of environments, activities and creative pursuits" (Ministry of Education, 2007, p. 12).

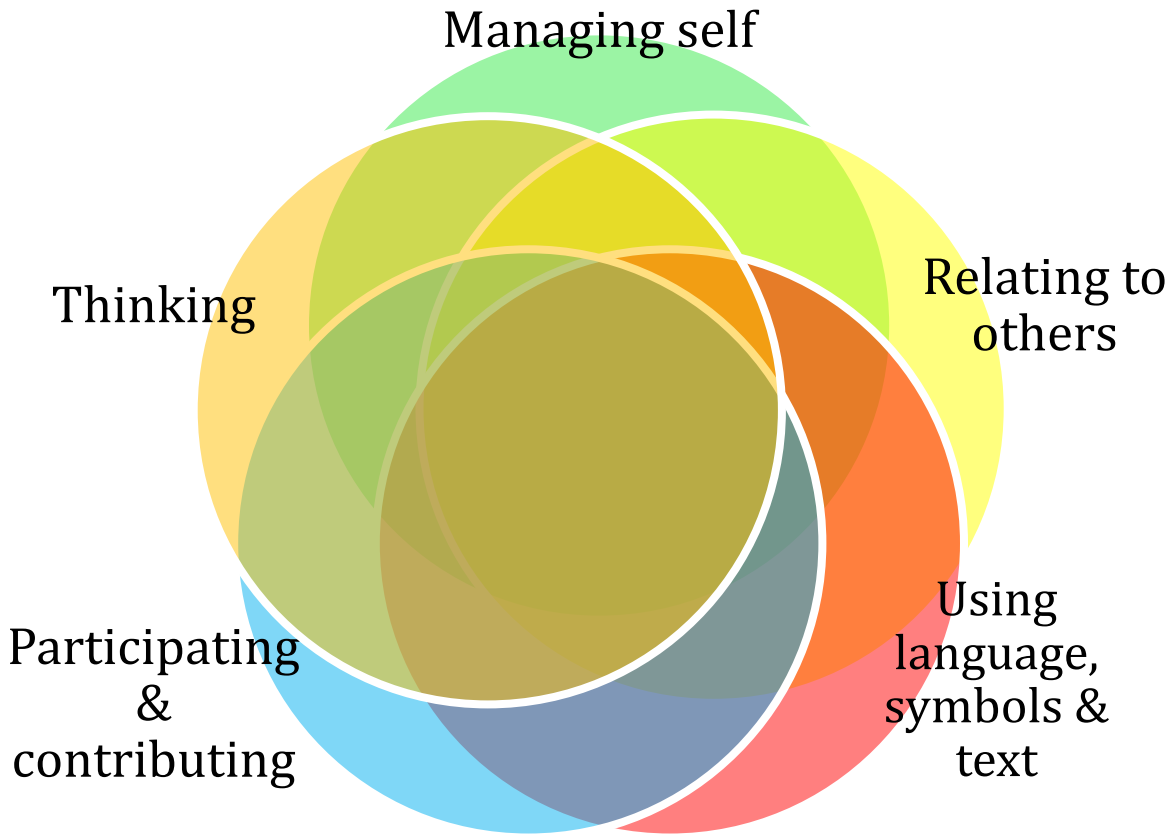
Managing self: Learners can "have a 'can do' attitude and be enterprising, resourceful, reliable and resilient" (Ministry of Education, 2007, p. 12).

Using language, symbols and text: Learners can "use words, symbols, numbers, images, sound and movement, and technologies as systems for representing and communicating information experiences and ideas in a range of contexts" (Ministry of Education, 2007, p. 12).

Relating to others: Learners can "interact effectively with a diverse range of people in a variety of contexts" (Ministry of Education, 2007, p. 12).

Participating and contributing: Learners "having a sense of belonging to communities drawn together for purposes such as learning, work, celebration or recreation… [and] contribute appropriately as a member of these diverse groups" (Ministry of Education, 2007, p. 13).

As noted by the Ministry of Education and in earlier research on the key competencies and music therapy (Halligan, 2011; Hall, 2014), “in practice, the key competencies are most often used [by children] in combination” (MOE, 2007, p. 38). Children do not stay in intersections between competencies long, such as between *thinking, managing self* and *relating to others* for instance and are constantly moving in and around the circle. The following diagram also acknowledges Rosemary Hipkins (2006) contributions to the understandings of the key competencies in the way that *thinking* is the foremost competency in the diagram. Hipkins believes that *thinking* underscores all the competencies.



1.5. Music therapy

The music therapy described in this study took place in a medium-sized room adjoining the main classroom in the special education unit. In the room there was a keyboard students could freely play on and an open box of instruments including guiros, shakers, small drums and glockenspiels. Therapy sessions were approximately 20 minutes in length, usually followed by a note taking session of 20 minutes. I increasingly introduced more structure into sessions as the placement proceeded which included the use of visual cue cards, limiting instruments, work contracts and rewards. The primary instruments I used were keyboard and guitar.

The therapy itself was creative and improvisatory (Wigram, 2004; Aigen, 2005; Rickson, 2015) and I used techniques such as attunement (Birnbaum, 2014; Conn, 2018; Hernandez-Ruiz, 2018) which sees the therapist musically mirroring, elaborating or contextualizing a child's music (Wigram, 2004; Carroll & Lefebvre, 2013). In the same way I also improvised and scaffolded interactions to enable students with physical and intellectual difficulties to play in the way they intended by taking weak or poorly timed hits as having purpose (Aigen, 2005; Geretsegger, Holck, Carpente, Elefant, Kim & Gold, 2015; Conn, 2018). By drawing from a shared history of interrelating I was able to develop characteristic interactions over time which helped develop relationships and shared attention and affect (Geretsegger et al., 2015). I also aimed to create positive relationships by 'being alongside' (Bunt and Hoskyns, 2000) children and showing and having empathy for how they are feeling (Milton, 2012). In the music therapy I also followed the child's lead by using songs, musical activities and instruments that interested them (Hernandez-Ruiz, 2018) and based the content and expectations of the therapy around their abilities (Geretsegger et al., 2015; Heidersheit & Jackson, 2018).

I did my best to ensure the music therapy room was a safe environment by keeping boundaries in place, and by keeping the layout of the room and the instruments in a similar place for every client (Bunt & Hoskyns, 2000). The music therapy too was flexible (Rickson, 2015) and took into account the individual children's needs, such as a need for visual structure, or time for toilet breaks. A large part of my practice too was

facilitating enjoyment, where I turned the client's interests into an opportunity to share attention and create a setting for children to find social communication intrinsically motivating (Geretsegger et al., 2015; Conn, 2018; Hernandez-Ruiz, 2018).

I used the SCERTS model, liaised with teacher's assistants, teachers and therapeutic staff and took my goals from this approach (Prizant, Wetherby & Rubin, 2005; Ayson, 2011). SCERTS is an educational and treatment approach developed for use with people with autism and is acronym for Social Communication (SC), Emotional Regulation (RE), Transactional Support (TS), all things needed in a successful programme for helping children on the autism spectrum. I also helped in team meetings, contributed to goals set in this model and supported individual education plans. For example, in one child's individual education plan there was a focus on cross body movement as well as emotional regulation, and social communication so in consultation with the child's teacher, parents and physiotherapist in an IEP meeting, I brought in hand clapping games like 'Slime Yuck Yuck' into the child's music therapy programme to support these needs.

1.6. Exegesis format

This exegesis begins with a literature review. Autism spectrum condition is surveyed and then links are made between music therapy treatment intentions and the key competencies. The methodology is outlined before a presentation of the results. The results are followed by a discussion which explores the important aspects of the research findings. The exegesis concludes by drawing together the key discoveries.

2. Literature review

2.1. Search strategy

A combination of databases were used in the creation of this review, including the Victoria University of Wellington Library database Te Waharoa, SAGE Research Methods Online, Google Scholar, and ProQuest. The search terms I used and combined into various search 'strings' were: 'autism', 'children', 'music therapy', 'education', 'key competency', 'improvisation', 'collaborator' and 'art therapy'.

The literature review that follows first touches on autism spectrum disorder. This is followed by literature outlining the various ways music therapy can be offered as a treatment for children on the autism spectrum. Research into arts experience with school aged learners is next, which suggests that the arts open up unique ways of thinking for young people and support well-being. I then explore how music therapy can meet the key competencies naturally in the course of therapeutic work and also provide clarity to the development of the key competencies in arts education.

2.4. Autism spectrum condition

The diagnosis of autism spectrum condition, or autism, is given to people with a neurological variant for which the basis is genetic, and whose neurological difference also has its own particular character (Walker, 2015). It also describes a spectrum of intensities and conditions, including Asperger's syndrome and the diagnostic presentation for each case can be very different (Dimitriadis & Smeijsters, 2011).

Autism has a strong influence on human development throughout the lifespan (Walker, 2015). The area of social interaction is a context in which individuals with autism often tend to be disabled (Rickson, 2015). Individuals with autism have a higher amount of synaptic connections than non-autistic individuals and as a result their subjective experience is often more intense (Walker, 2015).

Some argue that the social and communicative diagnostic criteria for Autism Spectrum Conditions spring from a unique autistic self, distinct from a neurotypical self (Perrykkad & Hohwy, 2019). This is supported by Conn (2018) who explains that the intersubjectivity of bodies usually taken for granted between neurotypical teacher and student is awkward for students with autism. Because empathy relies on intersubjectivity this can lead to a 'double empathy problem' (Milton, 2012) and the two bodies can find it hard to naturally locate a middle ground for teaching to thrive. Pedagogical intersubjectivity can of course be met and one way to achieve it is through symmetries of knowledge (Conn, 2018) and by the teacher orientating themselves to the interests of the child (Hernandez-Ruiz, 2018).

There are currently no known causes or 'cures' of autism (Slaughter, 2015), although some studies have found familial aggregation, traits inherited by children from their environment, or their parent's genetics may increase chances of autism (Sandin et al., 2014). Treatment helps individuals live with autism, though even the idea of autism treatment is contested and some say it instead helps individuals with autism live in our world. Studies vary in the prevalence of autism in the general population from 1 - 15 in 10,000 to as high as 1 in 150 (Williams, Higgins & Brayne, 2006). The prevalence of autism has increased around the world in recent years which has in turn increased the demands for Evidence Based Practice to help the needs of diagnosed people (Lord & Bishop, 2010). This increase in prevalence may be due to more awareness of the disorder in combination with a more confident diagnostic process, or an actual increase (Thompson, 2015).

In terms of what a diagnosis of autism can look like from a clinical diagnostic perspective, people with autism are said to display: 1) "deficits in social communication and social interaction" and 2) "restricted and repetitive patterns of behaviour, interests or activities" (American Psychiatric Association, 2013, 299.00 F(84.0)). Most importantly, and especially for a diagnosis of severe autism, these elements will disrupt the process of everyday life that occurs between people with autism and their neurotypical family members, peers and carers.

Autism affects children's abilities to manage the key competencies. Specifically, it can affect a person's ability to relate to others, participate and contribute to a group, learn

a variety of new thinking skills, manage themselves, and communicate their needs to others.

Autism is one of the most common areas for music therapists to work in. The nature of music therapy is suited to work with children with autism because it uses alternative pathways of communication, giving freedom to clients who may have restricted communication skills. This particular advantage was noted early on in music therapy development (Alvin, 1966; Gold, 2011). People with autism also often respond more positively to music than other sound stimulus (Gold & Wigram, 2006), can be musically gifted (Masataka, 2017), and react positively to music itself as a medium (Geretsegger, 2014).

Music therapists working in a multi-disciplinary therapeutic team using the SCERTS model can contribute to client goals successfully and in a way unique to what music therapy can offer (Walworth, 2007; Walworth, Register & Engel, 2009; Ayson, 2011). The SCERTS model was developed for treatment of people with autism and is an acronym for Social Communication, Emotional Regulation and Transactional Support. As can be seen, these are considered important elements for any autism treatment programme. A part of its success is due to the way treatment is extended into natural settings to aid generalisation of skills, and delivered with a high degree of coordination via parents or caregivers, the school and the therapeutic team.

A favourable ecology (Conn, 2018) is important in social interactions with people with autism. Simple language, longer response times and equal footings between communication partners all help, as well as recognising non-verbal or repeated communication as a legitimate turn in conversation (Conn, 2018). Further contributions to a favourable interactional ecology are recognising the child as an independent agent in the conversation, treating their utterances as meaningful and being confident to follow their lead (Geils & Knoetze, 2008).

2.5. Music therapy and Autism Spectrum Disorder

The commonly held goals of those who help to bring out the best in young people with autism, such as in education or therapeutic settings, usually revolve around addressing the main features of autism; for example, supporting children to relate, socialise and share attention, successfully integrate sensory information, and continue developing motor and cognitive function (Carroll & Lefebvre, 2013; Carpente & LaGasse, 2015; Rickson, 2015). An important part of the work in music therapy with children with autism, which assists these clinical objectives, is facilitating attunement (Birnbuam, 2014; Geretsegger et al., 2015; Holck & Geretsegger, 2016; Hernandez-Ruiz, 2018). There are many techniques to aid attunement in improvisational music therapy. These include; mirroring, elaboration, accompanying, grounding, contextualisation and support (Wigram, 2004; Carroll & Lefebvre, 2013, Geretsegger et al., 2015).

Attunement and this particular kind of interaction style takes its cue from theory around mother-infant dyad interactions (Trevarthen, Stern & Malloch, 2000) which is thought to be close to therapist-client interactions in music therapy (Trevarthen & Malloch, 2000). Everyone has an intrinsic motivation to engage in interaction and in successful encounters like these the subjective worlds of the people taking part in the interaction come together, otherwise known as an experience in ‘intersubjectivity’ (Scheiby, 2005; Scharff & Scharff, 2011; Birnbuam, 2014; Conn, 2018). The feeling of this in the music is described in the client’s voice as ‘me knowing that you know how I feel’ (Pavlicevic, 1997).

