Music therapy

Disability evidence summary 2024

Person-first language

Australian
Music
Therapy
Association

About the Australian Music Therapy Association

The Australian Music Therapy Association (AMTA) is Australia's peak body for music therapy. AMTA represents Registered Music Therapists (RMTs) and music therapy students and advocates for access to music therapy on behalf of the community. Our mission is to enable, advance and advocate for excellence in music therapy.

AMTA is the certifying body responsible for registering music therapists, accrediting music therapy courses, and maintaining professional standards and ethics. A member organisation of Allied Health Professions Australia (AHPA) and National Alliance for Self-Regulating Health Professions (NASRHP), AMTA supports Registered Music Therapists (RMTs) to use evidenced-based practices that actively promote the health, wellbeing and functioning of Australians.

AMTA respectfully acknowledges the Traditional Custodians of the lands we live and work upon. We recognise the enduring kinship and songlines retained in these lands. We cherish the rich and ongoing connections First Nations Peoples have to Country, culture, song, knowledge and artistic expression. We pay our respects to Elders past and present and recognise that sovereignty over these lands was never ceded**.**

A note about language

AMTA uses person-first language in this report. We do so understanding that individuals with lived experience of disability have varied preferences for identifying with person-first or identity-first language. The decision to self-identify with person-first or identity-first language may relate to the power dynamics implied by different language; personal history with and understanding of disability; and personal associations relating to identity, culture, and pride.

Similarly, many factors inform these decisions by organisations, such as in the publication of this report. There is no single 'correct' approach to language. With the Commonwealth Government and Commonwealth-funded agencies in mind as the primary audience for this guide, AMTA has chosen to use person-first language in accordance with the current Australian Government Commonwealth Style Manual.

AMTA is proud to share our intention to produce partner identity-first and person-first resources where possible in the future. We thank AMTA's Culture and Diversity Advisory Group for their generous and expert advice on language and disability.

Acknowledgements

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Introduction

Australian Music Therapy Association's *Disability Evidence Summary 2024* provides disability and health professionals, policymakers and members of the community with an overview of the efficacy of music therapy and the outcomes music therapy achieves with people with disabilities.

The report highlights:

- evidence for music therapy interventions and their outcomes
- case studies to illustrate the ways in which music therapy assists people to build their capacity to participate in the broader community.

The evidence summary is intended as an overview only and does not include an exhaustive list of music therapy research, potential outcomes or case studies in the disability sector. The evidence base for music therapy is continually growing, nationally and internationally. At the time of publication, technologies such as functional magnetic resonant imaging provide new insights into how music therapy impacts directly on brain structures and function, and these learnings will continue in the future. The evolving nature of clinical evidence means this resource provides a snapshot of evidence available at time of publication.

Music therapy has significant potential to improve the lives of people with disabilities. From movement to cognition and thinking, social connection, communication and self-regulation, music therapy plays a vital role in supporting people to achieve their therapeutic goals.

About music therapy

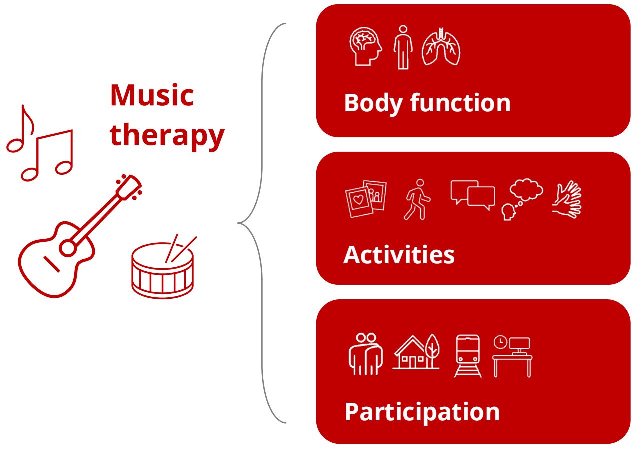
Music therapy is an evidence-based self-regulating allied health profession
Music therapy is an evidence-based allied health profession that supports Australians of all ages and abilities to improve their lives and achieve therapeutic goals.

Music therapy is delivered by Bachelor and Masters-level qualified and accredited Registered Music Therapists (RMTs). Music therapists have specialist expertise in how music interacts with the brain, body and in social and cultural contexts to support therapeutic outcomes. Nearly 900 RMTs are registered with the Australian Music Therapy Association (AMTA).

AMTA is a member organisation of Allied Health Professions Australia (AHPA) and the National Alliance for Self-Regulating Health Professions (NASRHP), along with speech pathology, occupational therapy and social work. Professional self-regulation ensures RMTs are appropriately qualified, skilled, and meet national regulatory requirements.

Music therapy delivers essential supports to people with disabilities
Music therapy provides crucial and life-changing supports for people with disabilities and their carers. RMTs are recognised therapy service providers within the National Disability Insurance Scheme. RMTs design and deliver individualised, music-based interventions that support social, communicative, physical, sensory, emotional, cognitive and behavioural goals.

RMTs have specialist expertise in the therapeutic use of music to impact the brain, mind and the body. Music therapy is an engaging, motivating therapy that helps participants address therapeutic goals. Music therapy influences thinking, behaviour, function and actions, and improves access to activities and community participation.



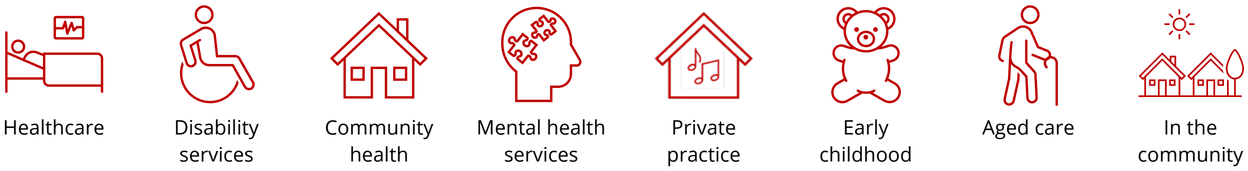
RMTs use their professional qualifications, knowledge and skills to:

- assess people's health and wellbeing
- devise therapeutic interventions and programs to preserve, restore or improve physical or psychological wellbeing, functional capacity and quality of life
- facilitate music-based interventions to positively impact brain function, neuroplasticity, physical, sensory regulation, social communication, cognition and emotional and behavioural regulation and community participation
- deliver treatment and support to achieve positive outcomes and experiences.

Music therapy techniques include singing, songwriting, instrument play, improvisation, music and movement, receptive music listening and other specialist techniques.

RMTs evaluate outcomes of music therapy using a variety of methods, including quantitative and qualitative methodologies and standardised reporting procedures commonly used within allied health settings, such as SOAP evaluations (Subjective, Objective Assessment and Plan) and person-reported measures.

Where RMTs work:



RMTs work in a range of settings including home, disability, aged care, mental health, acute hospital care, neurorehabilitation, palliative care, justice, out-of-home care and community wellbeing services. RMTs work collaboratively with individuals, carers, family members, support workers and other health professionals to develop and evaluate goals to achieve better health, wellbeing, functional and participation outcomes.

Music therapy may involve individual, group, carer training, education and telehealth models. Multidisciplinary work may include co-leading therapy sessions, providing specialist knowledge, team meetings, coaching others, sharing assessment and progress notes, and consultation about resources and equipment.

The number of sessions needed to make a difference:
The frequency of music therapy sessions depends on the needs of the person with disability. Sessions may be weekly, fortnightly or less frequent depending on goals and progress. The number of sessions required for a music therapy program is assessed on an individual basis.

In the National Disability Insurance Scheme (NDIS), music therapists, along with other allied health professionals, are required to write a detailed report for the time of review of a participant's plan. This report contains information about progress to date, and recommendations for further sessions if required. The report will include a plan clearly stating the expected therapy outcomes.

Music therapy delivers essential supports to National Disability Insurance Scheme (NDIS) participants

Music therapy is included in NDIS under the support cluster of Therapeutic Supports. These services, under Capacity Building, "are provided to assist participants aged from 7 years to apply their functional skills to improve participation and independence in daily, practical activities in areas such as language and communication, personal care, mobility and movement, interpersonal interactions and community living" (National Disability Insurance Agency, 2018, p.16). Music therapy is also approved for inclusion in Early Intervention Support for Early Childhood (p.14).

Through the NDIS, RMTs design and deliver individualised music-based interventions that support social, communication, sensory, physical, emotional, cognitive and behavioural skills that enable greater participation.

Continuum of music for health and wellbeing

The graphic below illustrates some of the ways in which music may be used in everyday life and when music is used as part of a funded music therapy service[16,17].

Music for wellbeing in everyday life

For example:

Personal listening to relaxing music before going to sleep
Listening and singing to favourite songs to lift your mood
Attending concerts and music festivals

Music for wellbeing in the community

For example:

Communal music-making in bands, choirs or drumming groups
Musicians playing music in public places to create a fun atmosphere

Music therapy for therapeutic outcomes

For example:

RMTs planning, facilitating and evaluating tailored music therapy programs for a therapeutic benefit
Using specialist evidence-based music therapy techniques to address a range of cognitive, behavioural, communication, physical and socio-emotional, community participation goals
Delivered in homes, education, justice, aged care, health, primary care and community settings

Note that RMTs often codesign music strategies for everyday life and in the community to support therapeutic goals of people with disabilities and their carers, family and support people

Music therapy research in Australia

Music therapy is an evidence-based health allied health profession that is recognised in Australia and internationally.

The Australian Journal of Music Therapy (AJMT) is the flagship publication for the Australian Music Therapy Association. Launched in 1990, it is an international, peer reviewed journal with a dual focus on empirical research and rigorous reports of clinical advances. As of 2016 it is an open access, online journal.

The University of Melbourne hosts the Creative Arts and Music Therapy Research Unit (CAMTRU). CAMTRU supports the development of creative arts therapy disciplines across Australia through research and research training. The National Music Therapy Research Unit (NaMTRU) established by Emeritus Professor Denise Grocke in 1999 was merged with CAMTRU in 2016 to include graduate research (PhD) training program for creative arts therapists. CAMTRU researchers collaborate with local, national, and international stakeholders and creative arts and music therapy academic institutions around the world. More than 80 music therapy graduate research projects have been conducted through the Research Unit, as well as large-scale projects funded by the Australian Research Council, the National Health and Medical Research Council, the Medical Research Future Fund, and several prestigious international grants. Music therapy training has been offered at The University of Melbourne since 1975.

Western Sydney University (WSU) music therapy researchers are globally recognised practitioners and scholars who are ranked above world standard (Excellence in Research for Australia). WSU research is conducted by composers, performers, producers, musicologists, music therapists and cognitive and computational researchers who work collaboratively within the School of Humanities and Communication Arts and its affiliated research institutes/centres. The research is unique for its lateral thinking which is synergetic across practice-led research and research-led practice. Research and scholarship outputs include publications in peer-reviewed journals, invited book chapters, conference presentations and proceedings, recorded works, reports, white papers. Ten higher degree research projects have been completed with nine additional projects underway. WSU research has strong intercultural connections to Western Sydney's rich cultural heritages and their connection to world culture.

Regulating mood and behaviour

Many people can experience difficulties regulating their mood, sensory and emotional needs. This can result in behaviours that are challenging for other people to manage or can cause harm to themselves or others. These behaviours can sometimes be distressing to the individual and those around them and can limit an individual's ability to participate in community.

Music therapy can help people:

- manage stress and anxiety[18,22,26-30,35,108,122,134,149-152]
- manage anger and frustration[16]
- manage challenging behaviour[16,18,23,27,35,97,99,107]
- increase skills in behaviour regulation[16,21,59,100,101,103]
- improve self-regulation and motivation[22,97,100,101,103,146]
- increase emotional awareness and attunement[23,101,106,146]
- improve mood and reduce psychological symptoms[18,22,23,28,29,31,32,59,91,94,95,111,134,135,149-152]
- promote and improve mood and emotional regulation[23,31,45,59,91-95,97,103,134,135,146,149-152]
- improve social skills[22,26,39,59,97,99,105,106,117,122,142-144]
- improve person-carer relationships[26,92]

- increase social engagement[45,80,92,93,97,101,115,122]
- improve quality of life[26,27,32,35,57,58,111,128,134-137,142]

The cause of changed or challenging behaviours can be varied. Music therapy can support people to regulate and reduce potentially harmful behaviours in a positive and person-centred way. Music therapists design music-based strategies that can support individuals and their supporters to regulate behaviour. These strategies can be included in positive behaviour support plans. In turn, music therapy interventions and strategies can reduce reliance on more restrictive practices (including pharmacological restraints).

The link between music and mood has long been recognised. Music therapy interventions can support people to manage mood-related challenges associated with disability. However, because music is also a strong emotional stimulus, it can also increase distress and even lead to self-harm if not used appropriately. For this reason, it is important for people with psychosocial disabilities and/or disabled people experiencing mood challenges to work with an RMT to ensure safe and appropriate use of music to support mood and behavioural goals.

Music therapy reduces aggression and promotes self-management

Vinny, a 32 year old man, experienced increasing physically and verbally aggressive behaviours and significant memory impairments resulting from a chronic acquired neurological condition. Because of his poor memory and impaired impulse control, traditional behavioural strategies had been ineffective in reducing his aggressive outbursts.

During music therapy sessions, an RMT wrote a song with Vinny to prompt his recall of behaviour management strategies and improve behavioural regulation. The melodic structure of the song was simple, repetitive and predictable and the tempo slow. These musical elements were used to provide structure to organise the behavioural management strategies for easy recall.

With simple verbal prompts, Vinny was able to successfully use this song to self-initiate de-escalation of his aggressive behaviours both within and outside of the music therapy context. For Vinny, the song composed in music therapy provides a cognitively accessible tool to promote successful behaviour regulation.[10]

Cognition and thinking

Music is known to be beneficial to brain health; both listening and playing music are complex and demanding cognitive tasks[36]. Music therapy can activate neurological (brain and nerve) structures to increase arousal and attention, facilitate memory, increase motivation and organisation, and support emotional and behavioural regulation. RMTs design music therapy interventions that address cognition and thinking skills in a positive way that focuses on building success.

Music therapy can help:

- improve cognitive function and abilities[27,34,37,64,97,111,121,131]
- improve memory[37,131]
- increase attention, including sustained, alternating and selective attention[37-39,131]
- improve executive functioning, including, planning, organisation, inhibition and self monitoring[40,41,131,132]
- improve problem solving[131]
- increase sensory processing and integration[37,59]
- improve reading ability and phonological awareness[109,110]
- improve brain function[40,42,49]
- increase initiation and motivation[39,95,102]
- increase independence and community participation[15,72,142,143]
- improve quality of life[26,27,32,111]

Nearly every person has a sophisticated network of neural systems that allow them to meaningfully perceive music, even those with neural disease, damage or delay[36]. Brain imaging research has found that a complex network of brain structures are involved in processing music[46]. Music therapy directly impacts these brain structures and systems to support and enhance cognition and thinking.

Music therapy supports independence

At 3.5 years old, Philip was assessed to have mild to moderate Autism. He had limited speech, showed limited social interactions with peers, engaged only in adult facilitated play and presented with stereotypic behaviours.

Philip attended a community-based childcare program, however exhibited difficulties during the morning arrival transition, frequently screaming, crying or lying on the floor. The morning transition consisted of putting personal belongings away, entering the room, greeting carers and peers, engaging in play-based activities, then saying goodbye to parents.

After initial assessment, the music therapist composed a song outlining the five steps of the morning transition routine. The RMT made a recording of the song, and carers were trained in using this song. The song aimed to reduce Phillip's distress, provide structure and predictability and increase independence during the morning transition routine. Before music therapy, Phillip completed an average of two (of five) transition steps independently. After nine sessions of intervention, Phillip was able to consistently perform four to five of the five morning transition steps independently with decreased distress. After the music therapy intervention period, other caregivers were able to use the transition song to increase independence and reduce transition-related distress for Phillip.

The music therapist-composed transition song was able to increase Phillip's planning, organisation and emotional regulation to ultimately increase his independence[15].

Communication and social interactions

The ability to process music is present from birth; the way we communicate is innately musical. Music offers a way of communicating emotion and social meaning without words, similar to how young children and parents interact before language develops[47,48].

Music therapy can help:

- develop receptive language[49,50,53]
- develop expressive communication[33,49-60,104,112-115,118,121-125,137,138,141-148]
- improve speech articulation and functional communication[53-58]
- improve respiration (breathing)[50,58]
- improve attention[19,38,39,122,131,141,146]
- develop social communication skills; including social understanding, non-verbal communication and gestures and the ability to use language for different purposes[26,43,49,52,97,99,105,112,142,143]
- increase social functioning, interaction and participation[39,50,101,112,113,115,117,124,138-140,142]
- support achievement of special education goals[52,109,110,143]

- improve quality of life for people and their families[57,58,111,135,137,142]

Music is processed through a network of cortical and subcortical brain structures, with strong connections in the limbic system's emotional core. As a result of this, the ability to meaningfully process music may remain intact despite significant deficits or damage[60].

For people who are non-speaking, non-verbal, pre-verbal, or who have difficulty communicating due to cognitive challenges, music therapy can provide a way to connect with others and express their emotions and opinions. Music based interventions are fun and person-centred; for this reason, music therapy is often more motivating and accessible for people working on communication goals than other traditional therapies.

Singing can be a way to help recover or maintain speech and language for people who have lost or impaired ability to speak due to a physical or neurological condition or injury. The phenomenon of individuals who cannot speak but are able to sing is well documented[61]. Singing is processed globally in the brain, which helps to compensate for areas of the brain that may be damaged (including those impacting speech). Additionally, singing exaggerates elements of speech (pitch, rhythm, articulation and phrasing), and can be an engaging and motivating way for people to practice and recover their speech[62,63].

Music therapy is uniquely placed to support communication goals in individuals who may have difficulty processing and responding to traditional speech therapy methods.

Music therapy supports independence

Daniel, a six-year-old boy with Down Syndrome, was assessed to have severely delayed speech articulation, vocabulary and sentence use and a significantly impaired ability to effectively utilise speech to communicate his needs. Daniel was described as non-compliant in traditional speech therapy interventions and his speech deficits were negatively impacting his ability to meaningfully interact with his peers.

Following an in- depth assessment, Daniel participated in a music therapy program of weekly 1:1 interventions for a period of 3 months. A home practice program was also provided. Music therapy techniques used during the music therapy sessions included developmental speech and language training through music, a neurologic music therapy technique[1]. Functional communication was paired with developmentally appropriate musical experiences. Rhythmic cues provided by a metronome were used to prime the required oromotor skills for verbalisation, provide external pacing for speech/singing production and increase comprehensibility. Articulation practice was paired with rhythmic body movements to reinforce sound production, singing was paired with picture cards to increase vocabulary and improvised songs used to reinforce and extend the development of vocabulary.

At the completion of the 3-month music therapy treatment period, Daniel was consistently producing new phonemes (sounds) at the beginning of words, his spoken vocabulary had increased to include additional intelligible words, and he was able to speak and sign two-word phrases[14].

Movement and coordination

Music interventions can have a positive impact on motor function, mobility and physical goals, due to both the impact of music on neurologic processes involved in movement, as well as the pleasurable and motivating qualities of music that can increase participation.

Music therapy can help people:

- improve gross motor strength, function, coordination and control[57,64-68,72,87,88,128,129,133]
- improve fine motor function and control[68,87,126,128]
- develop proprioception and balance[62,64,87,88]
- increase functional mobility[62,64,86]
- increase physical independence[72-75]
- improve function of the respiratory system[58,71]
- improve endurance[87,90]
- improve body mass index[90]
- manage pain[67,87]
- increase social interaction and participation[39,50,86]
- improve quality of life[26,27,32,86,128]

Music therapy improves upper limb movements

Rachel, a 17-year-old with cerebral palsy and paresis on her right side, hoped to improve movement of her upper right arm and hand. Rhythmic Auditory Stimulation is a music therapy technique that is used to improve movement by providing an external beat as a temporal organising cue[1]. Rachel attended music therapy upper limb training for 12 sessions over 4 weeks. The sessions involved goal-directed movements toward different targets set to a metronome beat. By the end of the training period, her accuracy, speed and fluency of movement in her right arm and shoulder were improved significantly. These improvements impacted positively on her daily function and were maintained six months after finishing music therapy[13].

Active participation in musical experiences requires specific motor control functions, including timing, sequencing and spatial organisation of movement.

Areas of the brain involved in the processing of rhythm are also associated with coordinating movement[77]. An effect of this is musical entrainment, where a person's body synchronises with musical stimulus[78]. Music therapists have specialist knowledge in how music interacts with the brain and use this knowledge to design targeted interventions to support the development, maintenance or rehabilitation of motor skills and physical independence.

Listening to preferred music has also been found to stimulate the pleasure and reward circuitry of the brain[79]. The pleasurable and motivating qualities of music can increase participation in physical and movement activities, ultimately resulting in achievement of therapeutic outcomes.

Community engagement

People with disabilities may often experience social isolation and reduced opportunities to participate in society; this can be due to individual challenges related to their disability, as well as social, environmental, and attitudinal barriers. Music therapy groups can provide a structured and safe space for people to connect with others who have similar disabilities and shared experiences. Music therapy can function as a first step to re-connecting with identity, hobbies, and community [80, 82]. Music therapy can help people connect with their community, both with peers within a music therapy group, and with community members outside of the group[83].

Music therapy can help:

- Improve global functional outcomes and quality of life[137]
- improve confidence and self-esteem[3]
- develop a sense of empowerment and purpose
- develop a sense of belonging and social connectedness[4-7,43,44]
- increase opportunities for choice and agency
- develop peer relationships[5,8]
- develop social skills and connections in a safe and supported space[7,9]
- improve social skills and increase social interaction[5,6,11,115,117]
- increase social inclusion and community participation[4,6,12,152]

For people who have difficulty participating in social settings, musical experiences facilitated during music therapy sessions can provide clients with clear cues for anticipating and planning social responses, and in turn improve capacity for social interaction[84]. Music therapy can provide individuals with opportunities to practice and explore social relationships and develop skills in a safe and motivating environment that can be transferred to other areas of life[85, 86]. Music can be an ideal motivator for participation in community activities, which then provide the routine and structure needed for participation in daily activities and future employment[74, 75, 152].

Music therapy promotes participation

Brian, an eight-year old boy in a special education setting was blind, developmentally delayed and presented with no speech (apart from clicking his tongue), head-banging, rubbing of his eyes with his fists, wailing and continual crying[2]. The only positive interaction or communication Brian engaged in was cuddling staff at lunch times. This behaviour was discouraged by staff as it was deemed as inappropriate.

Brian had a good sense of rhythm and would bang on items in the classroom. Given Brian's goal for involvement in positive relationships, music therapy sessions used his sense of rhythm to focus on interaction and participation. Brian obviously enjoyed playing musical instruments and continued to display a sense of rhythm during music therapy sessions. Brian also vocalised the melody or lyrics of some lines of his favourite songs.

Initially Brian would not tolerate singing or playing instruments with peers in a group setting and had difficulty taking turns. Through individual sessions with the music therapist, he began to take turns, listen and respond to the music therapist's piano playing, playing his own musical instruments and vocalising song melodies. Music therapy provided Brian with successful interactions and positive experiences of participation.

Brian's teacher reported that his mood was 'happier' after returning from music therapy and he became much more cooperative in class. His learning through music therapy transferred into interactive behaviour in previously challenging environments. Participation in music therapy sessions helped Brian to engage more comfortably with his peers in the classroom and develop more positive relationships.

Annotated bibliography

Mood and Behaviour

Population	Research	Key Findings / Outcomes	Sample Size/Study Design
Autism	Gassner et al., 2021[26]	This study reviewed the literature relating to music therapy interventions for autistic individuals. The review found that **social-emotional reciprocity improved**, as did **initiating-behaviour, social communication, brain connectivity, and parent-child relationship**.	Cochrane Review 10 studies
	Applewhite et al., 2022[19]	This systematic review found that music therapy can improve **emotional and behavioural outcomes** for Autistic people.	Systematic Review 81 Studies
	Lici et al., 2024[97]	This systematic review of music-based interventions found that singing, rhythm exercises and instrumental music can **ease social communication barriers** and **reduce challenging behaviours (particularly under pressure)** for autistic children. Music-based interventions **improved socialisation, emotional wellbeing, cognitive function, emotional regulation, and verbal communication** for people with ID. Found positive benefits of both music in education contexts, as well as **clinical music therapy** contexts.	Systematic Review 21 articles 15 reviews
	Marquez-Garcia et al., 2022[98]	This systematic review found **mixed results** for music therapy interventions for Autistic people, noting that smaller studies tend to report positive outcomes, but larger, more generalisable were non-significant. The study highlights the need for more methodological rigour, and focus on individualised functional goals, rather than more broad domain changes.	Systematic Review 36 articles included
	Shi et al., 2016[59]	This systematic review found that music therapy **improved mood, behaviour, language, sensory perception and social skills.**	Systematic Review 6 studies (n-300)
	James et al., 2015[99]	This systematic review found sufficient evidence in 58% of studies that music therapy was beneficial for **improving social communication and language skills,** and **reducing challenging behaviour.**	Systematic Review 12 studies included
	Rabeyron et al., 2020[21]	This study compared music therapy intervention with a music listening program. Results indicated that music therapy **improved lethargy and stereotypy** on the ‘aberrant behaviours checklist’, and **clinical global impression** scores decreased, indicating **clinically significant outcomes.**	n=36 RCT

	Bergmann et al., 2021[22]	A group music and movement intervention for adults with Intellectual Disability and Autism found **significant improvement** in **social competence** (compared to control) and in **emotional competence** (compared to pre-assessment). Participants rated the program as **fun, social and helpful for learning stress regulation**.	n=12 NCT & Qualitative
	Wagener et al., 2021[23]	19 autistic children were assessed for their ability to recognise different emotions in facial expression, compared to neurotypical children (n=31). Using emotionally congruent music was found to **increase accuracy of emotional recognition** for autistic children.	n=19 Pre/Post
	Dieringer et al. 2017[100]	This article found that music intervention + lyrics + verbal instruction **increased on-task behaviour** compared to music + lyrics alone.	n=5 Pre/Post
	Carpente, 2017[101]	This study found that a music therapy intervention helped to improve **self-regulation, engagement, behavioural organization**, and **two-way purposeful communication** for 4 Autistic children.	n=4 Pre/Post
	Srinivasan et al., 2015[102]	This study measured the impact of a music based (rhythmic) intervention delivered over 8 weeks by humans or robots to Autistic children, and found that the human-delivered music intervention **reduced negative affect and increased interested affect.**	n=36 Pilot RCT
	Mateos-Moreno et al, 2013[103]	This study examined the impact of a 17-week (2 hrs per week) dance-movement and music therapy intervention for Autistic students. Findings showed improved ability to regulate **emotion and behaviour.**	n=8 Pre/Post (NCT)
	Lim & Draper, 2011[104]	This study combined an applied behavioural analysis method with a music-based intervention, and found that music-based interventions can be as effective as speech-based interventions in **enhancing verbal production** for Autistic children.	n=22 Pre/Post (NCT)
	Kim et al., 2009[105]	This RCT found that a music therapy intervention increased **non-verbal social communication** and **joint attention** for Autistic children, compared to social play.	n=15 RCT
Intellectual Disability	Huang & Gu 2024[106]	This study found that music therapy intervention helped people with ID improve **emotional recognition** and **empathy towards** others.	n=120 Pre/Post (NCT)
	Smeets et al, 2024[107]	A mixed methods study investigated the impact of 16 individual music therapy sessions (either in-person or online) with adults with mild-moderate intellectual disability. **Challenging behaviour was reduced,** while **improvements** were reported for **attention span**, **relatedness.**	n=10 Pre/Post & Qualitative
	Youm et al, 2024[108]	This qualitative study found that long-term (3 year) music therapy intervention helped to **reduce anxiety** and **improve mental wellbeing** of young people with ID in Senegal.	n=6 Qualitative

Dementia	Gassner et al., 2021[26]	This review updated a previous Cochrane Review. It found that MT interventions have a **positive impact** on **anxiety, depression, social behaviour and quality of life**	Cochrane Review 10 studies included
	van der Steen et al., 2018[35]	This review found moderate evidence that music therapy interventions **reduce depression** and **improve behavioural challenges**, and low evidence that music therapy can **reduce anxiety** and **improve quality of life**	Cochrane Review 22 studies (n=1079)
	Zhang et al., 2017[27]	A systematic review found that music therapy has a **positive effect on treating anxiety and disruptive behaviours**, as well as positive **trends** towards supporting **depression, cognition and quality of life**.	Systematic Review 34 studies included
	Ueda et al., 2013[18]	Systematic review on effects of music therapy on 'behavioural and psychological symptoms of dementia' Found **moderate effect size for anxiety, small effect size for behaviour**	Systematic Review 20 studies included
	Baker et al., 2022[22]	This study examined an interactive music therapy group and group singing interventions for people living with dementia. **Depressive symptoms significantly reduced** following group singing intervention	n=214 RCT
	Holden et al., 2019[23]	This study investigated the impact of a home-based MT intervention on behavioural and psychological symptoms of dementia. On the **neuropsychiatric Inventory (measuring mood, behaviour and psychiatric symptoms) - overall scores significantly improved**: For those who completed therapy, neuropsychiatric symptom scores improved at 6 weeks, an effect that was **sustained at 12 weeks**	n=11 Pilot Pre/Post Study
Psychosocial Disability	Lu et al., 2021[30]	A meta-analysis of RCTs found that MT can **significantly improve anxiety** during treatment. Further research is needed on the lasting effects after the intervention is discontinued.	Systematic Review with Meta-Analysis 32 studies included
	Jia et al., 2020[32]	Meta-analysis showed that music therapy **significantly improved total symptoms, negative symptoms, depression,** and **quality of life** for people with schizophrenia	Systematic Review with Meta-Analysis 18 studies included
	Tseng et al., 2016[31]	Meta-analysis revealed that music therapy intervention has significant **positive impact on symptoms of schizophrenia**, including **negative symptoms, mood symptoms, and positive symptoms**.	Systematic Review with Meta-Analysis 12 studies included
	Volpe et al., 2018[28]	For people with psychosis, MT was found to **significantly improve symptom severity**, and **decrease anxiety/depression.**	Pre/Post n=61
	Trimmer et al., 2018[29]	For adults with depression and/or anxiety, a group CBT/MT intervention was found to **significantly improve disability; anxiety and depression scores were also reduced,** but not statistically significantly.	RCT n=28

	Hakvoort et al., 2015[16]	This study investigated the effect of music therapy on managing aggression, anger and dysfunctional behaviour for people with a psychosocial disability MT was found to **improve coping and management of anger and aggression under stress** for people who have psychosocial challenges. Participants in the music therapy treatment condition showed **greater changes in positive coping skills and less avoidance in coping** and dealing with their behaviour than the aggression management group. The researchers concluded that participation in music therapy may accelerate the process of behavioural change in people with psychosocial disability, which improves their capacity to participate in their community.	RCT n=14
	Grocke et al., 2014[136]	This study found that music therapy **significantly improved quality of life** for people with severe mental illness	Randomised Experimental Mixed Methods n=99
Chronic Health Conditions	Pakdeesatitwara et al., 2024[134]	Meta-analysis showed that music interventions have **significant positive impacts** on **depression**, **generic** and **disease-specific psychological quality of life**, and **mood disturbance.** When guided by music therapists in multiple sessions through music therapy process, music interventions showed **positive significant impacts on anxiety**.	Systematic Review with Meta-Analysis and Narrative Summary 21 studies
Neurologic Disabilities	Gold et al., 2015[135]	This narrative systematic review **supported the efficacy** of music interventions on **mood**, **depressive syndromes**, and **quality of life**	Systematic Review 25 studies

Cognition

Population	Article	Outcome	Sample Size
Autism	Gorbett Litchke et al., 2021[34]	This study compared the impact of yoga and drumming program to regular classroom physical activity. Both drumming and yoga **significantly improved cognition and mood cognition**.	n=21 Pre/Post
Intellectual Disability	Mina et al, 2021[110]	This systematic review found that music therapy interventions helped to improve **reading** and **phonological awareness**.	Systematic Review 7 studies included
	Jacob & Pillay, 2021[109]	This non-randomised controlled study found that 18 music therapy sessions **significantly improved reading ability** (based on pre/post Reading Skills Test) for students with an intellectual disability	n=17 Pre/Post (NCT)

