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Abstract

This research project set out to examine the meaning of music for five First Nations children diagnosed with Autism Spectrum Disorder, (ASD) in British Columbia, Canada. A pan-tribal framework within an Indigenist research paradigm was used. Data was collected during visits in 2013 and 2014. Five First Nations children with different tribal affiliations, and living locations, their families, and professionals were engaged in the project. Methods were conversations, observations, filmed observations, interventions and notes. It was found that current autism discourses and practices are based on a deficit model within Western paradigms, and therefore not compatible with inclusive, First Nations worldviews and perceptions of autism representations. Music is used for purposes such as relaxation, communication and when studying. Indigenous music is not used in targeted music interventions. This article presents unique material, emphasizing the lack of cultural sensitivity, and colonial residue in music interventions for First Nations children with autism.

Keywords: First Nations, Autism, Music, Indigenist paradigms, Canada

1. Introduction

1.1 Background

There is a scarcity of publications on First Nations children diagnosed with ASD, and connecting this issue with music. In an attempt to address the research gap, the purpose of this study was to investigate the meaning of music for First Nations children diagnosed with ASD in British Columbia (henceforth BC), Canada¹.

In this article, the terminology is intended to reflect reciprocal relationships and address the

¹ The cases can also be found in Lindblom (2016), Lindblom (2017) and Dindar, Lindblom and Kärnä (2017).

power imbalance in research. Therefore, the term research partners will be used instead of participants and conversation instead of interview. First Nations and Indigenous will be used because terms such as Indian and Aboriginal were given by the colonists. The latter terms will be used when they occur in official documents and citations. Decolonization is a key aspect of research within Indigenous research (Kovach, 2009; Lambert 2014; Wilson, 2008), and using decolonizing terms is a step in that direction. The person first approach is used in referring to children with autism. Autism Spectrum Disorder, ASD and autism will be used interchangeably. The term Indigenist (Adams, Wilson, Heavy Head & Gordon, 2015, p 35) will be used to emphasize that the philosophical assumptions, although they are currently practiced within Indigenous cultures, are open to all. Specific Indigenous teachings, songs, stories and other elements, however, are sacred and belong to the lands. Such tribal-specific Indigenous knowledge is not meant to be shared (Sexton & Stabbursvik, 2010; Kovach, 2009; Wilson, 2008).

1.2 First Nations

First Nations are one of three Indigenous Peoples (the term Aboriginal is used in official documents) recognized by the Canadian constitution. In Canada, approximately 1.4 million people identify themselves as Indigenous (First Nations, Metis or Inuit). Some First Nations individuals live on reserves, which can be situated in rural areas.

1.3 Autism

Although ASD prevalence is reported to be rising globally, autism appears to be under-detected among First Nations children in BC, Canada (Lindblom, 2014). In a review of publications on Indigenous Peoples and ASD in the global context, possible reasons for under-detection of

autism could possibly be diagnostic substitution (Coo, Ouellette-Kuntz, J Lloyd, Kasmara, Holden & Lewis, 2008), symptom representation (Roy & Balaratnasingam, 2010) or ethnic or cultural, or effects of historical discrimination (Burstyn, Sithole & Zwaigenbaum, 2010; Ouellette-Kuntz, Coo, Yu, Chudley, Noonan, Breitenbach, Ramji, Prosick, Bedard & Holden, 2006; Bernier, Mao & Yen, 2010; Ticani, Travers & Boutot, 2009; Mandell and Novak, 2005; Roy & Balaratnasingam, 2010; Begeer, Bouk, Boussaid, Terwogt & Koot, 2009; Kim, 2012; Anthony, 2009; Leonard, Glasson, Nassar, Whitehouse, Bebbington, Bourke, Jacoby, Dixon, Malacova, Bower & Stanley, 2011; Mandell, Wiggins, Arnstein Carpenter, Daniels, DiGuseppi, Durkin, Giarelli et al., 2009; & Kapp, 2011). In conclusion, I noted “It is essential that barriers of ethnic bias, discrimination and the impact of historical oppression are eliminated to ensure that First Nations and other aboriginal children with autism have the possibilities to reach their full potential and that their rights are recognized and respected” (Lindblom, 2014, p. 1257).

