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FEATURE ARTICLE

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Occupational therapists' practice with complex trauma: A profile

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Abstract

Introduction: Many children in Aotearoa (New Zealand) and Australia experience complex trauma and its developmental impacts. Internationally, occupational therapists work with complex trauma and use sensory-based, integrative, and functional approaches. The practices of occupational therapists in Aotearoa and Australia with children experiencing complex trauma have not previously been described.

Methods: This article reports the quantitative results of a mixed-methods study which profiled occupational therapists' practice in Aotearoa and Australia with children aged 0 to 12 years old who experienced complex trauma. Twenty-five participants completed the survey. The average age of participants was 43 years (SD = 10.65), all were female ($n = 25$), and most identified as New Zealand European ($n = 11$) or Australian European ($n = 9$). A survey was distributed via Occupational Therapy New Zealand – Whakaora Ngangahau Aotearoa and Occupational Therapy Australia.

Results: The majority of participants had a bachelor's degree (64%) and worked in community settings (76%). Fourteen participants (56%) used sensory approaches. The most common assessments used were those of sensory processing ($n = 12$, 48%) and observation ($n = 12$, 48%). The Sensory Profile was the most popular standardised assessment ($n = 8$, 32%). The most common interventions used with children experiencing complex trauma were sensory ($n = 13$, 52%) and play based ($n = 13$, 52%). Most participants reported not adapting their practices for Māori or Aboriginal children. Most participants felt somewhat prepared ($n = 15$) for working with complex trauma, with most reporting a lack of experience in this area ($n = 10$). Supervision was suggested by 92% ($n = 23$) of the participants.

Conclusion: Sensory-based practices were most common among occupational therapists in Aotearoa and Australia who worked with children experiencing complex trauma. The participants suggested supervision, social support, and practical training when working with complex trauma. Advocacy and research

are required within this subspecialty, and further professional engagement in the application of culturally safe practice.

KEYWORDS
complex trauma, cultural competency, developmental trauma, occupational therapy, stress disorders, post-traumatic

1 | INTRODUCTION

'Complex trauma' refers to a child's exposure to chronic trauma and the developmental impacts of this. The most closely aligned formal diagnosis is complex post-traumatic stress disorder (CPTSD) (Maercker, 2021). However, CPTSD does not specifically speak to childhood trauma nor the impacts on child development and occupations. For this reason, the term 'complex trauma' is used in this article.

Children experience complex trauma in a variety of contexts including community violence, family violence, and invasive medical treatment (van der Kolk, 2005). Complex trauma can impact a child's capacity to regulate their emotions and empathise (Stolbach et al., 2013), to sustain focus and learn new information (Adubasim & Ugwu, 2019), and to coordinate their bodies (Wade et al., 2017). These challenges have implications for childhood occupations such as play, self-care (Wade et al., 2017), and school participation (Adubasim & Ugwu, 2019), which can be addressed within occupational therapy.

This study describes occupational therapists' work with children who experienced complex trauma from chronic physical, sexual, psychological, or emotional harm within the domestic setting.

Key Points for Occupational Therapy

- Sensory-based and play interventions need to be researched for efficacy with complex trauma
- Support needed to implement a range of culturally safe practices with children who identify as Māori or Aboriginal
- Supervision and social support is needed when working with children who experience complex trauma

1.1 | Impacts of complex trauma on child development

Complex trauma can impact a person across all developmental domains from infancy to adulthood (Matte-Landry & Collin-Vézina, 2020). Three developmental impacts are those on children's self-regulation, cognition, and motor skills.

Complex trauma may compromise children's neurological capabilities for self-regulation. In one study, 214 children aged 3 to 17 years who experienced complex trauma were significantly more likely than other trauma-exposed children to have difficulty tolerating strong emotions, and to demonstrate maladaptive self-soothing, reactive aggression, and impaired empathic arousal (Stolbach et al., 2013). Difficulties with self-regulation may be a barrier to a child coping emotionally in the classroom, and to making and keeping healthy friendships (Atchison & Morkut, 2012).