	Pasiali et al., 2014[38]	A 6-week music therapy intervention for children with developmental delays significantly **improved selective attention** and **alternating attention/attention control**.	n=9 Pre/Post
Parkinson's Disease (adults)	da Silva, et al., 2021[64]	MT was found to **improve cognitive function, balance** and **functional mobility** of people with Parkinson's disease. However, the gains were not maintained when therapy was discontinued.	n=13 Pre/Post
Brain Injury (TBI)	Siponkoski et al., 2020[40]	MT **improved general executive function** and **set shifting** improved in the immediate and 6-month follow-up. MRI scan results showed **significant increase in grey matter volume in right inferior frontal gyrus** during the intervention period.	n=40 RCT (crossover)
	Martínez-Molina et al., 2022[130]	Music-based neurological rehabilitation **improves executive function**, particularly **set shifting**, **and induces neural plasticity changes**, including **gray matter volume changes in the right inferior frontal gyrus** and **changes in functional connectivity of large-scale resting-state networks**.	n=40 RCT (cross-over)
	Gardiner & Horwitz (2015)[131]	The study found **significant improvements** in **cognitive abilities**, **including verbal attention**, **visual attention**, **verbal learning**, **verbal memory**, **visual memory**, **planning and foresight**, and **mental flexibility** and **problem solving**. The group ratings of the **helpfulness** of the group sessions were also positive.	n=22
	Sihvonen et al., 2022 [132]	This study found that neurologic music therapy **induces structural white matter reorganization** within the executive function network, leading to **improved executive function** recovery in patients with TBI.	n=25 Single blind cross-over
Tinnitus	Moossavi et al., 2022[37]	Music therapy intervention **reduced loudness, awareness, annoyance, and disability** induced by tinnitus, and also **improved cognitive function (auditory divided attention, selective attention and working memory).**	n=26 Pre/Post
Stroke survivors	Haire et al., 2021[41]	Stroke survivors who received music therapy improved **mental flexibility** aspect of executive functioning.	n=30 adults, RCT (3 arm)
Psychosocial Disability	Geretsegger et al., 2017[153]	This **Cochrane Review** found that music therapy had moderate quality evidence for **improving global state**, **mental state** (including negative and general symptoms), **social functioning**, and **quality of life** of people with schizophrenia or schizophrenia-like disorders	Cochrane Review 18 studies (n=1215)
	Gold et al., 2013[135]	This study found that for people with psychosis, music therapy **improved negative symptoms** (SANS, d = 0.54, p < 0.001) as well as **functioning**, **clinical global impressions**, **social avoidance** through music, and **vitality** (all p < 0.01)	n=144 RCT
	Feng et al., 2019[42]	Adults with major depressive disorder experienced significant improvement on some aspects of a '**verbal fluency task**'. Scans showed **greater activation in areas of the brain involved in cognition** (dorsolateral prefrontal cortex, orbitofrontal cortex and	n=15 adults Pre/Post

		ventromedial prefrontal cortex) after music therapy. The results indicate that music therapy could improve the brain function of MDD patients	
Dementia	Moreno-Morales et al., 2020[111]	A systematic review with meta-analysis found that music therapy interventions **improve cognitive function** in people living with dementia, as well as **quality of life** after the intervention (short-term) and long-term **depression**.	Systematic Review 8 studies included

Communication

Population	Article	Outcome	Size/Quality
Autism	Mayer-Benarous et al., 2021[113]	This systematic review found that music therapy interventions were found to have a **positive impact** on **speech production** and **social functioning**, with stronger results observed for participants with dual diagnoses of Autism and Intellectual Disability.	Systematic Review 39 studies (n=1774)
	Geretsegger et al., (2022) [137]	Meta-analysis (Cochrane review) of music therapy for autistic people. Music therapy compared with 'placebo' therapy or standard care was **more likely (moderate evidence) to positively improve global functional outcomes and quality of life.**	Systematic Review 26 studies (n=1165)
	Vaiouli & Andreou, 2018[53]	This systematic review of music therapy interventions for autistic people found that music is an **age-appropriate, communicative medium**. Music was found to **promote pre-verbal communication**, **receptive communication skills,** and **speech/language production.** Music was acknowledged for its motivating and repetitive qualities that enhanced language learning. The review also provides support for **collaboration between music therapists and speech and language pathologists** for the design and implementation of interventions that embed music and target language development of young children with autism.	Systematic Review 19 studies included
	James et al., 2015[99]	This systematic review found sufficient evidence in 58% of studies that music therapy was beneficial for **improving social communication and language skills,** and **reducing challenging behaviour.**	Systematic Review 12 studies included
	Tsirigoti & Georgiadi, 2024[112]	This systematic review found that music therapy interventions **may enhance social communication** for Autistic children, however, small sample sizes and methodological heterogeneity prevent conclusions about efficacy compared to other treatments.	Systematic Review 12 studies
	Bieleninik et al., (2017)[138]	For autistic children aged 4-7 years, secondary outcomes were found, with **music therapy associated with greater improvements** than standard care in **social motivation** and **autistic mannerisms.**	n=364 RCT

	Salomon-Gimmon & Elefant, 2019[51]	4 autistic children received 20 music therapy sessions, which were filmed and analysed. Findings showed that children **increased vocal communication** following music therapy, but that progress was not linear.	n=4 Video Analysis
	Mossler et al., 2019[114]	Autistic children aged 4-7 received individualised music therapy sessions for 5 months as part of a large-scale RCT (TIME-A Study). This study explored a sub-set of participants and looked at the impact of the therapeutic relationship on social skill and communication outcomes. This study found that **different domains of social skills and language/communication were more likely to improve** when there was a **strong therapeutic relationship** between therapist and child. The findings were consistent between anonymised observers and parent self-report in natural settings. This suggests that **long-term consistent therapy with a professional** who can develop appropriate **rapport** is important for positive outcomes.	n=48 Pre/Post Sub-Analysis of participants in RCT
	Sharda et al., 2018[49]	Autistic children (aged 6-12) received 8-12 weeks of music intervention (compared to non-music intervention control). Outcomes measured included social communication measures (CCC-2) symptom severity (SRS-II), and receptive vocabulary (PPVT-4). Neuroimaging was also used to determine if there are any correlations between neurological changes and the communication outcomes. Music therapy **improved communication significantly**, and this was supported by **greater brain functional connectivity** for participants who received music therapy.	n=51 RCT
	Miller-Jones, 2018[52]	This study explored how music therapy impacted the speech and language of Autistic children aged between 3-8 years old, from the perspectives of their families and therapists. Families reported that music therapy led to an **increase in word utterance**, **progress toward special education goals**, **emotional wellbeing**, **expressive communication in the home** and **community**, and an **increase in social skills.**	n=10 Qualitative
	Thompson et al. (2022)[139]	For autistic adults aged 18-25 years, music therapy group work **promoted social connection and increased subjective wellbeing**.	n=12 Mixed Methods Pre/Post study
	Thompson et al. (2019)[140]	Musical play with pre-school aged children was found to **promote more social interactions** between parent and child compared to playing with blocks.	N=9 Pre/Post randomised cross-over design
	Yoo & Kim, 2018[115]	This study found that Autistic children showed **increased engagement in joint action** following a drumming intervention.	n=42 Pre/Post
	Srinivasan et al., 2016[102]	This study compared a music based (rhythmic) intervention delivered over 8 weeks by humans or robots to Autistic children. Children in both conditions **significantly improved**	n=36 Pilot RCT

		social verbalisation compared to standard treatment. Rhythmic interventions **improved spontaneous initiation of communication.**	
	Thompson & Abel (2018)[141]	For autistic children, findings suggest that singing interventions can **support spontaneous attention** in social interactions.	n=16 Pre/Post Randomised Cross-Over design
	Thompson (2017) [142]	Autistic preschool aged children who participated in music therapy 4 years prior continued to have **long-term benefits in their social communication skills**, **quality of life**, and **community participation**.	n=8 Qualitative
	McFerran et al., (2016)[143].	Within an autism specialist school, music therapy strategies supported autistic students to achieve their goals in areas of **communication, emotional expression, social skills, independence.**	n=10 Action Research Case Study
	Thompson & McFerran (2015)[144]	Pre-school aged autistic children received music therapy in a family setting. Mothers reported **increases** in the child's **social relationship behaviours.**	n=11 Qualitative
	Paul et al, 2015[116]	This study compared a speech vs music intervention for communication with Autistic children. Findings revealed that the music intervention **increased socio-communicative responsiveness** compared to the speech intervention.	n=3 Video Analysis
	Ghasemtabar et al., 2015[117]	This study compared the impact of a music therapy intervention with a control group (non-randomised) for Autistic students, and found **improved social skills**, which were maintained after a 2-month follow-up.	n=27 Pre/Post (NCT)
	Thompson et al., 2014[145]	This study found a **significant improvement** on the **Social Emotional Early Childhood** scale	n=23 RCT
	Epstein et al., (2020)[146]	For autistic children, **musical attunement supported emotional regulation, attention**, and **imaginative play**.	n=6 Qualitative
	Sandiford et al., 2013[118]	This study found that a music intervention (melodic based communication therapy) **significantly improved speech elicitation** compared to a traditional speech therapy intervention.	n=12 Pilot RCT
	Lim, 2010[119]	This study compared the effects of music intervention and a speech intervention on verbal production for Autistic children. Results indicated that the music intervention was as effective as the speech intervention in **improving verbal production**, but that children with higher degree of disability showed **greater improvement after the music intervention**.	n=50 RCT

	Gattino et al, 2010[120]	This RCT examined the impact of a music therapy intervention on communication for Autistic children. Overall scores were non-significant, however, a **significant improvement for a non-verbal communication subscale** was observed	n=24 RCT
Intellectual Disability	Després et al 2023[122]	This systematic review reports that music therapy interventions positively impact **anxiety**, **attention, communication, play experience.** However, only a small number of studies measured these variables. **Music skills** and **social skills**, obtained positive or significant results in 86% and 90% of cases, respectively, with 85% for the variable ***engagement*** **or** ***participation***. The results are lower for the variables **emotions, behaviours, and motor skills.**	Systematic Review 12 reviews 62 studies included
	Moreno-Garcia, et al., 2020[121]	This systematic review found that music has **positive effects** in the treatment and progress of the four main areas of development (**social-emotional**, **motor, cognitive** and **communication**) in children with DS.	Systematic Review 19 studies included
	Rushton et al, 2022[123]	This systematic review found that 6/7 studies reported that music-based interventions improved **social skills** for adults.	Systematic Review 7 studies included
	Johnels et al., 2021[124]	This scoping review found promising results of music-based interventions in supporting **social interaction abilities** for children with ID	Scoping Review 25 studies included
	Senkal and Muhtar, 2021[125]	This study found that after a 6-week Orff Music Therapy intervention, participants experienced **improved auditory processing**, indicated by reduced total Listening Inventory scores.	n=29 Pre/Post
	Thompson & McFerran (2015)[147]	In a special school setting, with four adolescents with profound and multiple disabilities, music therapy **was more effective** that toy play in **promoting positive communication behaviours**.	n=4 Pre/Post Cross-Over design
	Lee & McFerran, 2012[148]	This study found that a music therapy intervention helped non-verbal adults with profound and multiple intellectual disabilities to improve their **non-verbal communication skills**.	n=5 Video Analysis
	Chou et al., 2019[50]	Children with Rett Syndrome attended 2 x 120-minute MT group sessions for 24 weeks with a family member. For participants in the MT group intervention, MT was found to improve **receptive language**, **verbal** and **non-verbal communication skills**, **and social interaction** for RTT patients. P**urposeful hand function**, **breathing patterns**, and **eye contact** were also **significantly improved, and frequency of epileptic seizures was noted to decrease**. Family **caregivers** who participated in the MT intervention with their child exhibited significantly **lower stress** following the program.	n=23 Prospective Cohort study

People with communication disorders	Boster et al., 2021[39]	A systematic review of literature relating to music interventions for children and adults with communication disorders (including Autism, developmental and acquired disabilities) found that music-based interventions can **improve social** and **participation outcomes**, such as **frequency of responses**, **initiation of communication**, **turn-taking**, **joint attention**, and **group participation**.	Systematic Review 71 studies included
Post-Stroke Aphasia	Liu et al., 2022[55]	A meta-analysis included 6 studies with a total of 115 patients. Music therapy interventions were found to **significantly improve functional communication, repetition**, and **naming** in patients with post-stroke aphasia, however, there was no significant impact on comprehension.	Systematic Review 6 studies included
	Lim et al., 2013[54]	This study compared the impact of neurologic music therapy and speech/language therapy. Neurologic music therapy intervention was found to have **significantly improved** the **speech** and **language ability** of chronic post-stroke aphasia patients across **three domains** (**aphasia quotient, repetition, and naming**), while speech and language therapy only improved one domain (repetition). Neurologic music therapy was also found to **significantly improve language ability for subacute stroke survivors**, while speech and language therapy had no significant effect for this group.	n=22 NCT
	Raglio et al., 2016[56]	This study compared the impact of music therapy (free improvisational approach) combined with speech and language therapy, with people who received only speech and language therapy. Participants who received both music therapy and speech therapy showed a **significant improvement** in **spontaneous speech**. No improvement in this domain was noted for the SLP group. This suggests that people **who receive both** MT and SLP have **better speech outcomes** than people who receive SLP only.	n=20 RCT
Parkinson's Disease	Barnish & Barran, 2020[57]	A systematic review focused on creative arts therapies for people living with Parkinson's disease (including dance, singing, music therapy and theatre). 56 studies were included (total 1531 participants). The review found evidence that music interventions can **positively impact speech, communication, quality of life** and **motor function** outcomes for people with PD.	Systematic Review 56 studies included
	Tamplin et al., 2019[58]	This study investigated the impact of a group singing (ParkinSong) intervention. The ParkinSong intervention **significantly improved vocal intensity, maximum expiratory pressure**, and **voice-related quality of life** in comparison to controls (i.e. increase loudness and respiratory controls) . **Weekly** ParkinSong participants **increased vocal intensity** more than **monthly** participants. Vocal intensity declined in nontreatment control groups.	NCT N=75

Movement and coordination

Population	Article	Outcome	Size/Quality
Stroke Survivors	Magee et al., 2017[128]	This Cochrane Review updated the previous review from 2010 (see below) found that music therapy interventions **may improve gait parameters after stroke; upper limb function; communication outcomes, and quality of life**, however, quality of evidence was low-very low; more robust evidence via RCTs are required.	Cochrane Review 22 studies included n=775
	Bradt et al., 2010[129]	This Cochrane Review found that the music therapy intervention 'rhythmic auditory stimulation' (RAS) may be beneficial **for improving gait parameters** in stroke patients, including gait velocity, cadence, stride length and gait symmetry. More research is required for other outcomes areas.	Cochrane Review 7 studies included n=184
	Palumbo, 2019[86]	This study explored a combined music therapy (MT) and occupational therapy (OT) intervention targeting **upper limb movement** for stroke survivors and compared this intervention to a 'home exercise program'. Although overall, there was no statistically significant difference in scores on the Fugl-Meyer Scale (upper limb function) scale, the study found that for participants who were experiencing higher levels of **depression** benefited significantly more from the music intervention, compared to the home exercise program. These participants also scored significantly better on a **general health** questionnaire (PHQ9) and **self-perceived mobility** scale. Qualitative data supported this observation and indicated that participants who received the music intervention also benefited from **emotional support, social interaction** and **enjoyment of therapy**, which were not experienced by participants who received the home exercise program only.	n=25 RCT
	Gonzalez-Hoelling et al., 2021[88]	This study explored the impact of a music therapy intervention (rhythmic auditory stimulation) with conventional therapy for subacute stroke survivors. The music therapy intervention + physiotherapy was found to **improve walking ability**. However, it was not found to be more effective in improving gait or balance.	n=55 NCT
Acquired Brain Injury	Ghai, S. (2023)[133]	This systematic review found that music therapy had a **positive effect** on **gait speed**, **cadence**, and **step symmetry** in individuals with traumatic brain injury and spinal cord injury. Specifically, it finds that **gait speed increases with metronome at 25% faster than preferred cadence**, and that **rhythmic auditory stimulation at 5% faster than normal cadence decreases gait speed, cadence, and stride length.**	Systematic Review with Meta-Analysis 6 studies included
	Burns et al., 2024[126]	This integrative review found that music therapy interventions can **augment motor skills** and **enhance communication**, although more rigorous evidence is required.	Integrative Review 8 studies included

Neurological Disabilities	Twyford et al, 2024[127]	This scoping review found preliminary evidence for the use of music therapy interventions to support functional outcomes (**physical, communication, social, psychological, sensory and behavioural)** for children/young people with neurological disabilities. However, most studies were case descriptions with small sample sizes – further research is needed.	Scoping Review 30 studies included
Multiple Sclerosis	Gonzalez-Hoelling et al., 2021[87]	Music therapy intervention was found to be better than conventional therapy or no intervention in relation to **gait** (double support time and walking speed)**, fatigue level, fatigability, coordination, dexterity, balance, walking endurance, lower extremity functional strength, emotional status,** and **pain.** This suggests that music therapy is a safe and effective intervention for people with MS and can address both motor and non-motor related outcomes.	Systematic Review 10 studies included
Parkinson's Disease	Machado Sotomayer et al., 2021[68]	This review found that music therapy had **positive effects** for **motor symptoms**, as well as **communication, swallowing, breathing** and **emotional wellbeing.**	Systematic Review 58 papers
	Katlen et al., 2021[62]	This study explored a music-based intervention addressing physical outcomes for people with Parkinson's disease (PD). The study found a significant improvement in **balance, sitting and rising,** and **timed up-and-go tests.** This suggests that the music intervention improved **balance and functional mobility** for individuals with PD. These functional gains were not maintained when the therapy was discontinued, consistent with the progressive nature of PD. This highlights the importance of ongoing intervention for maintenance.	Pre/Post n=13
Cerebral Palsy	Ghai et al., 2022[154]	This review found that music intervention + standard care significantly **improved gait speed, stride length**, **cadence**, **and gross motor function** compared to standard care	Systematic Review 14 studies
	Yanagiwara et al., 2022[72]	This review found that music therapy had a **significant effect** on the **Gross Motor Function, Functional Independence Measure** and **Goal Attainment Scale** scores. Music therapy had no significant effect on any of the other items.	Systematic Review 8 studies
Intellectual Disability	Chou et al., 2019[89]	Music therapy improved **receptive language, verbal and non-verbal communication skills, and social interaction** for children with Rhett Syndrome. In addition, **purposeful hand function, breathing patterns, and eye contact** were significantly improved. Of note, music therapy also **decreased the frequency of epileptic seizures**. Caregivers in the study group exhibited significantly **lower stress** following the program.	n=11 Pre/post
	Martinez-Aldao et al., 2019[90]	This study investigated a music-movement intervention to improve the physical health and wellbeing of adults with intellectual disability. The music intervention was found to **improve body mass index**, **cardiovascular endurance** (6-min walk test) and **muscular strength** (standing long jump test). The intervention was also found to be feasible	n=30 Pre/Post

Adults with Tourette Syndrome	Dina et al., 2020[91]	A music intervention was used to support adults living with Tourette's syndrome. The music intervention was found to have a **positive impact on the manifestation of tics**, as well as on the **mood** of the participants. This suggests that music may play a positive role in **motor interventions** to support Tourette's Syndrome.	n=8 Pre/Post

Community engagement

Population	Article	Outcome	Size/Quality
Intellectual Disability	Thompson et al., 2021[43]	Members of an online music therapy group for adults with intellectual/developmental disabilities and the people who support them to attend were asked to complete an online survey about their experiences of participating in the groups. Findings revealed that both group members and carers felt that the groups provided an important space for **connecting with others who have similar interests, staying connected during COVID19 lockdowns, and practicing their social communication skills.**	Evaluative Survey n=6
	Pavlicevic et al., 2014[44]	This study explored the experiences of members of a long-term community music therapy group for adults with intellectual disabilities from the perspective of their supporters. Findings revealed that the long-term shared therapeutic music group provided the members with opportunities to develop and experience **confidence, self-esteem, shared acceptance and belonging, and success**. The group was found to be an important space for members and their families to **connect socially, form and sustain friendships and experience inclusion.**	Qualitative interviews with key stakeholders
Autism	Hillier et al., 2012[82]	A study of an eight-week music therapy group for Autistic young adults revealed that the group program **significantly reduced anxiety** amongst participants and **increased self-esteem** and **attitudes towards peers.**	Pre/Post n=22
	LaGasse, 2014[11]	This study compared the impact of a five-week music therapy group with a no-music social skills group for Autistic children. The study found that children in the MT group experienced improvement in **joint attention** and **social-responsiveness scores,** although there were no differences between groups in terms of initiating and responding to communication, or social withdraw/behaviours.	RCT n=17
	Kern & Aldridge, 2006[15]	This multiple-baseline study investigated the impact of personalised social songs for Autistic children on social play. The interaction **produced desirable peer interaction outcomes**, and the collaborative consultative approach enabled teachers to implement interventions successfully in ongoing playground routines.	Pre/Post n=4

Dementia	Thompson et al., 2023[45]	This study explored the experiences of people with dementia and their family carers who attend a therapeutic, community-based choir. Findings revealed that members experienced significant **social connections**, **reduced isolation**, and **opportunities to express their identity**, despite their condition. Participants also reported they received important **social and emotional support** from other group members, and benefits to **mood**, **cognition** and **general wellbeing** were noted.	Qualitative study n=11
	Clark, Tamplin & Baker, 2018[92]	This study investigated the experiences of people with dementia and family carers who participated in a 20-week therapeutic group singing program in a community setting. The study found that the choir provided opportunities for members to form **empathic friendships** through **the shared experiences** of dementia and singing together. Participants also reported experience **enhanced relationship** between carer and person with dementia, and **benefits to mood** and **general wellbeing**.	Qualitative study n=18
	Clark et al., 2021[93]	Following a 6-week therapeutic group song writing program for people with dementia and their family carers, participants reported that the program prompted **interaction and collaboration**, which led to **social connections**, **empathic relationships** and **experiences of inclusion**. Participants also reported that the program provided opportunities for supported engagement, which **highlighted their abilities** and **reduced feelings of self-doubt.**	Qualitative study n=10
Parkinson's Disease & Stroke Survivors	Fogg-Rogers et al., 2013[94]	Fourteen members of a community-based therapeutic choir participated in a qualitative study. Findings revealed that the choir provided a fun and social environment, that allowed members to **connect** with others who have **shared experiences**, which leads to improvements in **mood, language, breathing** and **voice.**	Qualitative study n=14
Stroke Survivors	Tamplin et al., 2013[95]	This study reports results of a 20-week community based therapeutic choir for stroke survivors with aphasia. Findings suggest that participation in a therapeutic choir can help to **reduce psychological distress**, **increase confidence**, **provide peer support**, **enhance mood**, **increase motivation**, and **support communication.**	Pre/Post + Qualitative n=13
Psychosocial Disability	Aalbers et al. 2017 [152]	This Cochrane review found that music therapy can help to **improve functioning** (such as **maintaining employment**, **engaging in community-based activities,** and **maintaining relationships).** Music therapy also **reduced depressive symptoms and anxiety**.	Cochrane Review 9 studies (n=421)
	Hense, McFerran & McGarry, 2014[80]	This study presents a grounded theory of how young people experiencing mental ill-health and subsequent psychosocial disability use music to aid in the **recovery of their identity.** Group music therapy was a helpful as a **'bridge' between the personal and community** for participants, and allowed them to practice **connecting with others** in a safe and supportive space.	Qualitative (Grounded Theory) n=11

	Windle et al., 2020[7]	Ten members of a group song writing program for people with long-term depression were interviewed about their experiences. Participants reported that the group provided opportunities for **social connection** that **continued following the end of the program**. The group was seen as a **safe space** that allowed for **enjoyment** and **personal achievement**.	Qualitative n=10

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Building resilience: a pilot study of an art therapy and mindfulness group in a community learning disability team

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ABSTRACT

This article describes findings from a pilot study for a new art therapy intervention designed for clients attending an Adult Learning Disability Service. The intervention consisted of an *art therapy and mindfulness group* for clients, for 90 min per week over an initial 6–8 week period, with the aim of improving group members' resilience and ability to cope with difficult life experiences. Clients completed questionnaires about their experience of the group sessions and a thematic analysis was conducted to identify three main themes. The results suggest that the clients who received this intervention experienced improvements in their clinical presentation as well as in their quality of life, an increase in joy and positive wellbeing, and a decrease in low mood and social anxiety.

Plain-language summary

This paper describes an art therapy group run for adults who have learning disabilities. In the group people used mindfulness practices as well as art making and discussion. This helped people to notice and share their thoughts and feelings. The paper shows the results of a questionnaire completed by the group members. It shares group members' comments about how they found the group and how the group helped them.

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KEYWORDS
art therapy; mindfulness; learning disability; groups; resilience; quality of life

Introduction

In 2015, the Adult Learning Disability Service made a decision to offer an *art therapy and mindfulness group* to clients as a response to a growing art therapy waiting list, as well as to the perceived needs of clients referred. For the purpose of this study we refer to Kabat Zinn definition of mindfulness as 'paying attention in a particular way: on purpose, in the present moment, and non-judgmentally' (Kabat-Zinn, 1994, p. 7). The aim of the intervention was to improve group members' resilience and ability to cope with life experiences on an ongoing basis. Informed consent to use clients' words and images was obtained and pseudonyms are used within this article to ensure clients' confidentiality.

The Learning Disability Service provides multi-disciplinary support and intervention to adults in the borough who have a significant learning disability or intellectual disability. This includes clients with a range of associated clinical presentations, e.g. autistic spectrum disorder, cerebral palsy, Down's syndrome and epilepsy, as well as psychiatric disorders. Within this, the art psychotherapy service provides assessment, individual and group interventions to clients referred to the service for psychological support with managing distress either in response to current situations or past experiences.

Literature review

In conducting a literature search, we found a paucity of published research literature describing *art therapy* and *mindfulness groups* with *adults* who have *intellectual disabilities*. However, we found promising research focused purely on the effectiveness of mindfulness practice with people who have intellectual disabilities (Hwang & Kearney, 2013). Robertson and Bronwyn's 2011 paper, 'The Adaptation and Application of Mindfulness-based Psychotherapeutic Practices for Individuals with Intellectual Disabilities', provides a useful overview of mindfulness based psychotherapeutic practices with this population and finds that 'current research and practice supports that mindfulness-based psychotherapeutic practices are clinically effective in the treatment of anxiety, mood, stress, aggression, and self-injury in individuals with intellectual disabilities (and their carers)'. Robertson (2011, pp. 46–52) also advocates that:

> Given the mental health and behavioural challenges faced by this population, there is a great need for individuals with intellectual disabilities to have effective

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> and practical treatment such as mindfulness-based psychotherapy. Further research and utilization of these practices with this population is needed.

A more recent publication by Thornton, Williamson, and Cooke (2017), describes a mindfulness based group for young people with learning disabilities and their carers, and concludes that client members found the group helpful, were able to continue with mindfulness practices after completion of the group and concludes that 'mindfulness can be effective and accessible for young people with learning disabilities' (Thornton et al., 2017, abstract p. 259), which again advocates for more research in this area.

Research has been carried out which suggests the benefit of art therapy with this client group (Lomas & Hallas, 1998; Strand, 1990; Tipple, 1994); however, the varied and person-centred nature of art therapy, combined with the limited ability of clients who have learning disabilities to engage in traditional therapy outcome measures, has meant that an evidence base is emerging rather than established. This has been highlighted in the *International Journal of Art Therapy* special interest publication on learning disability (Burns & O'Shea, 2017; Marshall, 2017). In Rappaport's publication on *Mindfulness and Arts Therapies* (2014), contributors describe pioneering work within a variety of settings; however, we found no specific reference to art therapy and mindfulness in a learning disability service. A lack of academic publication does not, however, mean that this work is absent from clinical settings, or art therapy training, e.g. that provided by art therapist Gill Lock.

Offering a group intervention can be a pragmatic response to meeting targets and keeping waiting times down when referrals to the art therapy service begin to outweigh capacity. This was a factor in our decision making. Other deciding factors included: a previous positive experience of co-facilitating an art therapy group together; a shared belief in the value of groups in reducing isolation and providing opportunities for people to establish positive social relationships, which, for people who have intellectual disabilities, can be limited due to reduced opportunities. Within the art therapy service we have noticed a change in the way clients receive disability benefits, and a review of the way day services are provided has led to decreased opportunity for service users to access long term on-going activities with peers, which provide people with opportunities to develop peer group friendships.

> Many people still do not recognise and accept that people with learning disabilities, like anyone else, want and need personal and sexual relationships […] Yet the evidence is that people with learning disabilities have very few relationships and limited opportunities to form or sustain them. People are often lonely.
>
> HM Government (2009, pp. 3.52–3.54)

When discussing therapeutic relationships, art therapist Kevin O'Farrell reminds us not to ignore the 'elephant in the room' (2017, p. 66) which refers to the very low levels of friendship and inversely high levels of loneliness experienced by intellectually disabled service users.

Group inclusion criteria

On analysing the referrals to the art therapy service, we recognised that – while for some individuals their needs would be best met by individual art therapy interventions (e.g. clients who had experienced trauma, abuse or were experiencing post-traumatic stress disorder symptoms) – other clients had been referred to art therapy for more generalised anxiety or for support with managing and coping with difficult emotions. This included clients who were experiencing low mood following bereavement. We hypothesised that a group intervention may be helpful in supporting clients to recognise and share difficult emotions that were connected to current or recent distressing events and who required support in expressing and coping with their emotional experiences.

The exclusion criteria for the pilot study was to exclude clients who were deemed to require individual interventions, due to the nature of their issues, e.g. those exploring the impact of abuse, clients whose behaviour would negatively impact on others and might reduce the safety of the group, or clients who would be unable to tolerate a group due to extreme anxiety. However, feeling anxious or nervous about being in a group was not an exclusion criteria, and the group was attended by some individuals who had no previous group experience. Clients' level of learning disability was not part of the inclusion or exclusion criteria and group members had varying levels of cognitive abilities. Referrals to the art therapy service range from clients with mild to moderate learning disabilities to those with severe disabilities.

Group rationale

The group was designed to be *supportive* rather than *analytic* in approach and to include a social aspect as well as an aspect of psycho-education to respond to the demand for clients to develop positive coping skills.

One of the facilitating art therapists' previous clinical experiences of teaching *mindfulness* as a psycho-social skill, as well as personal involvement in yoga and mindful meditation, led the organisers to consider the possibility of using mindfulness in the art therapy group. It was decided to include in the group session a directed mindfulness practice, followed by an art making time and a time of group reflection.

For the purposes of beginning the group, it was decided to offer a mindful approach of being 'in the moment', asking clients to try to notice and describe their own emotions as they experienced them in the group. A range of structured mindfulness practices, introducing experiential learning of mindfulness skills which clients could generalise into everyday life outside of the group, was also offered.

It was hypothesised that this experience would impact on the clients' experience of art making in the group and that their art making may become more *mindful* or may be seen as a continuation of the mindful experience. As mindfulness practice focuses on the experience of being wholly in the moment, one moment at a time, it was thought that this approach would be accessible to clients who struggle with memory and ordering events. While an awareness of how clients' past experiences have impacted on them was helpful for the facilitating art therapists to hold in mind, the aim was to keep the focus of the group on the *here and now*, and the client in the *present moment*.

Structuring the group

The group was run on a *slow open* basis. Clients attended an initial assessment and if they met the inclusion criteria, they were offered an initial 6–8 group sessions, followed by a review in the group. If the client continued to have needs that were being addressed by the group, they continue to attend and this was reviewed on an on-going basis.

For some individuals a brief group intervention was enough for them to feel supported in learning coping skills and managing emotions. Others needed longer in the group to consolidate their progress and a client centred approach meant that longer attendance of the group was available where clinically appropriate. This structure meant that new individuals could join the group when space became available as others were discharged after completing their intervention.

To support the regular reviews, and offer a level of consistent assessment across the board, on starting the group and at regular intervals, members were asked to complete an Adapted Child Outcome Measure (see Figure 8). The measure was chosen to enable the greatest level of meaningful engagement from group members when considering the broad range of abilities relating to individual level of learning disability.