Giving attention to attunement relates strongly to the theory of Paul Nordoff and Clive Robbins, frontier music therapists, who thought that musical expression and feeling is innate and intuitive for everybody. The aim of their theory and clinical practice was to create music-therapeutic relationships formed on interaction, intersubjectivity and connection (Birnbaum, 2014; Holck & Geretsegger, 2016). In the words of Clive Robbins, “I wanted to find a way to break through the barriers which make it difficult to reach deeply into children [with disabilities]” (NordoffRobbins, 1988). Rigorous studies have subsequently shown music therapy interventions can aid children with autism to

improve levels of attunement and shared attention (Kim, Wigram & Gold, 2008) and communication skills (Geretsegger, Holck & Gold, 2012).

The Early Start Denver Model (ESDM) is an autism intervention that teaches parents to use behavioural techniques to help attunement and socialisation for their children (aged 12 – 24 months). To help parental attunement with a child who has autism it is suggested that parents: 1) "Step into the spotlight" (p. 27) and orientate themselves to the activity and the interests of the child, 2) "Find the smile" (p.27) by making activities engaging for the child and also using regular social-sensory activities without objects like songs, finger play, roughhousing, and 3) create clear cues for closure and transitioning away from the activity (Hernandez-Ruiz, 2018). The technique of attunement in music therapy feels to me to be closest to the key competency *relating to others* for the importance placed on intersubjectivity.

Musically scaffolding the flow of the interaction is another important theme in the work with children with autism (Aigen, 2005; Geretsegger et al., 2015). Here the therapist takes the actions of children as having intent and meaning – even if weak or poorly timed (Geretsegger et al., 2015; Conn, 2018). By doing this the therapist increases the chances for the child to comprehend and engage in the interaction. This approach is musical and the therapist may use techniques such as mirroring or melodic expansion (Carroll & Lefebvre, 2013). This support then acts as a scaffold, by generating expectation, and *enables* children to engage in the interaction more. As and when the child shows signs of emerging communicative understanding, the therapist can support this musically (Geretsegger et al., 2015; Heidersheit & Jackson, 2018). This approach is grounded in the belief that musical expression is innate. *Using language, symbols and texts* seems to be the key competency closest to this music therapy approach in the way that the focus is on the essence of communication and how its raw materials are being used and amplified. Clive Robbins describes musical scaffolding:

> "You don't imitate, you musically enhance [which means] to make something more beautiful. You increase what's already there." (Robbins, cited in Aigen, 2005, p. 28)

Tapping into a shared history of interrelating between child and therapist is thought to be an essential and unique element of music therapy (Geretsegger et al., 2015). This possibility is particularly powerful in the work with children with autism as it may form the basis of shared musical themes of interaction (Geretsegger et al., 2015) and 'symmetries of knowledge' (Conn, 2018). With children with ASD these things are desired, because the goals for therapy with this population revolve generally around shared play and providing assistance to develop relationships. One example of this music therapy element is revising the musical activities the client enjoys which may have developed over time with characteristic interactions both play partners enjoy. This shared history and the expectations inherent in activities may also be played on for a deepening of the client-therapist relationship. This approach seems most similar to the competency relating to others, especially in terms of the relationship aspect of this skill. Tapping into a shared history of interrelating also resembles *participating and contributing* for the way there is a sense of *belonging* connected to the interrelating.

Building and maintaining a positive relationship is considered another essential element of music therapy with children with autism (Geretsegger et al., 2015, Rickson, 2015). It is not possible to quantify exactly what helps build a positive relationship but it is thought that being alongside is a good place to start (Bunt & Hoskyns, 2002). As a therapist, this means listening attentively to what is said and played by the client (Conn, 2018) and for clients to know that all their communicative acts are heard. Another element that may complement relationship-building is for the therapist to have an open presence and attitude (Bunt & Hoskyns, 2002). An open therapeutic presence reflects how we are in the room and an open therapeutic attitude reflects how we think and *know* the work, beyond any kind of theoretical orientation. Empathy and resonance to a client's situation is also thought to be an important part of establishing a real, working and positive relationship (Bunt & Hoskyns, 2002). *Relating to others* is the competency closest to this essential element of music therapy for its focus on relationships.

Bunt and Hoskyns (2002) also describe the process in action (the relationship once established) as two people knowing one another and in the interaction having a feeling for the expected and the unexpected. Mossler et al. (2017) additionally describe the strength of a therapeutic relationship in work with children with autism as related in

kind to the outcome of music therapy. For example the greater a therapeutic relationship between client and therapist, the greater the expected outcome for the development of social skills, communication faculty and language (Mossler et al., 2017). Having a working alliance is also an aspect of a healthy and positive therapeutic relationship. This means the therapist and client will partner to help meet the therapeutic goals (Bunt & Hoskyns, 2002).

Another crucial aspect of the work with children with autism, and for all clients, is facilitating enjoyment (Geretsegger et al., 2015, Hernandez-Ruiz, 2018). By meeting children's reciprocation with praise the child can experience affect sharing as well as experience interactions as "pleasurable, rewarding and intrinsically motivating" (Aigen, 2005; Geretsegger et al., 2015, Hernandez-Ruiz, 2018). By using the child's attention towards sensory input, therapists can create a playful and enjoyable atmosphere which will help to foster enjoyment in shared interactions (Geretsegger et al., 2015; Hernandez-Ruiz, 2018). The competency *thinking* may develop from gradually being able to reflect and learn from sensory experiences which are enjoyed, (though it remains speculative whether children with ASD process their sensory needs cognitively).

Providing a secure environment where the client feels safe is a vital part of any therapeutic practice (Geretsegger et al., 2015). Feelings like these are assisted by consistency and predictability; for example, the therapy occurring in the same space, ideally in a warm and private room with natural light, and the instruments, if possible, all being in the same place (Bunt & Hoskyns, 2002).

Keeping various boundaries of therapeutic work consistent is another important part of maintaining the client's feelings of security. How these are managed and chosen will depend on the client's needs. Successfully creating and holding these boundaries relies on an accurate understanding of the client's needs and the therapist also must find a balance between client independence and safety (Bunt & Hoskyns, 2002). Other boundaries too, such as time based boundaries, again hinging on consistency and predictability, and ethical boundaries, such as the therapist not bringing their own needs into the therapy room, help create a secure environment (Bunt & Hoskyns, 2002).

Following the child's lead is another important element of child-centred music therapy. In the first way this is about using the client's interests to engender enjoyment. Building on this, the therapist follows these motivations, and any other behaviours and features of attention, and incorporates them into meaningful interaction (Geretsegger et al., 2015; Hernandez-Ruiz, 2018; Conn, 2018). Everyone has an intrinsic motivation to engage in social exchange and using a child's interests, motivations and attention in this way helps facilitate this exchange. This technique helps the key competencies *relating to others* and *thinking*. Following the child's lead in a second way is about setting the parameters of therapy to match what the client is capable of developmentally and in terms of communicative ability. In this way the therapy is optimised for the child. This second approach also includes considerations on structure, such as opening the session to a child's initiatives, or reducing structure to prevent feelings of insecurity or aimlessness (Geretsegger et al., 2015).

Developing a flexible scope for practice is highly appropriate to music therapy with children with autism especially in regard to adjusting the therapy to the children's or families' needs (Geretsegger et al., 2015; Rickson, 2015). Including parents/caregivers in the therapy helps generalize skills for the child with autism and helps parents use musical interventions in natural settings (Hernandez-Ruiz, 2018). Having therapy at home may be easiest for the family too, which is an example of being flexible to practical possibilities. An example of incorporating clinical judgement, an additional component of developing a flexible scope for practice, is considering the safety of the client and others in the room, or using non-musical media like puppet play or role play.

While there are many important indicators regarding the promise of improvisational music therapy in research and case studies, a prominent international Randomised Control Trial (RCT) study (Bieleninik, Geretsegger & Mossler, 2017) indicated that there was no significant difference in symptom severity as reported by the Autism Diagnostic Observation Schedule (ADOS) for children with autism between an enhanced standard care group comprising of multiple inventions (including speech language therapy, physiotherapy, occupational therapy, play therapy, horse riding and Floortime) and enhanced standard care with music therapy. In the discussion of this study, the authors suggested there were indicators that parents and children valued

the intervention, despite the research findings not indicating significant change. The authors observed important factors, for example, that in practice music therapy is often sustained over years as opposed to months and, along with the average attendance of study participants at music therapy sessions being lower than expected (due to barriers like travel) and that this may have had some bearing on the results. Nevertheless, this remains an important international finding and increases the need better to understand improvisational approaches for children with autism.

2.6. Benefits of Arts Experience and Music Engagement

In many ways gains seen though young people's art's engagement match what music therapy as an arts therapy can offer. Engagement in the arts, such as *music*, dance, drama and visual art (MOE, 2007), can offer learners particular benefits including the opportunity to experience unique approaches to thinking (O'Connor & Dunmill, 2005, p.2), expression and interpretation. In turn, these enhance a person's well-being and support learners' confidence to take risks (MOE, 2014). Additionally, the arts occupy a unique place in the education system because they assist students in accessing the more traditional subjects (Bolstad, 2011).

Arts engagement also boosts imagination, grows creativity, and when the opportunity allows, encourages young people to work together (Eisner, 2002). Following on from this, music in schools and the increased art literacies of learners not only assist the artistic gains of young people and their intellectual development (MOE, 2014), but also bolsters the development of healthy communities (McFerran, 2010). Rickson & McFerran (2014) discuss the value of the music therapist's support to musical communities in school settings in meaningful and diverse ways, working directly with children and supporting teaching and learning support staff.

Explorations of the arts also aid in the learner's burgeoning development of all five key competencies (O'Connor & Dunmill, 2005), in some ways demonstrating the

interconnectedness of the competencies in practice (Rutherford, 2004; MOE, 2007). Additional research on how the arts relate to the key competencies notes their one of a kind development and use in increasingly complex settings in devised drama (Searle, 2009) and describes how the performing arts can deliver on each competency (Thwaites, 2009).

2.7. Music therapy and the Key Competencies

The key competencies seem to be addressed in the natural course of music therapy (Halligan, 2011; Hall, 2014). Music therapy also seems to provide clarity to the place and development of the key competencies in arts education (Field, 2011). Halligan (2011) observes a close link between the key competencies and music therapy in terms of what they accomplish and their focus, while Hall (2014) found the techniques and strategies of music therapy, as determined from her clinical goals, helps address the key competencies for learners with multiple and profound disabilities. Using educational constructs such as the key competencies in music therapy can add to students' social and emotional experiences of learning which is closely paired to success at school (Derrington, 2011). In naturally supporting the key competencies, music therapy can also support the global skills required for the 'five accomplishments' (Kincaid, 1996), which resemble the key competencies and are essential to a disabled person's quality of life (MOE, 2009).

2.8. Summary

Music therapy for children with autism focuses on supporting their ability to relate, socialize and share attention, successfully integrate sensory information, and continue developing motor and cognitive function (Carroll & Lefebvre, 2013; Carpente & LaGasse, 2015; Rickson, 2015). There are a number of themes of importance for music therapy with children with autism which include facilitating attunement, musically scaffolding the flow of interaction, tapping into a shared history of interrelating, building and maintaining a positive relationship, facilitating enjoyment, providing a secure environment, following a child's lead, and for children and their families, developing a flexible scope for practice (Geretsegger et al. 2015).

An arts education and experience can offer many benefits for young people, including; a chance to work alongside others (Eisner, 2002), access to more traditional subjects (Bolstad, 2011), increased emotional well-being (MOE, 2014), and a chance to develop creativity (Eisner, 2002) and in many ways these gains match what music therapy as an arts therapy can offer. Previous research seems to indicate that music therapy naturally addresses the key competencies in due course (Halligan, 2011; Hall, 2014) but what is less clear is the way the key competencies *feature in music therapy for children with autism*.

Research Question

How did the key competencies of the New Zealand Curriculum feature in student music therapy practice for children with Autism Spectrum Disorder?

3. Methodology

3.1. Overview, approach and methodology

Overview

This qualitative research used the clinical notes I generated during my student placement. It aims to understand how the New Zealand key competencies featured in my music therapy practice for children with autism, in the hope that this information may improve understanding about how the key competencies are addressed in music therapy. There were no direct participants in this study as the data were produced by me as part of meeting the responsibilities of my clinical placement in the natural environment of the school. I worked with many children during my placement and the data was generated from my interactions with staff and students over many rewarding months.

Approach to research

This research takes a constructivist approach and I acknowledge that the findings and conclusions are grounded in my understandings of the world. I apply constructivism in this research as an approach that views reality as understood by people through their accumulative interactions with, interpretations of, feelings about, and memories of, the world and each other (Alvesson & Sköldberg, 2009).

Methodology

Relevant data to the research question were selected from the clinical notes of three children on the autism spectrum with whom I worked in the course of my placement. Data were then deductively coded according to the definitions of the key competencies provided by the New Zealand Curriculum. The data, once sorted into categories representing the key competencies, were then inductively analysed to produce the themes and reflections developed in the findings of this project.

Deductive analysis means the researcher arranges data and creates findings by tying into existing definitions, information and theory. The research was deductive in the way the data was described and grouped into the separate competencies by relating the data to the definitions of the key competencies. The researcher then inductively sorted the data via thematic analysis. An inductive approach refers to the researcher using their expertise to sort the data and make sense of it their own way, as different from relating the data to an existing theory for example.

Thematic analysis as a research strategy, used for the inductive stage of my research, is heralded as user-friendly and flexible (Boyatzis, 1998; Braun & Clarke, 2006, Hoskyns, 2016), while “offer[ing] a toolkit for researchers who want to do robust and even sophisticated analyses of qualitative data, yet focus and present them in a way which is readily accessible to those who aren’t part of the academic communities” (Braun & Clarke, 2014). In the processes of analysis I applied the research strategy provided by Braun and Clarke (2006) which is: 1) familiarizing yourself with your data; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and naming themes; and 6) producing a scholarly report.

The process of reviewing data that has been previously collected is known as secondary analysis, and reviewing data that was created by the person who produced it is termed “auto data” (Heaton, 2004, p. 13). Along with the principal analysis of my clinical notes, I also reflected on my student journal which contained reflexive entries and notes from meetings with my supervisor, clinical liaison and visiting music therapist.

3.2. Data sources

I kept regular practice notes on the children I worked with and have used data from between March and July 2018 for three children with autism who have diverse needs. In the process of creating this report I also referred to my student diary which contained reflexive thoughts on my student music therapy practice as well as notes from meetings with my clinical liaison, other teachers, visiting music therapist, teachers assistants and research supervisor.