There are two publications on specific Indigenous Peoples, their worldviews and autism. One is about the Navajo in the United States of America, henceforth USA, (Kapp, 2011) and the other concerns the Māori context in New Zealand (Bevan-Brown, 2013). Indigenous Peoples are diverse and views cannot be generalized. However, these examples can broaden the understanding of how worldviews can affect the life of a First Nations child with ASD. Kapp (2011) explains Navajo philosophy as favorable for individuals with ASD as there is an acceptance of diversity. Furthermore, Western culture is described as disabling and the Navajo culture as empowering. Māori values are supportive of inclusion according to Bevan-Brown (2013). In an examination of three research studies she has conducted, Bevan-Brow (2013) concludes that Māori values should be incorporated in education and disability services, which would make service provision more culturally sensitive, thus contributing to inclusion for all

individuals with disabilities. This research project was conducted in BC in an area of over 1000 kilometers and with research partners from different First Nations. Therefore, there is not one single worldview but more of a pan-tribal framework incorporating the children, their families and other research partners who are First Nations.

Although First Nations worldviews are not compatible with a medical, deficit model, the children in this study are all dependent on the dominant systems for health, funding and support in their communities and schools. Therefore, the diagnosis of Autism Spectrum Disorder requires presentation. The diagnostic criteria for ASD are grouped in two areas; social communication and interaction, and restricted and repetitive behaviors (American Psychiatric Association, 2013). There are currently no medical tests that can be used to diagnose ASD. Assessments of behaviors are made by trained psychologists and physicians. Symptoms and severity of impairment in these areas vary among individuals diagnosed with ASD. Symptoms can include difficulty in engaging in social games and imitating, interpreting other's thoughts and feelings or understanding social cues (Autism Speaks, 2016).

According to DSM-5 (American Psychiatric Association, 2013), difficulties may range from adjusting behavior and making friends to a lack of interest for peers. Individuals diagnosed with autism may also express repetitive movements or speech, need for sameness, fixated interests and sensory sensitivity. Many children diagnosed with ASD, and severe speech impairments, use challenging behaviors as a means of communication (Chiang, 2008). Therefore, representations of autism characteristics can, in some cases, make education in a regular classroom inadequate if the environment is not adapted in some way.

1.4 Special needs categories and autism funding

The BC Ministry of Education has ten special needs categories that can be assigned to children, of which Autism Spectrum Disorder is one. There are three levels of special needs categories, and ASD is on the second level, which means that the school is provided with extra funding (BC Ministry of Education, 2013). BC also has a funding system for families with a child diagnosed with ASD (Ministry of Children and Family Development, 2015). This system provides funding for families to purchase eligible interventions and therapies for their child. There are two programs; one for children under the age of six and one for children from six to eighteen years of age. Therefore, a correct diagnosis of autism can entitle the family and school to funding opportunities for interventions and support.

1.5 Music and ASD

To my knowledge, there are no previous publications on music and First Nations children with autism. Within a reciprocal, relational Indigenist paradigm, music is integral. Traditional methods of healing often include music, singing, drumming or dance. However, within Indigenist worldviews, Indigenous, tribally-specific ceremonies, songs, dances and other traditions are not meant to be shared with all (Sexton & Stabbursvik, 2010; Kovach, 2009). Globally, colonialism bereaved Indigenous Peoples their traditions, which impacts their lives to this day. Therefore, it is difficult to find authentic research publications on Indigenous music which has not been interpreted through a Western lens.

Music with people with autism has been quite extensively researched within the fields of education and music therapy. Social interaction and communication are two areas in which music intervention is successful for children with ASD (Simpson & Keen, 2011). The music classroom can be a place where the strengths of children with autism can be seen, rather than the deficits. In their review on literature about autism and music, Darrow and Armstrong (1999)

describe the inclusive music classroom and conclude that music education together with peers may enhance skills of individuals with autism, such as initiating and maintaining communication, desirable behavior and task accuracy. In an exploratory study, Kim, Wigram & Gold (2009) conclude that music therapy is valuable in the development of children with autism in emotional, motivational and social areas. Allen, Hill and Heaton (2009) interviewed high functioning adults with ASD and found that they had difficulty verbalizing their emotions when listening to music, but use music similarly to typically-developing individuals to manage moods, for social inclusion and personal development.