Complex trauma may also impact on brain development and cognitive functioning. The prefrontal cortex, which contributes to attention and executive functioning, is thought to be particularly vulnerable to complex trauma (Wilson et al., 2011). In a systematic review of six studies focussing on the cognitive functioning of complexly traumatised children, four of those studies demonstrated differences between traumatised and non-traumatised children (ages 3–18) for language, attention, memory, visual–spatial, and visual–motor skills (Irigaray et al., 2013). Such challenges have implications for children's ability to sustain focus and learn at school (Whiting, 2018).

Finally, complex trauma can impact on children's motor skills. One study measured the motor skills of 78 children in a therapeutic preschool and found that children who had been maltreated had skill deficits 5 to 7 times higher than the published norms of the Peabody Developmental Motor Scale - 2 (Wade et al., 2017). Motor challenges can present functionally through difficulties joining in on play (Cooper, 2000), challenges with dressing and personal cares, and challenges with writing legibily (Faota & Faota, 2019).

1.2 | Occupational therapy practices used to address complex trauma

Occupational therapists work with children who experience complex trauma, targeting self-regulation and everyday occupations (Lynch et al., 2021; May-Benson & Teasdale, 2019; Warner et al., 2014). Current occupational therapy literature research mainly describes sensory-based and integrative practices with children and adolescents who experience complex trauma.

An example of a sensory-based, integrative intervention is Sensory Motor Arousal Regulation Treatment (SMART). SMART was developed by occupational therapist Jane Koomar alongside a group of psychotherapists and uses sensory modulation strategies within talk-based therapy for latency aged children and adolescents who experience complex trauma (Warner et al., 2014). In a quasi-experimental pilot study using a matched control group, 10 trauma-exposed young people aged between 12 and 22 years in residential care demonstrated significant reductions in internalising symptoms, somatic complaints, and on anxious and depressed subscales, and reductions in over arousal, when using SMART in comparison to treatment as usual (Warner et al., 2014).

Another example of sensory-based, integrative intervention is the Sensory Attunement Focused Environments Playfulness Love Acceptance Curiosity Empathy (SAFE PLACE) approach created by Jane Koomar and Psychologist Dr Dan Hughes. SAFE PLACE combines Ayres Sensory Integration with Dyadic Developmental Psychotherapy to address concerns related to complex trauma, sensory processing, and attachment (Koomar, 2012). In a single-case feasibility study, the SAFE PLACE programme was rated as very satisfactory by the child's caregiver. The child also demonstrated improvements across a range of standardised measures of gross motor performance, sensory processing, behaviour, cognition, social skills, and functional skills (May-Benson & Teasdale, 2019). However, obviously, the results of a single case study are difficult to generalise.

A study by Lynch et al. (2021) focussed on the outcomes of 10 children who experienced complex trauma and participated in occupational therapy as part of their multi-disciplinary treatment. The Canadian Occupational Performance Measure (COPM) was used for caregivers to rate their satisfaction and their child's skill in relation to therapy goals before and after occupational therapy input. The parent's goals for their children were mainly related to self-regulation. On average, caregiver's satisfaction with, and perception of, their child's occupational performance improved by 2 points per scale. However, the results of other standardised measures of the children's skill levels were inconclusive (Lynch et al., 2021).

None of the studies focussed on cultural safety when providing occupational therapy for children experiencing complex trauma. This is a significant oversight given that complex trauma affects children across cultures. Cultural safety requires service providers at all levels to continually reflect on how power and privilege operate within their system, and how this impacts the services provided to families (McGough et al., 2022). Cultural safety means time is taken to build relationships with stakeholders and clients before requesting their full commitment to the service. The service provider acknowledges their personal worldview as distinct, rather than as a neutral starting point for decision making. The clinician refutes any entitlement or power traditionally held by their profession, in favour learning from their clients and stakeholders. sThe culturally safe service provider understands the impacts of colonisation on health and socioeconomic outcomes and realises the role white privilege plays in maintaining this status quo (Tujague & Ryan, 2021). Finally, culturally safe service provision is approached with a focus on family strengths, wisdom, and resilience (Cox & Best, 2022).

