Mauri tui tuia: Dance movement therapist, music therapist, and early childhood teachers' collaborative bi-cultural response to community trauma

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ABSTRACT

Mauri Tui Tuia is a professional development programme established by the first and second authors who are a Registered Arts and Dance Movement Therapist and a Registered Music Therapist respectively. Mauri Tui Tuia seeks to empower educators to develop a kete of tools to support children in building resilience and maintaining wellbeing, through the medium of trauma-informed music and dance movement therapies. In this paper we discuss the theories that underpin the mahi (work) and give a broad overview of some of the ways our unique collaborative practices can potentially provide sustainable support for our communities in the wake of traumatic events, including the Covid-19 pandemic.

KEYWORDS

Dance movement therapy, music therapy, trauma-informed

Introduction

Mauri Tui Tuia programmes assist Early Childhood Education (ECE) teachers to use simple self-regulation strategies aimed at supporting their own body state, and that of their charges, through music and dance movement. Based on theories of co-regulation, mirror neurons, and embodied attachment, the program uses experiential learning to help the teachers to read and follow bodily cues that lead to self-regulation. The practical tools, viewed through the lens of the neurobiological and developmental stages of the child, expand teacher knowledge and understanding of the ways they can influence and support children who have experienced trauma.

Our programmes were originally offered as part of the New Zealand Ministry of Education's suite entitled 'Strengthening Early Learning Opportunities' (SELO) for children, whānau, families, and communities, in response to the escalating levels of adversity and potential trauma observed in children throughout the region of Te Tai Tokerau (Northland, NZ). The name Mauri Tui Tuia was gifted by a kaiārahi (Māori advisor). 'Mauri' refers to a "life principle, life force, vital essence … (as

well as) the ecosystem or social group in which this essence is located" (Ministry of Education, 2009). 'Tui Tuia' comes from an ancient waiata (chant) 'Te Tangi A Te Matui', symbolising the call of the matui bird, evoking a sense of unity, oneness, and collaboration (https://folksong.org.nz/tui_tuia/). The interweaving and collaboration that is central to Mauri Tui Tuia practice can draw our attention to the ancient knowledge we all carry in our bodies of song and dance as a means of connecting and healing.

The Northland region has a population of approximately 180,000, including 65,000 (36%) Māori and over 4% Pacific peoples (Statistics New Zealand, 2018). Compared to the rest of New Zealand, personal incomes and levels of education qualifications are low, and unemployment is high (Statistics New Zealand, 2018). In 2020, the region experienced one of the most severe droughts on record, followed by a '500-year' flood, which resulted in closed roads, washed out bridges, and flooding in homes and centres. The community was therefore already facing significant adversity and disadvantage as the Covid-19 pandemic struck. The tools that Mauri Tui Tuia offered, targeting emotional regulation through a trauma-informed lens, became even more crucial to the wellbeing of our children, whānau, families, and communities.

While Mauri Tui Tuia programmes are facilitated by registered dance movement and music therapists, and underpinned by psychotherapeutic theories, they do not seek to turn teachers into therapists. Rather, the aim is to upskill educators to use trauma-informed skills in their work, and thus to ensure help is more widely available, especially for so-called 'hard-to-reach' survivors and families (Lambie & Gerrard, 2018, pp. 34-35). Early childhood educators play a crucial role in supporting the wellbeing of children and families. They work at the 'coalface' of their communities and by doing so have access to 'hard-to-reach' children and their families, who may find accessing other support systems difficult. Working within existing community structures ensures that positive outcomes, for children and the wider community, can be sustained (Mutch & Latai, 2019).

Bicultural practice

A broad integrative approach allows us to meet people and communities where they live, to listen carefully to the expressive preference of the people we work with, and to be responsive to their needs (Levy 2014). It also requires us to develop relevant cultural practices, and to maintain cultural humility. Our collaboration with Māori teachers and tamariki grows from a humble and reflective approach, contained within a culturally specific model (Dunphy, 2014; Gray, 2017; Hodgson, 2014). Mauri Tui Tuia is informed by the principles of the Te Tiriti o Waitangi (Te Tiriti o Waitangi, 1840), collaborative learning of bicultural practice, trauma-informed arts therapies, and Kaupapa Māori ways of knowing.