2. Research Design

2.1 Aim and research questions

The aim of this study was to investigate the meaning of music for First Nations children with autism in BC, Canada. In this article, the following research questions are addressed:

- How can autism and music interventions be seen through a First Nations lens?
- How is music used by the First Nations children with autism and the other research partners?
- How is traditional music used?

2.2 An Indigenist paradigm

For the past decades, Indigenous researchers have begun defining their own paradigms and conducting research based on the ontologies, epistemologies, axiologies and methodologies held by the Indigenous Peoples involved. Smith (1999) has done her research in Māori context and has inspired many Indigenous scholars around the globe. Chilisa (2012), Bantu, Botswana; Kovach (2009) Plains Cree, Canada; Lambert (2014) Mi'kmaq/Abenaki, USA; and Wilson (2008), Opaskwayak Cree, Canada, are a few of the Indigenous researchers that have

used specific tribal knowledge to design their research paradigms. Indigenous worldviews hold common aspects. These philosophical assumptions can be described as Indigenist (see Wilson in Adams, Wilson, Heavy Head & Gordon, 2015, p. 20). This means that Indigenist research can be conducted by researchers who hold these philosophical assumptions, whether they are Indigenous or non-Indigenous.

Indigenist ontologies are relational, “reality is in the relationship that one has with the truth” (Wilson, 2008, p 73). Indigenous epistemologies, ways of knowing, are also relational.

Dreams, spirituality, ceremony, intuition are Indigenous ways of knowing that usually are not included in Western research endeavors. Knowledge itself is shared with all in creation and has agency to reveal or hide itself (Adams, Wilson, Heavy Head & Gordon, 2015). Axiology is the ethical conduct within the paradigm. Relational accountability means that the researcher is accountable to all his or her relations with all in creation (Wilson, 2008).

2.3 Methods and procedure

Initially, this study started off using an ethnographic approach. Over time the paradigm shifted from a Western tradition to an Indigenist research paradigm built on Indigenist epistemologies, ontologies, axiologies and methodologies. A three week preparatory visit to network and become acquainted with the field was made in 2012. Conversations were held with research partners over a six-week period in 2013. During six and a half weeks in 2014, follow-up conversations, observations and video-filmed observations were conducted. The conversations were audio recorded and transcribed, with one exception where the person did not want to be recorded. In that case, notes were taken. Notes were also taken in the follow-up conversation with this person. Some follow-up questions and clarifications were made by text message or email after the conversations. Transcripts were manually coded by color marking segments of

text related to the research questions (Creswell, 2009). Mind-maps were made from all the transcripts and used as a base for the follow-up conversations. This was also a way to structure themes for analysis. All the data was combined and analyzed together for clarity and depth (see Lindblom (2017) for more detail). This gave a mutual visual focus, and made the results from the first conversations clear. In addition to the above mentioned methods, Indigenous ways of knowing such as dreams, feelings, spirituality and intuition were utilized. However, as all Indigenous knowledge is not meant to be shared, all may not be explicit in the reported results. Indigenous knowledge holders were consulted in these matters.

A grid on music activities was used as a base for the conversations. The instructions were that the parents and children should have filled it out together before the conversations, but they had not. It was difficult to get the forms to the parents before the conversations. Several do not have Internet access or a computer at home. Due to the scarcity of First Nations children diagnosed with autism (Lindblom 2014) time was also an issue, since research partners had to be found, contacted and consent to participation, during the course of the six weeks of fieldwork in 2013. Through key people in Indigenous education and tribal contexts, research partners were found. This access was made possible through my family connections with the Lake Babin Nation in BC, Canada (see Lindblom, 2016a; 2016b; 2017).