The studies reviewed suggested that occupational therapy had promise as an adjunct therapy for children experiencing complex trauma. However, more studies, and studies with more rigorous designs, are required. Among the occupational therapy evidence, there was no empirical research, no evidence about practice in Aotearoa (New Zealand) and Australia, and none that considered the importance of culturally safe practice when working with complex trauma.

1.3 | Incidence of complex trauma in Aotearoa and Australia

In the year preceding June 2017, a total of 17,242 children aged 0 to 17 years in Aotearoa were recorded in child protection statistics with substantiated reports of concern (Oranga Tamariki, 2018). In Australia, in the year up to June 2016, a total of 60,989 children aged 0 to 17 years had recorded substantiated reports of concern (Australian Institute of Health and Welfare, 2018). Māori and Aboriginal children have been overrepresented in Aotearoa's and Australia's child protection systems (CPSs). In 2015, Māori children made up over a half of all children in out of home care (Child, Youth and Family Services, 2016). In 2018 in Australia, Aboriginal children were nearly seven times more likely to have a substantiated report of concern (Australian Institute of Health and Welfare, 2018). The overrepresentation of Māori and Aboriginal families within CPSs is complex and can be understood in the

context of systemic and interpersonal racism from the event of colonisation to present day.

Colonisation resulted in changes to Māori and Aboriginal family life. Māori and Aboriginal families often had to adapt to the loss of access to land and natural resources (Menzies, 2019; Moewaka Barnes & McCreanor, 2019). Many Aboriginal children were forcibly removed from their families to white society (Menzies, 2019), and English Victorian parenting styles became influential in Aotearoa (Wilson, 2016). Such events reshaped family structures, day-to-day family life, and parenting. Working against the current of much institutional and interpersonal racism, Māori and Aboriginal families continue to experience higher rates of deprivation. Socioeconomic challenge puts families at greater risk of CPS contact (Cram et al., 2015; Menzies, 2019; Moewaka Barnes & McCreanor, 2019), as does the racial biases that are thought to exist in CPS decision making processes (Funston & Herring, 2016; Harnett & Featherstone, 2020; Keddell & Hyslop, 2019).

This paper presents a study on the profile of occupational therapy practice in Aotearoa and Australia with children aged 0 to 12 years old who experienced complex trauma. The aims of the study were (1) to understand the profile of occupational therapists in Aotearoa and Australia working with children aged 0–12 years who experienced complex trauma; (2) to understand practice with Māori and Aboriginal children, and (3) to understand the supports therapists' need when working with children experiencing complex trauma.

2 | METHODS

This article reports the quantitative results of a mixed-methods study. Qualitative data regarding occupational therapists' practices with complex trauma will be published elsewhere (Occupational Therapists' Practice with Complex Trauma: A Profile and Perspectives, n.d.)

2.1 | Participants

There were 25 survey participants. All were female ($n = 25$), and most identified as New Zealand European ($n = 11$) or Australian European ($n = 9$). One participant identified as Aboriginal, and none identified as Māori. The participants' aged between 26 and 59 years, with an average age of 43 (SD = 10.65 years). A minority of participants had completed or were completing a masters ($n = 1$; 4%) or doctorate degree ($n = 3$; 12%).

The participants were included if they were registered occupational therapists in Aotearoa or Australia, had worked with children aged 0–12 years, and had worked with a child experiencing complex trauma. The participants not currently working with children were excluded. The participants were also excluded if they had not practiced in the last 2 years, if their survey was less than half complete, or if they did not provide consent within the survey's plain language statement and consent form.

2.2 | Instrument

An online survey with 39 closed questions and three open questions was used to capture data about participants' demographic information, training and experience, practice with children aged 0–12 years, and practice with children aged 0–12 years who experienced complex trauma. Questions about practice with children 0–12 years were modelled from a previous survey of occupational therapy practice (Rodger et al., 2005).