3.3. Data Analysis

I first photocopied my clinical notes then went through session by session looking for instances where the key competencies were: 1) demonstrated by the child or 2) aided by myself. When I identified data that resembled the demonstration or aid of a competency I wrote beside the data the relevant key competency and an inductive code [see Appendix 1].

Generating inductive codes

A code is a short phrase that captures the essence of a piece of data and is also used in tandem with other codes to create themes (Saldaña, 2013). The inductive codes I generated referenced the Ministry of Education's definitions of the key competencies, as stated in the pathway documents. For instance, the key competency *managing self* is described as learners "hav[ing] a 'can do' attitude… [and being] enterprising, resourceful, reliable and resilient" (MOE, 2017). Anything relating to this definition was deductively coded and grouped into the competency *managing self*, and uniquely described using an inductive code for the particular way it reflected this definition. Once the groups were assembled for each competency I then began the process of inductive thematic analysis.

An example of coding data inductively:

> *During pauses and while music was being played Sally sounded some phonemes I hadn't heard before like 'ga' which is interestingly what another child in the unit does at the moment. She had a look of surprise on her face.*

In terms of the *managing self* competency, I thought this data was an example of the child pragmatically searching out new sounds and enjoying and surprising herself with the discovery. Hence, I coded the data as:

> *Exploring mouth shapes and sounds in and around music.*

There are other ways of seeing this moment too, and I also coded this example under the competency *Thinking* as:

Exploring the improvised music of my body and voice

In *using language, symbols and texts* as:

I'm Talking! (using sound to represent or communicate experiences)

In *participating and contributing*:

Improvising new musical ideas

And in *relating to others*:

Improvised sounds for herself and to 'scat' with therapist

Coding Format

Below is an example of the format I used to store the data in Microsoft Excel for later thematic analysis for *Managing Self*. The data was stored in an identical manner for the other key competencies.

data	KC	Inductive
During pauses and while music was being played Sally sounded some phonemes I hadn't heard before like 'ga' which is interestingly what another child in the unit does at the moment. She had a look of surprise on	Man self	Exploring mouth shapes and sounds in and around music

her face.		

Including my facilitation in the data

As my research question broadly asks how the key competencies *featured* in my practice, I also chose to include data relating to contributions from my facilitation that may have aided in a child's development of a key competency, or in their ability to demonstrate a key competency. On the photocopies which I coded from, I indicated a participant's demonstration of a key competency in red and my own demonstration of helping in blue [see Appendix 1]. The shorthand for this approach was *help 'x'*. The table following gives an example of coding for how I helped the development of the key competencies.

Data	KC	Inductive
Juan started singing 'let's bang the drums' (adapted) completely unprompted which started off the session. An awesome example of initiation and risk taking and appropriate initiation. We (Nora, learning support assistant, and I) got straight into the song	Help man self	Getting in behind his initiation

This example by Juan (pseudonym) is representative of other competencies too, like help participating and contributing, or help relating to others, but I have only given help managing self here. When no new codes began to emerge and when repeated codes became the norm, in terms of how children demonstrated the definitions for the competencies, or how I helped the development of the key competencies, I considered the data to have reached saturation point (Saunders et al., 2018). This means no more

useful codes can be generated from the data as the researcher believes they have all been accounted for.

Thematic analysis using inductive coding

Once all data had been collected in the manner described I then started the process of thematic analysis for the inductive codes as described by Braun and Clarke (2006). The first round of analysis generated initial themes which were colour coded [see Appendix 2] (Braun & Clarke, 2006). In the second and third rounds of analysis I reduced the initial themes down to a handful of enlarged themes, then wrote the thematic summary based on these larger themes [see Appendix 2].

3.4. Ethical Considerations

In the process of this research I have abided by the ethical codes for conducting research as outlined by Victoria University of Wellington's Human Ethics Committee and Music Therapy New Zealand. In addition, I did my best to uphold the aims and ideals of the Treaty of Waitangi for the children of this country. This research as an observational study has prior ethics approval (NZSM 526 Casework and Research VUW Ethics memorandum 22131). I have consent from the facility in which I worked, to use my clinical data for research purposes [See Appendix 7]. All personal data of clients used in this research have been anonymised. Informed consent was sought from the families of the clients to develop clinical vignettes illustrating the research findings [see Appendices 3 & 4].

Since the data used in this study were clinical notes produced by the researcher, it is not formally considered that the study involved any participants. Of course I worked with many children in my placement and the data in reality arose from my interactions with staff and students over many months.

4. Findings

4.1. Overview

In the process of answering my research question I developed three main areas of findings. These are: 1) The working definitions I used; 2) how children demonstrated the key competencies; and 3) how I helped the development of the competencies for children as a student music therapist.

4.2. Working definitions

In the process of coding I developed working definitions of the competencies which allowed me to refer to them quickly in order to remind myself about what each competency looked like, and which I thought also described their use in music therapy. They were influenced particularly by Halligan's (2011) findings and were also informed by my broader reading around the subject and through discussions with my academic supervisor and visiting music therapist. The working definitions helped to sculpt my findings and so are pervasive in the process and outcome of all thematic analyses in my work.

They were written on a piece of card I used as a back while hand processing my notes. They are written here exactly as they were on the card. These definitions also developed over time and were not present at the very start. I found they were added to when I encountered data that struck the core of what I thought a key competency was about or when data did not traditionally encompass the definition of a key competency but on considering music therapy's values and theories, it was extended as such. The reason for their creation was that I found the usual definitions of the key competencies too long and over time these definitions did not live up to how I understood the potential of the key competencies existing in music therapy and when encountering interesting clinical examples I recorded.

Managing Self: Being pragmatic and taking responsibility for yourself; personal responsibility and well-being.

Participating and Contributing: Belonging to a group put together for music therapy; contributing appropriately.

Relating to Others: Anything to do with other people; relationships.

Thinking: The use of knowledge and being creative; knowing what I like; trying out something new to see if I like it; having fun!

Using Language, Symbols and Text: The language of music, smiles, and the body; verbal language.

4.3. How three children with autism demonstrated the key competencies in music therapy

The table below outlines the headings of the main themes I found through thematic analysis occurring within each key competency. Different music therapists and researchers may classify and understand the competencies differently and what follows is my interpretation.

Managing Self

• Addressing my needs
  ○ Self-regulation/self-stimulatory behaviour
  ○ Addressing my needs by seeking adult attention
• Transitions
• This little light of mine, I'm going to let it shine
• Giving it a go
• Demonstrating self-control by meeting very clear expectations

Participating and Contributing

• Being a part of something bigger
  ○ Being with the group
  ○ Enjoying meaningful shared experiences

- Influencing
  - Leading
  - Exploring
  - Sharing

Relating to Others

- Relating as emanating from a relationship
  - Trust
  - Relating to a shared history
- Taking time to withdraw
- Having it my way

Thinking

- Knowing and learning
  - Implicit knowing
  - Exploring, learning and requesting new knowledge
  - Musical play
  - Using knowledge
- Being creative

Using Language, Symbols and Text

- Passive
- Active
  - Using the language of the body
  - Being vocal
  - Sharing special photos
- The music of me

4.3.1. Managing Self

The themes that captured the ways children managed themselves in music therapy were (from the point of view of the child): *addressing my needs, transitions, this little light of mine I'm going to let it shine, giving it a go*, and *demonstrating self-control by meeting very clear expectations*.

Addressing my needs

Addressing my needs is comprised of two smaller themes: *self-regulating/self-stimulatory behaviour*, which describes the self-regulation common among children with autism also known as stimming; and *addressing my needs by seeking adult attention.*

Self-regulation/self-stimulatory behaviour

In my coding and thematic analysis I have considered self-regulatory behaviour, commonly used by people with autism spectrum disorder, as a form of managing self. This was demonstrated by children by walking around on tip-toes while self-stimulating; blinking eyes, touching thumb and fingers together, moving head side to side and clicking jaw, and by moving a trouser lace with a knot at the end back and forward rapidly.

Addressing my needs by seeking adult attention

I found that one way in which children managed themselves in music therapy was by seeking adult attention through expressive behaviour such as singing loudly, throwing a pen, and hitting their head against the wall and with their hands. I perceived this behaviour as resulting from a need for attention. A specific example of a child addressing their needs via an adult was when a young girl looked for sensory input from a music therapy collaborator. Here the teacher's assistant comforted the child and offered hugs, playing with hair and back rubs.

Transitions

For children with more severe autism, transitions, especially between school and home, can be tricky. This theme attempted to capture instances of children managing themselves around transitions in and out of the music therapy room, such as in the welcoming song or while saying goodbye. One example was when a young boy who was out of sorts took up the offer (and encouragement) to attend music. In this particular example I could see that he was upset when I arrived and when it was time for this music therapy session I sung a welcoming song for him from the music therapy room with the door open to the main room where he was. He was saying he did not want to attend and that he was sad but once he came in and sat down in his chair he settled well. We kept the usual structure which I think grounded him.

This little light of mine, I’m going to let it shine

This theme captures the personalities of the children I worked with. Ways in which children demonstrated their personality in music therapy included giving a unique and novel contribution to the musical activity, such as putting their chin gently on the drum for everyone to copy, or showing the therapist through gesture that something about the colourful quilt in the room was interesting them.

Another way that personality shone through in the therapy room was by children taking up instruments of interest; for example, a young boy favouring playing the guitar; when a young girl spontaneously and independently took up a toy keyboard to play; and when a young boy politely requested to play a colourful lollipop drum with a special beater upon entering the room. Another way I felt the children's personality shine was when a boy clearly initiated an activity by singing the opening lines to a familiar song; and when a child suggested a number verses for a preferred song of theirs.

Giving it a go

Giving it a go looked to reflect the self-management necessary to take on something new from one's environment; in this case, a suggestion from an adult. An example of this was when a child took up an offer to play the hello song on the piano with me where up until that point I had played it by myself. Another instance of *giving it a go* was when a child played along on a small keyboard and sung the lyrics with me to "Wheels on the Bus" where he had not before.

Demonstrating self-control by meeting very clear expectations

Expectations and rules were an important element of my practice. Musical activities often have naturally clear expectations on how to participate. For some children it was also necessary to implement an unusual rule for the music therapy room such as 'no playing loud' and I believe children demonstrated self-control to meet these rules. This particular unusual rule was for a boy who liked to play loudly to the point his ears hurt as a form of sensory stimulation. I limited this extreme volume to occur only a few times in the session rather than the whole time as he would prefer it.

4.3.2 Participating and Contributing

The two overarching themes which emerged within this competency were *Being a part of something bigger* and *Influencing*. In some ways they resemble *participating and contributing* respectively in the sense that the first is about following the group, and the second is about offering something for the group to take up, as well as to assist the first process in some ways. However, the theme *influencing* does differ from its counterpart (*contributing*) in that it also encompasses the children's agency to test the boundaries and explore different roles for themselves. The 'group' in which children demonstrated their ability to be a part of something bigger and to influence was either made up of the child and the therapist; or the child, therapist and a collaborator.

Being a part of something bigger

Being a part of something bigger is made up of two smaller themes; *Being with the group*, and *Enjoying meaningful shared experiences with the group.*

Being with the group

Being with the group captures the moments where children were in sync with the direction and dynamic of the musical group. For children with autism this can be challenging, as skills like awareness of others and the ability to attend to subtle social cues are needed. This theme encompasses: 1) being with the group when the musical rules are to improvise (e.g. a child being alongside in an improvisation and surprising herself with the use of her voice while the collaborator and I were laying a rhythmic ground for her and experimenting with different chords); 2) following the musical rules of the activity (effective songs should let you know how to participate and one instance of this was a child choosing appropriate and improvised rhythms, such as four quick hits in a row, in a sharing and copying activity were we would take turns leading); 3) parallel play; and 4) attending to the group and respecting the space (e.g. a child attending to the expectations of the music therapy room and the adults in the room by taking special care of a drum they requested when at other times instruments are damaged or broken).

Enjoying meaningful shared experiences

This theme captures the special shared moments that occurred in music therapy groups with the child, the collaborator and myself. Some examples of the children joining in on these warm times was a boy laughing, smiling and contributing passionately on the drums in a favourite activity of his which was to play loudly; and a girl giving warm eye contact while playing on a rotating colourful bell in C Ionian scale.

Influencing

Influencing is comprised of three sub-themes: leading, exploring and sharing. The theme as a whole attempted to capture how children navigated the group as an individual and explored the opportunities to lead, share and take up new roles.

Leading

Examples of the children leading the group were: 1) revising familiar material for the group to go on (e.g. singing the opening lines to “Old MacDonald” which we all enjoy); 2) Improvising material for the group to go on (e.g. creating actions that paint the lyrics which are interesting and that we all copy like putting our hands up for the word “Up” and our hands down for the words “Down”); and 3) taking up roles of responsibility (e.g. counting the group in).

Exploring

The theme *exploring* describes instances where children tried new roles and tested the waters of the group and the room. Ways I felt children explored in groups were: 1) through wanting to have more input and more ways to contribute (e.g. by strumming the hello song with me where before I had only played it by myself); and 2) by testing the boundaries of the group (e.g. hitting instruments hard to see what would happen).

Sharing

This theme looks to highlight times where children shared their thoughts and personalities in a group setting. It relates strongly to contributing, but also draws on leadership, as only they can state their own unique ideas to the group. One quite special example of this was when a child, given the cues to identifying an animal as being in a cage and having wings, chose a unicorn. The noise of this unicorn he said was a high pitch squeal like the sound the boy makes when he is anxious. At some

level I felt he may have been sharing the fact that he feels like a unicorn of good intention trapped in a cage of anxiety and autism.

4.3.3. Relating to Others

Children demonstrated their ability to relate to others across three themes in music therapy. These were: *relating as emanating from a therapeutic relationship, taking time*, and *having it my* (the child's) *way*.

Relating as emanating from a relationship

Relating as emanating from a relationship consists of both relating, which has trust as its foundation, and relating as tied to a shared history.

Trust

From what children felt was a foundation of trust, the instances of relating to others included: 1) trusting enough in the relationship to share and explore (e.g. telling others about the things we like such as our grandparents, the colour blue and swimming in the sea); 2) being a part of meaningful experiences like empathizing with the emotions of one another and smiling warmly from praise (e.g. saying “this is what I like now what do you like?”); and 3) sharing themselves by requesting through gesture and suggesting favourite verses (e.g. “the mummies and the daddies saying I love you” in “Wheels on the bus”). Further ways trust underscored relating was children telling others of their needs, confidently using their favourite instrument in music making with the therapist, in occurrences of developmental play which featured onlooker, parallel and associative play, following the instructions (and encouragement) of an adult, and listening to music played for them.