2.4 Research partners

The research partners come from several different areas, both urban and rural, within a distance of 1000 kilometers in BC, Canada. All names in this article are pseudonyms. Tribal affiliations and locations are not mentioned to ensure confidentiality in accordance with the terms of the ethical review. In addition to questions regarding music, the parents and caregivers told stories about the children's diagnosis and school history. Two children have been labelled with other

special needs categories in the school context and one has several comorbid diagnoses. Despite this, I will refer to the children as having ASD in this article as this is how the parents and school staff identified them, but also the diagnosis that determined their interventions in school. The research has been approved by the ethical committee at the University of Eastern Finland, which is the university where my PhD research was conducted, in accordance with protocol. All the research partners gave their consent. Parental consent was given for the children and four of the children also gave their written consent to participate. The fifth child, who is minimally verbal, accepted my presence, but also came up to me and leaned against me, which was interpreted as his consent. For two of the children, approval was given by the district school board to observe in the school and in one case the approval was given by the principal. Observations were not done in the school setting for the other two children so no approval was needed from the school, as a strike made it impossible in one case and one of the children attended a school where they had no music class. In Indigenous research, approval from the tribal councils should be sought, but as this research was with individual families, I did not apply for an ethical review from any tribal council. However, measures were taken to address the research ethics. I have taken courses in Indigenous research methodologies and ethics at a tribal college, attended and presented three times at the American Indigenous Research Association conference, and am a member of a group called Student Storytellers Indiginizing the Academy, SSITA. Furthermore, Elders and traditional knowledge holders from different tribes in North America have been my discussion partners during the research.

2.5 The children

Here follows a short presentation of the five children that participated in the research project.

Peter was fourteen years old at the time of the first conversations. He was living on reserve with his mother and stepfather, but had moved off reserve in 2014. Peter was diagnosed with autism at the age of five.

Connor was six years old at the time of the first conversations. Connor lives on reserve with a family of several generations. This family took care of his mother, from when she was little until she passed away when Connor was a baby. The issues of formal custody were still in progress during the first data collection. Connor was diagnosed with autism around the age of one. Connor is minimally verbal, so he could not participate in a conversation.

Tom was fifteen years old at the time of the first conversations. Tom lives off reserve with the family that has adopted him. Tom was diagnosed with autism at the age of seven. Tom attends a regular class and has not been assigned a Special Needs classification since 2013. This means that although he is diagnosed with autism, he does not require any special support in school.

Debbie was fourteen years old at the time of the first conversations. She lives off reserve with her mother and sister. Debbie was diagnosed with autism at the age of four. Debbie attends a resource classroom for most of her lessons at school.

Steve was twelve years old at the time of the first conversations. He lives off reserve with his parents and siblings. Steve was diagnosed with autism when he was four years old. Most of Steve's challenges are social but things have improved. Steve has had problems at school and has been in a resource room, but is now attending a mainstream class with support.

Table 1: Research partners.

Child	Other research partners 2013	Other research partners 2014
Peter	Mary, mother Ruth, teacher	Mary, mother Joseph, District Indigenous Education Coordinator
Connor	Elizabeth, mother figure Anna, teacher's aide	Elizabeth, mother figure Anna, teacher's aide Earl, grandfather figure Todd, uncle figure David, principal in Indigenous education
Tom	Patty, adoptive mother Evelyn, drama teacher	Patty, adoptive mother Rita, Education coordinator
Debbie	Grace, mother Emily, after school aide Mona, resource room teacher Victoria, music therapist Sandra, Indigenous support worker	Grace, mother Emily, after school aide Mona, resource room teacher Victoria, music therapist Sandra, Indigenous support worker
Steve	Brenda, mother Harry, music teacher Doris, Indigenous support worker	Brenda, mother Harry, music teacher Doris, Indigenous support worker

3. Results and analysis

3.1 Autism and music interventions through a First Nations lens

David is a principal in Indigenous education and has worked in teaching and leading positions for almost 25 years. Joseph is a District Indigenous Education Coordinator and has almost 30 years of experience of support work and teaching on reserve. Both of them conclude that they have not come across many First Nations pupils diagnosed with autism. Their experiences correspond with a review of publications (Lindblom, 2014) that revealed that First Nations children in BC appear to be under-detected. Tincani, Travers, and Boutot (2009) mention historical oppression as a possible cause for under-representation of autism in First Nations populations.

In BC they have the system of special needs categories and First Nations students are categorized in a variety of ways.

Behavior categories, intellectual mild and our moderate intellectual disabilities. You name a category. In many of them, the Aboriginal students are over-represented. Except for autism and gifted. (David).