Our practice takes account of the national shift in focus away from illness toward wellness and prevention in mental health, and from a less individualised model of care to a more family- and social group-based approach. It is grounded in the Māori wellbeing model, Te Whare Tapa Whā (Durie, 1998), and the practice of Tuākana-Tēina. The four pillars of Te Whare Tapa Whā, representing taha tinana (physical wellbeing), taha wairua (spiritual wellbeing), taha hinengaro (mental and emotional

wellbeing), and taha whānau (family and social wellbeing), are offered as a lens through which participants reflect on their own resources and potential to self-regulate. The Māori term tuākana refers to "elder brother, elder sister, cousin, prefect", and tēina to "younger brother, younger sister, cousin of a junior line, junior relative" (Te Aka Māori Dictionary). In tuākana-tēina educational pedagogy in Aotearoa New Zealand, tuākana refers to tutors and tēina to apprentices (Winitana, 2012). One of the unique qualities of the tuākana-tēina model, as opposed to other therapist-client or teacher-learner models, is that it recognises that, for any given pair of people, the roles may be reversed at any time, depending on the circumstances.

> For example, the student who yesterday was the expert on te wā and explained the lunar calendar may need to learn from her classmate today about how manaakitanga (hospitality) is practised by the local hapū. (Ministry of Education, 2009, p. 28)

Trauma and resilience

An understanding of the neurobiological basis of trauma, and its effects on attachment and relationship, can increase teachers' awareness of their potential to influence and support children who have experienced trauma in simple, accessible, play-based ways (Gray & Porges, 2017). According to the DSM-V (Diagnostic and Statistical Manual of Mental Disorders), trauma involves exposure to actual or threatened death or serious injury by directly experiencing an event; witnessing an event occurring to others (in person rather than through media); learning that such an event happened to a close family member or friend; or experiencing extreme exposure to the details of such events. Trauma results when dissonance is created between the magnitude of the threat and the individual's resources for coping with the threat (Felsenstein, 2013).

Young children can be adversely affected by single events, or unrelenting repeated ordeals, which *they* experience as challenges (Edwards, 2017; Terr, 2013). When faced with unsafe and potentially traumatic events, they may become hyperaroused, or disassociate. Hyperarousal involves increased activity in the sympathetic nervous system, affecting the regulation of emotion, behaviour, and stress, with presentations of hyperactivity, anxiety and fear, impulsivity and aggression, and unusual responses to sensory stimuli; while disassociation involves disengaging from the external world, becoming withdrawn, inattentive, and depressed (Bray et al., 2017; Gray, 2017; Mutch & Latai, 2019; Terr, 2013). It is not surprising that somatic pain is also a common response (Capello, 2019), since these state-shifts have physiological roots (Gray, 2017). Moreover, bio-emotional markers can leave long-lasting imprints, especially in very young children, as the developing brain is dependent on receiving the right kind of stimulation to support the development of emotional regulation (Edwards & Noone, 2016; Gray, 2017).

Engaging children in safe, predictable, motivating interactions, has the potential to help them develop neural plasticity, higher-order processing, and self-regulatory behaviours (Stegemöller, 2014; Wentling & Behrens, 2018). While verbal communication might be difficult for children who have experienced trauma, sensory creative activities not only enable them to express themselves (Malchiodi, 2017), but also to engage in interpersonal communication with others, and to re-create

or develop a sense of belonging. Group activities that enable children to share experiences with others who might understand what they have been through are particularly important, since experiencing empathy and commonality are important elements in the reduction of trauma symptoms (Farrow et al. 2005). Having possibilities to participate in activities that engage physical, cognitive, and affective domains, and involve *doing* things together rather than talking, can bring a profound sense of relief to people who have experienced trauma (Malchiodi, 2017; Pifalo, 2002).

While children are channelling their energy, threatening thoughts, and feelings into a positive task (Orr, 2007), careful facilitation can enable them to explore, process, and move on from the traumatic event (Mutch & Latai, 2019). Music, dance, and other arts therapists have developed innovative ways to enable children living in traumatised communities to experience the nurture and care that is needed to booster their resilience. Singing, playing, and moving simultaneously – i.e., engaging in synchronistic activity – are powerful ways to develop a sense of connection, foster solidarity, and create a sense of 'harmony' (Rickson et al., 2018).