Session structure

The 90-min weekly sessions consisted of:

- Welcome, coffee, tea and biscuits, checking in with group members (10–20 min)
- Mindfulness practice (10 min)
- Feedback from mindfulness practice (5 min)
- Art making time (35–40 min)
- Clear up and return to circle (5 min)
- Group reflection time (20–25 min)

Hot drinks and biscuits were offered at the beginning of the group to foster a social and nurturing environment as members arrived. Clients were asked to notice and reflect on any feelings they experienced that morning and if they chose to, to share any feelings they had noticed during the week. Emotion symbols and photo cards were available as a visual prompt, which some clients found helpful in articulating their feelings. Due to the range of cognitive abilities and difficulties in the group, some clients simply pointed to an emotion symbol and named the emotion e.g. 'sad' or 'calm'. Others were able to engage in detailed verbal description of an event which prompted a difficult emotion and describe the behaviour which followed. In both cases clients were rewarded with positive attention for being able to notice their feelings and their behaviours. As the group progressed, clients were asked to notice any times they used or practised their mindfulness skills and all attempts or examples provided were met positively by the facilitators. When clients brought news or stories of events in the week, they were asked to reflect on any feelings they noticed in response to this.

When clients had noticed or shared their experiences, one of the art therapists led a mindfulness practice. Group members were encouraged to participate but always reminded that they could also opt out. With any aspects of an exercise that may be experienced as problematic, options were given, e.g. a breathing practice may involve either gently closing the eyelids or maintaining a soft gaze if clients do not feel safe with closed eyes.

A practice involving movement, e.g. arm raises, could be practised *mentally* if the client did not want to attempt the movement in the session. For the most part, however, clients embraced the mindfulness practices and participated as fully as possible. Many of the practices have a meditative quality and focus on noticing and following the breath; however, mindfulness practices were also introduced to encourage observation of all the senses, e.g. tasting honey, observing and describing the shape and texture of different objects, and noticing the sensory and emotional experience of popping bubble wrap. There was much pleasure noticed when a group member with severe physical disabilities demonstrated the sound of bubble wrap popping as she ran over it with her wheelchair!

After the mindfulness practice, there was a short opportunity for feedback before group members were invited to use the art materials. As in most art therapy interventions, a range of different art making materials was offered and the clients chose how they made use of this time. The art making was not directed; however, the art therapists were available to help clients get started when required. An activity may be suggested if the client found it difficult to self-direct; however, this was not automatically offered at the beginning of the art making session. When the group members were all engaged in art making, the art therapists often created art alongside the clients. This was a practice which evolved in the group as a response to feeling that the group may be too 'facilitator heavy' when a trainee joined the group. This practice was maintained as clients (and therapists) enjoyed the shared experience of making art together. This also provided an opportunity to model *observing* and *reflecting non-judgementally* on our art making processes within the group.

The group session ended with a period of shared reflection. The art therapists asked clients to talk about experiences or emotions noticed during the process of making art, and they were able to reflect on feelings of frustration and noticing judgemental thoughts, as well as feelings of pleasure, satisfaction and excitement, during art making. Group members also reflected on each other's art making, and it was noticed that the process of paying compliments to other group members could have a positive impact on the emotional wellbeing of both.

Figures 1 and 2 were created by Adam (pseudonym). Adam was referred for art therapy following the death of his friend and housemate. The death of

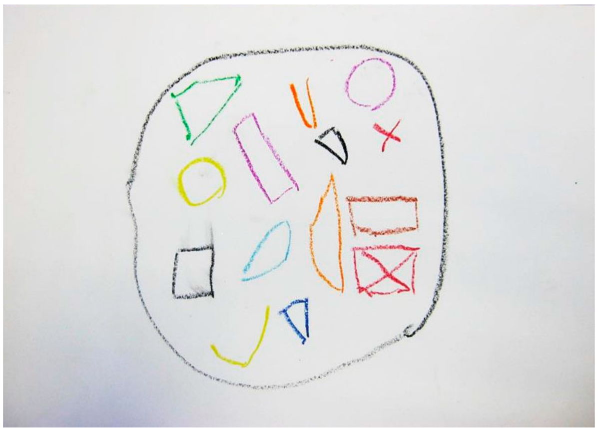


Figure 1.

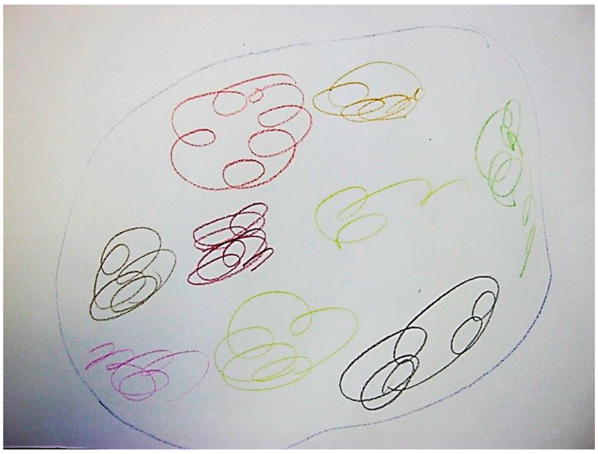
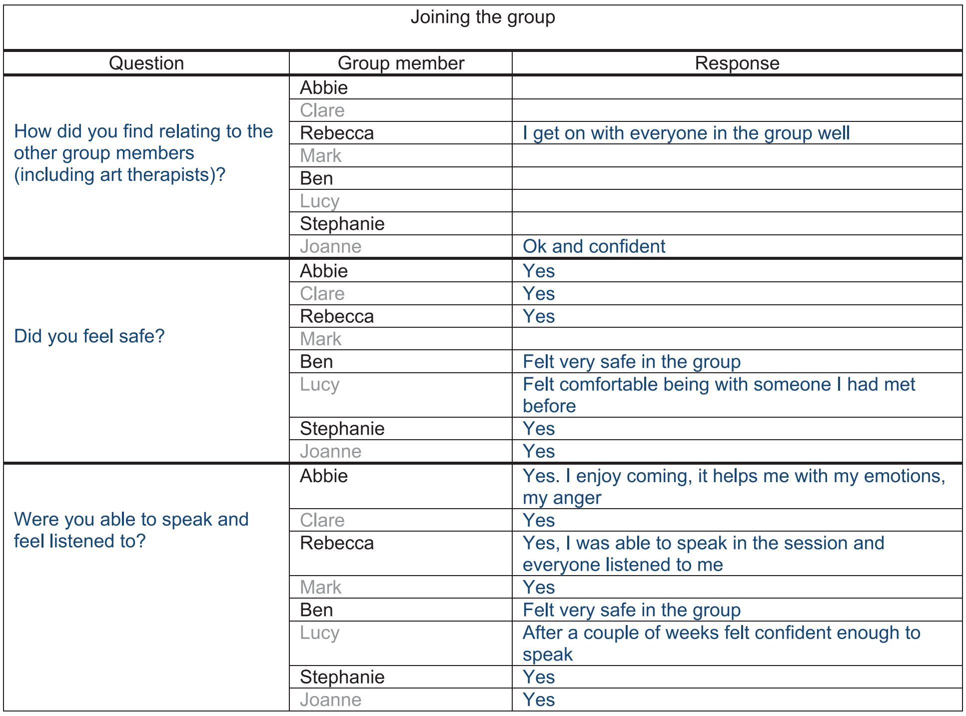


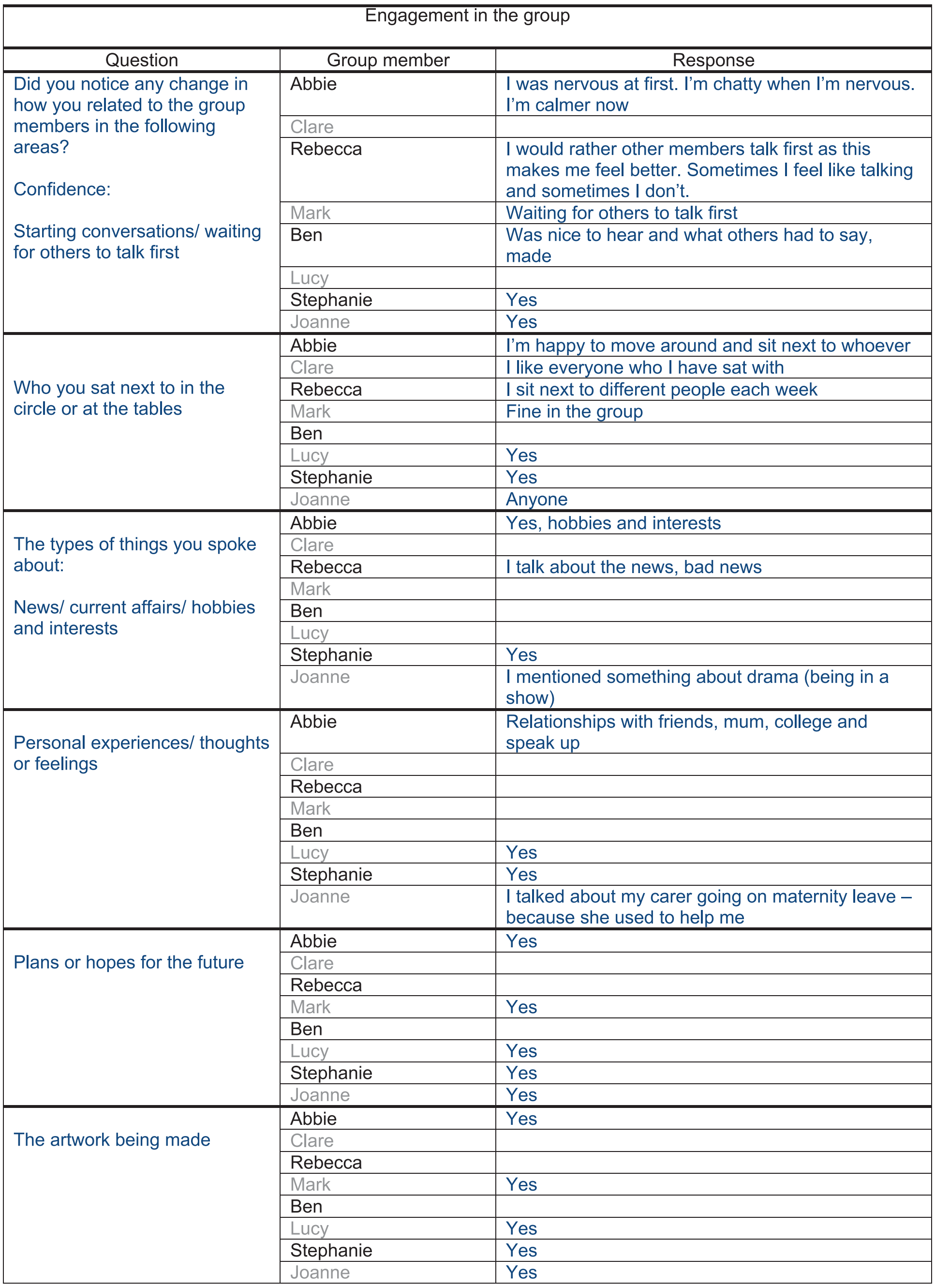
Figure 2.



Joining the group

Question	Group member	Response
How did you find relating to the other group members (including art therapists)?	Abbie	
	Clare	
	Rebecca	I get on with everyone in the group well
	Mark	
	Ben	
	Lucy	
	Stephanie	
	Joanne	Ok and confident
Did you feel safe?	Abbie	Yes
	Clare	Yes
	Rebecca	Yes
	Mark	
	Ben	Felt very safe in the group
	Lucy	Felt comfortable being with someone I had met before
	Stephanie	Yes
	Joanne	Yes
Were you able to speak and feel listened to?	Abbie	Yes. I enjoy coming, it helps me with my emotions, my anger
	Clare	Yes
	Rebecca	Yes, I was able to speak in the session and everyone listened to me
	Mark	Yes
	Ben	Felt very safe in the group
	Lucy	After a couple of weeks felt confident enough to speak
	Stephanie	Yes
	Joanne	Yes

Figure 3.



Engagement in the group

Question	Group member	Response
Did you notice any change in how you related to the group members in the following areas? Confidence: Starting conversations/ waiting for others to talk first	Abbie	I was nervous at first. I'm chatty when I'm nervous. I'm calmer now
	Clare	
	Rebecca	I would rather other members talk first as this makes me feel better. Sometimes I feel like talking and sometimes I don't.
	Mark	Waiting for others to talk first
	Ben	Was nice to hear and what others had to say, made
	Lucy	
	Stephanie	Yes
	Joanne	Yes
Who you sat next to in the circle or at the tables	Abbie	I'm happy to move around and sit next to whoever
	Clare	I like everyone who I have sat with
	Rebecca	I sit next to different people each week
	Mark	Fine in the group
	Ben	
	Lucy	Yes
	Stephanie	Yes
	Joanne	Anyone
The types of things you spoke about: News/ current affairs/ hobbies and interests	Abbie	Yes, hobbies and interests
	Clare	
	Rebecca	I talk about the news, bad news
	Mark	
	Ben	
	Lucy	
	Stephanie	Yes
	Joanne	I mentioned something about drama (being in a show)
Personal experiences/ thoughts or feelings	Abbie	Relationships with friends, mum, college and speak up
	Clare	
	Rebecca	
	Mark	
	Ben	
	Lucy	Yes
	Stephanie	Yes
	Joanne	I talked about my carer going on maternity leave – because she used to help me
Plans or hopes for the future	Abbie	Yes
	Clare	
	Rebecca	
	Mark	Yes
	Ben	
	Lucy	Yes
	Stephanie	Yes
	Joanne	Yes
The artwork being made	Abbie	Yes
	Clare	
	Rebecca	
	Mark	Yes
	Ben	
	Lucy	Yes
	Stephanie	Yes
	Joanne	Yes

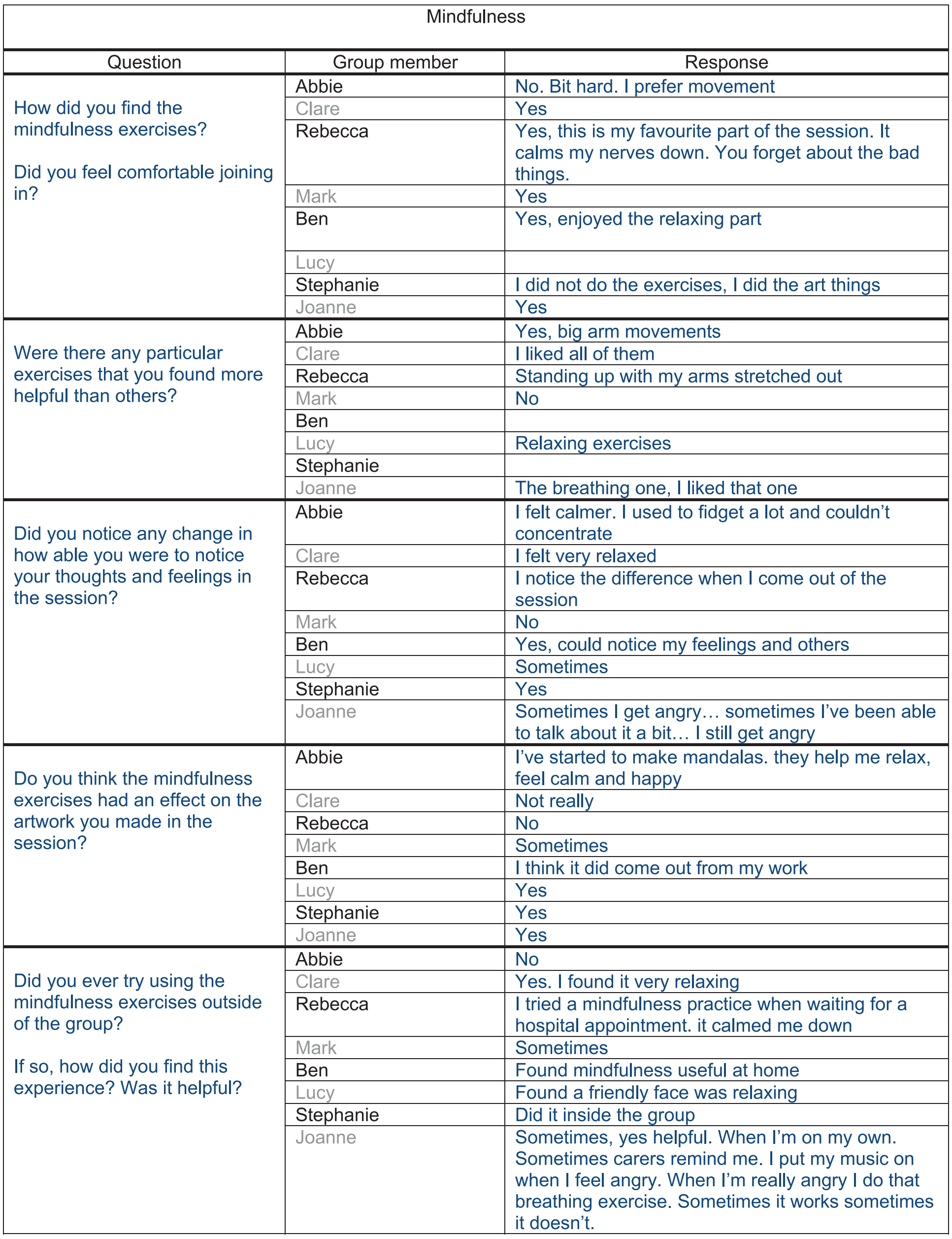
Figure 4.

Adam's friend also brought feelings to the surface of loss and sadness linked to Adam's parent's death a number of years before. Adam found it too difficult to articulate his feelings, but acknowledged that he had ups and downs.

Through the engagement in the mindfulness exercises and art making Adam shared how the focus on the here and now allowed him to feel a sense of relaxation and supported him to manage his feelings when they felt too difficult or painful.

Figure 1 was created near the beginning of Adam's engagement in the group. The position, size and colour of the shapes within the large containing circle were carefully considered and drawn with a deep concentration.

Figure 2 was created a number of weeks after Figure 1, with the same focus and concentration. When considering the two images side by side in the reflective space towards the end of the session, Adam was able to observe and accept comments regarding the similarities of the images, whilst noting that the second image had a fluidity and looseness about it. Comments from group members regarding Figure 2 included a comparison to clouds or breath and linked this to the focus on breathing in the mindfulness exercises. The changes between the fluidity and looseness in the images appeared to mirror Adam's increased ability to express his feelings of loss and sadness with the group. It also reflected increased confidence and resilience gained through



Mindfulness

Question	Group member	Response
How did you find the mindfulness exercises? Did you feel comfortable joining in?	Abbie	No. Bit hard. I prefer movement
	Clare	Yes
	Rebecca	Yes, this is my favourite part of the session. It calms my nerves down. You forget about the bad things.
	Mark	Yes
	Ben	Yes, enjoyed the relaxing part
	Lucy	
	Stephanie	I did not do the exercises, I did the art things
	Joanne	Yes
Were there any particular exercises that you found more helpful than others?	Abbie	Yes, big arm movements
	Clare	I liked all of them
	Rebecca	Standing up with my arms stretched out
	Mark	No
	Ben	
	Lucy	Relaxing exercises
	Stephanie	
	Joanne	The breathing one, I liked that one
Did you notice any change in how able you were to notice your thoughts and feelings in the session?	Abbie	I felt calmer. I used to fidget a lot and couldn't concentrate
	Clare	I felt very relaxed
	Rebecca	I notice the difference when I come out of the session
	Mark	No
	Ben	Yes, could notice my feelings and others
	Lucy	Sometimes
	Stephanie	Yes
	Joanne	Sometimes I get angry… sometimes I've been able to talk about it a bit… I still get angry
Do you think the mindfulness exercises had an effect on the artwork you made in the session?	Abbie	I've started to make mandalas. they help me relax, feel calm and happy
	Clare	Not really
	Rebecca	No
	Mark	Sometimes
	Ben	I think it did come out from my work
	Lucy	Yes
	Stephanie	Yes
	Joanne	Yes
Did you ever try using the mindfulness exercises outside of the group? If so, how did you find this experience? Was it helpful?	Abbie	No
	Clare	Yes. I found it very relaxing
	Rebecca	I tried a mindfulness practice when waiting for a hospital appointment. it calmed me down
	Mark	Sometimes
	Ben	Found mindfulness useful at home
	Lucy	Found a friendly face was relaxing
	Stephanie	Did it inside the group
	Joanne	Sometimes, yes helpful. When I'm on my own. Sometimes carers remind me. I put my music on when I feel angry. When I'm really angry I do that breathing exercise. Sometimes it works sometimes it doesn't.

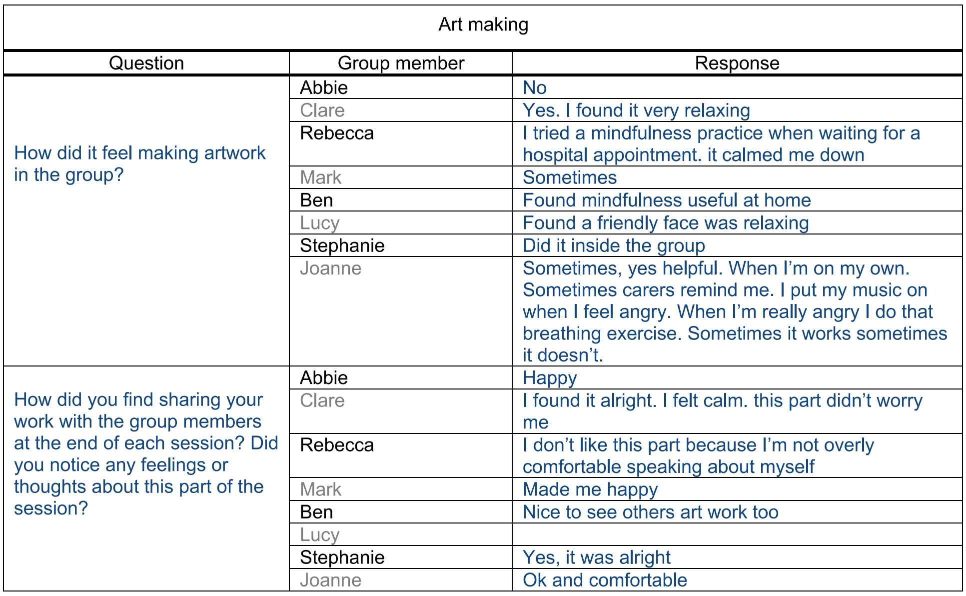
Figure 5.

the friendships made and the skills developed through attending the group.

What group members said about their group experience

Group members past and present were asked for their comments in the form of a questionnaire which clients had the option of completing independently or with support, either in written or verbal format. Participants were invited to answer as many of the questions as they wished, and carers were asked to provide any feedback however brief or concise. Therefore, not all participants completed all of the sections in the questionnaire which is consistent with the varying levels of clients' ability to understand and answer the questions presented. Eight participants returned the questionnaire and consented for their comments to be shared, and published anonymously. Figures 4 and 5 explore the responses from group members in regards to the social element of the group, the group structure and how it influenced their relationships with each other. A thematic analysis (Braun & Clarke, 2008) was used to evaluate the returned forms and extract the themes. Three main themes were identified and these concentrated on the three main aspects or components of the group which were hypothesised as having a positive impact on wellbeing. Participants were asked about the opportunity provided by the group for social interaction, experience of mindfulness practice, experience of using art materials and sharing images. The corresponding themes emerged from the returned questionnaires:

(1) Feeling safe in the group and developing confidence in interacting with others;



Art making

Question	Group member	Response
How did it feel making artwork in the group?	Abbie	No
	Clare	Yes. I found it very relaxing
	Rebecca	I tried a mindfulness practice when waiting for a hospital appointment. it calmed me down
	Mark	Sometimes
	Ben	Found mindfulness useful at home
	Lucy	Found a friendly face was relaxing
	Stephanie	Did it inside the group
	Joanne	Sometimes, yes helpful. When I'm on my own. Sometimes carers remind me. I put my music on when I feel angry. When I'm really angry I do that breathing exercise. Sometimes it works sometimes it doesn't.
How did you find sharing your work with the group members at the end of each session? Did you notice any feelings or thoughts about this part of the session?	Abbie	Happy
	Clare	I found it alright. I felt calm. this part didn't worry me
	Rebecca	I don't like this part because I'm not overly comfortable speaking about myself
	Mark	Made me happy
	Ben	Nice to see others art work too
	Lucy	
	Stephanie	Yes, it was alright
	Joanne	Ok and comfortable

Figure 6.

(2) Positive experiences of a range of mindfulness practices, improved ability to recognise own thoughts and feelings and participants' emerging ability to generalise these skills out of the group environment;

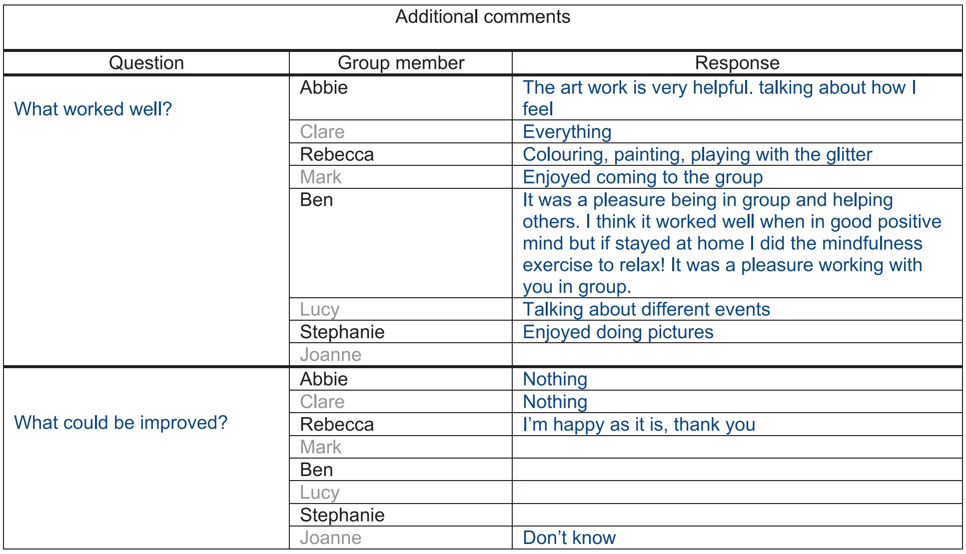
(3) Positive experiences of making art in the group and development of ability to reflect with others in a group.

Art Therapy Mindfulness Group Questionnaire responses December 2016:

(1) Clients overwhelmingly reported that they felt safe in the group; that they had been able to speak and felt listened to. Most participants referred to becoming more confident in their interactions with others in the group (Figures 3 and 4).

(2) Most participants reported that they enjoyed the mindfulness practices and found them helpful, relaxing or calming. Some participants stated they preferred the practices involving *movement* or *posture*, others preferred *still* practices which focus on the breath. By using the term '*exercises*' rather than '*practices*' in the questionnaire, clients may have been inadvertently influenced to think about the practices involving *physical movement*. The participants varied in their responses to questions about whether the mindfulness practices had affected their art making in the group, one participant describing making mandalas as a continuation of mindfulness. Over half reported that it influenced their art making and others did not report any link.

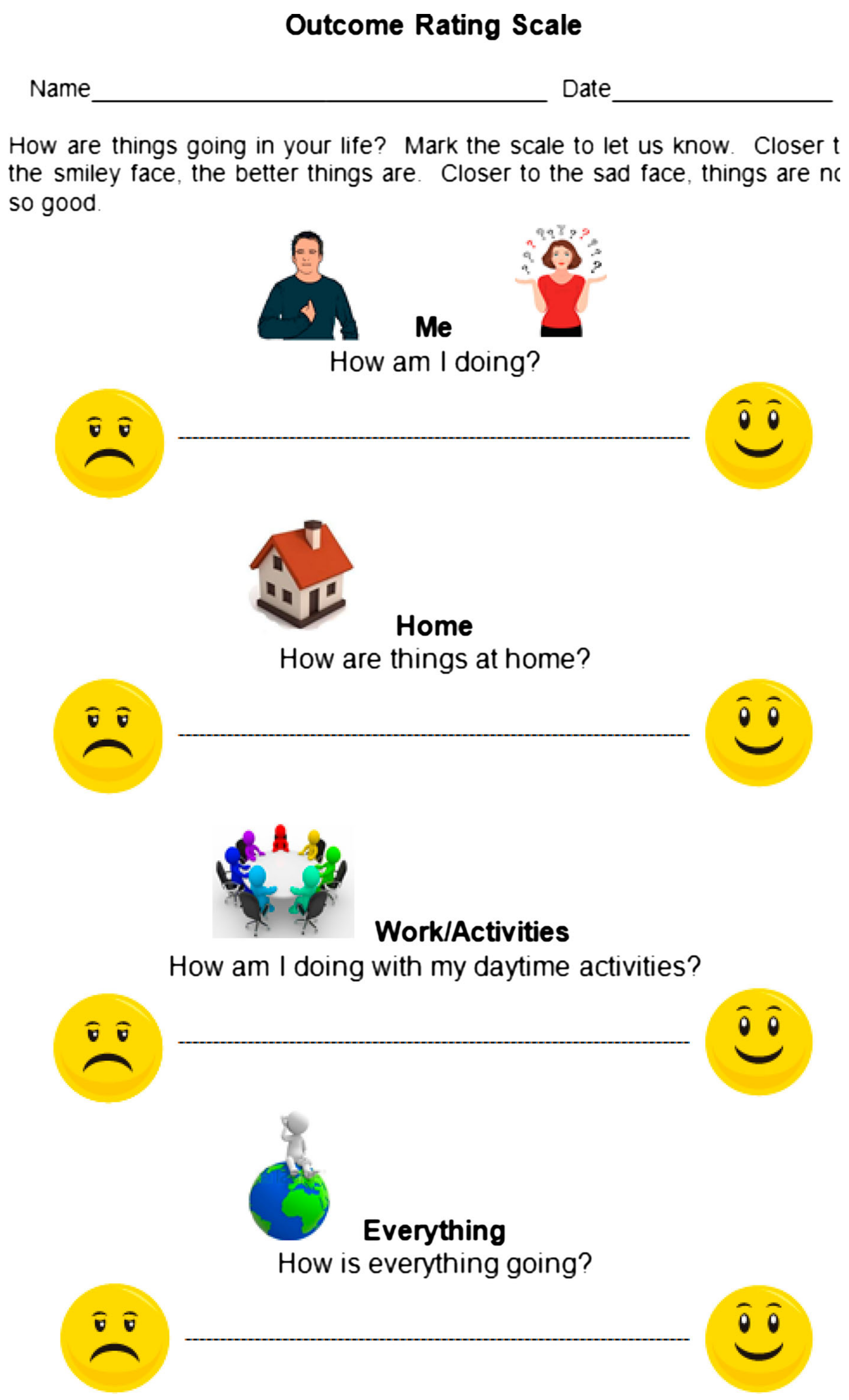
Most participants (87%) reported that they had improved their ability to *notice their thoughts and feelings*. Sixty-two percent of participants said that they had tried mindfulness practices at home (Figure 5).



Additional comments

Question	Group member	Response
What worked well?	Abbie	The art work is very helpful. talking about how I feel
	Clare	Everything
	Rebecca	Colouring, painting, playing with the glitter
	Mark	Enjoyed coming to the group
	Ben	It was a pleasure being in group and helping others. I think it worked well when in good positive mind but if stayed at home I did the mindfulness exercise to relax! It was a pleasure working with you in group.
	Lucy	Talking about different events
	Stephanie	Enjoyed doing pictures
	Joanne	
What could be improved?	Abbie	Nothing
	Clare	Nothing
	Rebecca	I'm happy as it is, thank you
	Mark	
	Ben	
	Lucy	
	Stephanie	
	Joanne	Don't know

Figure 7.



Outcome Rating Scale

Name________________________ Date____________

How are things going in your life? Mark the scale to let us know. Closer t the smiley face, the better things are. Closer to the sad face, things are nc so good.

Me
How am I doing?

Home
How are things at home?

Work/Activities
How am I doing with my daytime activities?

Everything
How is everything going?

Figure 8.

(3) 100% of participants answered the question ‘How did it feel making art in the group?’ and 100% responded positively. 75% of group members responded that they had been happy to reflect and share their art with others at the end of the session, with one participant noticing feeling uncomfortable at this part of the session (Figures 6 and 7).

Conclusion

Our findings correlate with Robertson (2011) in that we found the mindfulness based approach we used was clinically effective in the treatment of anxiety, mood and stress in individuals with intellectual disabilities and also with Thornton et al. (2017) who conclude that ‘mindfulness can be effective and accessible for young people with learning disabilities’.

Our study cannot differentiate between the effectiveness of the mindfulness practices and the effectiveness of the art making and reflection as we hypothesised that both aspects of the group would be helpful and the two were interwoven into one clinical intervention. (It is important also not to discount the effectiveness of the social aspect of the group and the attention paid to fostering a nurturing, person centred approach which was another potentially effective strand of the intervention).