The children in this research have all been assessed and diagnosed within the dominant health system. Only one of them has access to autism funding. Beeger et. al (2009) and Kapp (2011) discuss stereotyping as a possible reason for the under-representation of autism. This needs to be further investigated. There is a substantial amount of funding for families up until the child turns six years old. It is essential that barriers of systemic racism are identified and addressed.

First Nations communities were, and are still very much inclusive. Family systems are very strong. Joseph says that people with disabilities would be included in community and family events, "...they wouldn't be asked not to be included or segregated. That's wrong..." (Joseph).

David explains further:

...in the terms of my understanding of you know traditional First Nations, um is, my sense is a lot of times communities wasn't built on a deficit model....There's a view of people who are a part of the community everyone has a role and education happens organically within a family. Uh, you go hunting, fishing, trapping. All the traditional activities were done with the people you had.(David)

David estimates that 40-50 percent of the Indigenous students in his district live on reserve, which, according to him, translates as living a traditional First Nations lifestyle. There they have a First Nations environment with hunting, fishing, trapping, clan systems and the potlatch system. Families are usually multi-generational and the children benefit from a multiplicity of perspectives, learnings and understandings. David emphasizes the role of Elders.

...the role of Elders you know...it's the backbone of the community. The traditional knowledge holders and the um respect and the deference that is given to them, and the kids learn all of this stuff just by being in the community...(David)

On the topic of traditional First Nations lifestyles, autism, and multi-generational care within the family, Joseph clarifies:

So that example is um primarily in our communities because of the way we were raised. And how we look after one another. And when we define, or when we see a disability, no matter what the area, whether it be a limb, speech, um deaf, autism, whatever, we don't label that person in the community. They're just known to have what they have and we accept it and help them as much as we can. When you mention three or four generations being involved, it's because um they've been taught to look after their family members, you know, first...Nurturing, caring and remember what our parents told us and how they raised us too.(Joseph)

David and Joseph's narratives tell of the inclusive nature of First Nations cultures. In connection with First Nations children diagnosed with autism in Canada, this has not previously been reported in research publications. However, there are publications that discuss this in the New Zealand and the United States of America contexts (see Bevan-Brown, 2013; Kapp, 2011), in which the importance of cultural sensitivity is emphasized. Involving Elders could be beneficial in this context (see (Bartleet, Bennett, Marsh, Power & Sutherland, 2014, in Australian context).

David says the music is a part of who the people are and that they respond to it.

...I think there is something strong about the rhythm of the drum...I think it's

huge...within First Nations culture, the, the songs and the music are really important.

They're passed down from generation to generation and they're, they're um, they're

proprietary...(David)

The drum is "a powerful significance of our people", according to Joseph. He explains the importance of learning to play and sing their nation's songs. One cannot copy another Nation's songs without consent, that is considered stealing "you can't take what's not yours". Joseph compares it to the consent form in this study, "Just like I signed that paper before you, I'm giving you my consent, right".

The importance of music for First Nations suggests that music inventions need to be culturally sensitive (see Bevan-Brown, 2013).

3.2 The use of music by the First Nations children with autism and the other research partners

Music is important for all the five children in this study, but the importance and use of music varies. Steve is perceived to dislike music, but for Debbie, music is a big part of her daily structure. The children use music for different purposes. Several of them use music to help them relax. For Connor, music is a means for communication according to his assistant. Simpson and Keen (2011) found that music interventions can facilitate communication for children with autism, so using targeted music interventions with Connor could be beneficial.

Some of the children say they have used music to change their mood.

Researcher: ...I think I asked you last time if you ever used it to change your mood. Do you ever use music, like if you're sad or something? You use music to get in a better mood, or?

Tom: Yeah.

Researcher: Yeah. Would you even use it if you're maybe angry or something?

A: Yeah.

This could also mean using music to make oneself feel happy, or for self-soothing.

Researcher: But also you said you make yourself happy with music

Debbie: Yes

Researcher: too. And I could see when you have your song on that it makes you smile.

Debbie: Yes.

Researcher: And you get happy.

Debbie: Oh yeah.