Mirror neurons, and the development of attachment

From the beginning, newborns have the capacity to precisely synchronise movements and vocalisations with adults, to develop meaningful 'proto-conversations' (Malloch & Trevarthen, 2009). Their sensitively timed interactions contain melody, rhythm, and phrasing, which led Malloch and Trevarthen (2009) to describe the process as 'communicative musicality', a 'dance of wellbeing'. This interactional synchrony is presumed to be mediated by the mirror neuron system, a discovery that gives support to an embodied understanding of intersubjectivity (Praszkier, 2016; Tanaka, 2015).

Mirror neurons reflect movement and sounds. We experience them in our bodies (kinaesthetic interaction) and we become synchronised with what we are seeing and hearing – a process called 'kinaesthetic empathy' (Praszkier, 2016). The concept of interactional synchrony, or interpersonal coordination, is based on our intuitive understanding of each other's intentions to act – a perception-action loop described as intercorporeality (Tanaka, 2015). Intercorporeality enables the well-timed smooth exchange of nonverbal signals, including flow of gestures, vocal turn taking, postural changes, and regulation of distance (Tanaka, 2015). When communicating we "mesh the flow of actions with one another, as if […] dancing together" (Tanaka, 2015, p. 466). Embodied interaction that is experienced as interactional synchrony supports mutual understanding, and is therefore intersubjectively meaningful (Tanaka, 2015).

By merely observing the movements of others, people can feel as if they are participating in those movements, and experience associated feelings and ideas (Praszkier, 2016). The mirror neuron system therefore helps us to understand the intentional actions of others, and to share emotions and sensations with others, and thus creates the foundation for empathy (Tanaka, 2015). When we observe emotion in others, our mirror neurons trigger the same brain activation patterns as they do when we experience our own emotions (de Vignemont & Singer, 2006). Empathy involves intuitively recognising, feeling, and sharing a perceived emotion with another person, which creates a sense of connection (Eisenberg & Strayer, 1987; Praszkier, 2016; Roy, 2010).

Empathy is important in the treatment of trauma (Farrow et al., 2005), and is also one of the key components of person-centred therapy. Person-centred therapists strive to develop empathic understanding of their participants' thoughts and feelings, as well as being self-aware, genuine, and authentic, and demonstrating unconditional positive regard for them (Rogers & Sanford, 1985). Empathy is essential to the therapeutic relationship, which in turn is a strong predictor of positive outcomes (Cooper, 2008; Mössler et al., 2017), and it plays a key role in the expression of altruism, compassion for others, and pro-social and cooperative behaviours (Praszkier, 2016).

Dance Movement Therapy (DMT), and Music Therapy

Dance movement therapy is the psychotherapeutic use of movement and dance, through which people can engage creatively in a process to further their emotional, cognitive, physical, and social integration (ADTA, 2014). Kinesthetic empathy interaction, movement empathy, or empathic embodiment is a foundational technique of Dance Movement Therapy (DMT) (Payne, 2006; Praszkier, 2016). The rhythmic communication shared between mother and infant, described in the previous section, is where the child begins to learn about relational space and safety (Kossak, 2009). Attunement between the mother and infant happens at an embodied level, supporting the construct that the source of our empathic knowledge is in the body. This lays down the basis for co-regulation of the infant's developing nervous system, through the mother's mature regulation of her own system (Wittig, 2010). Gray and Porges (2017) explain that this is the way human beings are 'wired for relationship', with early co-regulation being the basis of learning to feel safe through the body.

As we have demonstrated in previous paragraphs, the importance of connecting on this bodily level is supported by research demonstrating that mirror neurons promote an automatic tendency to imitate the actions and share the feelings of others, which in turn leads to the development of attunement and attachment (Winters, 2008). As therapist and participant move in synchrony, they become attuned to each other (Payne, 2006; Praszkier, 2016). The developing therapeutic relationship, and the body's innate and innovative resources for recovery and renewal of mental and physical health (Capello, 2019), can lead to increased self-awareness and self-esteem, and open opportunities for growth, change, and healing (Payne, 2006).