The evidence from this pilot study suggests that for adult clients with significant learning or intellectual disabilities, attending a mindfulness art therapy group enables improvements in their clinical presentation, as well as more general improvements in their quality of life and resilience. Clients, their carers and families reported noticing an increase in joy and positive wellbeing after attending the group, as well as a decrease in negative symptoms such as low mood and social anxiety. Clients reported feelings of *safety* in the group and the development of confidence in their interactions with others, an improved ability to recognise own thoughts and feelings and an emerging ability for clients to generalise these skills outside of the group environment.

As with Thornton et al. (2017), we found that some clients reported being able to use the art making and the mindfulness skills on a continued basis outside of the group. This may be because clients find the art making experience as a continuation of mindfulness practice more accessible or easier to recreate at home without the presence of an art therapist.

Limitations to study and recommendations for further research

The outcomes we have started to gather are as yet tentative due to the small scale of this study. Further research is needed in this area.

By using the term *exercises* rather than *practices* in the questionnaire, participants may have inadvertently been influenced to think about the *practices* involving *physical movement*.

Further research would be beneficial exploring why the percentage of clients adopting their own art making outside of the group was higher after the art therapy and mindfulness group than in those attending individual art psychotherapy.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Siobhán Burns qualified as an Art Psychotherapist at the University of Sheffield in 2000. She has worked as an Art Therapist with Looked After Children, in Adult Mental Health services and, for the last 13 years, had worked with adults who have Intellectual Disabilities at the Rotherham Learning Disability Service. Siobhán is a guest lecturer on Art Therapy and Intellectual Disability on the Art Therapy Foundation and MA Course on The Northern Programme. She is an active member of the ATLDSIG (Art Therapy and Learning Disability Special Interest Group).

Mike Waite has worked within adult learning disability services since 2001, initially working as a Support Worker within an acute respite service in Oxfordshire. Mike completed his postgraduate diploma in Art Psychotherapy in 2004 and spent five years working within Adult Learning Disability Day Services in Sheffield. Mike's been in his current posts within Rotherham Doncaster and South Humber (RDaSH) NHS Trust since 2009. His work is divided between two roles, firstly as a Specialist Child Mental Health Practitioner in the Rotherham CAMHS Learning Disability team (three days per week) and secondly as an Art Psychotherapist in the Rotherham Adult Learning Disability Service (two days per week). Mike is an active member of the British Association of Art Therapists (BAAT) Art Therapy Learning Disability Special Interest Group and has guest lectured on the MA Art Psychotherapy course run by the Sheffield Art Therapy Northern Programme.

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'Reclaiming power over my story, my body and myself': Recovery and healing for adult victim-survivors of sexual violence

23 July 2024

The **REACH** Project Final Report

Elizabeth Mclindon | Mandy McKenzie | Amy Webster | Jen Hargrave
Phoebe Turner-Myatt | Kathleen Maltzahn | Laura Tarzia

THE UNIVERSITY OF MELBOURNE
Sexual Assault Services Victoria
Women with disabilities victoria empowering women
family safety victoria
VICTORIA State Government

Acknowledgements

Dedication

We dedicate this research to the survivors, practitioners and advocates who shared their experiences and expertise with us in the hope of better recovery journeys for others. We acknowledge the multifaceted harms of sexual violence and recognise that to address it, it is crucial to listen to the voices of survivors.

Acknowledgement of Country

We acknowledge that much of this research took place on the unceded traditional lands of the Wurundjeri People of the Kulin Nation. We pay our respects to Aboriginal and Torres Strait Islander Elders past, present and emerging and acknowledge the ongoing harm of transgenerational violence, trauma and racism. We are committed to standing and working with First Nations peoples.

Acknowledgment of Project Advisory Group and other advisors

We gratefully acknowledge our Project Advisory Group: Sabin Fernbacher, Dagmar Jenkins, Nicole Lee, Donovan Pill and Jasmine. Thank you for so generously sharing your time, knowledge and guidance; you strengthened this research considerably. We would also like to thank people and organisations who advised us on accessible communication and recruitment, including Inclusion Australia, Office of the Public Advocate, Sophie Yates, Georgina Sutherland, Chris Jennings, Marianna Codognotto, and Kim Savige and Rachael Walters from Gippsland CASA.

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List of Acroymns

ACT	Acceptance and Commitment Therapy
AOD	Alcohol and Other Drug
AT	Assertiveness Training
BPD	Borderline Personality Disorder
CASA	Centre Against Sexual Assault
CBT	Cognitive Behavioral Therapy
CPT	Cognitive Processing Therapy
CRI	Cognitive Restructuring and Imagery Modification
CSA	Childhood Sexual Abuse
DBT	Dialectical Behaviour Therapy
DFV	Domestic and Family Violence
EMDR	Eye Movement Desensitization and Reprocessing Therapy
FG	Focus Group
FME	Forensic Medical Examination
FV	Family Violence
FVIO	Family Violence Intervention Order
GCAT	Group Cognitive Analytic Therapy
GP	General Practitioner
ICA	Inductive Content Analysis
ID	Intellectual Disability
IPT	Interpersonal Psychotherapy
ITP	Independent Third Person
KI	Key Informant
PAG	Project Advisory Group
PE	Prolonged Exposure
PTSD	Posttraumatic Stress Disorder
RAMP	Risk Assessment and Management Panel

RCT	Randomised Control Trial
The REACH Project	The Recovery And Care to promote Healing for Victorian survivors of sexual violence Project
SASVic	Sexual Assault Services Victoria
SECASA	South East Centre Against Sexual Assault
SGT	Systematic Group Therapy
SOCIT	Sexual Offences and Child Abuse Investigation Team
SSAS	Specialist Sexual Assault Services
SIT	Stress Inoculation Therapy
SV	Sexual Violence
TF	Trauma-Focused
TF-CBT	Trauma-Focused Cognitive Behavioral Therapy
TOD	The Orange Door
TSY	Trauma-Sensitive Yoga
UNSW	University of New South Wales
VOCAT	Victims of Crime Assistance Tribunal
V-S	Victim-Survivors
WDV	Women with Disabilities Victoria

Definitions and concepts

A note on the language used in this report - While the authors have made every effort to ensure that the language, definitions and concepts used in this report are current, inclusive and concise, we acknowledge that language related to gender and violence is constantly evolving and often contested.

Ableism - a system of beliefs, processes and practices that privilege people without disabilities, and disadvantage and exclude people with disabilities (Frohmader & Sands, 2015). These beliefs include dominant ideas and expectations about typical abilities of people's bodies and minds. Society applies these standards to determine who is worthy, able, or 'normal', and discriminates against and disadvantages people who are not in line with this imaginary standard (Our Watch & Women with Disabilities Victoria, 2022).

Communication disability / little or no speech – Terms describing the ongoing experience of barriers to being understood and possibly also to understanding others. Communication disabilities maybe associated with cognitive and/or acquired disabilities, such as cerebral palsy, autism or acquired brain injury (Communication Hub 2024; Frohmader & Sands, 2015). The impacts of communication may be significant for service access and may be mitigated by support, including technology or sign language (Communication Hub, 2024).

Cognitive disabilities - A broad term that encompasses all impairments that may affect cognition such as processing and memory. The term may refer to people with a range of disabilities including intellectual disabilities, autism, acquired brain injuries, dementia, multiple sclerosis, and long-term, significant mental health issues. People with these impairments do not always experience an effect on cognition, and support needs vary between individuals (Frohmader & Sands, 2015; Our Watch & Women with Disabilities Victoria, 2022).

Disability - There is no single definition or model of disability. The UN Convention on the Rights of Persons with Disabilities defines disability as long-term physical, cognitive, sensory and psychosocial impairment, including chronic illness, which in interaction with various barriers hinder an individual's full and effective participation in society on an equal basis with others (Australian Human Rights Commission, 2024; Frohmader & Sands, 2015). We use the terms 'people with disabilities' and 'disabled people' interchangeably, recognising that there is not community consensus on preferred language (Our Watch & Women with Disabilities Victoria, 2022).

Disability discrimination - Disability discrimination occurs when a person with disability is treated less favourably than a person without disability in circumstances that are not materially different (Communication Hub, 2024).

Disabled Persons Organisation - A Disabled People's Organisation (DPO) is an organisation that is controlled by people with disabilities (at least 51% people with disabilities at the board and membership levels). A DPO is different to other disability sector organisations because it is 'for us, by us' (People With Disability Australia, 2024).

Easy Read (documents) – A style of making written information easier to understand. Easy Read documents usually combine short, jargon-free sentences with simple, clear images to help explain the content (Frohmader & Sands, 2015; Our Watch & Women with Disabilities Victoria 2022). Easy Read is different to Easy English (which has less words and is more image based than Easy Read) (Communication Hub, 2024) and Plain English or Plain Language (which is text that avoids obscurity, inflated vocabulary and convoluted sentence construction) (Disability Support Guide, 2022; Jenkins, 2018).

Recovery and healing - terms used to describe the process of feeling better after SV. Within this report, the terms are used interchangeably to reflect how they are applied in the literature and how they are used by survivors.

Sexual violence (SV) - acts of a sexual nature perpetrated without consent using force, intimidation or coercion towards adults or children (Cox, 2015; World Health Organization, 2012). SV encompasses rape, attempted rape and other forced sexual activity by a date, partner, acquaintance, or stranger (Cox, 2015). While men and boys experience SV, it is most frequently perpetrated against women and girls by men known to them (Australian Institute of Health and Welfare, 2020).

Specialist sexual assault services (SSAS) - refers to approximately 18 organisations in Victoria whose core work is providing therapeutic support to survivors of sexual violence in Victoria, funded by the state government. Historically, most of these services have been referred to as Centres Against Sexual Assault (CASAs). SSASs is the more inclusive term used by the peak organisation to include organisations that are not called CASAs but do receive SSAS funding (e.g. the Australian Childhood Foundation, Gatehouse Centre, and Centre Against Violence).

Survivor - People who have experienced sexual assault are often referred to as victim-survivors. Throughout this report we employ the shortened term 'survivor', to indicate the courage, strength, and resilience of those who live with the impacts of SV. We acknowledge that not all people who experience SV use this term to describe themselves.

Trauma and related terms (including PTSD) - Trauma is a complex set of psychological, somatic and social reactions to threats, violence or other distressing event/s. Feelings after trauma may include guilt and shame, persistent fear, distressing reliving of the event, anxiety, hopelessness, difficulty concentrating, dissociation and disconnection from others (Herman, 1992). Exposure to adverse events that may lead to a trauma response can also lead to disability or other long-term health conditions (Australian Institute of Health and Welfare, 2024). Posttraumatic stress disorder (PTSD) describes a cluster of psychological signs/symptoms including intrusive memories and a sense of ongoing threat, avoidance, nightmares, and other sleep disturbances (American Psychiatric Association, 2022). Complex PTSD or ‘complex trauma’ are terms used to describe a syndrome of responses to multiple or prolonged experiences of trauma over time, such as childhood sexual abuse (CSA) (Chen et al., 2018; Melton et al., 2020) (International Society for Traumatic Stress Studies, 2019).

Executive summary

> '[Knowing] that things that happen to you don't define how… other people treat you. That even though you hurt … you're making sure that other people are not hurting … I think that's what recovery means to me.'
>
> - **Survivor 18**

Project overview

The REACH (REcovery And Care to promote Healing for Victorian survivors of sexual violence) project aimed to understand:

1. what recovery means for adult survivors of SV, including survivors with disabilities
2. effective approaches available internationally and in Victoria for supporting recovery for adult survivors
3. enablers, opportunities and barriers to maximising the effectiveness of therapeutic approaches to recovery in Victoria
4. guidelines and tools needed to support Victorian service providers in a range of sectors to deliver effective therapeutic responses to support recovery from SV.

Methods

Our research was based on three primary sources of data: (1) a synthesis of reviews of the international literature on effective recovery responses for adult survivors; (2) in-depth interviews with 25 survivors of SV about their recovery experiences and what had assisted them; and (3) focus groups and interviews with 27 practitioners and key informants from a range of Victorian services and sectors, focused on the enablers and barriers to the delivery of effective interventions. Our interviews included survivors with disabilities and a range of professionals with significant experience supporting survivors with disabilities, to help inform accessible recovery approaches in Victoria. Ethics approval for the study was granted by the University of Melbourne (Reference: 2022-25080-35029-3).

Findings

The meaning of recovery and responses that are effective (answering research questions 1 & 2)

Survivors identified that recovery after SV is an ongoing journey that encompasses gaining safety and a sense of personal stability, as well as relational and social repair.

In relation to effective therapeutic responses, the evidence from across our data sources suggested a need for service providers to:

- develop an ongoing, trusted relationship with the survivor
- offer a social framework to help the survivor make sense of the harm they have experienced
- use accessible language and methods of communication
- take a collaborative and phased approach involving (1) relationship, safety and skill-building, (2) remembering and processing (for survivors who want to do this work), and (3) integration and (re)connection with other aspects of the survivor's life
- support the survivor to address the interconnected impacts of SV in a holistic way – including by offering a range of modalities (such as arts or mind-body programs, and peer and community interventions) and by collaborating with other practitioners with specific expertise (such as expertise in addressing alcohol and other drug use, mental health or family violence).

Another key finding was that whenever survivors engaged with the service or legal system, they needed service providers to convey that they recognised the significant harm and injustice of SV. Survivors suggested that minimising or dismissive responses from service providers seriously undermined recovery.

The findings made clear that recovery is facilitated when survivors can gain redress, accountability and justice. Survivors were not necessarily only seeking prosecution through the criminal justice system, but also valued redress from institutions and other processes (such as financial compensation and access to workplace leave) that signalled community recognition of harm. Also crucial to healing was rebuilding the survivor's relationships and sense of belonging in the community. Our study suggested peer support and opportunities to have a voice in advocating for social change could be transformative, particularly in helping to shift the isolation, shame and stigma associated with SV.

Enablers, opportunities and barriers (answering research questions 3 & 4)

Survivor and practitioner voices highlighted that the service system in Victoria had significant strengths, including a specialist SV service sector that recognised the social context of SV and provided survivors with individual support as well as opportunities to engage in some peer-based and advocacy interventions. However, major problems also prevented the service system from delivering effective responses when survivors were ready and for the duration they wanted.

Our findings indicated an opportunity for specialist sexual assault services (SSAS) to lead the development of a whole-of-system, survivor-informed framework for SV recovery to promote consistent, collaborative and coordinated support with expert input from relevant specialist sectors. Another implication that arose from the findings was the opportunity for the Victorian Government in partnership with service providers to develop and implement a tiered workforce strategy including professional development, research and evaluation, and knowledge translation capacity building.

A significant concern among participants was that there is not equity of access to support for Victorian survivors. Ableist and inaccessible responses to survivors with disabilities were endemic across support services and the legal system. Individual disability advocates have made sustained efforts to realise specialist roles and services to improve service accessibility, and a small number of SSAS deliver initiatives such as sexual assault counselling services tailored for people with cognitive and communication disabilities, but much more is required. Additional systemic problems included scant evidence about relevant or helpful approaches for First Nations survivors and survivors from migrant and refugee backgrounds, as well as other disenfranchised communities. Key implications arising from these findings include the potential to develop a rights-based access strategy to improve the sexual assault sector's responses to all survivors, with a focus on survivors with disabilities. There is also a pressing need for further research into effective healing approaches for First Nations survivors and those from migrant and refugee backgrounds.

Our findings underscore an urgent need to increase the accessibility, relevance and range of cost-free recovery interventions and modalities. Additionally, to increase the availability of recovery resources and information about effective responses, our findings point to the need for centralised online information and guidelines (potentially hosted by SSAS). This resource should include safety and stabilisation resources and web-based workshops, and a menu of available services, programs and peer group support options. Resources should include a guide for friends, family and community members, as our findings highlight that survivors' social networks can play a crucial role in providing support after SV.

A full list of detailed recommendations from the research can be found in Chapter 6.

Chapter 1: Introduction & background

‘What everyone just wants to do is healing. To achieve that, it’s not just on women … it’s on the system and educating men as well.’ - **Survivor 21**

Sexual violence (SV) is a common and traumatic experience. An estimated 2.8 million adult Australians have experienced SV since the age of 15 (Australian Bureau of Statistics, 2023). Some people face disproportionately high rates of SV, particularly those who experience social discrimination and disadvantage based on their gender, age, race, culture, ability, socioeconomic status or sexuality (Australian Institute of Health and Welfare, 2020). Women are significantly more likely to be subjected to SV than men. National data suggests that 22% of Australian women have experienced sexual assault since the age of 15 years, compared with 6.1% of men (Australian Bureau of Statistics, 2023). SV against children and young people is also common, with an estimated 11% of Australian women and 3.6% of men having been subjected to sexual abuse in childhood (Australian Bureau of Statistics, 2023). Other groups at high risk of SV include women and children from First Nations communities, women from culturally diverse migrant or refugee backgrounds, LGBTIQA+ people and sex workers (Australian Institute of Health and Welfare, 2024). Disabled people, and particularly disabled women and girls, are consistently over-represented among survivors of SV (Australian Institute of Health and Welfare, 2020). For example, a meta-analysis of international studies about SV against people with disabilities found that they were more than twice as likely to have been sexually victimised compared to others in the community (Mailhot Amborski et al., 2022). Disabled women are also more likely than other women to have experienced multiple incidents of SV from different perpetrators (Cox, 2015). People with cognitive impairments are particularly at risk of being targeted by perpetrators of SV (Royal Commission into Violence, 2023).

Although SV is common, its impacts on health and wellbeing remain under-recognised by the Australian community (Coumarelos et al., 2023). SV has significant consequences for victim-survivors (hereafter referred to as ‘survivors’), such as psychological trauma (including post-traumatic stress disorder [PTSD] and other mental health impacts), physical injury, disability, chronic illness, reduced employment and education, and increased mortality (Basile et al., 2021; Sawyer et al., 2016; World Health Organization 2019). Negative health consequences are not only associated with rape where there is also physical violence, but also in connection with more subtle forms of SV such as sexual coercion (Tarzia et al., 2017). Survivors often report profound feelings of shame and self-blame, describing the experience of SV as deeply dehumanising and traumatic (Tarzia, 2020) and damaging to their sense of identity (Tarzia et al., 2024). Some survivors describe a sense of disempowerment and disconnection from others as a defining characteristic of life after SV (Herman, 1992). Some of the coping mechanisms used by survivors carry their own health burden, including alcohol and substance dependence, self-harm and suicidal ideation (Cutajar et al., 2010).

Healing from the negative impacts of SV can be a lengthy, often lifelong journey (Gameon et al., 2021; Herman, 1992; Sinko et al., 2020). Over three decades, conceptual literature and experiential studies with survivors have indicated some core dimensions of recovery and healing: feeling safe (Draucker et al., 2009; Herman, 1992; Jeong & Cha, 2019), including gaining a sense of psychological stability (Jeong & Cha, 2019); remembering, processing and making sense of what happened (Draucker et al., 2009; Herman, 1992; Jeong & Cha, 2019; Sinko et al., 2022); grieving losses experienced as a result of SV (Herman, 1992; Sinko et al., 2022); (re)connecting with others and the social world (Draucker et al., 2009; Herman, 1992; Jeong & Cha, 2019; Sinko et al., 2022); rebuilding a sense of identity and purpose (Draucker et al., 2009; Herman, 1992; Sinko et al., 2022); and gaining a sense of hope and power (Chouliara et al., 2014; Gameon et al., 2021; Sinko et al., 2022). Collectively, the available studies highlight that for survivors, recovery encompasses much more than alleviating symptoms of poor mental health (Draucker et al., 2009; Herman, 1992; Sinko et al., 2022).

In Victoria, a range of professionals, services and systems play a role in supporting the recovery of SV survivors, including mental health services, health practitioners, family violence (FV) services, housing and welfare services, alcohol and other drug services and the criminal justice system. Within this service landscape, the therapeutic responses and programs offered include individual psychosocial interventions (i.e. supportive counselling and advocacy), group-based approaches and various therapeutic modalities, such as cognitive and behavioural therapies, creative arts and mind-body interventions. A central pillar of the Victorian service response is the specialised sexual assault sector. The first rape crisis centres were established by Women Against Rape in Collingwood in 1974 and the Geelong Rape Crisis Centre in 1978, followed by the first funded sexual assault service in 1979. In the following decade, funded specialist sexual assault services (SSAS) were established across the state, initially for women and children and expanded to men in the 1990s. Today, there are 18 SSAS, represented by their peak body, Sexual Assault Services Victoria (SASVic). They are primarily funded by the Victorian state government. Services for survivors, including of childhood sexual abuse (CSA), are commonly called Centres Against Sexual Assault (CASAs); however, some services have other names. SSAS typically operate from a trauma-informed feminist counselling model that connects individual experiences of SV to a wider context of gender-based inequality (CASA Forum, 2014; Egan, 2019).

There is a dearth of evidence available on whether the services, systems and therapies that are currently available in Victoria meet the recovery needs of survivors of SV. Firstly, there is a lack of knowledge about how survivors conceptualise recovery and what their needs are. A recent study asked adult survivors of SV about the top 10 topics they wanted researchers to investigate (Filippo et al., 2023). The number one topic was survivors' perspectives of what recovery involves, what outcomes they value and what factors can promote recovery (Filippo et al., 2023). However, to date, much of the research with survivors about recovery and what it involves has been undertaken outside Australia (Draucker et al., 2009; Sinko et al., 2022). Given that culture and context shape perceptions of recovery (Sinko et al., 2022), the findings may not reflect how Australian survivors of SV understand the recovery process. Secondly, greater understanding is needed around effective responses for supporting recovery in the Victorian community context. The international literature identifies a range of recovery interventions, including some that are supported by robust evidence of their efficacy (Brown et al., 2022; Heard & Walsh, 2023; O'Doherty et al., 2023). However, the research on therapeutic responses for improved wellbeing has not been synthesised in an accessible way for Victorian services. Additionally, many studies have used quantitative evidence alone (such as measurements of reductions in PTSD symptoms) to determine intervention efficacy (Sinko et al., 2022). This evidence does not tell us what survivors themselves consider to be "effective", and how they experience interventions, services and systems (Parcesepe et al., 2015; Regehr et al., 2013; Sousa-Gomes et al., 2022). Most studies of intervention efficacy have been conducted in the United States, predominantly with white, heterosexual middle-class women and thus may not be relevant for Victorian survivors of SV, particularly those from marginalised groups (Coates et al., 2022; O'Doherty et al., 2023). To improve Victorian responses, we need both an understanding of the international research about effective recovery interventions and knowledge of how survivors in Victoria with varying characteristics, backgrounds and experiences perceive recovery and the types of support they find helpful. A further major factor that impedes the delivery of optimal responses is a lack of research on the challenges Victorian service providers face in delivering effective recovery services, as well as the opportunities for building capacity and supporting best practice.

In seeking to understand effective responses to SV recovery, it is important to include a focus on recovery for survivors with disabilities due to the disproportionate levels of violence they experience, and the support system access barriers they face. SV services, like all other service systems, have disability-access barriers. Individual disability advocates have made sustained efforts to realise specialist roles and services to improve service accessibility. A small number of SSAS have successfully sourced funding for initiatives such as sexual assault counselling tailored for people with cognitive and communication impairments, a disability peer-led program on disability rights, and one-off community partnership projects. In 2021, Family Safety Victoria funded a part-time disability inclusion role at SASVic and contracted several disability FV practice leaders to build inclusive practice capacity. These programs are available sporadically across the state, reaching only a fraction of disabled survivors. Maintaining their funding takes a substantial commitment from program champions.

Outside of the specialist sexual assault sector, survivors may come into contact with disability advocacy services. These are available in some parts of Victoria and receive state and/or federal funding. They provide advocacy for people who meet the criteria particular to each service's funding model; i.e. people with intellectual disability, people with high-priority justice advocacy requirements or disabled people in a specific geographic catchment. Like SSAS, advocacy services have waiting lists and are inundated with requests for assistance with accessing the National Disability Insurance Scheme (an Australian funding policy designed to support people with a disability that affects their participation in everyday activities). Advocates often have no training or supervision to work with survivors of SV, yet they can play a critical role in supporting them. Understanding the perspectives and needs of survivors with disabilities and their support workers is crucial to effective, accessible and inclusive service system responses to recovery.

Aim and research questions

The REACH (REcovery and Care to promote Healing for Victorian survivors of sexual violence) project was designed to address the research gaps canvassed so far in this chapter. This collaborative project between the University of Melbourne, Sexual Assault Services Victoria and Women with Disabilities Victoria aimed to support Victorian services to deliver effective therapeutic approaches that promote recovery and healing for the range of adult survivors of SV.

The research question(s) that guided this study were:

1. What is recovery and what does it encompass for adult survivors of SV?
2. What approaches are effective in supporting recovery for adult survivors who have experienced SV?
3. What are the enablers, opportunities and barriers to maximising the effectiveness of therapeutic approaches to recovery in Victoria?
4. What guidelines and tools will support Victorian service providers in a range of sectors to deliver and evaluate effective therapeutic responses to support recovery from SV?

To answer our questions, we undertook:

- a synthesis of reviews of the international literature on effective recovery responses

- interviews with 25 survivors of SV
- focus groups and key informant interviews with 27 service providers and advocates from SSAS and other services.

To help inform accessible recovery approaches in Victoria, our interviews included disabled survivors and a range of professionals with significant experience supporting survivors with disabilities.

Positioning the research team

Conducting reflexive and truly collaborative research was important to us. Our approach involved reflecting upon and embracing the values, skills, perspectives and experiences that we brought to every stage of the research process (Braun & Clarke, 2020). Part of a reflexive approach is to acknowledge how our assumptions and backgrounds may have informed the study. All authors share an intersectional feminist understanding that gender-based inequalities of power are key contributors to SV, intersecting with other individual, interpersonal, social and political factors, including discrimination and disempowerment based on race, culture, age, ability, class and sexual or gender identity (Heise, 1998; Randall, 2010). We believe that accessible and effective support after SV is a basic human right and consider that both the SSAS and the wider service system have a critical role in supporting Victorian survivors to heal from the harm of SV perpetrated against them.

Some of the authors have lived experience of SV and of disability. Most bring more than a decade of research (LT, MM, EM, AW, KM, JH), advocacy (JH, AW, KM, PTM, EM, MM) and/or clinical (EM, MM) expertise as counsellor/advocates in SV services. Three work for the Victorian sexual assault services peak body (AW, KM, PTM). The researchers have backgrounds in policy and law reform (AW, JH, KM), social work (EM, MM), sociology (LT), psychology (EM) and public health (PTM). In developing our analysis of findings, we critically reflected on issues of power, ableist assumptions and divergent perspectives between researchers. The research team attempted to support one another in acknowledgement of the potential for vicarious impacts when engaged in SV research (McCann & Pearlman, 1990).

This introductory chapter has briefly canvassed the field of research in which this study seeks to contribute new knowledge about what recovery means and what responses are effective for adult survivors in Victoria. The next chapter presents the methodology applied to answer the research questions.

Chapter 2: Methodology

Introduction

Our methods were selected because they provided a triangulated way of answering the research questions, with survivor voices at the centre. This chapter includes our approach to engagement and recruitment of people with lived experience of SV, ethical considerations, the data collection phase and a description of how we synthesised the data to answer our research questions.

Project Advisory Group

We invited people with relevant expertise to join a Project Advisory Group (PAG) in a voluntary capacity. Membership included people with lived experience of SV and disability who had professional research experience. Our PAG also included specialist sexual assault practitioners who had expertise working with men, people with disabilities and/or mental health issues, and people with migrant and refugee backgrounds. Six PAG members met with the project team several times during the project and we occasionally consulted members outside of meetings for guidance on specific topics.

Research phases

The REACH Project comprised three phases: (1) a synthesis of international review literature about the efficacy of therapeutic interventions to support recovery and healing; (2) interviews with adult survivors of SV; (3) focus groups and key informant interviews with cross-sector practitioners and disability advocates.

Phase 1: Synthesis of reviews

To answer research question two about the efficacy of recovery approaches, we conducted a synthesis of the international review literature. Guiding this synthesis was the research question: ‘What is the effectiveness of approaches to support healing after SV for adult survivors?’. We undertook a synthesis of reviews instead of a literature review or systematic review because of the extensive existing systematic and other review literature about interventions to support survivors of SV. The purpose of our synthesis was to provide an accessible summary of the review evidence (Pollock et al., 2022).

Our focus was on reviewing the evidence on the effectiveness of therapeutic approaches designed to improve survivors’ long-term wellbeing and functioning after SV, rather than on crisis interventions that aim to respond to the immediate aftermath of SV (see Coates et al. (2022) for a review of SV crisis response interventions). The terms used in our search of the research databases related to three concepts: ‘sexual violence’ and ‘intervention’ and ‘review’. We brainstormed a list of other words and phrases with similar meanings to the three concepts and tested them on the databases. Literature searching was conducted in May 2023 across multiple databases (MedLine, PsychInfo, Cochrane Database of Systematic Reviews, CINAHL, ASSIA, and SocINDEX) (see the Prisma flow chart in Appendix 1).

We included reviews if they used qualitative, quantitative or mixed methods and we included systematic, narrative, scoping, and rapid evidence reviews, meta-analyses and meta-syntheses. We also included review papers if the majority of participants were adult survivors of SV or where the analysis and results were clearly separated for adult SV survivors (Table 1). For example, we included a study about complex trauma if the study findings about adult survivors of child sexual abuse were separated from the study findings about survivors of other types of complex or repeat trauma. In the case where we included a review study comprising less than half survivors of SV as study participants, we presented only the analysis and results pertaining to survivors of SV.

Table 1. Eligibility criteria for synthesis of reviews

Inclusion criteria	Exclusion criteria
• Psychological, psychosocial, mind-body, or pharmacotherapy approaches/interventions designed to promote recovery after SV • Individual or group interventions • Majority (≥50%) of study participants were adults who experienced SV in childhood or adulthood, or the findings about adult survivors of SV were separated • Systematic or other review of literature • Survivors of any gender or sexuality • Studies published after 2010 (given the amount of research and developments in the therapeutic field since then)	• Studies about SV with child participants • Single studies • Studies about sexual harassment • Unpublished reviews (eg. PhD dissertations) • Ongoing studies (i.e. where there was a protocol paper only) • Studies focused on crisis care response (less than 3 months post SV) • Studies focused on non-therapeutic interventions, (i.e. prevention, legal, healthcare responses) • Studies written in language other than English (because of project resource constraints)

Based on our criteria for inclusion/exclusion, we screened the titles and abstracts of all studies in Covidence, a web-based software platform designed to manage the production of systematic and other literature reviews (Covidence, 2023). We identified and managed duplicate studies in Covidence and retrieved and read the full text of all potentially relevant reviews. Any discrepancies we identified during either stage were resolved through team discussion. A total of 25 studies were included. We extracted data on the participants, interventions and outcomes of included studies into a Covidence form (Covidence, 2023). Due to the heterogeneity of the reviews which prevented quantitative summary measures, we conducted a qualitative narrative summary and synthesis of the review findings. The analysis was influenced by guidance in the Cochrane Handbook for Systematic Reviews (Pollock et al., 2022). The synthesis of reviews was led by author EM.

Phase 2: Survivor interviews

To answer research questions one and two about what recovery encompasses for survivors and what approaches are effective in supporting recovery, we conducted confidential in-depth interviews with adult survivors of SV. We developed recruitment information in consultation with members of our PAG and other researchers with experience designing accessible recruitment materials for people with disabilities. The aim of all survivor communication materials was to relay accurate and accessible project information to facilitate informed consent. Recruitment resources included plain language information, an Easy Read information sheet and a captioned video about the project. We advertised the study via social media, and SASVic provided the recruitment material to its members and asked them to share on to service users. The project information and advertisements are available in Appendices 2, 3 and 4.

Of the 25 survivor participants we interviewed, 13 said they heard about the project through a counsellor or service they used and 12 via social media. The interviews were held from March – July 2023, in-person at the University of Melbourne (6 participants), via video using Zoom video conferencing software (Zoom Video Communications Inc, 2016) (13 participants) and on the phone (6 participants). The duration of interviews ranged between 36-77 minutes. The interviews were informal and exploratory to allow participants to share their experiences and understandings of recovering from SV in their own ways (Guest et al., 2013). The interview questions were developed in consultation with members of the PAG with lived experience of SV. The interviews were undertaken by author MM who has extensive experience in ethical and safe interviewing practice in SV. The interview questions asked about the impacts of SV, what recovery meant, what survivors had tried to help their recovery and the support they needed (Appendix 5). We endeavoured to use accessible language that connected with participants and avoided conceptual or unfamiliar words (for example, we used the words ‘what helped you to feel better’ rather than ‘recover’). Interviews were audio recorded and professionally and confidentially transcribed by Pacific Transcription Services (Pacific Transcription, 2024).