Relating to a shared history

Having a shared history of musical activities and themes of interaction to draw from, which of course ties to a therapeutic relationship, is a unique form of relating that the client is able to use in music therapy. This theme resembles the powerful therapeutic goal in music therapy for children with autism which is to build strong relationships. Instances of relating arising from a shared history in my practice were clients leading familiar children's songs like "Five Little Ducks" by singing the opening lines and miming the opening hand movements unprompted. This was coupled with a look of expectation that I would follow them in the music and relating and that they were doing the right thing by stating things off in the usual way. Another way this appeared in my practice was when a child looked from their work desk into the music therapy room during a note writing session. This was after a fun session we had enjoyed a couple of days previously and they looked sad not to be in the music room with me.

Taking time

This theme reflects the need of a child with autism to sometimes remove themselves from a conversation or activity to self-regulate. *Taking time* attends to this need in the scope of *relating to others* and also includes the child's return to relating once they are better placed to continue. One example of this in my music therapy practice was a child entering the room on their tiptoes then settling to play music later. This child would self-regulate by being on her tip toes, blinking her eyes and putting the tips of her fingers together rapidly and on this day she had not slept very much the night before and seemed to be finding starting school in the morning difficult.

Having it my way

Having it my way connects to a characteristic of some children with autism to fixate upon things. This theme captures the quality of relating that can occur when the interaction is very one sided. An example of this which occurred in my practice was

when a child couldn't move forward without the guitar having six strings. Here I tried to fix the string a couple of times, and each time saying we should just move on and play without it, but every time I started a song in an attempt to move forward they began to try and fix the string themselves. Once it was visually present, however; we began to play even though it well out of tune and much lower than it needed to be. The metaphor of mending a string as mending the link between people and their ability to relate to one another stands out to me.

4.3.4. Thinking

In the process of thematic analysis, the two themes which emerged were *Knowing and learning* and *Being creative*.

Knowing and learning

Knowing and learning is made up of four sub-themes: 1) implicit knowing; 2) exploring, learning and requesting new knowledge; 3) musical play; and 4) using knowledge. The theme captures the different ways knowledge can be conceptualised: from unconscious knowledge through to actively seeking knowledge by exploring the world. This category also touches on the area of developmental play.

Implicit knowing

This theme captures an implicit knowing the children demonstrated naturally. This was illustrated by: 1) expressing empathy (e.g. taking time to amend an off session by being together and holding hands); 2) knowing about myself and what makes me (the child) happy or sad (e.g. trying to communicate something I like in a colourful quilt by taking my hand and bringing my attention toward the quilt); 3) knowing how to prompt others to be aware of my (the child's) needs (e.g. that when the drums are played loudly they frighten me); 4) knowing how to take a break (e.g. walking on tippy toes and self-stimulating using eyes, fingers and jaw away from the musical group); 5) knowing how to be a partner in intensive interaction (e.g. leaving space and making

music (including the child using their voice) in a way which is creative, to-and-fro and dynamic); 6) knowing how to follow musical instructions (e.g. listening to the lyrics and *musical direction* of songs such as when to stop playing because the phase ends in a perfect cadence and the lyrics tell you to stop or pass it on etc.); and 7) playing by ear (e.g. using the right notes when playing the hello song with me on the piano).

Exploring, learning and requesting new knowledge

Children actively sought knowledge and explored the world around them, taking on new interests and continuing to develop their personality and identity. They explored the instruments (e.g. having a go at playing guitar to experience its feel, action and sound); 2) exploring new roles (e.g. leading familiar routines like a song about drumming together instead of waiting for me to begin the song); 3) exploring boundaries (e.g. by damaging instruments and screaming at random to see what the boundaries in the music therapy room are); 4) improvising to see how the direction of the music will be affected (e.g. exploring the effect of bringing in new colours to an improvised song about the different colours we can see); 5) new learning (e.g. learning how to tell the notes of the piano apart and play simplified musical notation) and 6) requesting new knowledge (e.g. showing curiosity for the likes and dislikes of others in a sharing song about feelings which included how we all feel about the ups and downs of the weather or different foods).

Musical play

Musical play references the developmental stages of play as coined by Mildred Parten (1932, cited in Hughes, 2009). This theory observes that children develop their ability to play with others over time and pass through a number of 'stages': solitary play, onlooker play, parallel play, associative play, and cooperative play (Parten, 1932, cited in Hughes, 2009). These stages are a learning process, hence why I have included them in this competency. They also touch on a kind of knowing, in the sense that children can (or have the knowledge to) take part in play at the stage they are at, although in play, children move between the stages they have mastered freely.

Examples of children demonstrating play in the stages described by Parten were: 1) a girl watching the piano and the hands of the therapist (onlooker play); 2) a girl mimicking the dynamic of the therapist's music between fast and slow (parallel play); and 3) following the therapist's lead to share instruments and play loudly (associative play).

Using knowledge

Using knowledge is focused on the children demonstrating knowledge in an explicit and pragmatic way. One example of this was a child guessing an elephant when the cues which arose in the song were that the animal has it has a long nose and sometimes lives at the zoo.

Being creative

This theme is about being creative with music and is something special that the key competency *thinking* could offer children. It seems similar in quality to the previous themes in the way it is exploratory, playful and knowing, and to some degree many of the other themes have an undercurrent of creativity in them, but what makes this theme different for me is how creativity occurs just because the child is involved and following his/her own curiosity. Some examples of creativity like this which were demonstrated by the children were; 1) a child playing piano and pretending it is a car horn (“beep, beep, beep”) after we sung “Wheels on the Bus”, and 2) contributing a unique Latin-like rhythm to a drumming song which lent an air of interest and depth to the arrangement.

4.3.5. Using Language, Symbols and Text

In my practice this competency was used in receptive and active ways by children, as well as in a third way arising from music therapy theory, which I have called the 'music of me'.

Receptive

Receptive examples of the use of language, symbols and text arose in the children listening to music and following the suggestions of lyrics. I felt it was especially important to capture these moments, as being able to listen is a foundational skill for learning and using language. An example of this is a boy contributing to a sharing song by jingling the bell when his name was called and with assistance choosing the next person to pass it to.

Expressive

In the process of thematically arranging the active use of language, symbols and text I chose to focus on how the children communicated directly about their needs or ideas For example, I focused particularly on the qualities and shared meanings of their communications through their bodies, their vocal sounds and speech, and the objects they brought into the music therapy space. Children often pointed at objects and instruments, shared photos or demonstrated actions such as up and down to indicate their intentions or meanings. I have chosen examples below that demonstrate the children wanting to communicate their intention to me and doing this with direct expression.

Using the Language of the Body

Within this theme the children communicated meaning by taking the hands of an adult, smiling happily, using warm and meaningful eye contact, communicating by gesture and expressive behaviour. This occurred in my practice when a girl who is non-verbal, on her way out of the room, stopped and gently took my hands off the piano and held them for a few seconds. I think it was her way of saying ‘be with me’.

Being Vocal

This theme described the child communicating through the use of words; singing; speech that was garbled or in another language; the poetic use of words; communicating choices; and colorful vocal outbursts. This theme also captures when children used their words precisely, or more generally, to communicate something for others to take on board. For example, during an improvisation lead by me, a child said that the loud sounds of the drums, going between loud and soft, scared him. This was quite a sophisticated thing to say and a clear example of telling others how you feel.

Sharing Special Photos

This was a unique theme and referenced a particular occasion where a child brought a photo of their family into the music therapy room to show me. This was a very special moment for its warmth and everything else that goes with family. It seemed to reference feelings of belonging and he seemed proud to show the photo to me. The photo was of him and his family near a swimming pool in their home country.

Music as Communication

This theme explored the child's use of music and exploration of instruments, and the voice, as the gateway to musical mastery and musical communication. It covers exploring the keys of the piano, exploring the sounds of the voice, and expressive behaviour employing instruments. There were many examples of this area. One example was demonstrated in a musical improvisation where a girl who is non-verbal began to explore her voice and generated sounds I had not heard her use before. Her face was a mixture of surprise and excitement while her vocal style reminded me of the jazz technique of ‘scatting’. A second contrasting example is when a boy began a rap of the different letters of the alphabet (“A is for apple a, a, a, apple”) which ended up turning into an activity that was joined by another boy in the room. This theme relates to the music therapy idea that musical expression and communication are innate (Nordoff & Robbins; Birnbaum, 2014).

The Music of Me

The music of me references our innate connection to music and the *quality* of music that is produced because of that. It is a core assumption of music therapy that the music of someone is a looking glass into their inner world. It is not an active use of music, but rather an observational perspective concerning others, which is why it has its own thematic category. This particular way of using language, symbols and text is of course evident in all the music the children play. One specific example, however, is a child playing loudly and repetitively on a drum. Here, the driving rhythm and lack of change correspond to an inner quality which is highly focused, busy and unable to listen.

Another way this inner world presents itself in musical quality is through an observational technique known as 'vitality affect'. This particular way of observing sees the movements and moods of a child as innately expressive, and therefore innately musical. Again, this may apply to a child's being at any time. One time where this occurred in my music therapy practice was when a child was out of sorts and their music, if it could be heard, might be described as a ‘tempest’ spanning between the violins and the double basses.

4.4. How I helped the development of the key competencies for three children with autism in music therapy

The table below outlines the headings of the main themes I found through thematic analysis occurring within each key competency, relating specifically to how I helped the development of the key competencies for children with autism. Different music therapists and researchers may classify and understand the competencies differently and what follows is my interpretation.

Managing Self

• Offering a calm and safe space
• Being well-being focused
  ○ Offering unconditional support
  ○ Creating opportunities for success
• Pushing against the current
  ○ Tough love
  ○ Challenging
  ○ Helping break barriers
  ○ Consciously remaining calm

Participating and Contributing

• Validating
• Making participation easy
• Adding and subtracting
  ○ Adding
  ○ Subtracting
• Aiming for group cohesion
  ○ Sticking together
  ○ Creating awareness of the group for the child

Relating to Others

• Relating in music
• Relationships
  ○ Building warm and equal relationships
  ○ Offering friendship
• Offering other music
• Assisting relating

Thinking

• Supporting knowledge use
  ○ Helping support a personal way of doing things
  ○ Creating opportunities for children to use existing knowledge
• Encouraging new learning
• Encouraging exploration

Using Language, Symbols and Text

• Making music therapy child-lead
  ○ Modeling and exposing
  ○ Using language, symbols and text myself
• Providing music for the child to listen to
• Supporting expression through music
• Practicing words and stories

4.4.1. Managing Self

The three themes which arose were *offering a calm and safe space*, *being well-being focused* and *pushing against the current*.

Offering a calm and safe space

This theme reflects my desire for the children to see the music therapy room as a safe space and, especially for some children on some days, a calm and non-demanding environment. The ways I helped to create this space for children which allowed them to settle were: 1) keeping the music therapy room as a space that can help with regulation and calming (e.g. creating a relaxed environment on Mondays which could be a difficult day after the weekend): 2) honouring the child's need to leave (e.g. letting children go if for example, they want to play on their iPad and cannot bear to be away from it: or they have a sore tooth and want to be in the sensory room. In either case if music could not distract them, I would allow them to leave).

Being well-being focused

Being well-being focused is made up of two smaller themes; *offering unconditional support* and *creating opportunities for success*. This theme captures what I did as a therapist to build confidence and well-being in the children I worked with on the belief that these things will assist the child to manage themselves down the track.

Offering unconditional support

Ways I helped to instil a sense of well-being through unconditional support was by: 1) naming and praising (e.g. agreeing with a collaborator about how clever a girl is in front of her and her giving us a big smile); 2) getting in behind active and enterprising music making (e.g. creating a back and forth exchange based on a child's creative contribution on the piano); 3) supporting the choice to access an unfamiliar environment such as the music room in the first days of my placement) (e.g. by warm welcoming and naming); 4) helping the child to succeed (e.g. by helping a boy fix a string on the guitar who was struggling to change it himself); and 5) practising the philosophy that mistakes in music, and more generally, are okay (e.g. to ease the anxiety of a boy who was concerned about making mistakes).

Creating opportunities for success

Creating opportunities for success is about when I set up success for children by facilitating something they would find easy or something they were naturally good at. This choice ties into the idea that through successful encounters children will gain confidence. One example of this was letting a boy who loved to play the guitar, play the guitar. I do not think he had access to a guitar at home and this facilitation allowed him to get better at the instrument.

Pushing against the current

This theme reflects the area of my practice where I held expectations and challenged children. This is valuable and important for all children as they learn to assert their wishes in relation to others. It is hoped the actions and intentions in this area created a structure for children to manage themselves around. The smaller themes within this focus are *tough love*, *challenging*, *helping break barriers* and *consciously remaining calm*.

Tough love

Examples of '*tough love'* I used as a therapist were: 1) holding clear expectations (e.g. using a reward behaviour chart or work contract [see Appendix 10]); and 2) providing physical support (e.g. gently holding a child's hand to strum the guitar to demonstrate soft playing, where without my assistance the child would play loudly and unceasingly).

Challenging

One example of using the technique of challenging in my practice was when I created a competition to engage with a child's goals of managing self. The particular example was creating a competition for who could play the softest for a child who would play loudly only. The intent behind creating a competition was to ignite the child's interest in participating in an aspect of the music activity that they found challenging.

Helping break barriers

I was able to assist the child to break through boundaries which they may not have been able to do by themselves. Ways in which I helped do this were by: 1) keeping sessions regular (e.g. to show a child they can do something when they think they

can't); and 2) suggesting we do something else (e.g. to move away from objects of fixation).

Consciously remaining calm

Consciously remaining calm reflects the instances where I maintained a calm stance in my facilitation in order to influence children to manage themselves and be calm also. It was more effective with some children than others. One example of this approach in my practice was when, through remaining calm and not reacting to colourful behaviour, a boy whose behaviour is socially mediated and highly reflective of those around him began to relax and calm down. Instead of yelling and hitting his himself he began to talk in a calm voice and his whole posture and facial expressions over time changed and became more relaxed.