Similarly, in music therapy, the music therapist uses the "forces, experiences, processes, and structures of the music" (Ansdell, 1995, p. 5) to develop or strengthen the resources their participants bring. Theories of typical care-giver infant interaction recognise, for example, that early rhythms form part of our human ability to state-shift towards equilibrium and self-soothing (Trevarthen & Malloch, 2017). Music therapists engage their participants in improvised music making, responding sensitively and musically to their musical and non-musical expressions, and attuning to their movements, feelings, and intentions (Hardy & LaGasse, 2018; Kim et al., 2008; Slootsky & Gold, 2016). Music making is therefore a creative and expressive way for children to build resilience (McFerran et al., 2020; Pasiali, 2012), and for those who have experienced trauma to develop increased capacity, as they expand their expressive freedom, strengthen their self-esteem, and build their emotional resource (Bernstein, 2019).

Dance movement and music can be used to support the body to return from a state of arousal to homeostasis, and to enhance the body's own homeostatic potentials (Goodill & Graham-Pole, 2005).

If trauma is experienced by the body, through the body, it makes sense that the body can be a place where healing can start. The acute response of our bodies to situations that overwhelm us, situations that are beyond a cognitive sense of connection, control, or meaning, lead us to experience trauma. Our body's response to freeze, fight, or flight, testifies to our basic striving for life. When these states leave long-lasting imprints resulting in traumatization or PTSD, the state shifts that occurred are central to the restorative process. This is the place where dance movement and music therapists can move from, by working with the direct experience through the body, symbol, and metaphor, and promoting immediate state-shifts within the body. There is also the recognition of creating safety within relationships. Gray (2017) sees the safety-trust relationship as fundamental to humanity and dignity, and argues that safety begins in the body. By utilizing body system responses through creative mediums, the body becomes a universal and readily available vital resource toward resilience (Van der Kolk, 2014).

Given the synergies in their theories and practices, it is not surprising that creative arts therapists frequently write of skill sharing and collaborating with others, including families and educators, to ensure that maximum benefits and sustainable outcomes can be gained from programmes (Bolger et al., 2018; Rickson & McFerran, 2014; Twyford & Watson, 2008). However, genuine collaboration is a complex, negotiated process, which involves the "conscious, appropriate intent […] to support players to buy in […] to avoid the development of a tokenistic culture of collaboration […]. The therapist's role is to embody and offer a collaborative intent from which a mutual, shared process may emerge" (Bolger et al., 2018, p. 9).

Linking theories to our practice

When our programmes were first offered in 2019, each participating early childhood centre was offered an initial consultation visit to build rapport, a 2 to 3-hour practical workshop after centre hours with staff and families, and a follow up visit during centre hours to help the teachers integrate their learning. While the aim of these workshops was to provide teachers with tools to use with tamariki, facilitators used the tools to accommodate the needs and experiences of teachers too. In the following paragraphs we use the word 'participants' to indicate tamariki and teachers' participation in programme activities.

A crucial aspect of the Mauri Tui Tuia programmes is helping ECE teachers to understand the neurobiological basis of attachment and relationship, and to learn through experience how the process of co-regulation in dance movement and music activities can reduce anxiety and increase whakawhānaungatanga (sense of connection). They are encouraged to consider their own self-care, to understand the ways they use their own bodies, sensory systems, and resilience-building mechanisms to manage stress in their world. The simple actions of shared waiata, rhythm, and mirrored movement has been observed to move teachers from a state of heightened anxiety to calm, helping them to comprehend the neurobiological basis of secure attachment and co-regulation (Berrol, 2006), and to understand the rationale behind offering these self-care tools to their tamariki. Workshop participants often report experiencing a sense of light relief, fun, and shared purpose in the sometimes-poignant group work.

We also aim for teachers to learn about the intrinsic relationships between dance, movement, and music, and child development, and the ways these mediums can support brain, body, and relationship development. We believe the mediums of music and dance movement provide teachers with a kete of simple active strategies to promote body awareness, and support self-regulation, which in turn helps children to manage transitions and self-soothe in moments of change and anxiety. A song incorporating the rhythm of a heartbeat might be used, for example, to encourage children to calm. When children are calm, they are more able to integrate new learning and knowledge (Lorenzo-Lasa et al., 2007).