To analyse the interview transcripts, we used a reflexive thematic approach (Braun & Clarke, 2006). This was an organic and iterative process; MM inductively coded interview transcripts, assisted by the software NVivo 12 (QSR International Pty Ltd, 2018, and shared preliminary themes with a small working group (KM, JH and EM) who had read the de-identified transcripts. The working group met several times to discuss and refine preliminary themes, while reflecting on the influence of their individual assumptions in theme development. Preliminary themes were refined in discussion with the entire REACH project team and by returning to the transcripts to check whether themes reflected patterns of meaning in the data (Braun & Clarke, 2006).

Survivor participants: Demographic details

Of the 25 survivor interview participants, most (18 participants) identified as female, with four identifying as male and three as another gender. Participants ranged in age between 18-64 years; almost two-thirds were over 30 years. Most (21) lived in metropolitan Melbourne. For 22 participants their first language was English, and 20 were born in Australia, with the remaining five born in countries in Asia, South America and Europe. One participant identified as Aboriginal or Torres Strait Islander. Eighteen participants said they had a disability or long-term illness affecting their daily life. We did not ask participants to provide details about their disability/illness, though several noted that it had occurred as a result of SV. At least three participants had a cognitive or intellectual disability and found out about the project via our targeted recruitment campaign. Almost two thirds of the participants had completed a post-secondary school education. Twenty were employed and five were unemployed or retired. Over a third of participants received a pension or benefit. In their interviews, 15 participants indicated that they were sexually assaulted as an adolescent or early adult, 10 as a child and four as an adult. In the majority of cases (21 participants), the perpetrator was known to the survivor as a family member, carer, friend or partner. Further demographic details about survivor participants are available in Appendix 6.

Phase 3: Practitioner/key informant focus groups and interviews

To answer research questions two, three and four about effective approaches to supporting recovery, as well as the enablers, opportunities and barriers to maximising the effectives of approaches in Victoria, and guidelines and tools to support service providers, we collected data from 27 practitioners through two methods: focus groups and key informant interviews. For the focus groups, SASVic (authors AW and PTM) recruited practitioners using a compiled list of 80 potential participants who worked across the Victorian service system. SASVic contacted the potential participants and invited them to attend one of three focus group sessions. Potential participants who expressed interest were emailed a consent form and invited to attend a scheduled focus group session.

Three focus groups were conducted in May 2023, facilitated by authors AW, MM and PTM. A total of 17 practitioners participated. The first focus group consisted solely of SSAS practitioners, the second comprised participants from the wider social service system and the third included a combination of those from the SSAS sector and the wider service system. Eight practitioners came from SSAS, three were from the FV sector, two from mental health and one apiece from a LGBTIQA+ health service, a culturally and linguistically diverse women's service, a community legal service and a community health service. The focus groups were 90 minutes long and held online using Zoom video conferencing with recording. The focus groups were semi-structured with facilitators asking questions to prompt discussion on the meaning of recovery for survivors of SV, practitioners' experiences of delivering services to support recovery, the effectiveness of the overall service system in supporting recovery for adult survivors of SV, the barriers and enablers for effective responses in Victoria, promising or innovative approaches, and the information and tools that would promote better practice (Appendix 5).

Data was also collected through 10 key informant interviews. The purpose of these interviews was to supplement the focus group data by seeking the perspectives of practitioners and advocates with relevant expertise. We sought to recruit several key informants who work in various ways with disabled people (including disability rights advocates, disability FV practice leaders and workers who support self-advocacy groups), in recognition of the rarity and importance of their roles in understanding the experiences of SV survivors with disabilities. Authors JH, AW and PTM led the recruitment of key informant participants.

Participants in the key informant interviews consisted of four FV and disability specialist workers, four individual disability advocacy specialist workers and two mental health specialist workers. The key informant interviews were held via Zoom video software (Zoom Video Communications Inc, 2016) and ranged from 34-65 minutes in length. The interviews were semi-structured and facilitated by JH and MM, using the same questions as asked in the practitioner focus groups (Appendix 5).

The focus groups and key informant interviews were transcribed verbatim by PTM. Authors PTM and AW analysed the transcripts using inductive content analysis (ICA) (Vears & Gillam, 2022). We chose ICA as it is qualitative method useful for small-scale research on practice or policy issues and it proved an accessible method of analysis. In ICA, the analysis is built inductively based on data in the transcripts, with the aim of understanding the meaning of content relevant to the research questions. This involved coding relevant transcript sections in a spreadsheet to develop preliminary themes that reflected key categories of content. Coding and initial categorising was undertaken by PTM and AW and then shared with the practitioner data working group (AW, PTM, MM and JH) to develop themes. Preliminary themes were then presented to all the authors for discussion and final refinement.

Finally, all project authors contributed to drafting and editing the final report.

Participant safety and wellbeing

The interviews followed ethical guidelines for research with survivors of SV and other forms of violence (Campbell et al., 2019; World Health Organization 2007). While the interviews did not include questions about experiences of SV, we anticipated that participants may feel strong emotions as they reflected upon the impacts and aftermath of SV. Drawing on the principles of trauma and violence-informed research, participants were supportively listened to, provided time to pause or stop an interview, and options for further support were discussed as the interview closed (Campbell et al., 2019). Wellbeing, sensitivity and confidentiality were also key considerations in the practitioner focus groups and interviews (Campbell et al., 2019). Work was done to inform the ethics approval process about access and representation of people with disabilities in research (JH, MM). Ethics approval was granted by the University of Melbourne Ethics Committee (Reference: 2022-25080-35029-3).

Summary

To help answer our research questions, we undertook interviews with 25 adult survivors of SV, three focus groups with 17 practitioners, and interviews with ten key informants. We conducted a synthesis of literature reviews about the efficacy of therapeutic interventions after SV. The interviews and focus groups were thematically analysed, while a descriptive narrative analysis of literature review studies was conducted. The next two chapters of this report present the findings, beginning with our synthesis of the review literature.

Chapter 3: Findings from a synthesis of reviews on the efficacy of recovery interventions after SV

Introduction

The multifaceted harms of SV have led to the emergence of a variety of therapeutic interventions to support survivors to feel better. Beyond just improvements in mental health, survivors want interventions that positively impact upon their confidence, sense of self, physical health and relationships (Draucker et al., 2009; Herman, 1992; Sinko et al., 2022). In the last five years alone, a plethora of systematic literature reviews, meta-analyses and meta-syntheses have been published investigating the therapeutic efficacy of interventions to promote the recovery of survivors after SV (Brown et al., 2022; Heard & Walsh, 2023; O'Doherty et al., 2023). The purpose of this chapter is to narratively synthesise findings from the review literature about the effectiveness of individual and group approaches to support recovery and healing for adult survivors of SV. Within this chapter, the qualitative review evidence about how survivors experience interventions and the characteristics that promote healing is synthesised, followed by the quantitative evidence for specific approaches and modalities.

The scope of this review and included approaches

Our synthesis of reviews (Pollock et al., 2022) encompasses 588 studies about the efficacy of recovery-orientated therapeutic interventions with adult survivors who have experienced child sexual abuse and/or SV in adulthood. Therapeutic interventions (also called psychosocial approaches [Brown et al., 2022; O'Doherty et al., 2023]) are those that aim to improve physical, psychological and social wellbeing. In our review, intervention efficacy is examined in several ways, including in terms of discrete therapeutic modalities (i.e. talking therapies/mind-body approaches), delivery format (i.e. individual/group) and the therapeutic characteristics that underpin a range of approaches (i.e. setting/therapeutic relationship/duration).

For our synthesis of the review literature, we classified therapeutic interventions into two types:

Present-focused psychosocial interventions: also called ‘supportive counselling’ or ‘psychotherapy’, these are approaches centred on improving a survivor’s day-to-day functioning. This might include establishing safety, strengthening skills and strategies to manage trauma impacts, building positive connections through the therapeutic relationship, psychoeducation, goal setting, advocacy and strengthening a survivor’s connections with their social world

(Belsher et al., 2019; Brown et al., 2022). Present-focused interventions do not involve structured or guided remembering or memory processing of past traumatic events (Coates et al., 2022).

Trauma-focused (also called 'past-focused') psychosocial interventions: therapeutic (usually cognitive or behavioural) approaches that aim to alleviate trauma impacts, decrease distress when recalling disturbing memories and repair negative and unhelpful self-beliefs (NICE, 2018). Trauma-focused interventions may overlap with present-focused interventions in much of their content, but a core feature of trauma-focused interventions is guided remembering of traumatic experiences. Since the early theoretical work of Herman (1992), 'remembering' has been seen as a crucial part of trauma recovery. The rationale for focusing on traumatic experiences is based on the premise that the intrusive memories and ongoing sense of threat that many survivors feel after trauma suggests that their trauma narrative may have been maladaptively or incompletely encoded in their memory (Neelakantan et al., 2019). Cognitive Behavioural Therapy (CBT), including Trauma-Focused CBT (TF-CBT), Eye Movement Desensitization and Reprocessing therapy (EMDR), Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT) are all examples of trauma-focused psychosocial interventions. The aim of most trauma-focused approaches is to facilitate a process of careful and gradual remembering, once the survivor feels safe to do so, that allows the survivor to 'process' (i.e., contextualise, elaborate and integrate) traumatic memories into an adaptive narrative about their identity and relationship to the world (Burmester, 2019; O'Doherty et al., 2023). This allows overwhelming feelings and negative beliefs to be examined, and the possibility for new, presently-held information (for example, that the survivor is safe *now*) to be integrated with the memory (Burmester, 2019; O'Doherty et al., 2023). Trauma-focused interventions often incorporate psychoeducation and other psychosocial interventions (e.g., deep breathing, relaxation and grounding strategies) to assist a survivor to manage trauma reminders and to address other distressing and disruptive behaviours that are linked to the trauma or attempts to cope with the trauma (Neelakantan et al., 2019; O'Doherty et al., 2023; Shapiro, 1995). For more information on specific trauma-focused interventions, see Appendix 7.

Results of systematic search of review literature

A systematic search of 10 academic databases/registers identified 1,429 literature review articles about interventions for SV (Appendix 1). We removed 283 duplicates, then excluded 1,018 articles based on title and abstract screening. We retrieved 128 potentially relevant articles to read in full text. Of these, we excluded 103 articles based on *a priori* inclusion and exclusion criteria, discussed in Chapter 2, leaving 25 articles for inclusion in our review/synthesis (Appendix 1). Of the included studies, 24 were reviews and one was a review of reviews (Coates et al., 2022). A table with detail of the included studies can be found in Appendix 8. Taken together, the 25 reviews encompassed 588 intervention studies. Twelve reviews were quantitative (Burmester, 2019; Byrne, 2022; Chen et al., 2018; Coventry et al., 2020; Hardeberg Bach et al., 2023; Kim & Kim, 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Regehr et al., 2013; Sepeng & Makhado, 2019; Sousa-Gomes et al., 2022; Stobbe et al., 2021), two were qualitative (Brown et al., 2022; Parry & Simpson, 2016) and 11 were mixed methods (Coates et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Lange et al., 2020; Lee et al., 2022; McCalman et al., 2014; Melton et al., 2020; Nolan, 2016; Pebole et al., 2021; Scott Tilley et al., 2023; Westerman et al., 2020). The main review findings are presented in Table 2.

Table 2. Critical review findings – effective intervention characteristics to promote healing

Finding 1: Therapeutic relationships were central. Open, trusting and non-judgemental relationships were a central vehicle through which positive change could occur (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Heard & Walsh, 2023; Melton et al., 2020; Parry & Simpson, 2016; Regehr et al., 2013)
Finding 2: Survivors wanted tailored and flexible interventions over which they had control and choice (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Hardeberg Bach et al., 2023; Kim & Kim, 2020; Melton et al., 2020; Parry & Simpson, 2016; Regehr et al., 2013)
Finding 3: Survivors' readiness to engage in an individual or group intervention was important (Brown et al., 2022; Heard & Walsh, 2023; Lee et al., 2022; Parry & Simpson, 2016)
Finding 4. Practitioners working with survivors of SV benefitted from specialist training in SV (Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Heard & Walsh, 2023)
Finding 5: Individual and group interventions should build understandings of trauma, reduce shame, fear and self-blame and strengthen survivors' toolkit to emotionally regulate the impacts of trauma (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Konya et al., 2020; Lange et al., 2020; Parry & Simpson, 2016; Scott Tilley et al., 2023; Westerman et al., 2020)
Finding 6: A phased approach to therapeutic interventions may promote a survivor's sense of safety, stabilisation and overall efficacy (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; Sousa-Gomes et al., 2022)
Finding 7: Quantitative evidence demonstrated that trauma-focused interventions may be more effective than present-focused interventions in reducing the psychological impacts of SV, including PTSD, depression and anxiety (Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Regehr et al., 2013; Sepeng & Makhado, 2019)
Finding 8: Group interventions may promote healing in unique ways (Brown et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Lange et al., 2020; Lee et al., 2022; Nolan, 2016; Parry & Simpson, 2016; Westerman et al., 2020)
Finding 9: Mind-body approaches were well-received and may have reduced survivor distress (Lee et al., 2022; Nolan, 2016; Pebole et al., 2021; Scott Tilley et al., 2023)
Finding 10: The setting mattered - accessible, comfortable, confidential and non-clinical environments promoted a feeling of sanctuary and security (Brown et al., 2022; Burmester, 2019; Hardeberg Bach et al., 2023; Melton et al., 2020)
Finding 11: The duration of an intervention needed for efficacy was unclear (Burmester, 2019; Chen et al., 2018; Coates et al., 2022; Lee et al., 2022; Nolan, 2016; O'Doherty et al., 2023; Scott Tilley et al., 2023)
Finding 12: Survivors wanted to feel ready to end an intervention. To prepare to end an intervention, (re)connections to relationships with others and having an outward focus were important (Brown et al., 2022; Burmester, 2019; Konya et al., 2020; Parry & Simpson, 2016)

To expand on the main findings introduced in Table 2, we will first look at the qualitative evidence about how survivors experience interventions and the conditions for efficacy. Following this we discuss the quantitative evidence about the efficacy of specific therapeutic modalities.

Qualitative evidence: Therapeutic context, readiness and content to promote recovery

Two of the reviews were qualitative in their entirety (Brown et al., 2022; Parry & Simpson, 2016), and a further 11 were mixed methods with some qualitative evidence (Coates et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Lange et al., 2020; Lee et al., 2022; McCalman et al., 2014; Melton et al., 2020; Nolan, 2016; Pebole et al., 2021; Scott Tilley et al., 2023; Westerman et al., 2020). In the qualitative review findings, survivors said that psychosocial interventions had a range of psychological and physical health benefits, including improved self-belief, trust, strengthened interpersonal relationships, optimism about the future and capacity to (re)engage in many areas of life (Brown et al., 2022; Parry & Simpson, 2016; Westerman et al., 2020). Brown et al. (2022) and Parry and Simpson (2016) found that more than individual approaches or therapeutic modalities, what survivors found healing was the therapeutic context and conditions of an intervention. Below is a synthesis of qualitative findings from across the reviews.

Intervention context and conditions

The qualitative evidence in this review found that the nature of the therapeutic relationship, the practitioner's approach and the service setting had a significant influence on recovery. Brown et al. (2022) and Parry and Simpson (2016) found that healing was enabled through an open, trusting and non-judgemental therapeutic relationship. Given the interpersonal nature of SV harm, the therapeutic relationship was a central vehicle for repair (Parry & Simpson, 2016). Survivors wanted to actively collaborate and share power with their practitioner (Brown et al., 2022; Parry & Simpson, 2016). Parry and Simpson (2016) found that for survivors of CSA, having a sense of control and choice within the therapeutic relationship was especially important, since it was an experience that many survivors missed during their childhood. Interventions that helped survivors to establish their boundaries and assert their needs promoted a sense of safety within the therapeutic relationship, and these skills were useful more broadly in survivors' relationships and interactions with other services and systems (Parry & Simpson, 2016). Brown et al. (2022); Melton et al. (2020) and Parry and Simpson (2016) found that survivors needed interventions to be flexible and tailored around their individual needs and preferences. The final aspect to context was the importance of the therapeutic setting. Melton et al. (2020) and Brown et al. (2022) found that accessible, comfortable, confidential and non-clinical environments promoted feelings of sanctuary and security.

Survivor readiness for engaging in interventions

Brown et al. (2022) and Heard and Walsh (2023) found that feeling ready to both begin and end therapeutic work helped recovery. Survivors who felt ready to start were engaged and motivated, having established a sense of autonomy. Preparation sessions and assessment processes could assist with readiness and trust-building (Brown et al., 2022; Heard & Walsh, 2023). Barriers to survivor readiness included uncertainty about whether recovery was possible and high levels of distress that disrupted engagement (Brown et al., 2022; Parry & Simpson, 2016). Survivors needed to understand how the impacts of the harm they had experienced would be addressed by a proposed intervention (Melton et al., 2020; Parry & Simpson, 2016). Interventions also needed to be suited to the context of survivors' lives (Melton et al., 2020; Parry & Simpson, 2016). For example, if a survivor was experiencing homelessness or was unsafe in some way, trauma-focused interventions were not advised (Melton et al., 2020). Survivors also wanted the choice not to have to speak about their experiences of SV (Brown et al., 2022; Heard & Walsh, 2023; Parry & Simpson, 2016). Feeling ready to end therapeutic work mattered to survivors; many felt that interventions did not last long enough (Brown et al., 2022; Konya et al., 2020). Survivors who had to finish an intervention before they felt ready described being concerned about their ability to sustain positive change (Brown et al., 2022). A core component of concluding the therapeutic process was helping the survivor to develop an outward focus, by reinforcing their existing relationships with other people and establishing new ones, or improving their engagement with work, education and the community (Brown et al., 2022; Konya et al., 2020; Parry & Simpson, 2016). Many survivors felt motivated to use their experience to help others if they had the opportunity (Brown et al., 2022).

Intervention content

The qualitative evidence in this synthesis suggested that survivors saw therapeutic work in several phases. Important content included skill building, psychoeducation, exploring impacts, and, for some survivors, remembering and processing (i.e., trauma-focused work) (Brown et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Melton et al., 2020; Parry & Simpson, 2016; Scott Tilley et al., 2023; Westerman et al., 2020). Interventions that strengthened survivors' understandings of normal trauma responses and explored feelings of shame and guilt, as well as the survivor's relationships, sexuality, self-esteem and power, contributed to greater self-compassion and reduced distress (Brown et al., 2022; Heard & Walsh, 2023; Melton et al., 2020). Parry and Simpson (2016) found that it could be powerful for survivors to find words to articulate their trauma and to safely share them with a practitioner, creating a narrative that integrated their past abuse with their present experiences. Survivors also wanted to strengthen their toolkit of cognitive and behavioural strategies for emotionally regulating experiences of dissociation or intense distress (Brown et al., 2022).

The qualitative evidence suggested that survivors found both present-focused (Brown et al., 2022; Coates et al., 2022; Parry & Simpson, 2016) and trauma-focused interventions helpful (Brown et al., 2022; Melton et al., 2020). However, participating in interventions was not without risk, and some survivors reported anxiety, flashbacks and dissociation when activating traumatic memories in individual and group trauma-focused interventions (Brown et al., 2022) (see Appendix 7 for more information about specific trauma-focused interventions). Even so, most survivors said that remembering and processing traumatic events, while difficult, was also necessary and ultimately beneficial for healing (Brown et al., 2022; Melton et al., 2020; Parry & Simpson, 2016). Noticing positive changes linked to an intervention was empowering and encouraged survivors to remain engaged in the therapeutic process (Brown et al., 2022; Melton et al., 2020). However, the advantages of trauma-focused healing should be balanced with how acceptable survivors found these interventions. Even with adequate preparation and stabilisation, guided remembering could prompt feelings of aversion, fear and distress; therefore undertaking such interventions needed to be a survivors' choice after being given a careful explanation of the intervention (Brown et al., 2022; O'Doherty et al., 2023; Parry & Simpson, 2016).

The following section turns to explore findings from the quantitative literature about effective approaches to promote recovery.

Quantitative evidence: Effective therapeutic interventions to reduce trauma impacts

Twelve quantitative reviews assessed the efficacy of psychosocial interventions to support healing and recovery (Burmester, 2019; Byrne, 2022; Chen et al., 2018; Coventry et al., 2020; Hardeberg Bach et al., 2023; Kim & Kim, 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Regehr et al., 2013; Sepeng & Makhado, 2019; Sousa-Gomes et al., 2022; Stobbe et al., 2021) and a further 11 contained some quantitative findings (Coates et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Lange et al., 2020; Lee et al., 2022; McCalman et al., 2014; Melton et al., 2020; Nolan, 2016; Pebole et al., 2021; Scott Tilley et al., 2023; Westerman et al., 2020).

Seven review studies conducted a comparison analysis of trauma-focused interventions versus present-focused interventions (i.e. supportive counselling, psychotherapy) for reducing the psychological harms of SV. Trauma-focused interventions were found to be more effective for improving psychological wellbeing (Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Regehr et al., 2013; Sepeng & Makhado, 2019). Specifically, trauma-focused interventions were found to decrease:

- PTSD signs/symptoms (Chen et al., 2018; Coventry et al., 2020; Kim & Kim, 2020; Melton et al., 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Regehr et al., 2013; Sepeng & Makhado, 2019; Sousa-Gomes et al., 2022)
- depression (Coventry et al., 2020; Kim & Kim, 2020; Melton et al., 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Regehr et al., 2013; Sousa-Gomes et al., 2022)

- anxiety (Chen et al., 2018; Coates et al., 2022; Coventry et al., 2020; Kim & Kim, 2020; Parcesepe et al., 2015; Regehr et al., 2013)
- sleep difficulties (Coventry et al., 2020; Melton et al., 2020)
- negative self-concept, self-criticism and guilt (Coventry et al., 2020; Regehr et al., 2013)
- episodes of dissociation (Regehr et al., 2013)
- feelings of distress and fear (Coates et al., 2022).

Effective trauma-focused interventions included:

- EMDR (Burmester, 2019; Byrne, 2022; Chen et al., 2018; Coates et al., 2022; Regehr et al., 2013; Sepeng & Makhado, 2019)
- Trauma-focused (CBT) (Coventry et al., 2020; Melton et al., 2020; Sepeng & Makhado, 2019)
- PE (Burmester, 2019; Coates et al., 2022; Kim & Kim, 2020; Regehr et al., 2013)
- CBT (Byrne, 2022; Kim & Kim, 2020; Regehr et al., 2013; Sousa-Gomes et al., 2022)
- CPT (Burmester, 2019; Coates et al., 2022; Kim & Kim, 2020; Regehr et al., 2013).

Comparing the head-to-head efficacy of trauma-focused modalities

Four reviews directly compared the efficacy of different trauma-focused modalities (Chen et al., 2018; Coates et al., 2022; Coventry et al., 2020; Parcesepe et al., 2015). Of these, the most effective trauma-focused interventions were found to be:

- EMDR and TF-CBT (against DBT, IPT, CBT and pharmacology) for reducing PTSD and other mental health symptoms and improving sleep, for up to six months, in the systematic review of 116 studies and meta-analysis of 94 studies by Coventry et al. (2020).
- CPT, PE and EMDR (against AT, CBT) for reducing PTSD and depression symptoms for survivors with complex PTSD; EMDR and PE for reducing anxiety; and EMDR alone for reducing dissociation, in the review of six reviews (mostly randomised control trials) by Coates et al. (2022);
- EMDR and CBT for reducing PTSD, depression and anxiety symptoms, with EMDR associated with greater effect sizes and intervention efficiency in the review of six randomised control trials by Chen et al. (2018). Parcesepe et al. (2015), however, found no efficacy difference between EMDR, CBT and PE.

Many survivors of SV meet the diagnostic criteria for complex trauma (American Psychiatric Association 2022), a diagnosis that recognises the particular and serious impacts of traumatic experiences that may have occurred repeatedly and been difficult to escape from, such as child sexual abuse (Melton et al., 2020). Within the literature, there was uncertainty about whether interventions that are effective for survivors with PTSD will also be effective for survivors with complex trauma (Melton et al., 2020). Six review studies examined therapeutic recovery approaches for complex trauma (Burmester, 2019; Chen et al., 2018; Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; Sousa-Gomes et al., 2022). All identified trauma-focused interventions (specifically EMDR, CBT, TF-CBT and CPT) as the most effective in reducing trauma symptoms for survivors with complex trauma (Burmester, 2019; Chen et al., 2018; Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; Sousa-Gomes et al., 2022). In support of a phased approach (discussed later), two reviews suggested that trauma-focused interventions combined with stabilisation and skill-building before memory processing may hold the most promise for survivors of complex trauma to improve trauma symptoms, negative self-concept, emotional regulation skills and connection to others (Coventry et al., 2020; Melton et al., 2020).

Trauma-focused interventions with survivors who have a disability

In their systematic review of 11 studies with people with intellectual disability who had experienced trauma, Byrne (2022) found “tentative evidence for the potential of EMDR and CBT” (p. 551) to reduce trauma symptoms. Eight of the 11 studies included EMDR protocols that were modified to assist with communication differences, by using story-telling methods and alternatives to eye movements (Byrne, 2022). The review found that, particularly in the application of EMDR, protocols could be tailored to make them more accessible and helpful for survivors with communication and cognitive disabilities. However, the authors noted that more studies using rigorous research methods were needed, as existing studies were generally based on small sample sizes or used different measures, which made outcomes difficult to compare (Byrne, 2022).

In relation to the skills needed for practitioners to work with survivors of SV, Burmester (2019) found that therapeutic work with survivors should be delivered by practitioners with specialist training in SV (Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Heard & Walsh, 2023). Even small amounts of specialist SV training were associated with strengthened practitioner effectiveness and fewer unhelpful reactions to survivors (e.g., victim blaming) (Burmester, 2019). Having a SV-trained practitioner may also reduce unplanned survivor discontinuation from interventions (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Heard & Walsh, 2023; Lewis et al., 2020).

Present-focused interventions

Present-focused interventions alone may be effective in reducing PTSD as well as improving other aspects of recovery. Three reviews found supportive counselling was associated with reduced PTSD symptoms (Coates et al., 2022; Melton et al., 2020; Regehr et al., 2013). The Melton et al. (2020) review of studies with survivors experiencing complex trauma indicated that present-focused interventions were associated with lower levels of anxiety, improved emotional regulation, strengthened connections to others and better sleep. Regehr et al. (2013) found present-focused interventions improved depression symptoms (Regehr et al., 2013) and Coates et al. (2022) found they reduced survivors' distress and fear. Further, Coates et al. (2022) found psychoeducation was associated with reductions in survivors' alcohol and other drug use (Coates et al., 2022; Melton et al., 2020). However, the strongest evidence for the efficacy of present-focused interventions was when they were provided as part of a phased, multicomponent approach that included a trauma-focused intervention as one component (outlined below) (Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; Parcesepe et al., 2015).

Risk of survivor discontinuation

Three reviews found trauma-focused interventions may be associated with survivor unplanned discontinuation ('drop out') from the intervention (Coates et al., 2022; Lewis et al., 2020; O'Doherty et al., 2023) especially for interventions that involved a greater number and longer duration of sessions (Regehr et al., 2013). However, a review by Parcesepe et al. (2015) did not find significant differences in discontinuation rates between trauma- and present-focused interventions (Parcesepe et al., 2015). Survivor preparation, safety and resource building may reduce discontinuation by helping to minimise the level of distress experienced during therapeutic work (Brown et al., 2022; Lewis et al., 2020).

A phased approach to therapeutic work

A synthesis of the qualitative and quantitative evidence indicated that an effective way to support survivors engaging in individual (or one-to-one) therapeutic approaches is to organise the work into three consecutive phases (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Melton et al., 2020; Sousa-Gomes et al., 2022):

1. Relationship, safety and skill building: developing therapeutic relationships of trust and safety and working with a survivor to strengthen their skills and resources to manage and decrease distress (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Konya et al., 2020; Melton et al., 2020; Parry & Simpson, 2016; Regehr et al., 2013).
2. Remembering and processing (for survivors who want to do this work): providing information about trauma-focused interventions and supporting survivors to remember, grieve and form a more adaptive, integrated narrative about their abuse, themselves and the world (Brown et al., 2022; Coates et al., 2022; Coventry et al., 2020; Konya et al., 2020; Melton et al., 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Parry & Simpson, 2016; Regehr et al., 2013; Sepeng & Makhado, 2019).
3. Integration and (re)connection with other aspects of the survivor's life: assisting survivors to re-connect or create new connections with others — supports/peers/employment, etc — with an outward focus; preparing survivors to feel ready to end formal interventions (Brown et al., 2022; Burmester, 2019; Konya et al., 2020; Parry & Simpson, 2016).

Next we will move to synthesising the review evidence about group-based approaches.

Efficacy of group interventions after SV: qualitative and quantitative evidence

Five reviews focused on therapeutic group interventions, including professional-led (Heard & Walsh, 2023) and peer-led groups (Konya et al., 2020), groups for survivors with disabilities (Stobbe et al., 2021), groups for mothers who had survived CSA (Lange et al., 2020) and group-based mindfulness programs (Westerman et al., 2020). While it was not their main focus, several other reviews also included findings relevant to group work (Brown et al., 2022; Burmester, 2019; Kim & Kim, 2020; Melton et al., 2020).

The qualitative research indicated that group interventions were often moving experiences for survivors. Through sharing and validating experiences, survivors helped each other to normalise trauma responses (Heard & Walsh, 2023), challenge shame (Lange et al., 2020), improve their emotional regulation and self-understanding (Westerman et al., 2020) and strengthen their coping strategies (Lange et al., 2020). There was evidence that groups were effective for survivors who had intellectual disabilities (Stobbe et al., 2021). Stobbe et al. (2021) reviewed two groups with 15 (mostly women) survivors with intellectual disabilities. The review found some evidence that group interventions were effective in reducing feelings of anxiety and negative beliefs, and in improving self-esteem and assertiveness skills. However, this finding was tempered by methodological issues regarding study design and sample size. Stobbe et al. (2021) suggested that for groups to be effective for survivors with communication and/or cognitive disabilities, using accessible language, symbolic communication methods and information reiteration was beneficial.

Groups led by survivors may offer some benefits over those facilitated by professionals. Konya et al. (2020) found survivors in peer-led groups experienced feelings of mutuality and interconnectedness. The review by Konya et al. (2020) found that peer-led groups may complement other interventions and group types and may be useful as a stand-alone intervention for survivors who deem other interventions too medicalised. However, more research is needed to understand the use of peer-support groups as stand-alone or complementary interventions (Konya et al., 2020).

Although group interventions were found to have many positive benefits, Heard and Walsh (2023) found survivors had varied experiences of them. In one study of a group for mothers who had experienced CSA, some participants felt confronted, upset and unsure about how to respond to disclosures of SV by fellow group members (Lange et al., 2020). In another study, survivors with complex trauma reported that they found it difficult to engage in group work, particularly in trauma-focused groups (Melton et al., 2020). To minimise the potential for triggering distress and trauma reactions, Heard and Walsh (2023) suggested a thorough recruitment process to assess the survivor's readiness to participate, including checking the survivor was not in crisis and had the capacity to listen to others' stories (Heard & Walsh, 2023). Having two trained facilitators may be useful for when participants become distressed (Heard & Walsh, 2023). There was some evidence that trauma-focused group work was effective, but such groups needed to be managed carefully, including by using art or journalling to limit the risk of triggers to other participants in the group (Brown et al., 2022; Heard & Walsh, 2023; Kim & Kim, 2020). Heard and Walsh (2023) found key topics that were addressed across most group interventions included: connecting with safety, power and control, self-esteem, trust, misplaced guilt, anger, validating and normalising responses to the trauma of SV, acknowledging thoughts and feelings, social isolation, sexuality and relationships, identifying strengths and sharing coping strategies (Heard & Walsh, 2023).

Comparison of individual versus group interventions

In the three studies that looked at the efficacy of individual versus group interventions for promoting recovery on a range of psychological wellbeing measures, individual interventions were generally found to be more effective (Burmester, 2019; Melton et al., 2020; Sepeng & Makhado, 2019). However, the evidence also indicated that the social aspect and dynamic of groups may be especially helpful for improving some impacts of SV, including self-blame, shame, emotional regulation and self-understanding (Brown et al., 2022; Heard & Walsh, 2023; Kim & Kim, 2020; Konya et al., 2020; Lange et al., 2020; Westerman et al., 2020). Groups addressed social isolation more effectively than individual interventions as survivors developed relationships with each other (Brown et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Westerman et al., 2020). Heard and Walsh (2023) suggested that, at a minimum, initial group screening should occur via an individual counselling session, with one-on-one counselling also ideally offered during or after group. Groups may hold particular promise for survivors with similar cultural or racial backgrounds and shared experiences of marginalisation. For example, although there is a lack of evidence about the interventions most effective for First Nations survivors who share experiences of state-sanctioned violence, dispossession and racism, community or collective healing models using an intersectional framework may be particularly useful (McCalman et al., 2014).