4.4.2. Participating and Contributing

The themes which developed were: *validating*, *making participation easy*, *adding and subtracting* and *aiming for group cohesion*.

Validating

I was able to validate children's actions by accepting and valuing their contributions. These actions aided the child's confidence to participate and contribute and that the child's feelings of belonging in the group also increased. Ways I increased belonging, value and acceptance for the child was by: 1) extending the child's contribution (e.g. mimicking a creative contribution and turning it into a turn-taking game); 2) establishing common ground (e.g. starting the idea that we all have a lot in common in a song about the things we like, such as good food and being warm, and don't like, such as being scared or someone being angry at us.); 3) supporting their explorations of different roles (e.g. following leadership cues around including spontaneous actions in a familiar song); and 4) accepting anything a child gives to a musical activity (e.g. the child playing on a drum while I sing a musical invitation song).

Making participation easy

Making participation easy describes instances where I made the openings for children to participate as stress-free and simple as possible. This was done to create confidence around participating and contributing and to create feelings of acceptance and belonging in the group. Ways I helped make participation in music easy for children was by: 1) asking open and easy questions (e.g. creating a situation where there are many right answers such as asking, “what has a long neck and lives in Africa?”); 2) taking the pressure off participation (e.g. coordinating a group improvisation where the child followed my lead); 3) modelling open (and silly) contributions (e.g. playing the drum with elbows out like a chicken, holding nose and ears, etc.); and 4) making it fun (e.g. involving running activities the child enjoys).

Adding and subtracting

Adding and subtracting is made up of two smaller themes of the same name. The quality of this theme as a whole is quite cognitive and the therapeutic approach quite pre-planned on my part. The idea behind this theme is to describe the steps I made to remove or add something in order to achieve a desired result *and* which helped children to participate and contribute at greater levels.

Adding

Examples of adding something to my practice in order to achieve a desired result, and which also supports children to be better able to participate and contribute, was through developing a calming presence. One example of this was when, by remaining calm and not reacting to colourful behaviour, I helped a boy with socially mediated behaviour relax and be calm too.

Subtracting

An example of subtracting, or removing, something from music therapy in the hope of improving a child's ability to participate and contribute was when a boy and I shared playing on a larger instrument (bongos). The act of sharing an instrument (instead of him playing on his own) I felt was containing and hopefully reduced anxiety for him which I saw as a barrier to his participation.

Aiming for group cohesion

The idea behind the theme *aiming for group cohesion* is helping the child feel connected to the group. Feeling a part of a group and contributing to a dynamic process is a less common occurrence for children with more severe autism. To me this theme and experience is an important part of what music therapy and the competency *participating and contributing* can offer children with autism. It is made up of two smaller themes; *sticking together* and *creating awareness of the group for the child*.

Sticking together

This theme is about bringing the music of the group to the child in the hope that they feel a part of the group process and a sense of belonging in turn. Instances where I helped to bring the group to the child was when: 1) I supported the music of the group to move toward fitting the music of the child (e.g. modelling singing and playing softly to bring out a boy's quiet instrument); and when 2) I respected a child's need for time out and kept the group open for them to be included when they were ready to join (e.g. continuing to play while keeping space and instruments available).

Creating awareness of the group for the child

I sometimes challenged children to be aware of what the group is doing and where it's going. Group work and this awareness is an important experience for children with autism. Ways I helped the child to attend to the group was by: 1) creating a competition out of what the group was doing (e.g. who can play the quietest?); and 2) using activities which create respect within the group (e.g. turn-taking and copying activities).

4.4.3. Relating to Others

The four themes to emerge were *relating in music*, *relationships, offering other music* and *assisting relating.*

Relating in music

I used music to assist relating by: 1) finding the child in the music (e.g. moving the rhythmic emphasis of a song to sync with the child's contribution); 2) improvising uplifting music in special therapeutic moments (e.g. a repeating ascending melody (C, D, E) to match a moment of warm eye contact and playing together); 3) creating meaningful shared experiences (e.g. doing a musical activity the child loves such as singing nursery rhymes because they are an area of interest); and 4) naming what's happening (e.g. moving an improvisation toward a composed song about playing together).

Relationships

Relationships is made up of two smaller themes; *building warm and equal relationships* and *giving openly.*

Building warm and equal relationships

I helped children to feel accepted, attend to their relationships with others and develop trust over time in others. This theme also reflects my moves toward developing therapeutic relationships which were authentic and in which also saw the music therapy room feature as a rehearsal space for the children. Ways I helped was by: 1) following through with requests (e.g. singing the goodbye song when I indicated I would); 2) encouraging equality (e.g. by using turn-taking and copying songs); 3) ending early (e.g. before a child gets upset); and 4) making requests open, easy and fun (e.g. “what exciting instruments are we going to play today?”). The idea of following through with requests is an interesting contribution to this theme as the outcome not only impacts me but also the child's relationship with staff.

Giving openly

Giving openly relates to the idea of providing unconditional support to clients. Instances where I perceive I gave openly in the hope therapeutic relationships would develop were when I: 1) provided music for a child to listen to and enjoy (e.g. playing piano while a girl sat in her chair listened); 2) warmly welcomed children to the therapy room (e.g. improvising a hello song for a young girl).

Offering other music

Offering other music is about offering other ways of relating; in what I can give (and model), and in what might be possible for the child. The theme relates to my understandings of the music therapy concept of ‘vitality affect’ which sees gesture and body language as expressive and therefore musical at some level. In this theme there is also is an underlying feeling of belief where, by offering another direction for a child's relating, they take up what's on offer and improve the quality of what they are giving. Also, at some levels this theme is about distraction. One example of *offering other music* was when I improvised a siren song with words such as “*name,* it’s music time, I wonder what we’ll do today?” inviting a young boy who was self-harming in the main

room to come to music therapy, and once the routine of his session got underway he settled. In this example my facilitation was calm and the expectation I conveyed was for him to join me.

Assisting relating

This theme is about facilitation which helps children to relate to others. One example of this was meeting a boy's need for clear structure. In his sessions, as suggested by his teacher, I chose to set simple rules for the therapy room and follow a work contract [see Appendix 10]. I noticed that he was much calmer for having these clear structures and expectations in place and was better able to relate and follow instructions.

4.4.4. Thinking

The three themes which arose were: *supporting knowledge use, encouraging new learning* and *encouraging exploration.*

Supporting knowledge use

Supporting knowledge use houses two smaller themes; *helping support a personal way of doing things* and *creating opportunities for children to use existing knowledge*. I encouraged knowledge use on the child's behalf, which aided the ongoing development of a budding personality and assisted confidence in the application of more intellectual knowledge.

Helping support a personal way of doing things

I supported and followed children in what they know and share about themselves; for example, their favourite things to do. An example of this is when a boy and I conducted

a favourite activity of his which involved the two of us playing loudly on shared instruments and whooping.

Creating opportunities for children to use existing knowledge

This theme is about supporting the confident use of existing knowledge. The use of 'knowledge' in this theme is more intellectual on the child's part and less about knowing as related to something like personality (which was the focus of the previous theme; *helping support a personal way of doing things).* One way I helped support a child's confidence in this way was by asking easy and open questions such as, “what eats grass and sometimes lives on a farm?”

Encouraging new learning

I supported new learning for children by: 1) helping to grow the limits of what children think they are capable of (e.g. a boy making it to music therapy and participating after my suggestion he attend, when it may have seemed impossible due to anxiety); 2) allowing colourful behaviour to lead musical activities thereby making it real (e.g. taking a 'roar' as a cue to start a song about animals); 3) using structure to create space for new learning (e.g. using a work contract to improve attention and hopefully development of the key competencies); and 4) modelling qualities for children (e.g. being calm).

Encouraging exploration

Encouraging exploration is about responding to the child's creative investigations of the world and supporting them. Ways I helped children to continue to build their capacity to explore, improvise and learn was by: 1) improvising melodies to gestures highlighting colour (e.g. singing the colour a child points to in a different way each time); 2) copying creative ideas (e.g. turning a boy's use of the piano as a car horn into

a turn-taking game); and 3) creating opportunities to play by ear (e.g. offering a boy a chance to play along with me at the piano).

4.4.5. Using language, symbols and text

The four themes which arose were: *making music therapy child-led, modelling and exposing, supporting expression through music* and *practising words and stories.*

Making music therapy child-led

This theme is about following and responding to what children give in sessions which helps their refinement of, and confidence in using, spoken language or gesture for communication. This theme also touches on taking direction in therapy from all kinds of communication the child might give such as eye contact or smiles. Ways I made music therapy child-led in order to help foster the development of language, symbols and text for the child was by: 1) following the child's lead (e.g. joining a child in a familiar song they started); 2) strengthening the power of gesture (e.g. singing the colours a boy points to on a rainbow keyboard); and 3) encouraging connections by taking up what's on offer (e.g. copying spontaneous word painting gestures applied to a familiar song such as raising hands for the word “up”).

Modeling and exposing

Modelling and exposing is about continuing exposure for learners to language, symbols, texts and music. It is made up of two smaller themes; *using language, symbols and texts myself* and *providing music for the child to listen to*. Both are based around the early language development styles of infants.

Using language, symbols and texts myself

This theme relates to infant language development where before children can communicate using words, they are listening to the words of their parents and trying to pick up patterns and make sense of what they hear. Here I demonstrate instances where I modelled language for children based on the idea that they are listening to what I say and using it to develop their English language skills, and more broadly, their intonation and social skills. One example of this was when I greeted a young girl and welcomed her into the music therapy room by saying “hello *name,* welcome to music therapy, nice to see you today”.

Providing music for the child to listen to

This theme is thought about in much the same way as the previous one but instead of modelling language I am exposing the child more generally to music which they may want to pursue for themselves later on or in the near present. An example of this occurring in my practice was when a collaborator and I played a favoured song of a young girl to her on piano and percussion.

Supporting expression through music

Supporting expression through music is built around the music therapy idea that the music we play reflects us, which some believe can help us observe specific needs. This theme supports children using music to express themselves and their identity and learn about how music can be expressive. Examples of this in my practice were when: 1) I started a conversation around how what we feel could be played (e.g. what would happy or sad emotions sound like?); and 2) provided access to favoured instruments and activities (e.g. supporting a boy to play and express himself on different instruments in a song he loved).

Practising words and stories

Practising words and stories is about repeating the meaning of words, wider cultural stories and valuing speech. Ways I helped children to attend to these things was by: 1) holding clear expectations around rules (e.g. enforcing where appropriate the rules of the therapy room, like; "no playing loudly"); and 2) creating a rehearsal space (e.g. asking easy questions about the common traits of familiar animals from session to session).

4.6. Clinical vignette

This vignette considers my practice in more depth and focuses on an individual music therapy session in order to shed more light on how the key competencies featured in my student music therapy practice for children with autism spectrum disorder. The child's name and identifying details have been changed and the anonymised session notes can be viewed in the Appendix [see Appendix 8].

Sally is lovely and gentle young girl. She can be shy with people she doesn't know, can appear passive at times and is sensitive to loud noises and busy commotion around her. Sally is warm to familiar people and sensory-seeking. She often requests hugs from teachers' assistants and walks on her tippy toes. She communicates using gesture and is learning to use a talker. Sally often self-stimulates by blinking her eyes, tapping index and thumb together and makes vocal noises.

After a month or so of getting to know Sally, talking to teachers' assistants who are close to her and receiving feedback from parents [see Appendix 9] my goals for Sally in music therapy became for her to relate more and feel comfortable and confident in therapy, and also to begin to initiate relating. My approach for meeting these goals were to offer unconditional positive regard and create opportunities for success, something that was also important to Sally's mother. To encourage relating I often offered Sally spaces in the music for her to reply to me and hopefully for the both of us to start an improvised musical conversation.

In every session as Sally and Deborah (the teachers' assistant who usually attended music therapy with Sally) came into the room I would sing the hello song. Sally had been attending music therapy for a number of months and sat in a chair near a box of instruments. Deborah, handed her a drum and I began to play 'Indians'. This song sounds like a popular setting of a North American First Nations chant. In the music it has a strong fifth in the base as an ostinato, like a gathering drum, and a light rhythmic minor motif on the top. In this song Sally was *participating* as she began to play the drum in the pauses I offered her, with her body language and visual attention away

from me. She was *relating* to me, and joining in musical conversation in a completely appropriate way, although her demeanour looked as if she was not wanting to engage.

Next I changed songs and Sally opened out and started to play a colourful toy keyboard as well as the drum she began on in the pauses. I picked up on Sally's natural vocalisation and after some time Sally began to respond to me and explore different and new vocal sounds paired with a look of surprise. Throughout this exchange Sally was also *using language, symbols and text* by giving occasional eye contact.

At this stage in the music I was going between two chords on the piano to provide a musical foundation, singing in response to her melodies and copying her sounds, and giving exciting and interesting facial cues. An extract from my clinical notes describing the session after it took place reads:

"It felt like what mother-infant communication might feel like for the mother. Back and forth and leaving space and doing it with love." [see Appendix 8]

This vignette relates to the research findings in the way it shows Sally taking up a theme in *managing self,* called '*Giving it a go'.* This theme reflects the self-management needed to take on something new from one's environment and touches on Sally's broader music therapy goals of being comfortable and confident in the therapy room. The vignette also illustrates a theme from *participating and contributing*, '*Being with the group',* which attempted to capture the moments where children were in sync with the direction and dynamic of the musical group such as her improvising with me and us forging a musical direction together.

Sally also demonstrated a theme from *relating to others* called '*relating as emanating from a relationship'*. I believe Sally's trust to reach out and explore vocally draws from the trust she had in our therapeutic relationship and complements her wider music therapy goals of building strong relationships. This clinical story also seems to reflect the thinking competency and the theme '*knowing*', which captured a kind of implicit knowledge the children seemed to demonstrate - for example, the ability to take part in intensive interaction. This story for me also seemed to touch on another thinking

theme, ‘being creative’, in the way that both Sally and I were improvisatory with our vocalisations.

To me, our session described above also captures elements of the key competency *using language, symbols and text*. Sally used ‘receptive’ skills when she noticed the space I offered her in the music to contribute, and perhaps when I improvised melodies to encourage her to keep up the exchange with me. I also feel Sally used ‘expressive’ skills in how she played on the piano and the drum and then later vocalised with me.