The survey was reviewed by Tirritpa Ritchie Kaurna man. Tirritpa is an occupational therapist and researcher who is also an Aboriginal man. Tirritpa consented via email to being named in this article and specified how he would like to be referred to (see above). On review, Tirritpa suggested the use of the term 'Aboriginal' in the survey rather than Indigenous Australian/Torres Strait Islander in the survey and provided a weblink for inclusion that opened to a definition of 'Aboriginal' in Australia (National Aboriginal Community Controlled Health Organisation, 2016).

Suaree Borreal, a public health researcher who identifies as Māori also reviewed the survey before it was sent out. Suaree consented to being named in this article via private social media messaging. Changes made to the survey in response to Suaree's reviews were the following: asking for respondents' date of birth, aligning the multiple choice options for ethnicity with the New Zealand Census, asking for the postcode area that the respondent worked within, including Māori health providers in the options for workplaces, including specific multi-choice options for the funding streams of occupational therapists working in private practice, and defining how long children had participated in occupational therapy.

The survey was piloted by four occupational therapists before distribution. Two of these therapists were bachelors level practitioners with >20 years' experience in paediatrics. Two of these therapists were in academia, supervising the principal author's research. Suggested changes by the occupational therapists included formatting changes, changes to the order of questions, and additions to the multi-choice options for assessment and intervention approaches used.

Examples of the closed questions are

What ethnic group do you belong to?

What medical conditions or life circumstances do the children present with? Tick all that apply.

What theoretical approaches did you use? Please list.

An example of the open question is

How did you practice differently than you would have if working with a child who did not identify as Māori or Aboriginal?

2.3 | Procedure

Ethical approval was gained through the Deakin University Human Ethics Advisory Group. A link to the survey was distributed via the Occupational Therapy Australia e-newsletter and via Occupational Therapy New Zealand – Whakaora Ngangahau Aotearoa (OTNZ-WNA) special interest groups for children and young people's occupational therapy, leaders and managers, independent practitioners, mental health, and for primary health care. Association members could email the survey link to non-member occupational therapists for completion. The survey was open between December 2016 and February 2017 and re-advertised 1 month after being launched.

2.4 | Data analysis

Numerical data were analysed with descriptive statistics. Text entry data were analysed thematically for each question. Themes were analysed by exporting text entry data into Microsoft Excel, dividing each answer into phrases, and then grouping phrases into columns by theme. The resulting themes were coded and numerically analysed using descriptive statistics.

3 | RESULTS

3.1 | The profile of occupational therapists working with children aged 0–12 years

3.1.1 | Demographic information

Most participants had a bachelor's degree as their highest level of occupational therapy education ($n = 16$). On average, the participants graduated 19 years ago and had 14 years' experience working with children. The participants had completed a range of post professional training, with the most common being Sensory Integration certification ($n = 7$). One participant had completed a Graduate Certificate in Developmental Trauma. The majority of the participants worked in the community ($n = 19$) or in educational settings ($n = 15$). The participants worked between 4 and 70 h a week, with an average of 33 h worked. The number of clients worked with ranged from as few as 4 to as many as 135. Table 1 provides a summary of participants' demographic information.

3.1.2 | Practice with children in general

Referrals for children were usually received from schools ($n = 21$), families ($n = 20$), doctors ($n = 19$), and other allied health professionals ($n = 19$). Referrals from social services ($n = 15$) were also common. Children referred to occupational therapy were typically seen within 3 months, with the most common wait time 1 to 2 weeks ($n = 9$). Occupational therapy was usually provided for more than 2 years ($n = 6$) or 6 months to a year ($n = 5$). Usual formats for therapy were child-caregiver sessions ($n = 22$), followed by individual child sessions ($n = 19$), and family or group sessions ($n = 17$ each). The participants most commonly worked with school aged children ($n = 23$), followed by pre-schoolers ($n = 21$), toddlers ($n = 14$), and infants ($n = 9$). The most common client conditions participants reported working with were developmental delay ($n = 24$), neurological conditions ($n = 23$), and abuse or neglect ($n = 22$). Although 88% of the participants currently worked with children who experienced abuse or neglect, all had previously worked with a child who they believed had been maltreated and experienced complex trauma.