We have observed that when the children engage in dance movement and music activities, they gradually develop their ability to attend to somatic clues from their bodies; and as they recognise internal feelings and needs, they are more able to regulate their emotional experiences. We anticipate they will eventually be able to depend upon their own bodies to meet new challenges, to heal, to take care, and to know limits (Levy, 2005). Creative movement and music also offer another dimension through which to develop group cohesiveness, and socialization. Engaging in simple song and dance seems to give participants a sense of flexibility, relaxation, and resilience in responding to the unfamiliar.

One of the most debilitating components of being traumatized is isolation. Helsel (2016) speaks of the need for a community of 'witnesses' to surround those in trauma. While acknowledging the survival systems that kept them safe, we try to assist them to regulate, by engaging them in embodied rituals that support the restoration of a sense of self. The experience of being witnessed with effective therapeutic holding and presence becomes essential to working with acute trauma, addressing the fundamental safety-trust relationship that allows bodily state-shifts (Gray, 2017; Meekums, 2006). Utilising the practice of tuākana-tēina we have been able to offer supportive spaces where collective and shared knowledge increases social support and resources for all who are involved. Working with groups of children, the ECE setting creates a place where participants can connect with others who may have a similar way of experiencing the world, in an inclusive, creative environment.

We have noticed that some ECE teachers are less confident than others in using music, dance and/or movement with children. However, we, the facilitators, were also stepping out of our comfort zone at times, as we encountered practices from each other's disciplines. Modelling our own developing confidence in using expressive dance movement or music was helpful in breaking down barriers. With any trauma-informed practice, one of the fundamental pillars is self-care, and appropriate boundaries for the work, to ensure sustainability. As facilitators, we have been mutually and deeply collaborative ourselves, mindful of self-care and the need to embody our own teaching, in terms of sustaining our own regulation and well-being. We maintain safe boundaries by engaging in flexible practice, matching teaching to the strengths and needs of a group, with some workshops expanding on, and deepening, existing work, and others engaging with the basic and solid principles of self-regulation and team building. We need to adopt an attitude of 'not knowing' when entering each centre, as children, staff, environment, and resources, are different each time.

The integrative tuakana-teina approach allows us to meet people and communities where they are, and to ensure the sessions are culturally relevant, respectful, and responsive to the needs of each centre. In addition to the generalised observations we have made, we have found that each workshop has resulted in a unique body of knowledge that is meaningful and specific to the early childhood centre in which it is situated. By working alongside the whole centre team, we have been able to recognise and reinforce the resources that each teina brings, thus helping to remove barriers and developing the team's resources.

The inclusion of an indigenous model of health and wellbeing has been imperative to this work. Te Whare Tapa Whā supported the emergence of each participant's own knowing in relation to self-care, self-regulation, resourcing, and professional practice. An awareness of the effects of colonization and the place of historical trauma must be reflected in our work as creative arts therapists in Aotearoa. The honoring of old wisdoms and embodied practices of cross-cultural co-creation, both within each centre's session and as a guiding principle for Mauri Tui Tuia, holds the seed for the emergence of new ways of integrating knowledge into sustainable practice. This was evident when the facilitators were greeted by children showing them the songs and dances that they had been learning. It was clear that the teachers were putting the tools into practice with their tamariki.

While New Zealand was in lockdown, centre projects were on hold. However, the day before the official lockdown, we produced five short videos of dance and music 'first aid' tools, which would help calm and support whānau and tamariki. We offered these videos to the fifteen centres we were working with, and invited head teachers to send the resources on to whānau who had the technology to use them. This helped to maintain connection and provide support through some simple tools that could be used at home. As restrictions were lifted, the work resumed. Nevertheless, it has continued to be challenging for us to engage in teacher-focused work. Many teachers are experiencing high anxiety levels themselves; and many workshops have had to be cancelled, or postponed, as teachers go into protective isolation after individual Covid testing, or are anxious about having new people enter their centres.