This vignette also illustrates the findings about how I helped the development of the key competencies in music therapy for children with autism. The theme ‘*being well-being focused’* in *managing self*, for instance, reflects the ways I supported Sally through unconditional positive regard such as facilitating an improvised interaction with warmth and encouragement. This also relates to her wider music therapy goals suggested by her mother which was for me to create chances for Sally to be successful.

This clinical story also draws into how I helped the development of *participating and contributing*. By conversing with Sally in the music I touched on the theme ‘validating’ where it is hoped actions like these aided Sally’s confidence to participate and contribute and that her feelings of belonging in our group also increased. Ways I supported the competency *relating to others* for Sally were by ‘relating in the music’ and creating opportunities for her to experience musical connection. It is hoped opportunities like these create happiness in their immediacy and in the long term influence the child to seek out others to relate to. Another way *relating to others* was assisted was when I ‘offered friendship’ through giving unconditional support in the hope a relationship would develop, such as when I offered spaces for Sally without expecting a reply.

How I helped Sally use the key competency *thinking*, and the theme ‘encouraging exploration*’*, was by responding positively to Sally’s explorations of her voice which required creativity on her part as well as the use of existing knowledge. Ways in which this vignette illustrates how I helped the development of the key competency *using language, symbols and text* was by ‘*making music therapy child-led’*. This theme is

about responding to what children like Sally give which helps their refinement of, and confidence in using spoken language or gesture for communication. Even though I was moving the music toward something like the intensive interaction we experienced because of Sally's music therapy goals, it seemed she also wanted to go in this direction more as the session developed.

5. Discussion

5.1. Discussion overview

The findings raise five main areas for further investigation and discussion, which are: 1) the unique uses of the key competencies in music therapy and arts engagement; 2) how the themes of my assistance to help develop the key competencies in music therapy reflect the literature; 3) the reflection of my developing clinical stance as a humanistic therapist, in the way I helped the development of competencies for children with autism in music therapy; 4) the way that the key competencies work together; 5) this research suggests something promising about the use of improvisational music therapy. Following these I discuss the implications for future research.

5.2. The unique uses of the key competencies in music therapy and arts involvement

Early on in the process of coding my notes, I began to feel that the definitions of the key competencies provided in the New Zealand Curriculum to which I was referring, as good as they were, seemed to overlook some important aspects that would be valued in music therapy. Yet, at the same time, my music therapy practice seemed to be matching in many ways the benefits described in the New Zealand Curriculum for students engaging in the arts and seemed to follow the major threads of music therapy with children with autism as outlined in the literature. These included benefits such as building well-being, prizing enjoyment, valuing others and developing skills in interrelating (MOE, 2014; Geretsegger et al., 2015).

What I think this means is that the benefits that learners gain from an arts experience, and the way engagement in the arts and music therapy uniquely uses the key competencies, need to be reflected more in the definitions of the key competencies. Previous research on how the arts relate to the key competencies notes their one of a kind development and use in increasingly complex settings in devised drama (Searle, 2009) and how the performance arts can deliver on each one (Thwaites, 2009) but the research does not ask more of them. What follows is a brief comparison of the New

Zealand Curriculum definitions of the competencies, to the key competencies as they appear in the context of music therapy, to illustrate this point.

Managing Self

Learners "have a 'can do' attitude and… [are] enterprising, resourceful, reliable and resilient" (Ministry of Education, 2007, p. 12).

A special theme which arose in how children demonstrated the key competencies and in managing self was, '*this little light of mine, I'm going to let it shine*', which captured the personalities of the children I worked with. What is illustrated here is the space for personality and warmth in the key competency *managing self*. In music therapy we hope client's foster their genuine self and do things with warmth and enthusiasm, especially in a neurodiversity model where people with autism can thrive in the ways best for them (Walker, 2015; Conn, 2018). This also relates to letting music therapy be client-led in terms of a client's interests, motivations or sensory needs (Geretsegger et al, 2015; Hernandez-Ruiz, 2018). A definition around being resourceful and enterprising seems fine, but I feel it misses out on individual purpose, personality and happiness. A definition of *managing self* like this also honours the unique autistic self (Perrykkad & Hohwy, 2019).

Participating and Contributing

Participating and contributing: Learners "having a sense of belonging to communities drawn together for purposes such as learning, work, celebration or recreation… [and] contribute appropriately as a member of these diverse groups" (Ministry of Education, 2007, p. 13).

In *participating and contributing* a theme which arose through thematic analysis was '*Enjoying meaningful shared experiences'* which captured warm examples of children participating and contributing such as a boy laughing, smiling and contributing musically in a favourite activity of his. This competency as described in the New Zealand Curriculum has a number of qualities I believe are valued in music therapy and arts education, for instance, encouraging children to be confident to participate in

a group; be sensitive to the feelings and needs of others, and; have a sense of belonging to communities and diverse groups as mentioned in the definition (MOE, 2017, p. 13). What is less clear, however; is the space for a sense of enjoyment one may get from belonging to a group such as the earnest example of the young boy given before.

Relating to Others

Learners can "interact effectively with a diverse range of people in a variety of contexts" (Ministry of Education, 2007, p. 12).

In *relating to others* one theme which developed was '*relating to a shared history*'. This theme illustrated the kinds of relating children gave in connection to a shared history of music making and which also tied to a therapeutic relationship. For example, a boy leading a familiar song about playing music together on the drums by singing the opening lines unprompted. This theme of tapping into a shared history of relating (Geretsegger et al., 2015) also is present in the literature on music therapy with children with autism. This theme advises that characteristic relating tied to a shared history can help in the development of genuine relationships and meaningful shared experiences (Geretsegger et al., 2015, Conn, 2018; Heidersheit & Jackson, 2018).

The New Zealand Curriculum's definition of *relating to others* touches on a number of values that are equally prized in arts education and music therapy. Some examples of these include the guidance of learners to be sensitive for the feelings and needs of other people, to develop confidence and trust in peers and adults, and to express feelings and ideas (MOE, 2017, p. 12). What I feel is missing, however, and which music therapy can offer this competency, is the kinds of relating that emanate from a strong relationship and build on a shared history.

Thinking

Students "understand that learning makes sense of our world and exploring it in different ways is rewarding." Students also "learn how to learn and to apply this

learning in a variety of environments, activities and creative pursuits" (Ministry of Education, 2007, p. 12).

In the key competency *thinking* an interesting theme that developed was '*being creative'*. Like the other themes where creativity was being used by children in tandem with existing knowledge to explore the world, this theme reflected children being creative seemingly 'just because' and the outcome seemed to be quite non-practical. This for me relates to what arts involvement can similarly offer learners. I imagine this approach applied to the definition of the key competency *thinking* would see a move away from "intellectual curiosity" (MOE, 2017) toward equally celebrating creativity as an outcome.

5.3. How the themes of my assistance to help develop the key competencies in music therapy connect to the literature.

Managing Self

A concept mentioned in the literature in working with children on the autism spectrum is having a flexible practice (Geretsegger et al., 2015). This means being able to adjust the therapy to the needs of the children, the setting or family (Rickson et al. 2015, Conn, 2018; Hernandez-Ruiz, 2018). The theme *offering a calm and safe space* related to creating a predictable and safe room for children particularly relating to elevated stress and matches this need. Some examples of this in sessions were letting the children unwind on a Monday and having soothing music or quiet. Another way having a flexible practice helped me to develop children's ability to *manage self* was by using a reward behaviour chart (work contract) in the theme *tough love* for a child who needed structure in music therapy, and in his day to day activities, because of his insecurity around open direction. Without structure the session would fall apart, as he would not respond to instructions or observe boundaries, and in this way using a reward behaviour chart meet the case for flexibility in music therapy.

A theme in the literature is following the child's lead (Geretsegger et al., 2015) which refers to using children's interests and motivations to create meaningful therapeutic moments and relationships (Rickson, 2015; Holck & Geretsegger; 2016) as well as

setting and unfolding the therapy to the ability of the clients we work with (Aigen, 2005). The literature also describes that lead's not be followed all the time and that therapists can playfully challenge children to evoke a response (Geretsegger et al., 2015). This occurs in the theme *Challenging* where I test a child's ability to *manage self* and play quietly with the rest of the group who were going in between loud and soft.

Participating and Contributing

A theme in the literature was building and maintaining positive relationships (Geretsegger et al., 2015) which is thought to be assisted by 'being alongside' and showing empathy as well as having an open therapeutic presence and attitude (Bunt & Hoskyns, 2002). To help *participating and contributing* in the theme *Validating* I developed positive relationships by accepting and valuing children's contributions which I also felt helped increase their feelings of belonging and confidence to engage in a group (Rickson, 2015; Hernandez-Ruiz, 2018). An example of this were when I established common ground in a song about feelings suggesting that everyone in the group has a lot in common about the things we like, such as good food and being warm, and don't like, such as being scared or someone being angry at us.

Following the child's lead (Geretsegger et al., 2015) is an important theme in the literature and can relate to arranging music therapy delivery and goals around a child's abilities (Rickson et al., 2015; Heidersheit & Jackson, 2018). One way I addressed this theme from the literature was in *creating awareness of the group for the child* where I used the unspoken musical rules of a turn-taking activity (i.e. the music will let you know how to participate) to help bring a child's focus toward the group.

Relating to Others

Musically scaffolding the flow of interaction (Aigen, 2005; Geretsegger et al., 2015) in music therapy with children with autism refers to taking weak or poorly timed musical expressions as having meaning and intent. The therapist then builds on these expressions which has the effect of enabling children to *relate* to greater extents in music (Aigen, 2005). I enabled children to *relate* in the theme *relating in music* where I moved the rhythmic emphasis of a song to sync with a child's contribution

(Hernandez-Ruiz, 2018). This approach also increases the chances for a child to comprehend in and engage in the interaction (Geretsegger et al., 2015; Conn, 2018) and I did this by improvising uplifting and ascending music around a moment of warm eye contact in the theme *relating in music.*

Thinking

Facilitating enjoyment sees that, through therapists meeting reciprocation with praise, children can experience affect sharing as "pleasurable, rewarding and intrinsically motivating" (Birnbaum, 2014; Geretsegger et al., 2015, Hernandez-Ruiz, 2018). Additionally, by using the child's interests, such as sensory input, therapists can create playful and enjoyable atmospheres which help to foster enjoyment in shared interactions (Geretsegger et al., 2015; Hernandez-Ruiz, 2018, Conn, 2018). One way I used enjoyment to help *thinking* was in *helping support a personal way of doing things* where I followed children in what they know and share about themselves; for example, their favourite things to do. One of the children I worked with loved sensory input through his hands and ears and an activity developed we would play as loudly as we could and 'woo' at the top of our voice.

Using language symbols and texts

Tapping into a shared history of interrelating (Geretsegger et al., 2015) is about referring the characteristic interactions which have developed over time to deepen the client-therapist relationship (Aigen, 2005). I helped *using language, symbols and texts* through this technique in *making music therapy child-led* which describes how a young boy and I over time developed a game where he would a play a key on a rainbow coloured keyboard and I would sing the colour and fit the note around different chords on the piano.

This same example of the client and I in a characteristic interaction also relates to facilitating attunement which is described in the literature as experiences based in intersubjectivity and developed though musical techniques such as mirroring, grounding, contextualizing and elaborating (Wigram, 2004; Carroll & Lefebvre, 2013,

Geretsegger et al., 2015). I would mirror and contextualize his notes in the improvisation I made on the piano, and in the moment it felt like both of us knew how the other was feeling (Pavlicevic, 1997).

5.4. A reflection of my clinical stance in how music therapy helped the development of the key competencies

In the process of developing my thematic analysis summaries I began to notice that in many instances, and over different competencies, the reasons behind my own actions often came back to my personal therapeutic stance. In my work for children with autism, most common was my belief in the power of unconditional positive regard, validation and acceptance which I used to in an attempt to: 1) increase well-being and confidence (managing self); 2) elevate feelings of belonging and courage to participate in groups (participating and contributing); 3) develop therapeutic relationships and trust in others over time (relating to others); 4) create positive experiences of explorations of the world which may contribute to 'knowing' later on (thinking); and 5) aid in the client's confidence to communicate (using language, symbols and text). I think that seeing the client in such an accepting way allowed me in some instances to act automatically. Only on reflection, and while trying to perceive connections between my actions over the course of placement, do I see that my actions often had this positive regard in common.

The other way in which my emerging therapeutic stance featured in my practice was when I began to meet what Abrams (2016) describes as the client's therapeutic need for "conditions that can adequately serve as opportunities for change" (p. 148) and self-actualization. My bringing about of these 'conditions' occurred when I began using the techniques of the teachers assistants, and in taking on board advice from my clinical liaison, other teachers and my visiting music therapist.

Specifically, these techniques were: 1) use of a work contract (e.g. negotiating with the child the amount of ticks needed for them to access their chosen reward such as playing the violin); 2) using food rewards to encourage the child to complete an activity requested by me (e.g. tiny teddies, crackers or popcorn); 3) the use of visual cards to

indicate musical activities (e.g. a cartoon of two children with their hands on their head for the action song “Heads, Shoulders, Knees and Toes”); 4) creating clear expectations in music therapy before children enter the room (e.g. no playing loudly and listening to Emmett); 5) using the structure of music itself to let children know how to participate (e.g. by parodying nursery rhymes like “The Muffin Man” which have a strong cadence); and 6) following through with requests (e.g. making sure that what I requested took place, and by extension, not requesting anything too difficult).

5.5. The key competencies work together naturally and it is difficult to perceive them on their own

The Ministry of Education and earlier research on the key competencies and music therapy describe that “the key competencies are most often used [by children] in combination” (MOE, 2007, p. 38). The strength of this observation, even though I was aware of it, still surprised me for how powerfully I felt it in the early stages of thematic analysis. Once I had expanded my data into single competency groups, suddenly there was a real sense of it all wanting to come back together. In fact, it became difficult to perceive data as relating to one competency but not another. One example of this was acknowledging that examples of leadership did not fit the competency *managing self*, based on the idea that leadership involves others. In doing this, the intentions behind leadership, such as making things happen in your environment and being pragmatic, then came into focus as skills in the *managing self* set.