3.1.3 | Practice with complex trauma

When working with children experiencing complex trauma, sensory-based ($n = 14$) approaches were most common. The second most common type of theoretical approach were occupational therapy models ($n = 7$). Table 2 summarises the theoretical approaches used.

The most common assessments used were assessments of sensory processing ($n = 12$) and observational assessments ($n = 12$). Overall, the Sensory Profile was the most popular standardised assessment ($n = 8$). Table 3 summarises the assessments used.

The most common interventions used with children experiencing complex trauma were sensory ($n = 13$) and

TABLE 1 Participants' demographic information

Demographic information		Participants ($n = 25$)	
		n	**%**
Ethnicity	New Zealand European	11	44%
	Australian European	9	36%
	British	2	8%
	South African	1	4%
	*New Zealander	1	4%
	Aboriginal	1	4%
Highest level of occupational therapy education	Bachelor's in occupational therapy (OT)	16	64%
	Undergraduate certificate or diploma in OT	5	20%
	Enrolled in doctorate in OT	2	8%
	Enrolled in masters in OT (post professional)	1	4%
	Honours degree in OT	1	4%
Work setting(s)	Community	19	76%
	Educational	15	60%
	Private practice or self employed	8	32%
	Hospital	5	20%
	Primary health organisation	3	12%
	Marae	1	4%
	Maori health provider	1	4%
	Aboriginal health provider	1	4%
	Consultancy	1	4%
Employment status	Part-time	12	48%
	Full-time	11	44%
	Variable hours	1	4%
	Combining part time jobs	1	4%

New Zealander = participants identifying as 'New Zealander' over a specific ethnic group.

play ($n = 13$) based. Sensory-based interventions were usually sensory modulation ($n = 7$). Play interventions were typically not described further than as being play or play based ($n = 7$). Table 4 summarises the interventions used.

Culturally safe practice

When asked to describe how they practiced differently with children who identify as Aboriginal and experience complex trauma, 56% of Australia-based participants did not answer. Among the participants who answered this question, differences in practice usually pertained to how participants engaged and interacted with Aboriginal children and their families ($n = 5$). This included increasing time for engagement and rapport building, emphasising family involvement, involving third parties, verbalising less in-session, and increasing time and flexibility within service provision. Two participants reported they did not practice differently with children who identify as Aboriginal and who experience complex trauma. These participants also reported not practicing differently with children who are Aboriginal in general and described using a client-centred, individualised approach with all children.

When working with children who are Māori and experience complex trauma, most participants in Aotearoa reported not practicing differently than with non-Māori children ($n = 4$). Like participants working in Australia, these participants reported not practicing any differently with children who are Māori in general, and some described instead using a client-centred approach. The differences in practice that were reported usually pertained to how whanau were engaged with ($n = 3$), for example, identifying who key family members were to talk with and being less expectant that whānau (family) would attend clinic-based appointments.

TABLE 2 Theoretical approaches used with complex trauma

Theoretical approach	Participants ($n = 25$)	
	n	%
Sensory based	14	56%
Sensory processing	5	20%
Sensory integration	3	12%
Sensory modulation	3	12%
Multisensory	2	8%
Sensory (unspecified)	1	4%
Occupational therapy models	7	28%
Person–environment–occupation	5	20%
*CMOP-E/CMOP	2	8%
Trauma-informed or related	5	20%
Motor related	5	20%
Psychotherapeutic modality	5	20%
Other approach	5	20%
Attachment related	4	16%
Developmental	4	16%
Behavioural	4	16%
Neurodevelopmental	2	8%
Maori or Aboriginal models	2	8%
Psychosocial	2	8%
Mindfulness	2	8%

CMOP-E = Canadian Model of Occupational Performance and Engagement/Canadian Model of Occupational Performance.