This is similar to the findings of Allen, Hill and Heaton (2009) when they interviewed high-functioning adults with autism. It can, however, be difficult for the children to describe the kind

of music they like. Steve says he has listened to music a few times and likes some kinds of music, as long as it is good. “If it’s terrible I hate it.” (Steve).

Listening to music, or watching videos and films, which also include music, is common among the children. Tom listens to music when he is studying and finds it relaxing. Studying while listening to music is perceived as successful according to his mother Patty.

He had to study not too long ago for some tests. It was, they were big tests right. And yeah, he had music on while he was studying. Yeah and it seemed to help him, and he did very well...He got an A and two B’s in the subjects he studied for so as you can see I think it has a very good impact on him...(Patty, Tom’s mother).

Playing instruments is something the children all are interested in. Connor likes playing instruments and had a ukulele according to Elizabeth. “He would sit for hours and twing twing.” (Elizabeth, Connor’s mother figure). Tom would like to play the piano. He likes singing, but only by himself in his room. Debbie says she likes to sing and she learns songs by listening to the radio. In the follow-up conversation, Debbie’s mother Grace told me that Debbie had been to camp and played drums there. The following year she would be trying musical theatre at camp. She was also planning to start playing the keyboard. Debbie likes the popular young artists but is also open to different genres. Sometimes she dances to the music. Steve has tried the guitar and xylophone at school and would like to learn more about the acoustic and electric guitar. In the follow-up conversation I learn that Steve is in band but he does not play his instrument at home. He does not like playing the alto-sax and thinks it is too loud and disruptive. He would rather have played another instrument that was not available.

...I like instruments like the guitar, the piano, drums more than, than, I like strings and percussion more than horns and stuff” (Steve).

He has signed up for guitar class in high school for the coming semester. Darrow and Armstrong (1999) conclude that the music classroom can be inclusive and enhance strengths of children with autism. Peter and Tom do not have access to music class in school, but for the other children, music could be used more intentionally as an autism intervention.

Music is sometimes used as a motivator or reward by parents and by a teacher's aide at an after-school club. In school settings, music is not used in this way. Kim, Wigram & Gold (2009) found that music can be motivational for children with ASD. The results in this study suggest that perhaps research results and publications do not make it to practitioners. Conducting research projects together with tribal communities, based on their interests, could be a step in bridging the gap between research and practice.

3.3 The use of Indigenous music

Although all five children in the study are identified as Indigenous in the school setting, Indigenous music has not been used in any targeted music interventions. Indigenous music is not often used in the educational setting at all. Sometimes it is used in the background in Indigenous class or there may be some Indigenous drumming, singing and dancing at Indigenous graduations. Not all of the children in the study have had access to their tribal music in the home setting. Indigenous music is integral in healing, but not all tribal music is meant to be shared (Sexton & Stabbursvik, 2010; Kovach, 2009). This could be addressed by involving Elders, as in an Australian project (see (Bartleet, Bennett, Marsh, Power & Sutherland, 2014). This would make the interventions culturally sensitive (see Bevan-Brown, 2013). Since music has agency (see Adams, Wilson, Heavy Head & Gordon, 2015), and everything in creation is connected within Indigenous worldviews, providing First Nations children with access to their specific culture and heritage would also connect them to their ancestors and culture.

In this context, it is relevant to present experiences the children in this study have had with their tribal music. Peter says he does not like Indigenous music, but his mother Mary says he likes hearing it and that they sometimes go to functions. Mary believes he would like it more if they lived in their own territory. Where they come from all the drummers play on one big drum but where they live now, everyone has their own hand drum.

Connor was exposed to Indigenous music at home when the grandmother figure in the family listened to it or watched the Aboriginal Peoples Television Network, APTN. The family has tried taking him to functions but: “He’ll just get all rambunctious and destructive, he doesn’t like it.” (Elizabeth, Connor’s mother figure). At school Anna thinks the Indigenous drum might be soothing for Connor, but she has not tried it. In two music interventions with Connor, a hand drum and an Indigenous song given to me by an Ojibway traditional teacher were used. This singing and drumming style resembles that of Connor’s tribe. Connor and I sat on the floor during the interventions. Initially, I played the drum and sang. Connor responded with eye contact, turn taking in playing the drum and singing.