5.6. This research suggests something promising about the use of improvisational music therapy with children with autism

This research suggests something promising about the use of music therapy with children with autism as aligned with earlier research (Kim, Wigram & Gold, 2008; Geretsegger, Holck & Gold, 2012) despite Bieleninik’s et al. (2017) RCT study which found improvisational music therapy did not make a significant difference to changes of symptom severity on the ADOS for children with autism compared to enhanced standard care groups.

This study seems to confirm that music therapy helps children with autism *relate to others*, attune to others and experience intersubjectivity (Trevarthen & Malloch, 2000; Wigram, 2004; Carroll & Lefebvre, 2013, Geretsegger et al., 2015; Conn, 2018) and also seems to suggest music therapy can support children with autism to *participate and contribute* successfully by referring to shared histories of interrelating (Geretsegger, 2015). This study too, like Bieleninik's et al. (2017), was taken over a number of months and does not align with usual practice (which can see music therapy continuing for a number of years) therefore the findings remain specific and particular to the children and myself as the student therapist concerned. However, the study helped me to understand better my goals and process with the key competencies and therefore how music therapy could contribute to the children's learning in a broader context.

5.7. Future research

This study looked to determine how the key competencies featured in student music therapy evaluation and did not focus on how children developed the competencies over time. We know that music therapy can help guide children with autism to toward better health outcomes such as improving joint attention with an adult (Kim, Wigram & Gold, 2008) and communication skills (Geretsegger, Holck & Gold, 2012) yet how this occurs over time and in relation to the key competencies seems not to have been evaluated yet.

6. Limitations

The data in this study were reviewed and analysed by the researcher based on their own understandings, experiences and memories of the world. Compounding this matter is the fact that the researcher reviewed notes made by themselves, so there is potential for any oversights that have been made in the clinical note-taking process to be reflected in the findings. Music therapy in practice can occur for a number of years and this study being only a few months may not truly represent the way the key competencies of the New Zealand curriculum feature in student music therapy. This research also has a particularly small number of participants so the findings may not generalise to all leaner's experiences of the key competencies in music therapy.

6.1. Delimitations

This study looked to determine how the key competencies featured in student music therapy evaluation and did not focus on children's development of competencies over time. Additionally, this study focused on long-term individual student music therapy and did not include data that related to group work.

7. Conclusion

Through thematic analysis of my student notes I observed that three children with autism spectrum disorder in music therapy with me demonstrated the key competencies in diverse ways including instances of children: letting their personalities shine (*managing self*), enjoying meaningful shared experiences in a group (*participating and contributing*), relating as emanating from a relationship (*relating to others*), creatively exploring the world (*thinking*) and sharing the music of me (*using language, symbols and texts*). I also assisted the development of the key competencies for children by: being well-being focused and offering unconditional support, validating and making participation easy, building warm and equal relationships, supporting knowledge use and creativity, and making music therapy child-lead. Additionally, I found the unique ways in which the key competencies are used by learners in arts education and music therapy could be considered to a greater extent in the New Zealand Curriculum definitions of the competencies. This research looked at how the key competencies featured in music therapy processes and future research could focus on evaluating how the competencies develop over time for learners.

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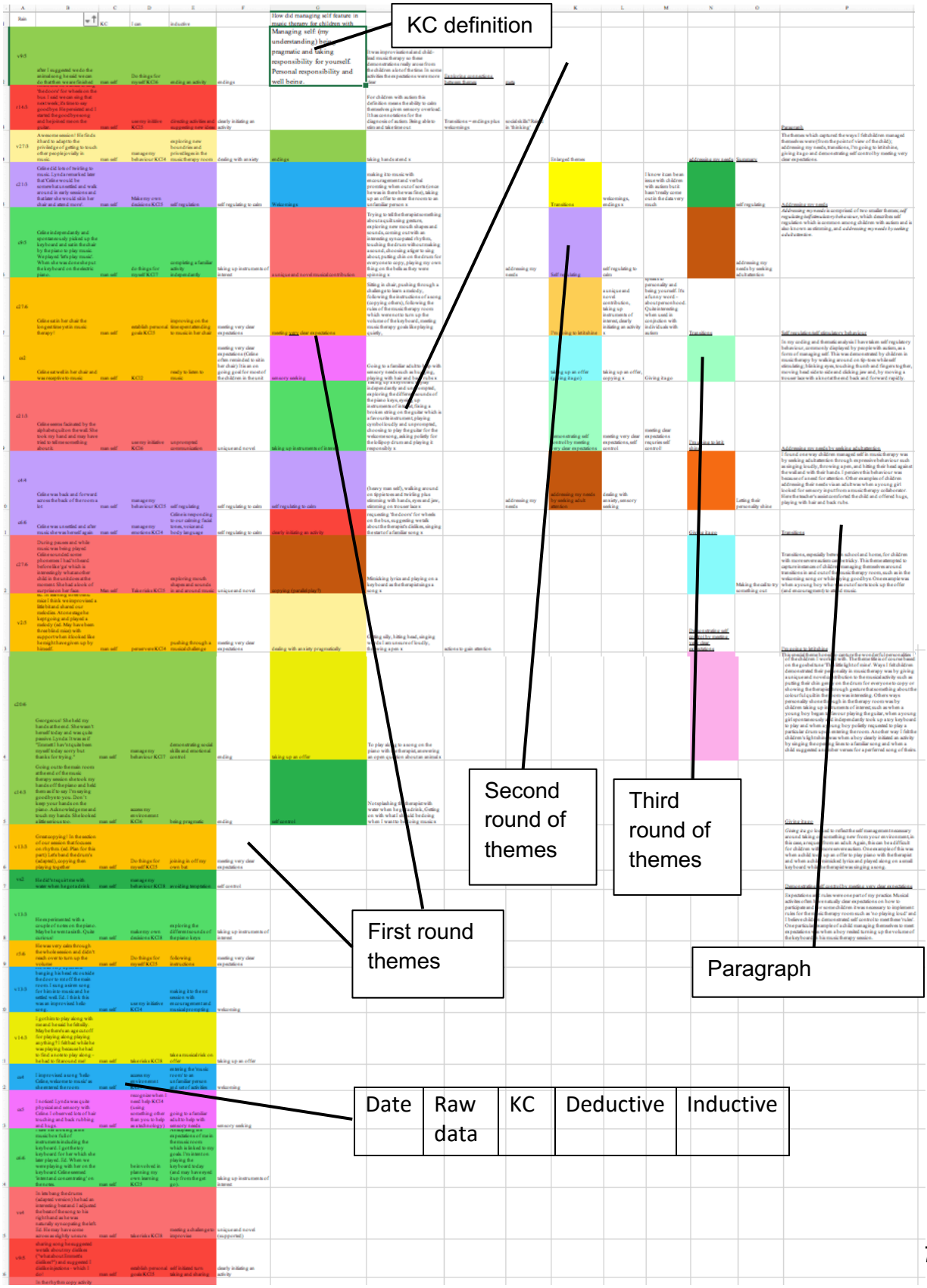
Appendix 1

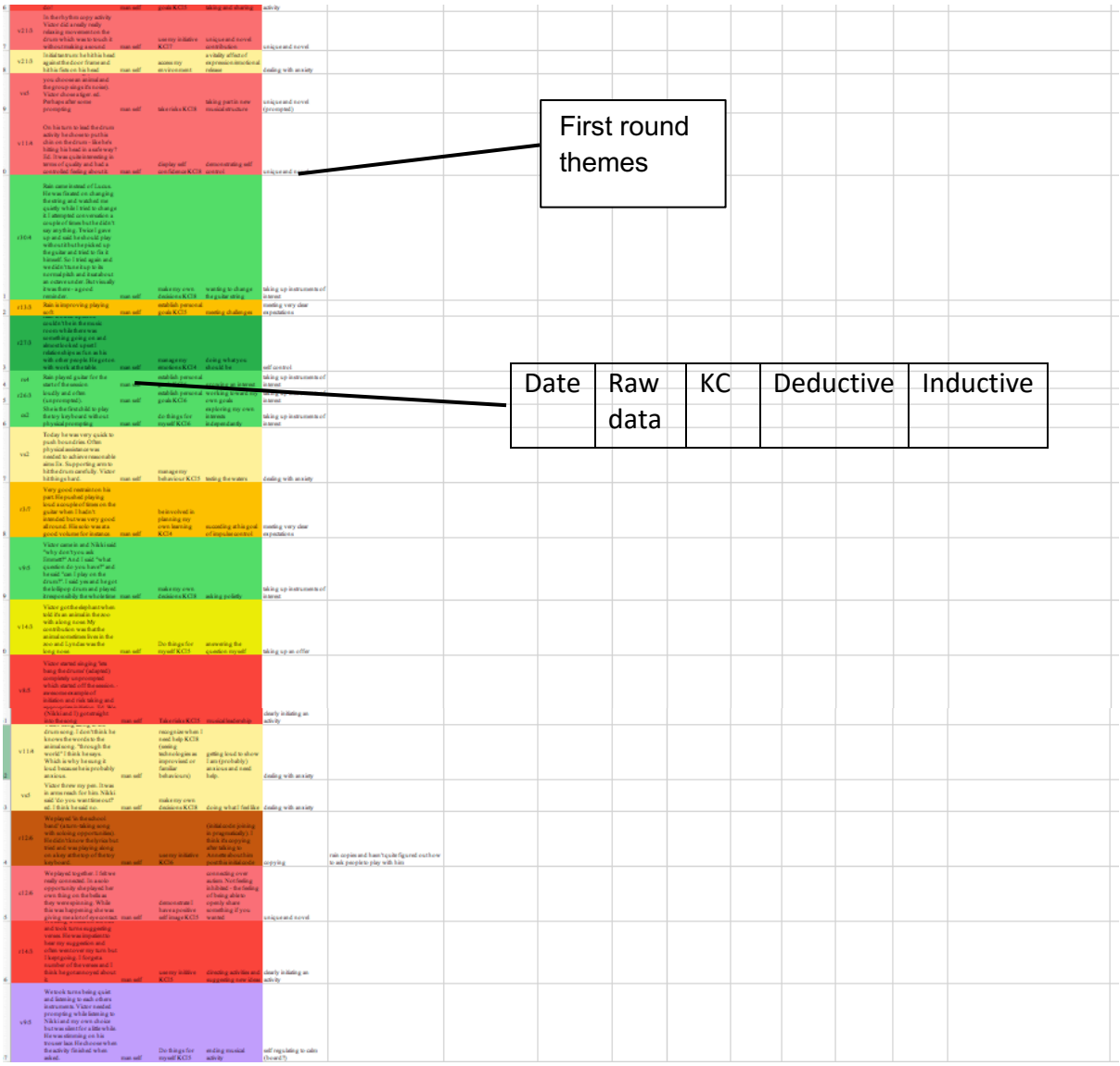
An example of coding raw data with an inductive code. As can be seen the same raw data was also an example of 'using language, symbols and texts'.

Data	KC	Inductive
'Makes me feel high lyric' he put his arms up then we all copied him in the 'makes me fell low part'	Part and cont	Leading in the music activity

Appendix 2

Showing the inductive thematic analysis of the key competency *managing self* on Excel for how children with autism demonstrated the key competencies in music therapy. The Braun and Clarke (2006) process reads from left to right.





First round themes

Date	Raw data	KC	Deductive	Inductive

Appendix 3

Information sheet for parents, caregivers and family members.

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI VICTORIA UNIVERSITY OF WELLINGTON

TE KŌKĪ NEW ZEALAND SCHOOL OF MUSIC
VICTORIA UNIVERSITY OF WELLINGTON, PO Box 600, Wellington 6140, New Zealand
Phone + 64-4-463-5369 Email music@nzsm.ac.nz Web www.nzsm.ac.nz

Addressing the New Zealand Key Competencies in student music therapy practice for children on the autism spectrum.

Information Sheet for Parent, Caregiver or Family Member

Dear Parent/Family member

My name is Emmett Sutherland and I am the music therapy student working with (name of person) at [redacted]. I am currently on placement as a second year music therapy student. This is my second and final year as part of a Master of Music Therapy degree at New Zealand School of Music, Victoria University of Wellington.

I am required to research about music therapy as part of my training. For my research topic I have chosen to explore how the Key Competencies (KCs) featured in my student music therapy practice. The KC's are educational goals at heart and include the focuses of managing ourselves, participating and contributing, relating to others, thinking and using language symbols and texts. As a result of this project, I hope to fill the gaps in the research on the use of the KCs in music therapy for children on the autism spectrum and to improve my own practice.

I would like to ask you to give a written permission for some materials recorded in my notes and reflections to be included in this research. This information contains specific musical and personal experiences with your child during music therapy sessions. I will not use names or other information that can potentially identify (him/her) in any publication or presentation of this research. All the records and consent forms for this research will be stored in a locked cupboard and kept for five years at New Zealand School of Music. However there is a possibility of (name of person) being recognised as there are few music therapists working in schools in New Zealand. I will make every attempt to protect (name of person)'s and your family's privacy and confidentiality.

My research process will involve looking back at my practice notes, and journal reflections about music therapy work with (name of person) to answer my research question. I will be writing a document about my research, and there will be a section called a case vignette which will describe a particular point in my music therapy sessions with (name of person). This is to illustrate any musical experiences or meaningful interactions that are relevant to my research topic.

I will provide a summary of the results of the study to you if you wish to see the findings of this project, but please note that this study may not be ready for

publication until early 2019. I will be happy to discuss with you about this study during and/or after the study.

The proposal for this study has been reviewed and approved by the New Zealand School of Music Postgraduate Committee. Victoria University Human Ethics Committee has given generic approval for me to carry out this project and they have considered it to be low risk. Please feel free to discuss with [redacted], (Deputy Principle) or myself if you have any questions. If you feel you have obtained sufficient information about this research and happy to give permission, please sign the enclosed consent form. There will be no changes to the ongoing music therapy if you decide not to give your permission. You can contact my research supervisor Aprof Sarah Hoskyns if you have any concerns or questions relating to this research.

The supervisor named below is responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research, please contact the supervisor or, if you wish to raise an issue with someone other than the student or supervisor, please contact the Victoria University of Wellington Human Ethics Convenor AProf Susan Corbett, email susan.corbett@vuw.ac.nz, telephone +64-4-463 5480).