3.1.4 | Therapists' practice needs when working with children with complex trauma

The participants rated whether they felt well prepared, adequately prepared, somewhat prepared, or unprepared for working with complex trauma. Most participants reported feeling somewhat prepared ($n = 15$), three felt adequately prepared, two felt well prepared, and two felt unprepared. Among the participants who felt somewhat prepared ($n = 15$), most reported a lack of experience ($n = 10$) for working with complex trauma. A number of these participants ($n = 5$) reported completing training for working with complex trauma but still lacking confidence because of a lack of experience. These participants also expressed how challenging or overwhelming working with complex trauma can be ($n = 7$). Practical experience ($n = 5$), training ($n = 5$), and having worked with other professionals who specialised in this area ($n = 3$) were factors that supported their practice.

The participants were asked to suggest training, professional supports, and personal supports for occupational therapists working with complex trauma.

TABLE 3 Assessments used with children with complex trauma

Assessment	Participants ($n = 25$)	
	n	%
Sensory processing	12	48%
Sensory profile	8	32%
Beery VMI	4	16%
Observational	12	48%
Observation (unspecified)	9	36%
Perceive recall plan perform	3	12%
Motor functioning or development	7	28%
Movement ABC	3	12%
Alberta infant motor skills	1	4%
Hammersmith examination	1	4%
BOT of motor proficiency 2	1	4%
Retained reflex assessment	1	4%
Developmental	6	24%
Ages and stages questionnaire	3	12%
Bayley's scales	2	8%
Miller assessment for preschoolers	1	4%
Play based	6	24%
Play based (unspecified)	5	20%
SIPDC	1	4%
Other assessment	5	20%
Functional assessment	2	8%
Discussion with caregiver	5	20%
Standardised psychological	3	12%
SDQ	1	4%
CBCL	1	4%
HONOSCA	1	4%

Berry VMI = Beery Buktenica Developmental Test of Visual Motor Integration; Movement ABC = Movement Assessment Battery for Children; BOT of Motor Proficiency 2 = Bruininks–Oseretsky Test of Motor Proficiency, Second Edition; Bayley's Scales = Bayley's Scales of Infant and Toddler Development; SIPDC = Symbolic and Imaginative Play Developmental Checklist; SDQ = Strengths and Difficulties Questionnaire; CBCL = Achenbach Child Behaviour Checklist; HONOSCA = Health of the Nations Outcome Scales Child and Adolescent Mental Health.

Training regarding intervention was most often suggested ($n = 9$). This included training about strategies for working with abuse, strategies for addressing violent/aggressive behaviour, psychotherapeutic modalities, attachment-focussed interventions, and using sensory-based approaches. There were a number of suggestions about the format of training ($n = 9$), with practical training emphasised ($n = 5$). Specific suggestions for practical formats of training were using video

TABLE 4 Interventions used with children with complex trauma

Intervention	Participants ($n = 25$)	
	n	%
Sensory based	13	52%
Sensory modulation	7	28%
Unspecified	5	20%
Sensory integration	1	4%
Play	13	52%
Unspecified	7	28%
DIR Floortime	2	8%
Play for skill building	2	8%
Play therapy	1	4%
Selection of toys	1	4%
Adaptive/structuring environment	11	44%
Visual schedule	3	12%
Time related	3	12%
Visuals other	2	8%
Classroom equipment	2	8%
Other adaptive/structuring	1	4%
Client education and/or consult	11	44%
Caregiver	6	24%
Children	3	12%
School staff	2	8%
Physical/motor based	6	24%
Child counselling	3	12%
Social skills	3	12%
Activities of daily living	2	8%
Behavioural	2	8%
Risk management	2	8%
Art or craft	2	8%
Music	1	4%

DIR Floortime = Developmental Individual-difference Relationship-based Floortime.

examples of intervention techniques, opportunities to practice theory, follow up from trainers, and post-course homework. In regard to professional supports, supervision was suggested by 92% ($n = 23$) of the participants. Other suggestions included knowing where to access support (for clients and the practitioner) ($n = 7$), participation in relevant professional groups ($n = 7$), and opportunities to present cases and problem solve with others ($n = 7$). The most suggested personal support was having someone to debrief with ($n = 6$), such as a supervisor, colleagues, a manned helpline, or with another person in general.