Moving from the review findings about the efficacy of group interventions, this chapter now examines the evidence about mind-body interventions.

Mind-body therapeutic interventions

This synthesis of reviews found that several mind-body interventions were positively received by survivors, with some evidence that they reduced psychological trauma symptoms after SV. Four reviews used mixed methods to examine mind-body interventions (Lee et al., 2022; Nolan, 2016; Scott Tilley et al., 2023; Westerman et al., 2020). In a review of trauma-sensitive yoga, participants reported that it helped them gain a sense of safety and control, and in all three RCT studies of trauma-sensitive yoga, the intervention group experienced a reduction in psychological trauma impacts compared to the control group (Nolan, 2016). In their review of 18 physical exercise studies, Pebole et al. (2021) found that while survivors reflected positively on exercise interventions, the quantitative analysis of benefit was unclear. By contrast, a recent review of five studies of mindfulness interventions found they were associated with significant improvements in PTSD and depression symptoms and emotional regulation (Scott Tilley et al., 2023). In one of the five studies, exercise paired with mindfulness meditation was effective, although neither were found to be effective in isolation (Scott Tilley et al., 2023). Finally, a review of 11 studies concluded that therapeutic dance may improve survivor self-awareness, expression and emotional regulation, interpersonal relationships, boundary setting, and a sense of safety and freedom (Lee et al., 2022). The main risks for any of the mind-body interventions were the potential for retriggering trauma memories (Lee et al., 2022) — argueably a risk in all trauma interventions.

What we still do not know: The evidence gaps

The findings of this evidence review are promising; they indicate that many existing interventions are effective in promoting recovery for many survivors. Nevertheless, the findings should be interpreted with caution. Common methodological problems affecting the reviews on which the findings rest include:

- small participant sample sizes in some studies (Coates et al., 2022; Nolan, 2016)
- missing data and high participant unplanned discontinuation rates (Coates et al., 2022; O'Doherty et al., 2023; Scott Tilley et al., 2023)
- small effect sizes (Coventry et al., 2020) and other methodological issues (Coates et al., 2022; O'Doherty et al., 2023).

Further, some individual intervention studies appeared in more than one review, an overlap that may overstate the evidence in the field.

As Sinko et al. (2024) has recently argued, there is still no one study or instrument that adequately measures all of the facets of recovery that survivors find to be meaningful (i.e. trauma symptom alleviation, social support and connection, self-esteem, reduced shame and self-blame, regaining trust, hope, autonomy and power, etc). The existing reviews looked at interventions that, in the main, were designed to reduce psychological health impacts; yet recovery is often about so much more (Draucker et al., 2009; Herman, 1992; Jeong & Cha, 2019; Sinko et al. 2024; Sinko et al., 2022). A further problem is the lack of data on how long any positive impact of interventions last. Most evaluations of individual approaches were undertaken in the short-term, usually just 6-12 months after the intervention ended (Brown et al., 2022; Kim & Kim, 2020), some studies even less (Scott Tilley et al., 2023), while evaulations of group interventions usually lasted no longer than two weeks (Heard & Walsh, 2023). Among the studies included in the 25 reviews, the duration of the interventions varied considerably, both in terms of session length and number. The most effective intervention duration is likely to differ depending on the modality and survivor needs. More research is needed to determine what intervention duration is effective for survivors who have had single versus repeated experiences of SV, and for those who experienced SV as children versus as adults versus both, as there is very little evidence to inform best practice.

A major limitation of the available evidence is that the studies included in this synthesis of reviews were predominantly conducted with heterosexual, young to middle-aged, white middle-class women who did not have disabilities, particularly not cognitive or communication disabilities (Coates et al., 2022; O'Doherty et al., 2023). Further, only five of the 25 literature reviews came from countries where the first language was not English (Chen et al., 2018; Kim & Kim, 2020; Sepeng & Makhado, 2019; Sousa-Gomes et al., 2022; Stobbe et al., 2021). All but one review was conducted in an industrialised country (Sepeng & Makhado, 2019). The substantial lack of diversity among participants within individual and group intervention research severely limits interpretation of what is effective and for whom (Heard & Walsh, 2023). For example, in their review about responding to Indigenous Australians after SV, McCalman et al. (2014) found a complete lack of grey or peer reviewed evidence about what approaches are effective in supporting their healing. More recently, individual studies of interventions designed by and for First Nations communities have been undertaken (for instance, Black et al. (2019), though their findings have not yet been systematically reviewed or synthesised. Similarly, there is a lack of evidence about what types of recovery support are effective for survivors who are often excluded from recruitment, such as those with suicidal ideation or problem drug use (Westerman et al., 2020). Researchers have not synthesised the available studies on what recovery interventions are effective for male or gender diverse survivors. Finally, several interventions designed to support SV survivor healing have not been the focus of enough research to date. These include art, music, nature and animal therapies, and the efficacy of brief interventions and mind-body interventions.

Conclusion

This chapter synthesised the findings from 25 international reviews exploring the efficacy of a range of therapeutic interventions for survivors of SV. The synthesis identified evidence of efficacy for many existing individual and group present-focused and trauma-focused approaches and mind-body interventions, but no single approach will be experienced as healing by all survivors at all points of their recovery journey. Regardless of healing approach, the qualitative and quantitative evidence indicates interventions may be helpfully organised into three consecutive stages: (1) relationship, safety and skill building; (2) remembering and processing; and (3) integration and (re)connection with other aspects of a survivor’s life. More research is urgently needed to understand the most helpful approaches for survivors who bear a disproportionate burden of SV prevalence — survivors with a disability, First Nations survivors and survivors from culturally and linguistically diverse backgrounds.

Chapter 4: Survivor, practitioner and key informant perspectives on recovery after SV

'Recovery is reaching a point where I feel safe … in terms of other people, but also within myself… [in] my body and my mind.' - **Survivor 8**

This chapter describes our findings from our analysis of data from interviews with 25 survivors, as well as focus groups and interviews with 27 practitioners and key informants. It is divided into two sections:

- Part A describes the nature and key components of recovery based on the perceptions of survivor interview participants, followed by a brief discussion of the perceptions of practitioners and key informants (KIs).
- Part B outlines effective responses to promote recovery as well as the barriers and enablers to effective practice, drawing on data from survivors, practitioners and key informants.

A. The nature of recovery after SV

Most of the survivor participants we interviewed described SV as a significant and often life-changing experience. They suggested SV was a personal, relational and social injury: it was a personal and bodily violation; a betrayal of trust often by a known perpetrator, with the minimising responses of family and friends frequently compounding the sense of betrayal; and it was associated with social stigmatisation and victim-blame. Yet, many survivors said that the harm of SV and what was involved in recovering from it was poorly understood by those who had not experienced it. According to survivors, recovering after SV was an ongoing process of growth and change. Two key themes reflected survivor understandings of the nature of recovery after SV.

- **Recovery is multifaceted and not only the survivor's responsibility:** Survivors emphasised that in order to recover, they were not the only ones who needed to change. Many said their own ability to recover was shaped by the responses of the perpetrator, institutions and society; as one participant said: 'it's on the system and educating men as well' (Survivor 21). Participants suggested recovery not only involved gaining relief from psychological or physical distress, but also seeing accountability from the perpetrator, along with social recognition of the wrong done to them.
- **It's about learning how to live with it rather than being 'fixed'**: Most survivors said they came to realise that they may not reach an end point of being fully recovered or returned to 'normal'. Some said they had no baseline to return to because the SV had occurred early in their lives, while others said they could never go back to 'normal' because they had been profoundly changed. For example, one woman said: 'I expect to repair, to feel better and to be able to function well, but not to be the

person I had hoped to become before the sexual abuse' (Survivor 19). Many also found that even when they felt they had achieved a level of stability and wellbeing, setbacks could occur when new events (such as childbirth or contact with the perpetrator) re-triggered distressing feelings. Thus, for most survivors, recovery meant an ongoing journey; it was about 'learning how to live with it', rather than 'trying to erase it' (Survivor 4).

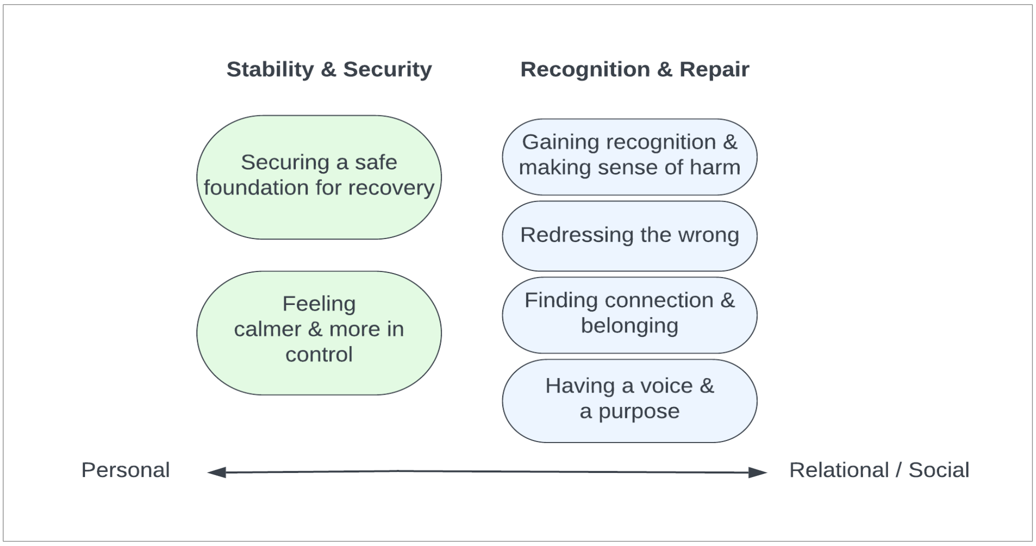
Recovery needs

- From a thematic analysis of survivor interviews we developed two overarching themes related to how participants described their recovery needs (

Figure 1).

1. **Stability & security:** This theme was focused on the survivor's immediate personal world. It included a need for physical safety and psychological stability after SV. Two subthemes (described using survivors' quotes) were associated with this theme:
   - Securing a safe foundation for recovery: 'I don't have to be on the lookout'
   - Feeling calmer and in more in control: 'Being comfortable within myself'.
2. **Recognition and repair**: This theme was focused on relational and social processes, including gaining accountability from the perpetrator and others, rebuilding the survivor's social relationships and standing in the community, as well as repairing the survivor's sense of identity. The subthemes within this theme were:
   - Gaining recognition and making sense of the harm: 'I'm not bad or broken'
   - Redressing the wrong: 'I want them to know it's not OK'
   - Finding connection and belonging: 'I'm not alone'
   - Having a voice and a purpose: 'I can make a difference'.

Figure 1. Key needs for recovery after SV: themes from survivors



The next section describes these two themes and their subthemes.

1: Stability and security

According to survivors, a key aspect of the harm of SV was the intimate and sexual nature of the violation. As one woman said, it made the victim feel 'exposed' and that their body had been 'taken over' (Survivor 25). Many survivors described pervasive feelings of fear and loss of safety after the SV, which often continued even when they no longer had contact with the perpetrator. Being assaulted also caused survivors to lose their trust in others and to lose their confidence in their own ability to trust their judgement of other people. Consequently, survivors' immediate focus was regaining stability and security within their immediate personal world. They emphasised the need for a safe foundation to begin the process of recovery, as well as the need to feel calmer and more in control in their day to day lives, as described below.

1.1: Securing a safe foundation for recovery: 'I don't have to be on the lookout'

When survivors were asked about what helped their recovery, many responded that becoming safe from further harm was the first thing they had focused on. This included gaining physical safety (for example, by installing security cameras at home), as well as psychological safety (such as avoiding social situations where the perpetrator may be present). Participants suggested that once they established some 'peace of mind' that they were not under threat of imminent violence, they were able to turn their attention to other components of recovery.

1.2: Feeling calm and more in control: 'Being comfortable within myself'

Participants said that the trauma of the SV had a major impact on their psychological wellbeing and manifested in intrusive memories, overwhelming feelings of anger, hypervigilance, anxiety and depression. For some, the

SV had direct physical impacts such as injury and pregnancy. For many the psychological trauma had physical consequences, such as pain, bodily dysfunction and difficulties sleeping. In some cases, the impacts resulted in chronic illness or psychological or physical disabilities. The behaviours survivors used to cope often also had long-term ramifications, including disordered eating, addiction to substances and self-harm. Thus, a major focus of recovery was gaining relief from trauma and distress so that they could feel stable and more in control in daily life. Survivors spoke of this process as 'learning to let go', feeling 'safe in my body and mind', and becoming a 'calmer person'.

2: Recognition and repair

A need for social recognition and to repair the wrong after SV was the second key theme in survivors' descriptions of recovery. This was connected to an understanding of SV as not only a personal trauma, but also an interpersonal and social injury. For many, the SV was an immense betrayal of trust that occurred in a relationship with a family member, friend or partner. Additionally, survivors suggested SV was an act of stigmatisation and denigration that damaged their social status, identity and sense of belonging in the community. One said it 'leaves you feeling ashamed', as though there is a 'blanket of mud all over you' that other people could see (Survivor 17). Another suggested SV was dehumanising as it stripped the victim of their dignity and worth as a person: 'Your own nature becomes objectified… [it's] like, "Well, this is what you are designed for" … [Your] value is just minimised or erased' (Survivor 18). The denigration and betrayal were often reinforced when survivors received judgemental or minimising responses from family, friends, communities and institutions. For people with disabilities, it was also reinforced when services excluded them by failing to accommodate access needs. Thus, gaining recognition and understanding of the harm, and finding ways to redress the wrong and repair their social identity were perceived as key aspects of recovery; one person described this process as 'reclaiming power over my story, my body and myself' (Survivor 23). Also important was repairing their trust and sense of belonging as a member of the community, as well as having a purpose and a voice in contributing to social change, described below.

2.1. Gaining recognition and making sense of the harm: 'I'm not bad or broken'

Almost every survivor participant spoke of grappling with feelings of shame and self-blame, including a sense of responsibility for causing the SV or for responding to it in the 'wrong' way, as well as feeling 'bad' or ashamed about how they had coped with it. Consequently, survivors stressed that a crucial aspect recovering after SV was gaining a recognition that they were not to blame for what had happened or the impacts it had; rather, the wrong and harm had been caused by the perpetrator and those who had failed to provide support, protection or justice. This recognition provided psychological relief. For example, one person said after struggling to understand: 'Why did this happen to me? … maybe something's wrong with me?', having a 'narrative' to make sense of it helped 'so my mind can rest and I can ... calm down' (Survivor 18). A recognition of who was responsible was also empowering as it supported survivors to tell a new story to themselves and to others. As one woman described, this recognition helped to repair her sense of identity: ‘It went from being like, “I am a broken, bad person” to being like, “I have been damaged by other people’s actions”’ (Survivor 14). However, making sense of what happened and how it affected survivors’ self-perceptions was described as a complex and exhausting process that included revisiting memories, unpacking the responses of family, friends and institutions, and understanding the social stigma associated with SV.

2.2 Accountability and redressing the wrong: 'I want them to know it's not OK'

Many survivors struggled with the injustice of having to bear the consequences of the SV, while the perpetrator was unaffected. For instance, one woman said:

‘I live with this, still, day-to-day. I find it quite upsetting that they [the perpetrators] get to go about the rest of their lives and not really think about it.’ **- Survivor 7**

Another woman who had a disability described a deep sense of injustice that she was constantly invalidated, yet her perpetrator experienced no consequences:

‘[It’s hard]… not having that accountability [from the perpetrator] … In general life with my disability, because it’s invisible, I have to prove myself. I have to prove that I need support … yet he is being treated [as] innocent.’ - **Survivor 1**

A further factor that troubled participants was a fear that the perpetrator may harm others. Consequently, many participants said that to recover, they needed an acknowledgement and accountability from the perpetrator(s) anud those who had protected or colluded with them, including family members, communities and institutions. Survivors were not necessarily seeking punishment through the criminal justice system; rather, they were more interested in having the harm acknowledged and further harm prevented. This included having those responsible say: ‘Sorry and I see how I’ve hurt you’ and drawing ‘a line in the sand’ and committing to ‘do better’ in future (Survivor 13).

2.3: Finding connection and belonging: ‘I’m not alone’

Most survivors said the SV had shattered their trust in those around them and their faith in the broader community. This contributed to feelings of aloneness and alienation. Consequently, repairing relationships and finding belonging and connection were perceived as essential for recovery. Some survivors found a sense of belonging through their relationships with family, friends and work colleagues. Many found solidarity and connections with other survivors. Building connections with other survivors was a particularly powerful experience, including through participating in peer-based groups, advocacy and therapeutic programs, reading survivor stories and testimonials, and engaging in online survivor communities. Connections with other survivors transformed how survivors perceived themselves, prompting a recognition they were not 'alone' or inadequate; instead, their experiences and reactions to SV were normal and shared by others.

2.4: Having a voice and purpose: 'I can make a difference'

Survivors described SV as an experience that stripped them of their autonomy and self-worth, and was compounded by a lack of community recognition of the harm that they had suffered. Consequently, being able to make a difference in addressing SV was transformative both personally and socially. One person said it offered 'a whole different sense of healing' because it demonstrated their value as a member of the community, helping them to 'reclaim' their sense of identity and self-worth. Another suggested advocacy enabled people who were disempowered to have a voice and regain a sense of dignity, rather than just 'silencing and taking it'. Advocacy also offered an opportunity to have their experiences seen as a shared social problem rather than just a private and personal one. For instance, one woman said campaigning for systemic change 'gives [the SV] meaning beyond like, a horrible experience that really kind of, fucked me up' (Survivor 25). Another person asserted that:

> 'Saying that they're a victim of sexual assault, or that they've experienced trauma … it's a big part of disability pride and of being open about your experiences to empower other people.'

They said speaking publicly was a way of highlighting that people with disabilities faced discrimination and a 'high risk' of abuse, and it supported other people with disabilities 'to not be ashamed of what you've been through' (Survivor 22).

Practitioners' and key informants' perceptions of recovery

When asked about recovery after SV, practitioners and KIs shared similar views as survivors. They described recovery from SV as a journey that had no clear end; as one practitioner said, it would 'ebb and flow over time' (Focus Group 1). KIs suggested that recovery was not necessarily 'getting back to what the person was before' but it was about being able to 'go on with life in a meaningful way to them with the baggage that they have' (KI 1). Like survivors, they emphasised that recovery was multifaceted and involved more than relieving mental or physical health symptoms. Practitioners and KIs observed that while recovery was an individual process, survivors shared common needs, including establishing safety, making sense of how and why the SV occurred, seeking recognition and accountability for the harm done and repairing their trust in the social world. Practitioners also emphasised that the larger material and social contexts of people's lives (such as their housing or financial circumstances, the responses of their social networks, and the support they could access and how it was provided) had a powerful impact on recovery.

Summary

The ways in which participants conceptualised the meaning and key components of recovery suggest that it was an ongoing process of personal, relational and social change. Consequently, as we outline in part B, the responses that survivors perceived as therapeutic were those that not only alleviated trauma symptoms, but also responses that provided moral, legal or social recognition – including a way of making sense of the harm, an acknowledgement of wrongdoing from those responsible, opportunities to repair social connections and restore a sense of belonging, and having a voice in social change. Next, we discuss participants' perceptions of the responses that promote recovery after SV.

B. Responses that promote recovery, and the barriers and enablers to effective practice

In their interviews, survivors discussed accessing a range of services as part of their recovery journey. Most (21 participants) had seen a psychologist, counsellor or psychiatrist (either privately or in the public system), and 15 had accessed counselling at a SSAS. Twelve survivors had participated in a peer support or education group (either facilitated by a service or by other survivors). Participants also shared information about engaging with general practitioners (8 participants), hospitals (4), drug and alcohol services (3), housing services (3) and FV services (2). Eight had contact with the police or legal system in relation to the SV. Many (17 participants) also spoke about the role of their partners, family members or friends in their recovery and 5 spoke about the role of pets. Participants described trying a range of formal therapeutic modalities, particularly cognitive behavioural therapy (CBT) (8 participants), meditation (8), medication (6) and EMDR (6). They spoke of using a wide range of informal strategies in their recovery, particularly being in nature (11 participants), doing exercise (6), arts-based activities (5) or participating in advocacy or supporting other survivors (8).

The following 12 themes describe the key responses that survivors perceived to be helpful, combined with themes from practitioner and KI participants. Within each theme, we also discuss participants' perspectives on the barriers and enablers to delivering effective practice.

1. A safe base for recovery

As outlined in part A, survivors said that help to establish a stable and secure living environment was fundamentally important for them to begin to recover from the trauma of SV. For example, one person said getting help from a FV service to install a security camera gave them 'peace of mind' so they could then focus on recovery. Practitioners similarly identified the fundamental importance of safety but said that institutional and legal responses prevented some survivors from being able to establish the safety they needed to begin the process of recovery. Several KIs emphasised that there were significant barriers to establishing safety in disability service environments, particularly when people with disabilities often experienced SV and other forms of abuse from support workers and co-residents in group homes. The impact of unsafe environments on recovery was succinctly summarised by a KI: ‘You can do counselling, but if your environment is shit, you’re not going to get to that place of feeling safe, or recovery’ (KI 1).

Practitioners also repeatedly expressed concern that there were disability-access barriers to legal protection, often due to inflexible and inaccessible communication methods used by police and legal practitioners. Consistent with this concern, an example of inaccessible police practice was described by one of the survivor participants we interviewed, who said that when she made a statement, the police failed to organise an independent third person to help explain their questions.

Another major problem described by practitioners was a lack of safety in psychiatric hospitals. Practitioners in the mental health care system said that mixed-gender wards impeded women survivors of SV from being able to focus on recovery; one said: ‘[being] amongst a whole bunch of disinhibited co-patients who are male … does not lend itself to a scenario of talking and opening up’ (KI 9). Their concerns echoed those of some survivors interviewed who had left home to escape SV and had subsequently been sexually assaulted in a psychiatric hospital. Practitioners recommended expanding the number of women only in-patient units to better facilitate recovery and highlighted the importance of the units being co-designed with women survivors.

2. Recognition of the wrong

Survivors emphasised that when they disclosed SV, having a service provider who recognised and validated the significant harm and injustice they had endured was profoundly important for their recovery. SSAS were highlighted as consistently providing responses that took a clear stance in recognising the injustice of SV. For example, one woman said SSAS intake workers had immediately made her feel in ‘safe hands’ because: ‘Everybody that I spoke to...said something like, “I believe you … and I’m sorry that this happened to you”’ (Survivor 3). Survivors said it was vital to have an affirmation that the SV was significant and that they were deserving of support because many had worried that their experiences were not serious enough to warrant receiving support from services.

It was evident in interviews that survivors not only needed the service provider’s validation that they had experienced SV, but also a clear recognition of the gravity and injustice of SV as a deliberate and wrongful act. For example, one woman said her psychologist’s explanation was pivotal in her recovery:

> ‘She explained to me that I was actually a victim of crime … She goes: “You didn't do anything wrong … he’s the one in the wrong” ... I just thought … I was one of those — someone who was raped or sexually assaulted but I didn't know it was actually called [a crime].' - **Survivor 2**

However, in many cases, when survivors disclosed SV and sought support, they did not receive recognition of the significance of their experiences. For example, several survivors described receiving unhelpful or undermining responses from psychologists, including responses that were superficial (such as simply being encouraged to focus on positives), as well as responses that were dismissive or blaming (such as conveying a message that the survivor needed to ‘get over it and stop wasting people’s time’). Such responses stopped some survivors speaking about the SV for a very long time afterwards. Similarly, practitioners observed that service system responses often conveyed to survivors that their needs were unimportant and that no support was available for them. For instance, a practitioner from outside the specialist sector explained that such responses seriously undermined recovery:

‘People will come to our service after experiencing not only an incidence of violence but [also] multiple attempts at accessing service… [and] wherever that door is, it’s closed. And people are so traumatised by that experience that it’s a real unpacking of all the secondary wounding.’ - **Focus Group 2**

A major concern among practitioners from the SSAS was that the community sector, police and SOCITs did not adequately understand the particular harms and impacts of SV. They recommended more training was needed to build their knowledge and skills to respond in ways that didn’t compound trauma for survivors. Practitioners from both SSAS and other sectors suggested that generalist mental health services, emergency departments, inpatient unit staff, psychologists and other private practitioners would also benefit from this capacity building.

Another theme among participants was that to help survivors recognise SV and its impacts, it was crucial that services could convey information using accessible language and modes of communication. For example, one woman participant found a psychologist who provided an accessible description and helped to understand that she had been a victim of crime (this was illustrated in the quote above from survivor 2). However, another survivor participant said she had trouble finding a psychologist who understood how to work with people with autism spectrum disorders and how to explain things in a ‘less vague’ way.

Additionally, key informants who worked with people with disabilities expressed great concern about a perceived lack of skills of SSAS and other violence-response services in supporting survivors with disability. One KI observed that often service providers ‘panic and go, “I don't have the skills to do this” when they were faced with a survivor with a cognitive or communication disability. However, with guidance, training, and exposure to those more experienced at supporting disabled people, service providers often realised: “I can do this, I just need to think outside the box” (KI 4). Along similar lines, another KI recommended that SSAS target education to their workforces on how to use visual communication support and ‘how to use simple English, how to present complex ideas in a simple way [and] how to use real-life objects to support your messaging’ (KI 6).

A major area of concern was the inadequate response of police and the justice system. Practitioners and KIs said that for survivors who had a disability, including those who had a cognitive disability or little or no speech, legal reporting pathways were often closed. For example, a KI said:

> ‘What’s really important to a victim of [SV] is … that there is someone in authority that can hear their story and empathise with them — that goes a long way towards the recovery process. Because they get some sense of closure. [But that doesn’t happen] when the Victoria police turn their back on them because they're not trained in … how to communicate with them, and they're sent back to the same situation they were in (KI 7).’

Sexual rights and consent education was identified by participants as an important strategy to promote recognition of SV across the community. KIs said people with cognitive disabilities were often excluded from school-based respectful relationships education programs and consequently may not have had access to information on their rights, what SV is or consent laws. Some of the disabled survivors that we interviewed had participated in sexual rights education programs as adults. They said the programs were profoundly helpful as they had validated their rights to respectful sexual relationships and helped them to recognise experiences of SV. For example, a participant said a sexual rights peer-education program had ‘started the process of healing [because I realised] … I could speak up’ (Survivor 1). Another said she had learned that: ‘it’s OK to have safe sex, it’s OK to be in a relationship…but it's not OK to be raped’ (Survivor 2).

3. A social framework for making sense and processing the harm

As described in part A, survivors said a large aspect of their recovery involved coming to understand who was to blame for the SV and how the experience had affected their physiological, psychological and behavioural responses. Consequently, they highlighted the immense therapeutic benefits of having a service provider who offered a structured framework for understanding the harm they had experienced, combined with techniques that reduced the intensity of intrusive memories and other trauma symptoms. A variety of therapists were described as helpful in this regard, but survivors particularly highlighted the effectiveness of SSAS guidance and expertise. For example, a male participant said ‘having a specialist service was really impactful’:

> ‘It was pretty clear how we were going to work through it … [they] … knew how to help me through the process, engaging and reflecting on the events and their effect on me. Whereas the normal [counsellors] I had been seeing couldn't really help … lead me through that story to see the impacts of things.’ - **Survivor 4**

Survivors emphasised the importance of having a counsellor who was able to situate their personal experiences of SV within a social and political context. For example, one said it was crucial for her recovery to have a counsellor who could help her understand how SV was influenced by ‘individual psychology and … the psychology of society’ (Survivor 8). Survivors suggested this understanding was crucial, given the gendered power dynamics and social stigma associated with sexual victimisation. For example, a woman described her SSAS counsellor's help to understand that SV was ‘a symptom of an unequal society… rather than like, this person did a bad thing’ as ‘transformative’ in her recovery (Survivor 14). Similarly, another participant said his psychologist’s help understanding how imbalances of power contributed to his experiences of sexual assault as a child was powerful in lifting his sense of self-blame. Similarly, both SSAS and practitioners in the wider service system highlighted that acknowledging and responding to the broader social context was crucial for survivors to make meaning of the violence they had experienced. For example, a practitioner commented: ‘One thing that the sexual assault sector holds is that analysis of power … [the] feminist origins of the service is a really important tool and strategy that works’ (Focus Group 2).

However, specialist practitioners, KIs and survivors expressed concern that not all sectors understood SV within a social framework. Many described a tendency for those in the mental health sector to medicalise trauma symptoms and to label survivors with psychiatric diagnoses, which compounded their disempowerment. For instance, a survivor expressed concern about the mental health service system treating trauma ‘as a pathology’, and said this framing enabled those with social and political power to avoid responsibility for change. Similarly, several practitioners identified inappropriate diagnoses of borderline personality disorder (BPD) as working against the recovery interests of survivors. One said:

‘It [a BPD diagnosis] makes it her inadequacy, her deficit, her problem, and generates a therapeutic nihilism in the treating staff, who then shrug their shoulders, and go “Well, what can I do? She’s got a personality disorder.”’ (KI 9)

4. A trusted therapeutic relationship

Both survivors and practitioners emphasised that the success of any therapeutic response hinged on the relationship between the service provider and survivor. Survivors repeatedly asserted that for recovery, what mattered most was the service provider’s personal and relational skills — it was ‘the type of person’ and ‘the way that people talk with you’ — rather than the kind of therapies they offered. As one woman explained, SV was a betrayal of trust and a negation of a person’s value, so for a professional to help remedy the harm:

‘… The number one factor is … the relationship, more than any other modality … If you get one person who you can trust … that can almost save you.’ - **Survivor 17**

Similarly, a practitioner said:

‘I don't think any modality works without that relational connection — that creates safety and validates the person's experience.’ - **Focus Group 3**

Survivors found trusted and supportive relationships through SSAS, psychologists and other counsellors, GPs, health professionals and others. The personal and relational qualities of professionals that aided their recovery included taking the time to build trust (one participant commented it took multiple sessions before she could even speak to her counsellor about what had happened to her as a child), 'really listening' rather than making assumptions; being non-judgemental; exploring individual needs, including disability access requirements, rather than treating people as 'just a number'; demonstrating emotional care, such as by providing a quiet setting and a cushion to hold; sharing 'bits' of their own life experiences; and working collaboratively and 'doing it together'.

Practitioners recognised that building trust took time and suggested that services needed to be creative in offering different ways to help survivors build their confidence that the service was 'safe' to talk to. For example, one practitioner spoke of working with survivors in an art studio as part of a community development program for young people. This allowed free-flowing conversations with practitioners and helped to build survivors' confidence to disclose difficult things happening in their lives.

Both survivors and practitioners stressed that facilitating a gradual transition to other sources of support was vital when support ceased. Survivor participants said that when practitioners did not sensitively manage the ending of a trusted therapeutic relationship, it caused a profound setback in recovery; several described feeling 'abandoned' and 're-traumatised' when counselling abruptly ended. Practitioners identified the importance of offering alternative ways to enable survivors to maintain a connection with services after they had completed therapy:

> 'People often ask at the end of service if there's a way for them to remain connected with the service. People ask about the potential for peer work [or if there is the] potential for them to volunteer or to come back and somehow still be part of the service.' - Focus Group 3

To create a pathway for survivors to maintain their connections, some practitioners suggested that SSAS could provide an open arts studio, which would provide a safe and creative space for survivors to stay involved in the service.

5. Holistic and coordinated care

Survivors consistently emphasised that they wanted the service system to recognise that SV affected their mental and physical health and behaviour in an interconnected way. Responding holistically to the impacts not only meant that they could be addressed, but it also meant that the extent and significance of the trauma they had endured could be validated. The powerful effect of a holistic approach was illustrated in the following quote from a survivor participant, describing how a hospital pain management specialist helped her to chart how her bodily pain was connected to life events:

> ‘To see that all written down, and [for] him to really get that these traumatic events had actually impacted [my] pain levels, and injury and everything … I’m so used to being compartmentalised when you go to health care providers [but] … to put the whole jigsaw puzzle together … [it was] so validating, it was really transformative.’ - **Survivor 12**

However, survivors felt that often service providers tended to treat a single issue or condition in isolation. For example, one commented: ‘you get diagnosed…[you’re] put in this box, you’re set on that pathway’ (Survivor 23), while another said his GP prescribed medication for anxiety but gave little attention to the underlying trauma that caused it.