Kind regards,

Emmett

Student Music Therapist: Emmett Sutherland

Email: sutheremme@myvuw.ac.nz

Supervisor: Sarah Hoskyns

Email: sarah.hoskyns@vuw.ac.nz

Phone: 04-463-5233 x 35807

Appendix 4

Consent form for parents, caregivers and family members.

TE KŌKĪ NEW ZEALAND SCHOOL OF MUSIC
VICTORIA UNIVERSITY OF WELLINGTON, PO Box 600, Wellington 6140, New Zealand
Phone + 64-4-463-5369 Email music@nzsm.ac.nz Web www.nzsm.ac.nz

Addressing the New Zealand Key Competencies in student music therapy practice for children on the autism spectrum

Parent, Caregiver or Family Member's Consent Form

- I have read the information sheet and have obtained sufficient information about the study
- I understand that my family member's name will be changed and that the location and name of the setting will not be identified
- I also understand that the research data will be kept in a locked cupboard at the New Zealand School of Music for a period of 10 years
- I acknowledge that the study will be published in the library at Victoria University and may be presented in a conference or published paper
- I understand that I can contact the student music therapist and his research supervisor Dr Sarah Hoskyns if I have any concerns or questions relating to the research.
- I also understand that I can contact the Victoria University of Wellington Human Ethics Convenor if I have any other concerns about this research.

I therefore give consent for materials recorded in Emmett Sutherland's student music therapy clinical notes and reflective journal that are related to my family member's music therapy to be used in a case vignette to illustrate the findings of the research.

Signature: _____ Date: _____

(Caregiver/s) Full name/s printed:_____

☐ I would like to receive a summary of the findings (please tick if appropriate).

My email to receive the summary is _____

Or, I would like to receive the summary another way_____

_____

_____

Appendix 5

Information sheet for team members and supervisors.

TE KŌKĪ NEW ZEALAND SCHOOL OF MUSIC
VICTORIA UNIVERSITY OF WELLINGTON, PO Box 600, Wellington 6140, New Zealand
Phone + 64-4-463-5369 Email music@nzsm.ac.nz Web www.nzsm.ac.nz

Addressing the New Zealand Key Competencies in student music therapy practice for children on the autism spectrum.

Information sheet for team members and supervisors

My name is Emmett Sutherland and I am researching how the New Zealand Key Competencies featured in my student music therapy practice this year. The research is being undertaken as part of the Master of Music Therapy programme at Victoria University of Wellington. In this project I hope to find out the ways music therapy can use the Key Competencies to help children on the autism spectrum and to improve my own practice though reflection and research.

This project involves reviewing the notes I have assembled over the year which may include contributions by yourself. Using these various forms of data I hope to develop an understanding of how the Key Competencies featured in my student music therapy practice, and how they are thought about generally, which may have influenced my practice along the way. The Key Competencies are part of the New Zealand Curriculum and highlight the learners holistic education and engagement with 'managing self', 'participating and contributing', relating to others', 'using language, symbols and texts', and 'thinking'. I am writing to you because I would like to use data that was collected as part of my clinical practice, and which relates to you, in my research project. The data will be analysed along with data from other sources, to answer my research question.

The advice I have collected from team members and received in supervision I perceive as significant to this project. This includes suggestions for how I could use the tools music can offer to more effectively incorporate the Key Competencies into my practice, how to engage the children I work with in the best possible way to absorb the Key Competency skills, and the ways in which the Key Competencies can be thought about which has influenced my practice along the way. If you give permission for your data to be included, your name will not be mentioned and other details which may relate to your identification made anonymous. The music therapy clients which may be mentioned in our discussions will also have their identity safeguarded. The music therapy community in New Zealand is small, and although your real name, or the name of the facility, will not be included in any written material, it is possible that you might be identified.

The data collected as part of this project will be subject to a process known as thematic analysis where the researcher looks for broad themes existing within the data. These themes will be refined and reviewed and then used to organise the overall findings of the research question. One example of a theme may be how smiles are used to 'relate to others'. Data will be securely stored in an office at Victoria University for 5 years and destroyed at the completion of this time. A summary of the project findings can be made available for you. If you would like this please indicate it on the consent form attached. The method for preserving confidentiality is intended to be robust. I will make all efforts to ensure confidentiality through the use of pseudonyms and removing identifiable data.

You are under no obligation to give your permission for your data to be used for research purposes. Not giving permission will not affect the eligibility of current music therapy clients to receive therapy. If you decide to allow it to be used, you have the right to:

- ask any questions about the study at any time until it is completed;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- withdraw information from the research up till the end of the data analysis which will be the 15th of October;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the New Zealand School of Music Postgraduate committee. The VUW Human Ethics Committee has given generic approval for music therapy students to conduct studies of this type. The music therapy projects have been judged to be low risk and, consequently, are not separately reviewed by any Human Ethics Committees. The supervisor named below is responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research, please contact the supervisor or, if you wish to raise an issue with someone other than the student or supervisor, please contact the Victoria University of Wellington Human Ethics Convenor AProf Susan Corbett, email susan.corbett@vuw.ac.nz, telephone +64-4-463 5480). If you have any questions please do not hesitate to contact me or my supervisor AProf Sarah Hoskyns.

Student music therapist: Emmett Sutherland

Email: sutheremme@vuw.ac.nz

Supervisor: AProf Sarah Hoskyns

Email: sarah.hoskyns@vuw.ac.nz

Phone: 04-463-5233 x 35807

Appendix 6

Consent form for team members and supervisors.

TE KŌKĪ NEW ZEALAND SCHOOL OF MUSIC
VICTORIA UNIVERSITY OF WELLINGTON, PO Box 600, Wellington 6140, New Zealand
Phone + 64-4-463-5369 Email music@nzsm.ac.nz Web www.nzsm.ac.nz

Addressing the New Zealand Key Competencies in student music therapy practice for children on the autism spectrum

Supervisors and team members consent form

- I have read the information sheet and have obtained sufficient information about the study
- I understand that my name will be changed and that the location and name of the setting will not be identified
- I also understand that the research data will be kept in a locked cupboard at the New Zealand School of Music for a period of 5 years
- I acknowledge that the study will be published in the library at Victoria University and may be presented in a conference or published paper
- I understand that I can contact the student music therapist and his research supervisor AProf Sarah Hoskyns if I have any concerns or questions relating to the research.
- I also understand that I can contact the Victoria University of Wellington Human Ethics Convenor if I have any other concerns about this research.

I therefore give consent for materials recorded in Emmett Sutherland's student music therapy clinical notes and reflective journal to be used to illustrate the findings of the research.

Signature: _____ Date: _____

☐ I would like to receive a summary of the findings (please tick if appropriate).

My email to receive the summary is _____

Or, I would like to receive the summary another way_____

_____

_____

Appendix 7

Formal request to research.

TE KŌKĪ NEW ZEALAND SCHOOL OF MUSIC
VICTORIA UNIVERSITY OF WELLINGTON, PO Box 600, Wellington 6140, New Zealand
Phone + 64-4-463-5369 Email music@nzsm.ac.nz Web www.nzsm.ac.nz

Dear [redacted],

As you may know, over the course of this year I am running a student music therapy programme for the children of the Special Education Unit. One element of my studies is a research component that requires me to focus and expand upon a specific part of my practice. I am writing to ask for formal permission to undertake research at [redacted].

The element in particular I am intending to focus on is how the New Zealand Key Competencies might feature in my student music therapy practice for children on the autism spectrum. The method I intend to use is called secondary analysis of data. It is commonly held that the ethical risk of this type of research is low because the data is regular notes about practice taken in the course of usual work at school and is analysed retrospectively. I would be reviewing my clinical notes used for summarizing sessions, assessment and planning, a personal reflective journal and notes from supervision.

The research proposed intends to inform and improve my own practice while contributing to the literature more broadly. Currently the Key Competencies have not been specifically examined with music therapy for young people on the autism spectrum and other research has focused on more diverse populations and in different educational settings.

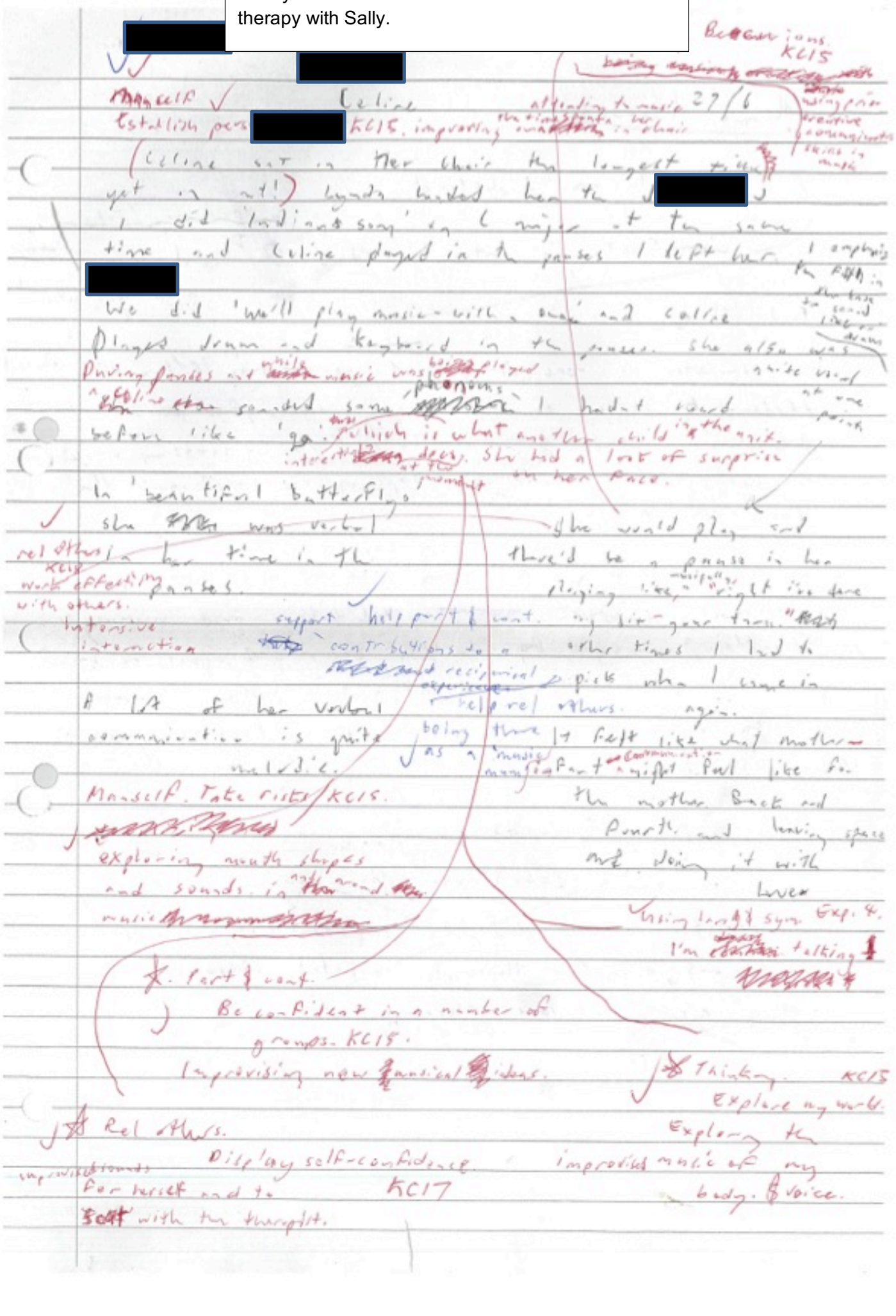
The research proposal which I have attached, and that is described here, has been approved by the Postgraduate Committee of the New Zealand School of Music and conforms to the ethical standards of Victoria University of Wellington and Music Therapy New Zealand. In my writing any personal data of children used in the research will be anonymous and the name of the school will not be identified. Further, if approved I will seek informed consent from families and assent from children to develop any clinical vignettes which might illustrate the research findings.

If more information about my proposal is required before a formal consent can be given please do not hesitate to contact me. I am also accountable to my post-graduate research supervisor Sarah Hoskyns (sarah.hoskyns@vuw.ac.nz) who can also answer any questions. Could you let me know by email, preferably by Monday 23rd July if I can have permission to go ahead?

Kind regards,
Emmett Sutherland (sutheremme@myvuw.ac.nz)

Appendix 8

Anonymous session notes from individual music therapy with Sally.



Appendix 9

Letter to parents and caregivers to request information for music therapy goals and to make contact generally.

To Parents and caregivers,

My name is Emmett and I have had a fantastic and satisfying time so far conducting music therapy for all the children of the special education unit at [redacted].
I am writing to you to request information that will help me to build on the work we have done so far and further support your child's steps to independence which they are making at school. I hope this term will be full of great breakthroughs and look forward to talking to you again soon.

Kind Regards,
Emmett Sutherland

Questions begin here:

What music does _____ hear at home?

What musical experiences has _____ had in the past?

What are _____ favorite songs?

_____

_____

Is there anything you would like music therapy to help with in particular? For example, fine motor skills to support eating with a knife and fork, or, balance and core strength for walking?

_____

_____

_____

_____

_____

_____

_____

_____

Questions finish here. Thank you!

Please note any information you provide is considered confidential and will remain at [redacted] when I leave at the end of the year. I am a student music therapist studying through Victoria University of Wellington and my services at the school are free. Not replying to this letter will not affect your child's eligibility to receive music therapy at school. If for any reason you wish for your child to stop receiving music therapy please contact me or my supervisor [redacted]. Additionally I can be reached by email and can meet with you in person if you wish.

Kind regards,
Emmett Sutherland
(sutheremme@vuw.ac.nz)

[redacted]

Appendix 10

A negotiated work contract/reward behavior chart as recommended by my clinical liaison. To start I would ask children if they would like circles or squares. Next, I would ask how many ticks they would like (for example six or seven) and then inquire what they were working for (e.g. playing loudly!). In the process of music therapy I would tick the circles if the child followed my guidance (in this framework I tried to make plenty of room for fun). As suggested by my liaison, I would tick boxes for simple tasks to begin with, such as for the child sitting in their chair and listening, (so they trust I will give them the reward) and progressively make ticks more challenging to earn. I was also encouraged to be enthusiastic when children were doing well and say things like “I can’t wait for you to do that!” and if children did not follow my guidance, to be less animated and say something like “I guess no playing loud today”.