Tom has made an Indigenous drum at school. His mother Patty says he plays it sometimes but Tom disagrees. Patty also says that Tom goes to functions such as potlatches. Evelyn, Tom’s drama teacher, says music is used sometimes in Indigenous class, but this class is optional.

Researcher: ...Uh, we talked about last time, that you sometimes go

to functions up on the reserve.

Tom: Yeah.

Researcher: Yeah, so there, I guess, they have their drummers and dancers and stuff?

Tom: Yeah.

Researcher: Do you ever play the drums with them?

Tom: No.

Researcher: No? Do you sing?

Tom: No.

Researcher: Do you dance to it?

Tom: No.

Debbie's mother Grace has an uncle that has a dance troupe that Debbie has seen and she has been to Indigenous day trips and graduations. Other than that, Debbie has not been exposed to Indigenous music at home or shown an interest in it. At school Indigenous music is not used in the resource room. Indigenous music is not used at the after school club nor in music therapy. "I myself I'm not familiar with Aboriginal music, and then um whenever Debbie suggests a song she has not requested an Aboriginal song." (Victoria, Debbie's music therapist). Sandra used to have Indigenous class with Debbie when she was younger and there they sometimes had Indigenous music. They also did pow wow dancing but Debbie did not join in. In the Indigenous class that Debbie had chosen the second time I visited for field studies, she made her own drum and played it. This was enjoyable to her and she liked it as much as the contemporary music she listens to.

Debbie: "Yeah, I did... I played on my own drum."

Researcher: Oh, did you like the drumming and singing?

Debbie: Yes.

Researcher: Yeah.

Debbie: Oh yeah.

Researcher: Yeah. Did you like it as much as you like the music on your Ipod?

Debbie: Yes.

Steve has not been raised with Indigenous traditions but says he has listened to Indigenous music. In music class they have not used Indigenous music. “I don’t know about it to be honest.” (Harry, Steve’s music teacher). In the Indigenous class, Doris has not used Indigenous music.

The children’s experiences of Indigenous music vary. Even if they live on reserve and have access to their culture, the sensory overload could be too overwhelming. Involving Elders and traditional knowledge holders in one-on-one interventions could be a possible solution. My results also point to what Bradley (2015, p 195) describes as ‘cultural whiteness’ or ‘the assumption of cultural superiority’ in the music education of North American schools. Awareness of autism and the child’s culture is essential when designing support and interventions. Again, Elders and traditional knowledge holders should be involved in these processes.

4. Conclusions

The effects of colonialism and how many First Nations individuals are bereaved of their traditional ways of living are apparent in the results of this study. Elders, and others involved in the schools teaching traditional ways, are very important for the survival of these traditions. For a First Nations child with autism, the inclusive environment in the traditional community with all the aspects of the culture, including the music, could be beneficial in many ways. However, the children in this study have little, or no, access to Indigenous music in school. This implies that teachers and therapists may feel more comfortable teaching music the way they were taught (Saunders, 2010, p. 72), which may lead to them reproducing the inequalities of the dominant system.

Autism can be seen as a diagnosis that comes from a Western, medical, deficit model which may be problematic in the First Nations context. There is cause to reflect over the diagnosis process and subsequent intervention and support systems. The diagnosis of autism appears to have little relevance within the Indigenous context. However, for the First Nations children who are diagnosed with autism, it could make a great difference for them, both as children and later as adults, if interventions and support systems are culturally sensitive.

Music can be a wonderful intervention for children diagnosed with Autism Spectrum Disorder. First Nations children diagnosed with ASD are no exception. They are, however, not a homogenous group, which means that interventions must be formed to suit every individual. The use of music interventions, especially involving Indigenous music, appears to be underestimated. Future research should include investigation of diagnosis procedures and subsequent interventions and support on their cultural sensitivity. This may have implications for all interventions regarding First Nations children diagnosed with autism. First Nations children diagnosed with ASD are at risk of being marginalized in school settings and, in extension, as adults in society. Culturally-sensitive music interventions and participation in music constitute an integral part of the complex endeavor to meet the needs of First Nations children diagnosed with ASD, and subsequently other disabilities.

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