The delivery of professional development has changed significantly worldwide since 2020, with a bounty of trauma-informed and early childhood training moving online. However, we believe that, although many trauma courses and resources can be offered online, on-site and centre-specific training is still vital. On-site, in-person training allows and encourages whakawhānaungatanga, the "process of establishing relationships, relating well to others" (Māori Dictionary, 2020), which is much harder to do online. Sharing kai (food), allowing time before workshops to get to know each other, and taking a very personal approach to understanding each person and their whānau, is an important part of the Mauri Tui Tuia programme. Although we operate under time limitations, setting whakawhānaungatanga as a priority was key in reaching a position of trust, particularly when teachers were themselves in a traumatized state. Once teachers and facilitators had reached a deeper level of trust, the teachers were more readily able to develop their practice, and to both contribute to and accept ideas and understanding.

Final words – where to from here?

Our clinical observations and the self-report of teachers indicate that workshop participants have been able to recognise ways they can use music and dance therapy tools to enhance their own hauroa (wellbeing). They have expanded their thinking around the practice they are already undertaking, applied new ideas to their practices, and extended their resources to support all children, including those who have experienced trauma. They have provided safe places where the children have been able to tackle unmastered experiences and fears. And they have noticed that, as the children have engaged in music and movement, so too their ability to recognize, regulate and express emotion has developed. They have seen how the integration of body and emotion contributes to a strong sense of self as an emotional, social, and cognitive being.

Children will thrive in safe and trusting environments with consistent and predictable caregivers. Such an environment is securely founded when there is a mutual understanding on a kinaesthetic level (Stern, 1985). When ECE teachers are made aware of the kinaesthetic system of attachment and safety, they understand how and why dance and music are fundamental to child development and relationship. In practice they can access a plethora of simple active strategies that promote body awareness and self-regulation, and support children to self-soothe in moments of change and anxiety, and to manage transitions. This then promotes communication and expression though a developing joy and relationality, using the mediums of music and dance movement. This therefore suggests that the tools that are shared through the Mauri Tui Tuia programme have the potential to support the communication, expression, emotional development, and general well-being of all children across all levels of society.

The Covid-19 pandemic will have major adverse consequences for many people over their lifespans (Holmes et al., 2020), with social isolation and loneliness leading to increases in anxiety, depression, self-harm, and suicide attempts (Mahase, 2020). Children and young people are likely to be affected in a variety of ways and to varying extents, as they are in other disaster situations (Mutch & Latai, 2019). Indeed, we have observed that the pandemic has had a widespread effect on centres and families. Centres that were already supporting families on a low income, and with significant support from social services, found themselves managing an even higher level of emotional disregulation in the children they were supporting.

In post-disaster contexts, it is important to consider the short and long-term needs of both individuals and communities. There is often a need to provide psychosocial support to local workers, since they are immersed in other people's needs at a time when they themselves might be dealing with their own post-traumatic distress (Possick et al., 2017; Shamai, 2015). Care needs to be taken to avoid worker burnout and/or to prevent the emergence of feelings of abandonment when supports disappear. This is where integrated models allowing for longer-term coordination become important. Programmes need to be evaluated, taking into account the emergence of the community's own resources, and withdrawn if no longer required. Mutch & Latai (2019) describe two arts-based post-disaster projects, run with outside assistance in school settings, alongside teachers, parents, and community members. The success of the programmes was attributed to the long-term commitment and involvement of the schools and their communities; the development of trusting relationships;

negotiated roles and responsibilities; and collaborative problem-solving. They considered the provision of respite for teachers, as well as strategies for them to use, to be important.

Our workshops focus on whole-centre learning, and all staff participate. This means that we can reinforce the utilisation of existing practices and resources, as well as strengthening or developing new resources, to ensure that the work is sustainable. Dance movement and music activities are ever-present resources for teachers, children, and families, thus providing an equitable and strength-based practice in response to the Covid-19 pandemic. Short-, medium- and long-term programmes continue to be needed to build individual and community resilience, and to mitigate the mental health consequences of this pandemic (Mahase, 2020). Carefully facilitated, gentle, supportive, and empathetic, arts-based processes can be powerful tools to help children and young people who have experienced disasters to process their experiences and reduce trauma (Mutch & Latai, 2019).

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