Survivors said a holistic approach could also be effectively delivered through a coordinated team of services, although only one participant had actual experience of this. She said withdrawing from substance use was impossible without concurrently addressing the traumatic impacts of CSA, considering that trauma and substance use ‘feed each other’. Like other survivors, she described it as ‘exhausting’ having to re-tell her story to multiple service providers. However, what greatly progressed her recovery was when her SSAS counsellor began working in tandem with a holistic multi-disciplinary service that included a team of drug and alcohol counsellors, GPs, lawyers and mental health workers.

There was agreement among practitioners that the specialist and non-specialist service sectors needed to be better integrated to provide greater continuity and more holistic support for survivors. Specialist practitioners described how strong links between SSAS facilitated better recovery responses: ‘SASVic is a real strength in how CASAs are set up … We're all talking with each other, we're … robustly debating how we're doing things and why and sharing resources and information’ (Focus Group 1). However, practitioners shared a concern that survivors continued to ‘fall through the cracks’ in between different sectors and systems. They highlighted an urgent need for better integration between the alcohol and other drug, mental health, FV and SV sectors, as well as with inpatient mental health units and private practitioners. A major problem was that services had been established to address single issues and still operated in insular ways. Several expressed concern about the siloing of the SV and FV service sectors; for example, one said the fact that this siloing continues even after the recommendations of the Royal Commission into FV ‘[is] a completely and utterly terrible service gap for survivors of sexual assault’ (Focus Group 2). Another problem with siloing was that practitioners in non-specialist services often automatically referred clients to SSAS as soon as the client mentioned experiencing SV. This not only meant survivors did not necessarily get the services they were seeking, but also meant practitioners in non-specialist services did not develop the confidence to respond to SV. A focus group participant from a specialist service said when a client was referred to them:

‘We have to be very careful about what the reason for the referral was. Was it a tick and flick referral? Was it a [service provider who was] out of depth in this case, who is referring on to what they see as a specialist service? Or is this [survivor] actually really ready for sexual assault counselling?’ - **Focus Group 1**

The increased sharing of expertise across sectors was perceived by practitioners as a crucial strategy to develop more holistic and coordinated approaches to recovery. Practitioners from the non-specialist sector wanted greater access to training and secondary consultation from the specialist sector:

‘I would like to see … the expertise that is held in the sexual assault sector actually shared more widely with other sectors in ways that then are building up what you know.’ - **Focus Group 2**

At the same time, practitioners wanted a greater acknowledgement of the expertise of those who do not directly work in the specialist SV sectors. For example, a focus group participant said that there was a lack of recognition that, ‘sexual assault counselling and work is happening across the sectors, it's not just happening in the sexual assault space’ (Focus Group 2).

Practitioners said approaches that facilitated cross-sector collaboration and case management should be consistently available throughout Victoria, such as Multi-Disciplinary Centres, which can house SSAS, SOCIT, forensic medical facilities, child protection and community nurses together in the one location. Several practitioners had observed that Multi-Disciplinary Centres had improved collaboration between services, which enhanced outcomes for survivors. Some suggested ways of better integrating responses to SV and FV. One practitioner described the benefits of having a SSAS counsellor advocate spend half a day a week located at The Orange Door.[1] This had enabled The Orange Door staff to consult with the counsellor advocate and access resources and enhanced the ability of Orange Door staff to ask clients about experiences of sexual assault from the perpetrator of family violence. SSAS practitioners observed that being able to sit in on FV risk assessment and management panel (RAMP)[2] meetings gave them greater access to relevant information when they need to assess the risk of a case which had come through SSAS services.

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[1] The Orange Door (TOD) is the entry point into FV services across Victoria established after the 2015 Royal Commission into Family Violence. There are approximately 40 TODs in operation across Victoria.

[2] Risk Assessment and Management Panels (RAMP) are formal meetings of key local agencies to conduct a multi-agency risk assessment of people who are at high risk of serious harm from FV. There are 18 RAMPs across Victoria.

6. The choice of therapies and tailored approaches

Survivors consistently emphasised that services offered only a narrow range of therapies and more variety was crucial to meet individual needs. For example, several said they had been encouraged to use CBT but found it of limited use; it was described as a 'cookie cutter approach', too 'rigid' and 'rational', and didn't recognise the depth of the harm or 'resonate in an emotional way'. Others said that 'classic sit-down therapy' was not a mode of engagement that was comfortable or helpful for people of all backgrounds or ages. Many said training in meditation strategies helped them feel 'grounded' and less overwhelmed by distress, but others found it a 'nightmare' for triggering intrusive thoughts. Several found EMDR 'extraordinary' for reducing the intensity of intrusive memories or making sense of what had occurred, but some said it 'didn't click' with them. Some said trauma-informed yoga helped them re-connect with bodily sensations and release muscular tension. Arts- and body-based therapies were also appreciated as they provided the opportunity to be in a shared space with other survivors. However, when therapeutic modalities were assumed to work in the same way for everyone, it was not only ineffective, but also made survivors feel inadequate, as illustrated by the following quote:

> 'You kind of get locked into a track of, oh we're going to do CBT now, or ACT therapy, or DBT or EMDR … it's a very prescribed sort of thing and you feel like, if it's not working for you, it's your fault.' **- Survivor 23**

Survivors spoke of a range of informal strategies that they had found helpful them to feel calmer and more in control. These included poetry and art (which one person said enabled them to 'see things that I can't necessarily form into words') (Survivor 8) and exercise, which released tension and built confidence. An approach that was frequently mentioned was being in nature, which many described as especially therapeutic. Being in nature was experienced as calming (one said the ocean felt like 'a parent rocking you up and down') (Survivor 2); a safe space to escape harmful social norms (one woman commented: 'I'm not seen as a sexual object [among] trees and animals') (Survivor 21); an 'equaliser' for people of all cultures (because 'we all go back to the earth') (Survivor 18) and it made human problems seem small, because there were 'so many other planets and so many other stars' (Survivor 8).

Many survivors said that they would like to see alternative approaches to recovery receive greater funding and support within the Victorian service system. Practitioners agreed that a greater variety of modalities was vital, including alternatives to traditional talk-based therapies, with one practitioner commenting that 'often with sexual assault trauma, [survivors have] promised not to tell [anyone], so to express things by nonverbal means can be really powerful' (Focus Group 1). However, practitioners noted that alternative therapies were often viewed as 'a bit fluffy' and 'nice to have', while for many survivors, such approaches were essential (Focus Group 1). Additionally, practitioners said that standard models focused on individual counselling were not equally relevant or useful for all Victorian survivors, and an emphasis on individual models restricted the development of alternative approaches. For example, as one practitioner said:

> 'For First Nations people, having options for just being present and yarning might be more appropriate for what their needs might be, but we just can't afford that amount of time, we need to have appointment-based services based on targets.' - **Focus Group 1**

Alternative approaches that practitioners had observed to be valuable for survivor recovery included trauma-informed yoga, equine therapy, song-writing groups, play therapy and creative arts. For example, one practitioner detailed how equine therapy was empowering, particularly for survivors who were hesitant about counselling, as being with horses enabled them to 'talk about positive things while grounding their bodies and breathing' (KI 5). Practitioners recommended that funding models allow survivors to choose from a wide range of individualised recovery supports and therapies, including providing brokerage funding for survivors, similar to FV brokerage models that provide flexible funding for survivors of FV.[3]

7. Recovery responses that cater to the whole population

A strong concern expressed both by survivors and practitioners was that the current service system did not adequately cater to all Victorian survivors. As outlined previously in several sections of this chapter, survivors and practitioners repeatedly highlighted that services were failing to accommodate access requirements. A KI who worked in disability advocacy reported that some disability-focused services had stopped referring to SSAS because of their lack of communication access options and their limited accessibility more generally.

Survivors also said they needed greater cultural safety when engaging with services, including better training for service providers and being able to work with service providers from more culturally diverse backgrounds. For example, one survivor said most counsellors had 'a general understanding that… you need to take culture into consideration' but they lacked the knowledge, skill and confidence to put that into practice:

> 'Either you get people … that ask you very directly about your culture. It's like, woah where did that come from? Or some people just completely avoid it because they don't want to mess up.' - **Survivor 23**

Several survivors said they were yet to find a counsellor who understood how their culture or religion had shaped their experiences and felt that most counsellors relied on cultural stereotypes or 'completely avoided' exploring the influence of culture.

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[3] Brokerage funding is also accessible to survivors of SV through SSAS, but the amount available is much less than what is available to FV survivors.

Survivors spoke of the need for services to better recognise gender diversity among survivors. For example, at times male survivors found engaging with CASAs a challenging experience. One man said although the counselling he received was immensely helpful, he sometimes felt a sense of 'otherness' using CASAs and feared his presence made women service users uncomfortable (Survivor 5). Male participants said they recognised the large unmet demand for services by women survivors and were cautious about insisting they be included in SSAS, yet they also wanted the service system to acknowledge that men had particular support needs. For example, one said ideas about masculinity made recovery challenging, when the common assumption was: 'You're a man – how can you be sexually assaulted?' (Survivor 13).

Practitioners agreed that responses were more effective when tailored to individuals and specific cohorts of survivors, including Aboriginal and Torres Strait Islander peoples, migrant and refugee people, LGBTIQA+ people (particularly trans people and gay men), and people with cognitive and communication disabilities. One such example discussed was the importance of Independent Third Persons (ITP) to support people with disabilities, although KIs highlighted that such services were not always well known or utilised by police. Another practitioner described a program for migrant women, which involved local community mentors and survivor advocates supporting survivors to find employment (Focus Group 2). To more effectively meet the needs of all Victorian community members, some practitioners also called for more cohort-specific services, and/or having dedicated roles within SSAS to support people with disabilities, LGBTIQA+, people on temporary visas and older people.

8. Ongoing and as-needed support

Survivors repeatedly stressed that recovery was not a process with a clear end. Thus, having access to only a set number of free or low-cost support sessions (such as through the public health system, Medicare or SSAS) not only curtailed their ability to recover, but it also sent a message that they had 'failed' if they did not feel better within the timeframe of available support. Concerns about services that have 'an end date before they begin' were frequently raised by those who experienced SV in childhood and/or from multiple perpetrators (for example, one person said 'just providing my case history' took several sessions (Survivor 12). Their concerns were shared by participants with disability access requirements, who spoke about the need for services to provide appropriate amounts of time for finding shared language and communication styles, and using communication aids. A need for longer-term recovery support was also identified by survivors who had migrated to Australia and did not have established support networks here to rely on.

Practitioners agreed that more flexible, longer-term models of therapeutic support designed around the priorities of individual survivors were more conducive to recovery. Practitioners described how current funding models limited the number of counselling sessions provided and didn't allow for adequate case management.

Those from the specialist sector described how demand pressures on their services led to tightened and variable eligibility criteria across services (depending on regional demand pressures). They said service limitations that were 'dictated by funding rather than need' had the effect of imposing artificial recovery timeframes on survivors and often resulted in survivors having to 'start again' with private practitioners or other mental health services, putting additional pressure on the already strained SSAS workforce. According to practitioners, there were gaps in the availability of SSAS counselling outside of business hours, and a need to offer outreach, online chats and after-hours counselling appointments.

A critical concern among practitioners from the SSAS was that survivors' access to recovery support was delayed due to demand pressures, which had led to long waitlists in some regions. Practitioners emphasised that when a timely response was not possible it had a damaging impact on survivors' recovery journey and potentially deterred some survivors from seeking help again. For example, one commented: 'We see really significant differences in those [survivors] who get a positive early response. Validating and creating that safety initially will significantly impact the level of therapeutic resources required [in future]' (Focus Group 2). To address these challenges within constrained and insecure funding models, some services were re-considering how to provide support options for those who were not ready to engage in counselling, as well as what could be offered to those on waitlists seeking counselling.

Along with greater funding for more support sessions, survivors said other strategies could help to provide 'safe, supportive places that you can go to when you're feeling depleted' (Survivor 5). These included the 24-hour Sexual Assault Crisis Line, and, as mentioned above, being able to return to a SSAS or other services to engage in advocacy opportunities after counselling ended. Some survivors wanted fact sheets, online workshops and other resources, 'where you can just access them … in your own time' (Survivor 22). Similarly, practitioners suggested that web-based methods could expand access to recovery support and provide options for those who required support but did not necessarily need one-to-one counselling. They suggested providing peer support or other recovery programs (such as yoga) online and developing online guides so survivors could understand the trauma-informed services and programs available in Victoria.

9. Redress and accountability from perpetrators and the community

Many survivors said that having the perpetrator, institutions and the community acknowledge the harm done to them was a necessary part of recovery. Some said that when police and courts demonstrated a recognition of the injustice they had endured, it restored their sense of faith in the community. This was the case for one woman who said the police and prosecutors' 'determination to get this to a trial was really comforting' as it demonstrated they were committed to seeking justice for herself and others:

‘Not only did they listen and believe [me], but they were very proactive … So that really, really … aided my recovery to know that there are organisations and groups out there that are behind you. They've got your back.’ - **Survivor 19**

However, most survivors felt unable to gain accountability through the criminal justice system because they found that their experiences of SV were not taken seriously by the police or courts, or the process was too traumatising to engage in. Yet, survivors were not always seeking a formal criminal justice response. Several said that institutions or community members played a strong role in promoting acknowledgement and accountability. For example, one person said their friends in the transgender community had helped them to confront and exclude the perpetrator from a community forum. Another said that the ‘most important’ factor in his recovery was his former school’s public acknowledgment of sexual assaults by a teacher and its commitment to ‘do better’ (Survivor 13). Similarly, practitioners recognised the value of institutional apologies, restorative justice processes and other avenues for survivors to tell their stories in ways that were meaningful and enabled them to feel heard. For instance, a focus group participant recalled a young woman who was determined to tell the Commissioner for Children and Young People what had happened to her: ‘She didn’t want a legal or a justice response. She wanted to tell this person whose job was to keep all the children in Victoria safe’ (Focus Group 3).

Other signs of social recognition of the harmful impacts of SV also facilitated recovery. Survivors said access to crimes compensation, funded disability services and income support, and workplace mental health leave was not only financially helpful, but also had psychological benefits. For instance, a participant said: ‘It’s an acknowledgement that there is validity in what I’m saying and what happened to me’ (Survivor 6). Disabled people said financial assistance was particularly important as they often already had significant healthcare needs and less capacity to work; one person said managing their physical health was already expensive ‘so I don’t want to add another psychologist on top of that’ (Survivor 22).

10. Opportunities to connect with other survivors

Survivors consistently identified that engaging and building connections with other survivors (such as through support groups, peer education, mentoring programs, online communities, systemic advocacy networks and hearing other survivors’ stories) had unique therapeutic impacts; one described groups as ‘the biggest catalyst in my recovery’ (Survivor 23). Crucially, survivor groups helped people to shift stigmatising self-perceptions and recognise that they were not ‘abnormal’; one woman said a peer support group helped her to realise ‘other people had gone through a similar thing and … that I wasn’t wrong ...I wasn’t bad because of that’ (Survivor 1). Groups provided a shared understanding, sense of belonging, reduced survivors’ isolation and offered the potential for ongoing friendships. For instance, one woman said she felt ‘at home and safe’ in an online survivor community:

‘They kind of get what you are saying without you even having to say it. They know the effects, they know what it's like … it's helped me to feel less alone.’ - **Survivor 6**

Even when SV was not directly discussed, simply being in a shared space with other survivors – whether in-person or online – provided a sense of belonging. Groups also offered support to articulate the harm of SV in a public forum; as one woman said: ‘there’s so much secrecy around CSA … To have a space where you hear other people, it encouraged you to start speaking’ (Survivor 17). Groups helped to repair trust; for instance, one man explained that male survivor groups provided an opportunity to learn to be vulnerable around other men. Participants also said other survivors acted as role models, providing hope in their healing journey, helping at a practical level by sharing their ‘toolbox’ of recovery tips and strategies. Similarly, practitioners had observed that peer support models provided pathways for progression out of counselling, reduced isolation and had a powerful impact on self-blame. However, some practitioners noted that peer support programs were offered by different groups and organisations on an ad-hoc basis, which made it difficult for survivors and practitioners to know what groups were available and whether they were run in a safe and supportive way.

A consistent theme among survivors was a desire to connect with peers with similar backgrounds and identities, which one person said ‘helped to turn down that sense of otherness’ (Survivor 5). Survivors spoke of wanting culturally specific groups and groups designed for young people, survivors of CSA, gender-diverse people, male survivors and women with disabilities (tailored to access requirements). For instance, one person was hoping to find a group specifically for gay men because he had found participants in general male survivor groups often had homophobic assumptions that being gay was caused by being sexually assaulted by another man.

11.Social inclusion

All survivors found a sense of community acceptance, belonging and participation important for healing, and many spoke of a desire for services to assist them to build social networks. Yet some were not afforded the same opportunities as others for community inclusion. For example, one participant was sexually assaulted by another student at school, rendering her schooling even harder, as she was already feeling excluded because of her sensory disability. She said her teachers and support staff did not do enough to stop the abuse and they failed to help social inclusion: ‘It wasn’t always easy for me because — making friends — it was such a big school. I think a lot of people were just really mean to me’ (Survivor 11). Another participant who had migrated to Australia said they needed help to build social networks that other people simply ‘take for granted’, yet it was difficult to find this kind of help when the service system’s focus was on individual therapies.

Practitioners agreed that services should provide survivors with more opportunities to connect with the community and build social networks. For example, one commented that for some survivors, their support 'just falls away' after counselling ends, leaving them socially isolated (KI 8).

Survivors highlighted a need for services to provide more support to their partners, family and friends. Several said their partner, friends or family members struggled to know how to help them and did not fully comprehend why their recovery took so long or why it was so difficult. A couple of survivors had accessed family therapy to help their family members to understand how best to support them, but many felt that more guidance was needed for their social networks. Other participants found their partners, family and friends immensely helpful (one said they 'have your back and … get angry on your behalf') (Survivor 15) but at the same time, they recognised that offering support took a toll and they wanted services to offer emotional support to their loved ones.

12.Opportunities to have a voice in change

Survivor, practitioner, and KI participants highlighted the immense value in offering survivors opportunities to use their experiences to contribute to social change. For instance, a practitioner said: 'I think advocacy and having other people witness what you've gone through is pretty powerful … that sort of work in recovery is really important' (KI 1). Survivors described the powerful impact of services supporting them to engage in advocacy, education and mentoring. For example, one participant said being engaged through a SSAS as a mentor for a younger person gave him compassion for himself: '[being able to say that] it gets better and it's not your fault … kind of allowed me to believe it a bit more myself' (Survivor 5). Several were involved in peer education and self-advocacy through SSAS and Disabled Persons Organisations; one said supporting other people with disabilities was healing because: 'to see the difference in that person, it actually makes a difference in you' (Survivor 2). Importantly, advocating for social change lifted a sense of hopelessness and affirmed the person's value in the community. For example, one woman had participated as a person with lived experience in government policy consultations. She said:

'It helps me actually stay alive and have a purpose – so I feel like I'm living a life of meaning … [knowing] there's a lot of things that I can contribute towards, as damaged and traumatised as I may be.' - **Survivor 12**

Conclusion

This chapter has explored understandings of recovery and the responses that are effective, drawing on data from survivors, practitioners and key informants. The findings provide a survivor-informed understanding of recovery and the responses that promote it, and an overview of enablers and barriers to effective practice in Victoria.

Table 3 provides an overview of the findings of this chapter. In the table we have used the two themes that reflected survivors' key recovery needs (i.e., personal stability and security; and relational and social recognition and repair, as discussed in Part A) to categorise the effective responses that participants identified (i.e., the 12 themes outlined in part B).

Table 3. Survivors' recovery needs and perceptions of effective responses

Recovery needs	**Effective responses**	**Key elements**
Personal stability and security	A safe base for recovery	• Safe housing and a stable environment • Police and legal protection
	A framework for making sense and processing the harm	• A structured and specialised therapeutic approach for reflecting on and addressing the impacts of SV • Understanding SV in a social context
	A trusted therapeutic relationship	• A collaborative and caring approach • Longer-term support to allow survivors time to develop trust • Different avenues to help survivors build a trusted relationship with a service • Facilitating transition to other support • Providing ways for survivors to remain connected to a service (such as open arts studios, peer mentoring)
	Holistic and coordinated care	• Recognising impacts of SV on mind, body and behaviour • A collaborative team of services to address interconnected impacts
	A choice of therapies and tailored approaches that fit	• Access to a variety of recovery interventions (including mind-body, nature, arts and community-based approaches), along with traditional one-to-one talk therapies
	Ongoing, as-needed support	• Timely responses available when survivors are ready • Flexible, longer-term models of therapeutic support • Access to 24-hour support, online resources and programs
	Responses that cater to the whole population	• Practitioners with skills and knowledge of using accessible language and modes of communication • Practitioners who understand the influence of culture on SV and recovery and who can provide culturally safe responses • Tailored responses for First Nations people, migrant and refugee people, male survivors, LGBTIQA+ communities and women with disabilities
Relational and social recognition and repair	Recognition of the wrong	• Recognition and legitimisation of SV by service providers, legal authorities and institutions • Accessible sexual rights and consent education
	Redress and accountability from perpetrators and community	• Criminal justice system that holds perpetrators to account • Community processes that hold perpetrators to account • Institutional acknowledgement and redress • Compensation and workplace leave
	Opportunities to connect with other survivors	• Peer education and peer support groups • Specific groups tailored to survivors with shared backgrounds, identities or experiences
	Social inclusion	• Inclusion in social networks and communities

		• Support from (and for) partners, family and friends
	Opportunities to contribute to change	• Avenues to participate in advocacy, peer support or mentoring to have a voice in social change

Chapter 5: Discussion of findings

'For me [recovery is] much, much bigger than just like, do I feel safe? It's actually much more like, do other people feel safe and how can we make more people feel safe? … [But] centring it on the individual and not thinking about the broader picture — I just don't think it's helpful.' - Survivor 14

Introduction

This chapter summarises the key findings of this study in response to the research questions, bringing together the data from 25 survivors, 27 practitioners and key informants, and our synthesis of 25 literature reviews on the efficacy of therapeutic approaches. The chapter presents a discussion of effective responses to support recovery after SV and analyses how findings intersect or diverge from existing studies in Victorian, Australian and international settings. We discuss some of the barriers to delivering optimal responses in Victoria and how to address them. We conclude this chapter with our key project learnings and reflect upon the strengths and limitations of the study.

Effective responses to support recovery after SV

Our findings identify that recovery after SV is an ongoing journey of change that not only involves the survivor but also the perpetrator and the wider community. At the personal level, consistent with existing literature (Draucker et al., 2009; Herman, 1992; Jeong & Cha, 2019; Sinko et al., 2022; Tarzia, 2020; Tarzia et al., 2024), survivors perceived SV as a unique harm that encompassed feelings of bodily violation, breach of trust and an injured sense of self. This underpinned profound feelings of not being safe in the world and disruption to every area of life. Their perceptions of the impacts of SV shaped how they understood recovery and healing. In addition, survivor and practitioner narratives suggested that recovery is a journey taken in a social world that is characterised by misconceptions and judgement, where survivors are often stigmatised and silenced (Rees et al., 2019). With this in mind, our findings suggest that recovery requires two key components: personal stability and security, and relational and social repair. Survivors not only need effective interventions to address trauma symptoms, but also social recognition and accountability for the harm and injustice experienced, a sense of solidarity with other survivors and inclusion in the community, and an opportunity to influence social and political change. In other words, we need a broader view of recovery, going beyond the alleviation of individual psychological and physical trauma impacts.

Recognising that the broader historical and cultural context shapes how recovery after SV is perceived (Sinko et al., 2021) we acknowledge that our findings are likely to have been influenced by recent shifts in cultural understandings of SV in Victoria and internationally. An understanding of SV as a problem connected to gender-based inequality, ableism and other forms of oppression has been promoted by the #MeToo movement and recent royal commissions into FV and the abuse of people with disabilities (Commonwealth of Australia 2017, 2023; State of Victoria, 2016). Our findings suggest that promoting recovery requires a whole-of-community response, with multiple systems and services, including health and welfare practitioners, legal authorities, schools and other institutions having an important role to play. Drawing on our survivor-informed conceptualisation of recovery, we identified the following responses as being crucial to support survivor recovery across the Victorian service system.

Promoting personal stability and security

Our findings indicated that a sense of stability and security is facilitated through the following responses.

Centring safety as foundational for recovery

The fundamental need for survivors to feel safe from further harm for recovery work to be effective was a finding that accorded with international studies about survivors' recovery needs (Draucker et al., 2009; Sinko et al., 2022). Our findings highlighted the importance of proactive policing and legal protection to support safety in the community, as well as the need for safety for survivors in service and institutional settings, particularly in disability services and group homes, and psychiatric in-patient care. A lack of safety for survivors in those settings has been identified in other Australian research (Isaac et al., 2023; O'Dwyer et al., 2019, 2021; Watson et al., 2020). New approaches to promote safety and recovery in select psychiatric settings were described by some practitioners, with two women-only trauma-informed mental health services now being offered in Victoria. However, these services are not yet accessible to the majority of women who might benefit from them. Further, the lack of safety of people in disability service settings remains an injustice that prohibits recovery.

Services taking a position in recognising harm

All study participants emphasised the need for service providers to take a moral position by conveying recognition of the significant harm and injustice of SV and legitimising a survivor's entitlement to support. Similarly, other researchers have identified the importance of recognition from services, institutions and the community. McGlynn and Westmarland (2019) have conceptualised recognition as a form of justice for survivors. Also, as we found, they have identified that recognition is more than being believed; it is about having the significance of the harm and injustice acknowledged (McGlynn & Westmarland, 2019). The impact of recognition and validation in helping to shift shame and self-blame was also identified in some studies in our synthesis of the review literature (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Konya et al., 2020; Lange et al., 2020; Parry & Simpson, 2016; Scott Tilley et al., 2023; Westerman et al., 2020) and in other Victorian studies (Hegarty et al., 2017). The importance of recognition for people with disabilities was highlighted in our study, with participants indicating it had a transformative impact when a professional or legal authority recognised the harm and injustice of their experience and provided an accessible way of explaining it. As other researchers have suggested, people with disabilities are often affected by repeated abuse, discrimination and disempowerment and may come to perceive that those experiences are something they have to accept in an ableist environment (Maher et al., 2018; Woodlock et al., 2014). Many people with disabilities are denied access to sexual rights and consent education (Frawley & O'Shea, 2020). Thus, recognition of the wrong of SV and an acknowledgement of the right of survivors to an accessible pathway to safety and recovery may be particularly important (Maher et al., 2018).

A specialised therapeutic approach

Our findings suggested that because SV is a specific kind of harm, recovery interventions require a specialised approach. Firstly, our synthesis of the review literature highlighted that practitioners need the skills and adequate time to build a therapeutic relationship based on trust and collaboration with a survivor (Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Heard & Walsh, 2023). The survivor participants in our study prioritised the relational responses of service providers far more than particular therapeutic modalities (Brown et al., 2022). Reinforcing the findings of Brown et al. (2022), they suggested that a practitioner who demonstrated genuine care and worked in partnership with them countered the loss of trust and autonomy associated with the experience of SV. Also consistent with our synthesis of reviews (Brown et al., 2022; Konya et al., 2020; Parry & Simpson, 2016) Brown et al. (2022), our participants highlighted the importance of being ready to end a service and being supported by practitioners to transition to other types of support where needed (Brown et al., 2022; Konya et al., 2020; Parry & Simpson, 2016). Our findings identified that survivors valued other ways to maintain their connections with services and practitioners after the intervention ends, such as opportunities to engage in workshops, forums, art or music studios, peer group work and advocacy (Burmester, 2019).

As has been found in other Victorian research (Hegarty et al., 2017), many survivors in our study were unable to build a relationship with a service provider who could support them throughout their whole recovery journey. Survivor and practitioner participants spoke about a lack of adequate funding to meet demands for specialist services, resulting in service rationing. This not only meant that the negative impacts of SV were not adequately addressed, but it also created an unhelpful pressure for survivors to feel 'recovered' within a pre-determined time frame. Echoing this finding, the review literature suggested that having services end before survivors are ready may jeopardise the sustainability of positive changes already made (Brown et al., 2022). Flexible, longer-term models of therapeutic support designed around the priorities of individual survivors are essential to support recovery.

A second element of an effective therapeutic response was the need for service providers to offer a psychological, social and structural framework to help survivors make sense of their experiences. Situating SV as a wider social problem assisted survivors to shift shame and self-blame and normalised their coping responses after the SV. The synthesis of reviews also spoke of sense-making as key to the efficacy of therapeutic interventions by supporting survivors to process traumatic events in their lives and challenge negative beliefs (Brown et al., 2022; Burmester, 2019; Parry & Simpson, 2016).

A third element of an effective therapeutic response was a phased, trauma-focused approach. Our synthesis of the qualitative and quantitative reviews supported the organisation of therapeutic interventions (where appropriate) into three phases: (1) building therapeutic relationships of trust and safety, and working with a survivor to strengthen their skills and resources to manage and decrease distress (Brown et al., 2022; Burmester, 2019; Coates et al., 2022; Konya et al., 2020; Melton et al., 2020; Parry & Simpson, 2016; Regehr et al., 2013); (2) supporting survivors to engage in revisiting and processing memories if they want to (Brown et al., 2022; Coates et al., 2022; Coventry et al., 2020; Konya et al., 2020; Melton et al., 2020; O'Doherty et al., 2023; Parcesepe et al., 2015; Parry & Simpson, 2016; Regehr et al., 2013; Sepeng & Makhado, 2019); and (3) assisting survivors to (re)connect with others (support/peers/employment, etc) with an outward focus, preparing them to feel ready to end formal interventions (Brown et al., 2022; Burmester, 2019; Konya et al., 2020; Parry & Simpson, 2016). Consistent with a phased approach, survivor participants in this study valued having a sense of control over the therapeutic process and being guided through an intervention, including being supported to process memories (Brown et al., 2022; Heard & Walsh, 2023; Melton et al., 2020; Parry & Simpson, 2016).

Consistent responses across the service system

SSAS were highlighted for their consistency in providing trusted, phased responses and helping survivors to understand the gendered nature and specific harms of SV. However, study participants voiced concern about superficial, minimising or dismissive responses from a variety of service providers, including from police, courts and legal authorities. They also described problematic responses from practitioners, particularly in the mental health sector, who medicalised and pathologised their experiences of trauma. Additionally, a lack of understanding of how to respond to SV resulted in practitioners making inappropriate referrals to SSAS services, which prevented practitioners in other sectors from developing their skills and confidence in working with survivors. It was suggested by participants that generalist mental health services, emergency departments, inpatient unit staff, psychologists and other private practitioners could benefit from capacity building. This would include knowledge of how experiences of trauma often lead survivors to rely on coping mechanisms such as alcohol and drug use and self-harm, and how to respond in ways that don’t pathologise survivors or compound their trauma.

This points to the need for targeted or tiered workforce development strategies that increase the consistency of responses and build on the roles and expertise of different sectors across the Victorian service system (Burmester, 2019; Coates et al., 2022; Coventry et al., 2020; Heard & Walsh, 2023). Evidence suggests that even a small amount of training can improve a practitioner's efficacy in responding (Burmester, 2019), however knowledge and attitude improvements are unlikely to be sustained with brief or single session training (Sammut et al., 2019). Collaboration also improves consistency of practice, but relationships are difficult to develop when services face intense demand. For example, while several SSAS practitioners spoke of strong relationships with police and SOCITs in their regions, high turnover and staff shortages across both workforces, particularly during COVID, has disrupted these connections. To improve cross-sector understandings of SV, our findings identify a need for greater access to training for a range of service providers, and the development of collaborative and multidisciplinary ways of working across the Victorian service system. A service system culture that supports research, ongoing evaluation and practitioner improvement is essential (Anderson & Whiston, 2005; Sammut et al., 2019; Sawyer et al., 2016).