4 | DISCUSSION

4.1 | Demographic information

The female-only sample may reflect current workforce data as only 8.7% of occupational therapists in Aotearoa (OTNZ-WNA, 2021), and 10% of occupational therapists in Australia (Occupational Therapy Board of Australia, 2022) are male. Māori and Aboriginal participants were underrepresented. This may also reflect current workforce data as just 6% of registered occupational therapists in Aotearoa are Māori (OTNZ-WNA, 2021). The Occupational Therapy Board of Australia does not gather data about registrant's ethnicity (Occupational Therapy Board of Australia, 2022), however Indigenous Allied Health Australia (IAHA) (2018) reported in 2018 that less than 0.5% of the allied health workforce were Aboriginal. An underrepresentation of Māori and Aboriginal occupational therapists could hamper best practice with children who experience complex trauma. Aboriginal allied health professionals may facilitate more accessible and subscribed allied health services for Aboriginal persons (IAHA, 2018), and Māori occupational therapists may facilitate more appropriate and satisfying services for Māori (Te Rau Matatini/New Zealand Association of Occupational Therapists, 2009).

4.2 | Experience and training

Survey participants generally had more practice experience than occupational therapists in the last survey of paediatric occupational therapy practice in Australia (completed 13 years ago) (Rodger et al., 2005) and marginally more than in the current Aotearoa workforce (OTNZ-WNA, 2021). Perhaps more experienced occupational therapists choose to engage in this area of practice, or perhaps experienced occupational therapists are more aware of complex trauma in order to identify and address it. Although the most reported post-professional training was Sensory Integration certification, it was not possible to determine the fidelity of this training to Ayres Sensory Integration therapy.

4.3 | Practice with children aged 0–12 years

Almost twice the number of participants worked with school-aged children as in the last survey of paediatric occupational therapy practice in Australia (Rodger et al., 2005). Perhaps the impacts of complex trauma become more apparent and problematic for adults when

children are at school. As most participants reported working with developmental delay, neurological conditions, or complex trauma, it is likely that some occupational therapists work both with paediatric disability and complex trauma.

The participants usually worked with children for relatively long time periods, with the most common timeframes for therapy being more than 2 years. As vicarious traumatisation occurs though ongoing empathetic engagement with people who are traumatised (McCann & Pearlman, 1990), long timeframes for therapy could pose a risk for occupational therapists being vicariously traumatised. Other potential risk factors for vicarious traumatisation were the high caseloads and long working hours of some participants.

4.4 | Practices used with children experiencing complex trauma

Sensory-based practices were most common among the theoretical approaches, assessments, and interventions used with children experiencing complex trauma. Among the sensory-based interventions that the participants used, sensory modulation interventions were the most common. This finding concurs with a scoping review of 16 articles about sensory-based practices with children and young people experiencing complex trauma, in which six occupational therapy articles described sensory modulation interventions (Fraser et al., 2017). The sensory modulation interventions used in the scoping study included sensory rooms, Sensory Diets, sensory modulation programmes, and sensory modulation strategies for crisis prevention (Fraser et al., 2017). The review concluded that the evidence for using sensory-based interventions with children and young people experiencing complex trauma is promising, but that empirical evidence is limited (Fraser et al., 2017).

A minority of the participants used evidence-based play modalities, but play-based theoretical approaches were not reported as guiding frameworks for practice. In previous studies about occupational therapists' use of play, occupational therapists were not using play-based theoretical approaches to guide play-based practices (Lynch et al., 2017; Miller Kuhaneck et al., 2013).

Although limited empirical evidence exists about occupational therapy practice with children who experience complex trauma, the participants' use of sensory and play-based interventions may provide a starting point for evidence-based practice. In one empirical study, play-based, sensory-motor activities in combination with filial therapy (a modality of play therapy), guided by the Neurosequential Model of Therapeutics, improved the social–emotional development and behaviour of 28 children who attended a therapeutic preschool (Barfield et al., 2014). Gains were retained at 6 months for the first phase of the study (Barfield et al., 2014). The use of combined sensory-motor and play activities with children experiencing complex trauma is also supported by theory in neuroscience literature (van der Kolk, 2015).

4.5 | Cultural safety in practice

When working with Māori and Aboriginal children with complex trauma, the participants' practices mostly pertained to client engagement. Although client engagement is an important part of cultural safety, cultural safety also involves addressing power imbalances with clients and engaging with diverse social, financial, and historical realities (Papps & Ramsden, 1996). OTNZ-WNA's (2022) competencies for registration and continuing practice for occupational therapists and the Australian Occupational Therapy Competency Standards 2018 (Occupational Therapy Board of Australia, 2018) require occupational therapists to engage with the social, economic, and historical factors impacting on Māori and Aboriginal persons.

From the participants who reported not practicing any differently with children who identify as Māori or Aboriginal, several stated that they felt using a client-centred approach was adequate. Many possibilities exist for why practitioners gave this response. It is possible that the practitioners were not aware that culturally safe practice is different from client centred practice. Thus, they would assume client-centred practice serves the need for culturally safe practice. It is also possible that practitioners assumed that equal treatment across clients of different ethnicities would result in equal therapy outcomes. This outlook is reminiscent of the theory of colour blindness from critical race theory (Zamudio, 2010) and may constrain best practice by not recognising the role of ethnicity-related concerns and implicit racism (Zamudio, 2010). Finally, it is possible that these practitioners' practices for complex trauma were inherently culturally safe. Practitioners' decisions not to adapt their practice for Māori and Aboriginal children were not further elaborated on in the survey data and will be re-examined in the analysis of the study's qualitative results (Occupational Therapists' Practice with Complex Trauma: A Profile and Perspectives, n.d.).

4.6 | Felt preparedness and suggested supports

Most participants felt 'somewhat prepared' for working with complex trauma. Having practical experience seemed highly valued by the participants. Evidence for this was that the participants who reported feeling somewhat prepared for working with complex trauma commonly reported a lack of practical experience as a reason for not feeling more prepared. They and also reported having some practical experience as a reason for why they felt at least somewhat prepared. Furthermore, participants suggested practical training about implementing interventions as a need. Occupational therapy is a practical profession that is focussed on doing. The participants may have prioritised practical knowledge to helpfully engage with the practical and real-life challenges of children who experience complex trauma.

Supervision and other forms of social support were emphasised by the participants as needed by occupational therapists who work with complex trauma. In addition to supervision, different forms of social support suggested were participation in professional groups, sharing case studies, joint problem solving, and having someone to debrief with. Social support, both within and external to the supervision relationship, may promote resilience among practitioners who work with complex trauma (Adamson, 2011). In a qualitative study of Australian psychologists, supervision, social support at work, and getting new perspectives about clients from colleagues were all reported to buffer the emotional impacts of working with children experiencing complex trauma (Edwards & Karnilowicz, 2013).

5 | LIMITATIONS

A small sample size ($n = 25$) with mostly Aotearoa-based participants (64%) may limit the generalisability of results to occupational therapists in Australia. The sample was a purposive self-selected sample. A potential source of bias was that the researcher is known within one OTNZ-WNA special interest group that the survey was distributed through. It was not possible to calculate a response rate as there is no previous workforce data in Aotearoa or Australia about occupational therapists who work with children experiencing complex trauma. Data from the participants who partially completed the survey were not analysed, and information about occupational therapists who did not respond to the survey is unknown. The survey was specifically designed for this study, and its psychometric properties are not known. Definitions were not provided in the survey for variables such as types of post-professional training, theoretical approaches, assessments, and interventions. This led to a lack of clarity in the data analysis for some variables.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Julia Mason: Conceptualisation (equal); methodology (equal); investigation (lead); data curation (lead); formal analysis (equal); visualisation (lead); writing - original draft preparation (lead); project administration (equal); and funding aquisition (lead). **Dr Karen Stagnitti**: Software (lead); supervision (lead); writing - review and editing (equal).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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