Choice of interventions and an integrated approach to address impacts of SV

Participants in our study reported that the psychological, physical, social and behavioural impacts of SV needed to be responded to in an integrated way. Consistent with other Victorian studies (Hegarty et al., 2017), survivors wanted both traditional and non-traditional therapies that addressed a variety of impacts and suggested these were crucial for their recovery. The interventions survivors valued included mind-and-body or arts-based therapies. They also highlighted the powerful impact of nature-based approaches, which many suggested offered unique mental, physical and social benefits. The efficacy of approaches that differed to traditional talk-based therapies was also supported by some evidence in the review literature (Lee et al., 2022; Nolan, 2016; Scott Tilley et al., 2023; Westerman et al., 2020), although more research is needed, particularly on the efficacy of nature and art-based interventions. Current funding models and a lack of opportunities for service providers to be trained in different modalities were cited by practitioners as key barriers that limited the capacity of specialist and non-specialist services to offer alternative approaches. Along with funding for training for practitioners to deliver a range of interventions, including trauma-focused interventions and non-traditional therapies, participants suggested providing expanded brokerage funds so that survivors can choose private therapies that fit their needs, and online information for survivors and practitioners about available services, support groups and other programs.

Study participants suggested that collaborative responses delivered through a team of practitioners with relevant expertise (such as practitioners from SV, FV, mental health, medical, and drug and alcohol treatment services) were vital to treat the impacts of SV in an integrated way. However, a consistent concern was that co-occurring experiences of harm (such as SV and FV) and their interconnected impacts were not being addressed holistically. According to practitioner participants, this was because of differing paradigms across sectors for understanding SV, the siloing of services in different Victorian sectors, and the pressures of demand and long waiting lists. These problems have long been identified (Hamilton et al., 2023; Hegarty et al., 2017; Humphreys & Joseph, 2004; McLindon & Harms, 2011; O'Dwyer et al., 2019; State of Victoria, 2016), but have persisted without adequate address. Approaches suggested by participants to develop more integrated support models included co-location of services and the expansion of Multidisciplinary Centres (that include SV and FV services, child protection and police); shared or coordinated case management; and clear referral and reporting pathways between services.

Promoting relational and social repair

Our findings indicated that relational and social repair is essential for recovery, facilitated through the following responses.

Avenues for accountability and redress

Study participants identified that a key element of an effective recovery response was an acknowledgement and accountability for wrongdoing from the perpetrator, institutions and community. The importance of justice and redress has received little mention in previous international studies with survivors about their recovery needs (Draucker et al., 2011; Sinko et al., 2022). However, 'justice, truth and repair' has recently been included as a new stage in the widely-cited trauma recovery model developed by renowned trauma expert Judith Herman (2023), drawing on the findings of her interviews with SV survivors. Consistent with Herman's (2023) model, our findings suggest recovery requires repair of a damaged relationship not only between the survivor and perpetrator but between the survivor and their community (Herman, 2005). Survivors in our study not only wanted the perpetrator formally held accountable through the criminal justice system, but they also valued accountability and acknowledgement from institutions, along with other demonstrations of community recognition and redress, such as crimes compensation and workplace mental health leave. While justice and redress approaches were out of scope for our synthesis of reviews about therapeutic interventions, our findings are consistent with studies that identify that justice from a survivors' perspective does not easily fit within either a restorative or retributive system and can include a wide range of community responses (Herman, 2005; McGlynn & Westmarland, 2019).

Opportunities for peer connection and social inclusion

Echoing the findings of other international research with survivors (Draucker et al., 2009; Sinko et al., 2022), our study indicated that healing requires opportunities for social connection and inclusion. Consistent with the review literature, participants emphasised how group interventions with other survivors bolstered healing through the process of sharing and validating experiences, promoting a new sense of self, a feeling of belonging and strengthening coping strategies through learning from others (Brown et al., 2022; Heard & Walsh, 2023; Konya et al., 2020; Lange et al., 2020; Westerman et al., 2020). Further, Konya et al. (2020) found that peer-led support groups contributed to feelings of mutuality and interconnectedness among survivors. In our study, participants with disabilities emphasised that sharing experiences of SV and other forms of disempowerment with peers promoted a sense of solidarity that was healing. The importance of solidarity in recovery has also been written about in research with communities that face oppression and marginalisation, including First Nations people (Black et al., 2019; Lindeman & Togni, 2022). Our findings pointed to a need for greater awareness and availability of peer-based approaches. Practitioner participants indicated that while peer support groups had existed for a long time in some areas, they tended to be offered on a regional and/or ad-hoc basis and were not widely promoted. Practitioners found it difficult to know what support groups were available in the community and how survivors could access them.

Survivor participants told us that support from their social networks and communities was essential to recovery. Many survivor participants relied on their partners, friends and family, and they wanted services to provide their loved ones with emotional support and guidance on how they could respond in helpful ways. People with disabilities also wanted services and institutions (such as schools) to foster community inclusion, because being socially isolated and excluded compounded the harm of SV. Although survivors' informal social networks and communities have largely been neglected in the literature on recovery, some studies have found their responses can significantly help or hinder healing (Brown et al., 2022; Lorenz et al., 2018).

Supporting survivors' voices in change

Survivor participants emphasised the importance of feeling they could make a difference in supporting other survivors and contributing to social and political change to prevent SV. Having a voice and a purpose was also identified in the Brown et al. (2022) review, among others (Burmester, 2019; Konya et al., 2020; Parry & Simpson, 2016). Some participants in our study emphasised that speaking publicly and without shame about experiences of SV and other abuse was part of 'disability pride' and countered the silencing of people with disabilities. Study participants gave examples of the transformative impact of participating in advocacy, such as having input in policy or practice responses, speaking to the media, or engaging in mentoring, education and peer support programs, either facilitated by services or survivor communities.

In the next section, we discuss some key barriers across the service system.

Key system barriers to effective responses in Victoria

> '[Recovery] does take a lot longer [when] you don't have the fundamental things that a lot of people take for granted, like family supports [or] cultural safety or cultural meaning … You meet a society that's so detached, and there's no understanding as to why things are so difficult for you. They just think it's a "You" problem.' - **Survivor 18**

Based on our findings from survivors, practitioners, key informants and the review literature, we identified two system-wide barriers that were central to effective recovery responses in Victoria.

A lack of access to recovery support

Our findings demonstrated that people with disabilities share the same recovery needs as other survivors, yet they have greatly reduced access to support. Participants emphasised that an ableist environment, characterised by inaccessible systems, services and information, undermined recovery by compounding the invalidation and denigration that disabled people frequently experienced. Participants spoke about major barriers to establishing safety in disability service environments [consistent with other Australian research including, Cadwallader et al. (2018)], and a lack of understanding among police and the justice system about how to support survivors with disabilities, which hindered access to legal protection (Commonwealth of Australia, 2023; Royal Commission into Violence, 2019). Participants suggested the lack of access to sexual rights and consent education served as a barrier for disabled people to recognise experiences of SV. Further, echoing other studies (Commonwealth of Australia, 2023; Dyson et al., 2017), our findings pointed to barriers obtaining therapeutic support from specialist SV services and other service providers due to a failure to physically accommodate, communicate well with and tailor interventions for survivors with disabilities (Dyson et al., 2017). Our findings reinforce those of other Australian research (Dyson et al., 2017) by highlighting that access requires more than simply removing barriers, it takes proactive steps to engaging survivors with disabilities. These initiatives should include training for specialist SV and FV services to increase their skills and confidence in supporting survivors with disability; and expanded access to sexual rights and consent education informed and/or led by people with disabilities.

A system that does not equally cater to the whole population

A concern consistently expressed by study participants was that the current service system did not adequately cater to the whole Victorian community. Survivors emphasised a need for greater cultural safety when engaging with services, including having service providers who had greater expertise in culturally competent responses or who were from a broader range of cultural backgrounds. Likewise, a need for alternatives for individual talk therapies were seen as important for a range of people, including those with little or no speech and people for whom individual talk-based therapies would be culturally or otherwise uncomfortable. In these instances, creative art and tailored group interventions were among the alternatives suggested. A study in our synthesis of review literature found that some trauma-focused therapeutic approaches, including EMDR, could be promising approaches for supporting survivors with communication and cognitive disabilities, although more research was needed (Byrne, 2022). A need for alternatives to traditional Western models of individual therapy have been identified in studies about SV recovery with Australian migrant and refugee communities

(Sawrikar & Katz, 2017) and First Nations peoples (McCalman et al., 2014; Prentice et al., 2016). Echoing the findings of other research (Gee et al., 2023; McCalman et al., 2014), participants in our study suggested that group and community-based healing models founded on cultural knowledge and values were often more appropriate and relevant, but funding models that centred on individual appointment targets hindered their development. Other researchers have drawn similar conclusions and have highlighted that the prioritisation of individualised recovery responses has been shaped by those with social and political privilege (Black et al., 2019; Lindeman & Togni, 2022). Participants in our study identified gaps in service providers' understandings of the experiences and recovery needs of men who are survivors, and a need to develop, expand and promote models that better accommodate specific cohorts and marginalised groups (such as peer support group models for gay men, young people and women with disabilities).

Strengths and limitations of the research

The strengths of this study include:

- Triangulated data collection and analysis where the voices of survivors and practitioners, and evidence from the international literature were integrated to answer our research questions
- Using in-depth interviews with survivors enabled us to hear their detailed descriptions of their recovery experiences.
- Survivors were from a range of ages and locations across Victoria and drew on experiences of SV in childhood and adulthood. Further, there was some gender, cultural and racial diversity among participants.
- The representation of participants with disabilities and key informants with experience working with people with disabilities meant that our study included experiences that are often missing from SV research.
- Our study included practitioner perspectives drawn from a mix of Victorian services, including SSAS, disability advocacy, FV, mental health, legal and health services.

The limitations of this study include:

- Many survivor participants were recruited from SSAS and disability advocacy services, which may have influenced their perspectives. While we undertook targeted recruitment across many sectors, more survivors were recruited from the abovementioned services than other sectors.
- We did not succeed in recruiting survivors who had not accessed the Victorian service sector. The perspectives of people who have never accessed the service system are important and missing from this report.

- Many of the authors currently or previously worked within the SSAS service system. Our backgrounds and connections with disability-rights and feminist organisations are likely to have made our analysis more attuned to themes of rights and social justice within the data. While we have worked to be reflexive in considering how our assumptions and experiences have informed this study, it is important to acknowledge these backgrounds here.

The final chapter of this report presents the implications, recommendations and conclusions of this research. This final chapter advances recommendations for workforce development, systems change, community engagement, research and evaluation.

Chapter 6: Implications and recommendations

Drawing on a survivor-informed perspective, our findings suggest that recovery and healing after SV is a multi-faceted process that incorporates social and relational repair alongside the alleviation of trauma symptoms. While the effectiveness of therapeutic approaches is unique to each individual and no single intervention alone will meet the needs of all survivors, our findings support the potential of coordinated and multi-dimensional interventions, including individual and group therapeutic approaches, peer and community support, and processes that promote social recognition, redress and accountability. Along with practitioners who have specialised knowledge of effective therapeutic responses, a wide range of service providers play an essential role in supporting recovery, by conveying a recognition of harm, contributing expertise in particular therapeutic modalities and offering responses that are tailored to the communities they serve. Our findings point to a pressing need for service and system-wide change so that recovery support is consistently delivered, readily accessible, individually responsive and effective for all Victorians.

The following recommendations should be considered in order to promote effective responses to support survivor recovery in Victoria.

Workforce development

1. **Implement a tiered workforce development strategy to build professional competencies in responding to SV and delivering evidence-based interventions**. This would include:
    a) expanded access to online clinical guidelines and toolkits for therapeutic work/practitioners, covering a range of trauma-informed modalities and interventions
    b) ongoing professional development opportunities supported by longer-term contracts in SSAS and higher pay to incentivise development of practitioner expertise.
    c) expanding and delivering targeted training, guidelines and tools for frontline service providers that frequently have contact with survivors (such as police, SOCITs, health practitioners and GPs, drug and alcohol, disability and aged care workers) on:
        - recognising the injustice and harmful impacts of SV, including how compounding experiences of trauma often lead survivors to rely on coping mechanisms and behaviours such as alcohol and drug use and self-harm.
        - how to respond in ways that avoid pathologising survivors or compound their trauma.
2. **Develop and implement a rights-based access strategy for the specialist sexual assault sector** with a focus on survivors with disability. This should be accompanied by regular training and audit tools.
3. **Introduce new practices, processes and models to improve the safety of survivors in institutional and service settings**, including disability services and group homes, inpatient psychiatric care and homelessness services. Survivor safety is the first step towards recovery.

Service delivery

4. **Increase and diversify the range of effective, culturally safe and free recovery interventions and support available to survivors**, including:
   - trauma-focused psychosocial approaches
   - mind-body, creative arts, and nature-based interventions
   - flexible, outreach, and ongoing support options, including in regional areas
   - tailored interventions to meet access, support and cultural requirements, including for men, LGBTIQA+ people, older people and people with communication and cognitive disabilities.
5. **Deliver disability-accessible, high quality sexual rights and consent education to promote recognition of SV across the community.** People with cognitive disabilities are often excluded from school-based respectful relationships education programs and consequently may not have had access to information on their rights, SV or consent laws.
6. **Improve access to specialist support and resources to assist survivors and community members to understand the available support options**. Avenues to address this include:
   - increase survivors' access to expand 24/7 'top up' support through increased resourcing to the SSAS and Sexual Assault Crisis Line to deliver services by phone and online
   - build an online hub of free, accessible recovery resources such as fact sheets, online workshops for survivors to use as needed
   - develop a 'menu' of information about recovery programs and activities offered by each service and pathways for referral.
7. **Develop centralised information and guidelines on recovery support groups, for the SSAS and survivors to access group support options**. Guidelines could be online and outline a 'menu' of different types of groups, based on:
   - purpose (therapeutic, supportive, advocacy, etc)
   - approach (talk-based or mind-body), provider, facilitation model (including models that use peer facilitators exclusively or in combination with counsellor/advocates)
   - delivery form (in person versus online), duration and frequency
   - eligibility and cost (related to the survivor's geographic location, previous/current engagement with 1:1 therapeutic work and readiness to participate).

Systems change

8. **Support system-wide consistency and collaboration by developing a shared Victorian service system framework about SV recovery. The framework should:**

- be led by the SSAS with expert input from other specialist sectors for specific content (eg. disability, mental health, drug & alcohol, homelessness and FV services)
- build an understanding of the SSAS sector's approach, evidence base and service offerings, while supporting a 'whole of system' approach
- encompass a survivor-informed understanding of SV recovery and effective therapeutic responses, as elucidated in this report
- identify the role non-sexual assault services can play in models that promote collaboration and coordination, including MARAM
- support stronger and more consistent referral pathways between services and sectors
- leverage and expand upon the contribution of Multi-Disciplinary Centres.

9. **Change the SSAS funding model** to allow for more effective and timely interventions and facilitate trusted therapeutic relationships and ongoing connections with survivors, if required. The new model should facilitate provision of longer-duration support where needed, and greater capacity for secondary consultation, advocacy, case management, brokerage funding and integrated care.

Community engagement

10. **Foster a social context where the wrong done to survivors is more strongly acknowledged, where pursuing justice is less traumatic and survivors are supported at an interpersonal and community level**.
    - Develop online survivor-led resources for friends, families and supporters, providing information about what survivors find helpful.
    - All tools and guidelines should be developed in Easy Read, be translated into different languages and accessible to people with different communication requirements.
11. **Provide and promote opportunities to connect with other survivors and contribute to social change.** Expand availability of free peer-based therapeutic and advocacy groups for survivors. Peer support models provide pathways out of counselling, reduce isolation and self-blame. Advocacy opportunities enable survivors to use their experiences and voice to help others and prevent further violence.

Research and evaluation

12. **Investigate how to optimally support recovery for First Nations survivors and survivors of SV from migrant and refugee backgrounds.**
    - First Nations organisations to lead research on First Nations survivors' needs and experiences.

- Migrant and refugee survivor organisations to lead research about migrant and refugee survivors’ needs and experiences.

13. **Support service providers to research, evaluate and share knowledge about the effectiveness of current SV recovery interventions and models being implemented in Victoria**, including individual and group approaches, and alternatives to one-on-one talk therapy. Avenues to address this include:
    - forums and platforms to share evidence and models, with a focus on models for cross-sector information-sharing and collaboration
    - case studies of interventions or recovery groups that cater to intersecting needs and experiences (i.e. for child sexual abuse survivors with substance abuse concerns)
    - co-designing services and evaluation processes with survivors
    - commissioning testimonials/case studies from survivors.

Conclusion

The findings of this study have addressed a gap in knowledge by illuminating the recovery needs of SV survivors in Victoria, the perspectives of practitioners and advocates who have supported them and the international evidence about what interventions are effective. These findings suggest that SV is a specific kind of harm, compounded by the silencing and stigmatising of survivors. To recover in the aftermath of SV, survivors not only need therapeutic interventions to address trauma symptoms, but also a social context where the harm and wrong done is recognised by services, the justice system, other institutions and the community. This is best complemented by a coordinated service system, where survivors receive specialised recovery support that combines trauma-informed, phased interventions within a social and structural framework for understanding SV. However, our findings suggest that presently the burden of recovering from SV falls heavily on survivors, in the absence of a social and legal system that consistently holds perpetrators to account. Although the Victorian service system goes some way towards meeting survivors’ needs, many do not receive a trauma-informed response from all parts of the service system and may wait a long time for a service that then ends before they feel ready. Further, the service system is weighted towards individual therapeutic work, with less priority given to arts-based or mind-body approaches, group programs or supporting survivors to advocate for social change. Inadequate funding for services, including SSAS, means survivors may not receive the type of support they need when they need it and there is a lack of capacity to implement innovative practice. Major system barriers prevent many survivors with disabilities from being able to realise their right to recovery and there is an urgent need to consider how the system, rather than the survivor, must adapt. The findings point to the need to increase the accessibility, range and relevance of recovery interventions so that all Victorians are supported throughout their recovery journey.

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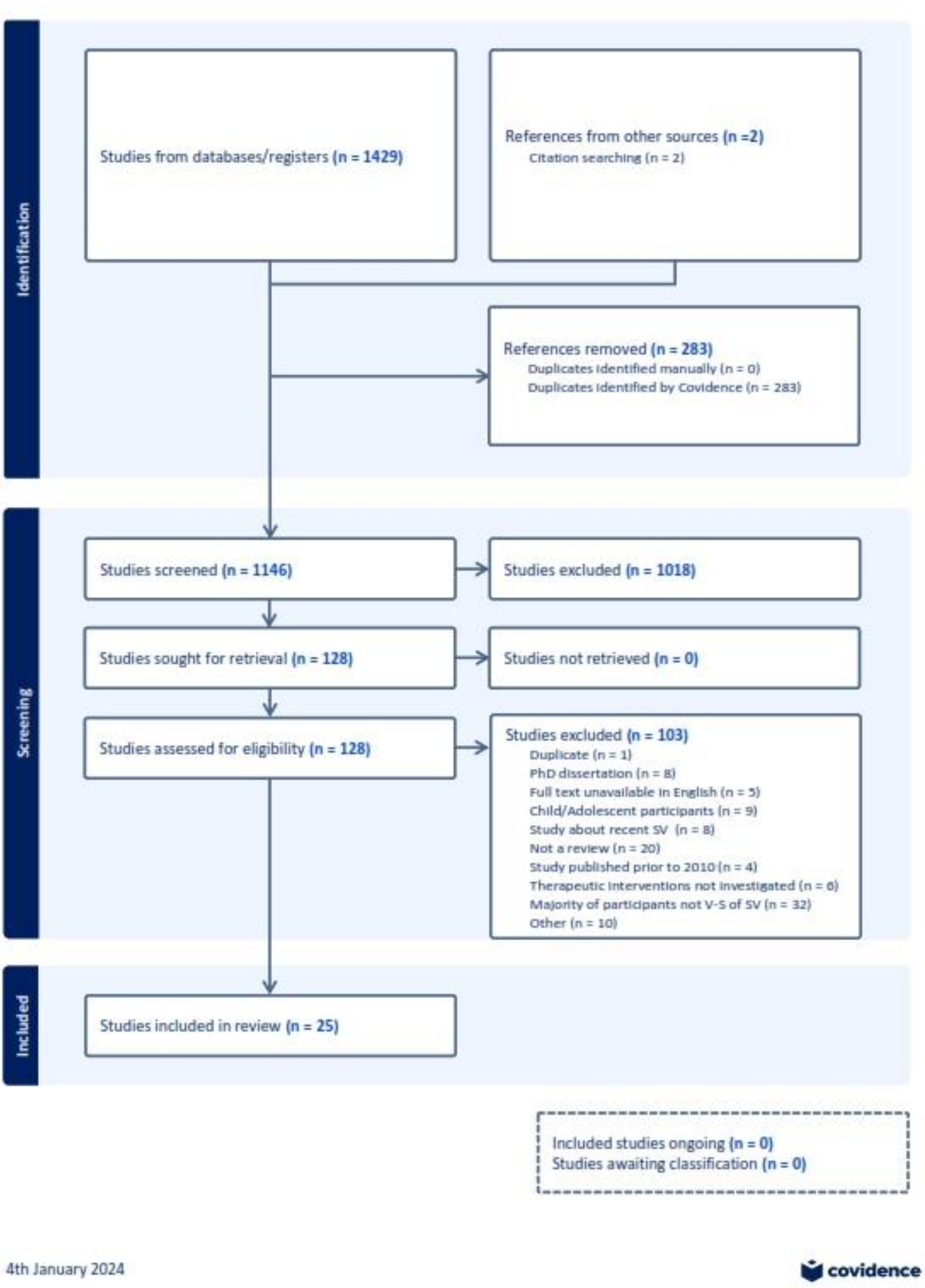
Appendices

List of appendix items

Appendix 1: Synthesis of reviews Prisma diagram



Appendix 2: Survivor participant information and recruitment processes

We provided information for survivors about the project and what the interviews involved through:

- A plain-language information sheet, available on The University of Melbourne Safer Families Centre website.
- An Easy Read project information sheet. This was based on an example shared by colleagues at the UNSW and used a description of SV adapted from the *Making Rights Reality* project at SECASA (https://www.secasa.org.au/programs-and-services/making-rights-reality/) with guidance from our PAG.
- A video with captions, which presented a conversation between project partners from WDV and The University of Melbourne explaining the project and assisted potential participants to understand who the researchers were.

We also developed an advertisement to promote the project through social media.

The recruitment information indicated we would accommodate reasonable adjustments for disability access, including allowing participants to have support people in interviews, and covering disability participation support costs.

Our recruitment material and project information are available in Appendices 3-5.

We used the following methods to share project information and advertisements:

- SASVic provided recruitment material to member organisations (sexual assault services and other relevant organisations), which then shared the material with their service users, either via advertisements on their social media or by discussing the research with current or former service users.
- The University of Melbourne Safer Families Centre posted the advertisement on its social media channels.
- WDV shared the material with members and people known to have an interest in recovery. This generated some recruitment of participants by word of mouth, and some disability advocacy services also shared WDV’s promotion via their social media.

Potential participants expressed interest by either emailing the interviewer directly or via an online form (Appendix 4). Some people requested to see the interview questions to help them decide whether to participate, or noted access requirements, such as captioning or rest breaks. Participants viewed the plain language statement (or Easy Read version) and gave their consent to participate by signing the consent form, the Easy Read consent form, or by providing verbal recorded consent.

After interviews, participants were offered a $40 gift voucher honorarium in recognition for their time and expertise, as well as information about support services.

Appendix 3: Survivor recruitment material and information

Social media advertisement

What helps in recovering after sexual assault?
Research participants wanted

Have you ever been pressured or forced into doing sexual things that you didn't want to do?

If so, we invite you to participate in a confidential interview about recovering after sexual assault and what helped you to feel better.

What you tell us will be used to help improve support services.

- We are interviewing approx. 20 adults aged over 18
- Interviews are with a Melbourne Uni researcher
- You will get a $40 voucher to thank you for your time.

Go to
https://tinyurl.com/REACHprojectform
or use the QR Code. Or email
womens-health@unimelb.edu.au

This research is by Sexual Assault Services Victoria, Women with Disabilities Victoria and the University of Melbourne.

Ethics ID: 2022-25080-35029-3

Plain language statement – survivor interviews

Information about this research project

Department of General Practice

Project: The REACH project: Recovery and Care to promote Healing for Victorian Survivors of Sexual Violence

Responsible Researcher: Elizabeth McLindon
Additional Researchers: Mandy McKenzie and Laura Tarzia, Department of General Practice, University of Melbourne; Amy Webster & Kathleen Maltzahn, Sexual Assault Services Victoria; Jen Hargrave, Women with Disabilities Victoria.

Introduction

Thank you for your interest in participating in this research project. The following few pages will provide you with further information about the project, so that you can decide if you would like to take part in this research.

Please take the time to read this information carefully. You are welcome ask us questions about anything you don’t understand or want to know more about.

Your participation is completely voluntary. If you don’t wish to take part, you don’t have to. If you begin participating, you can also stop at any time.

What is this research about?

This research is part of a project called “REACH” (Recovery And Care to promote Healing for Victorian survivors of sexual violence) and it is conducted by the Safer Families program at the Department of General Practice at the University of Melbourne, Sexual Assault Services Victoria and Women with Disabilities Victoria. The research is about what helps people to recover from sexual assault. Sexual assault (also called ‘sexual violence’) is when someone pressures, tricks or forces you to do sexual things that you don’t want to do, such as looking at or touching your private parts (for more information about forms of sexual assault see Sexual Assault Services Victoria website).

We will be interviewing approximately 20 people who have experienced sexual assault. In the interviews we want to hear about what ‘recovery’ means to them, what they think has helped or would help them to recover from sexual assault, and what approaches or services they have used to support them recover.

Who can take part?

You can take part in this project if you are an adult of any gender aged 18 years old or older, you live in Victoria and you have experienced sexual assault that happened more than 6 months ago (when you were a child and/or as an adult).

What will I be asked to do?

Should you agree to participate you will be involved in taking part in in a confidential interview with Mandy, a member of the project team who is from the University of Melbourne. The interview is about your experiences of recovering after sexual assault and what would or has helped you recover. We won't be asking you to describe the sexual assault/s you have experienced – the focus of the interview will be on what helps to feel better and recover after sexual assault.

The interview will take approximately 45-60 mins. It can be done over the phone, using Zoom (or other online video meeting program), or in person at the Department of General Practice, depending on what is convenient for you.

With your permission, the interview will be audio recorded. We will use a professional service to transcribe (write up) the recording of what you said in your interview.

You will not be identified in any reports, publications or presentations from the project. If you heard about this project through a support service that you use, we won't tell them whether you participated in an interview.

You will receive a $40 gift voucher to thank you for your time.

What are the possible benefits?

Participating in this project is an opportunity to share your experiences of recovering from sexual assault and to help the researchers learn from you about how services can better support people to recover. Based on the information from the interviews, we will develop resources for services about the best ways they can provide support.

What are the possible risks?

There is a risk that talking about this topic may make you feel uncomfortable or upset. You may pause or stop the interview at any time or withdraw from the project. We will give you a list of resources that you can contact if you need support after the interview.

We will not use any names or other identifying details in the report. However, there is a very small risk that someone who knows you could guess who you are from the answers you provide. You can check the transcript of your interview after it is written up. You can let us know if you want to remove any details that you feel might identify you.

Do I have to take part?

No. Participation is completely voluntary. You can stop the interview at any time or withdraw (quit) being part of the project at any time, even if you have completed an interview. You can also skip questions in the interview that you prefer not to answer.

Will I hear about the results of this project?

We will send you a link to the reports when they are available online unless you tell us you do not want that to occur.

What will happen to information about me?

Your interview data will be de-identified (your name, other people's names and other identifying details will be removed). Only the researchers will know whose interview it is. When we report on the findings, no real names or identifying details will be used. If you have participated in an interview on Zoom, the video recording will be deleted immediately after your interview to protect your confidentiality. Only the audio recording of your Zoom interview will be kept. All interview data will be stored securely at the Department of General Practice (using password protected files, encrypted storage, and locked filing cabinets). All the information you provide will be kept strictly confidential (within legal requirements).

Who is funding this project?

The project is funded by a research grant from Family Safety Victoria.

Where can I get further information?

If you would like more information about the project, please contact the researchers by emailing womens-health@unimelb.edu.au or phoning: Mandy McKenzie () or Elizabeth McLindon at The University of Melbourne

Who can I contact if I have any concerns about the project?

This project has human research ethics approval from The University of Melbourne [Project ethics ID 2022-25080-35029-3]. If you have any concerns or complaints about the conduct of this research project, which you do not wish to discuss with the research team, you should contact the Research Integrity Administrator, Office of Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 1376 or Email: research-integrity@unimelb.edu.au. All complaints will be treated confidentially. In any correspondence please provide the name of the research team and/or the name or ethics ID number of the research project.

INFORMATION ABOUT THE REACH PROJECT

This sheet has information about a research project called the **REACH project**

You can ask someone you know and trust to help you understand this sheet.

If you would like, you can watch a video that explains what the REACH project is about.

Who is doing the research? What is it about?

[photo of researcher Mandy]

My name is Mandy McKenzie. I do research at the University of Melbourne.

I am also working with:

- Elizabeth McLindon and Laura Tarzia at the University of Melbourne,
- Amy Webster and Kathleen Maltzahn at Sexual Assault Services Victoria
- Jen Hargrave at Women with Disabilities Victoria.

We want to learn about what helps people to feel better after sexual assault.

Sexual assault is when someone gets you to do sexual things that you do not want to do. For example, touching your private parts or making you touch their private parts.

Sexual assault can be a hard thing to deal with. It can make you feel confused or upset.

For our research we want to find out about what helps people to feel better after sexual assault.

How do I help with the research?

If you would like to help with the research, it will involve talking to Mandy.

You can talk to her on the phone or in person, or you can use a video chat program.

Mandy will ask you about:

- What would make you feel better after sexual assault
- What help you would like from services.

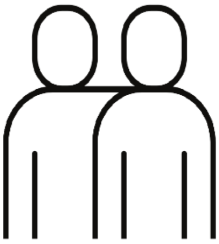
Mandy will not ask you about what happened when you were sexually assaulted.

It will take between 45 and 60 minutes.

Mandy will ask to record what you say. If you don't want her to, that is

OK. She will take notes instead.

You can choose which questions to answer. You can say no if you don’t want to answer a question.



If you want to, you can have someone you trust in the room to help you when you talk to Mandy.

If you need other help so you can take part in the research, you can talk to Mandy about that. She may be able to help you.

You will get a $40 gift card to say thank you.

What will happen with the information I share?

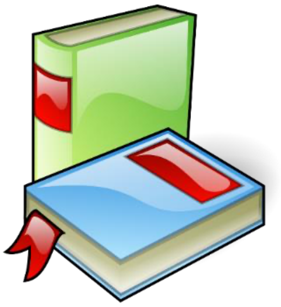
The information you tell Mandy will be kept private. We will not tell anybody your name or where you live.

We won’t tell anyone else that it was you who helped us with the project. You can choose if you want to tell anyone.

We will store your information in a private computer folder. It will be kept for 5 years after the research report is published.

We will write down everything you told us. We won’t use your real name in what we write.

You can read what it says before it is finished if you like. You can get support to read it if you need to. You can ask for things to be changed in what we wrote down.



We will write a report about what we find out. The report will tell services how they can help people to feel better after sexual assault.

If you want, we will send you a summary of what we wrote.

We can call or email you to help you understand the summary.

You only have to take part if you want to.

You can say no. It's your choice. No one will be angry if you decide you don't want to do it.

Even if you say yes, you can change your mind later and stop taking part.

What do I do if I want to take part in the research?

You can go to this webpage where you can fill in your name and contact details: https://www.tinyurl.com/HelpWithREACH

Or can get in touch with Mandy McKenzie to tell her you would like to take part:

- Email: womens-health@unimelb.edu.au
- Phone: 9344 5159

If you want to complain about the research project, can you get in touch with:

- Research Integrity Administrator, Office of Research Ethics and Integrity, University of Melbourne.
  Phone: +61 3 8344 1376 or Email: research-integrity@unimelb.edu.au.
  Tell them this number: HREC: 2022-25080-35029-3

If you feel upset after taking part, you can talk to someone who supports you.

Or you can call:

- Sexual Assault Crisis Line, phone:1800 806 292

Recruitment video (captioned)

How can you help with the research [text from video conversation]

My name is Jen. I work at Women with Disabilities Victoria. Our organisation is run by people with disabilities.

And my name is Mandy and I work at the University of Melbourne.

In this video we are going to tell you about a project that we are doing together and how you can get involved. It's called the 'Reach' project.

Mandy, can you tell us why you wanted to be involved in this project?

Well, in my work I've spent lots of time talking with people who have been sexually assaulted. And we know that lots of people have experienced sexual assault.

But we don't know what helps people to feel better after sexual assault. And we want to learn how services can help people to feel better.

So we want to hear from people about what helps to feel better after sexual assault.

We especially want to listen to adults with intellectual disabilities.

It's important that people with disabilities have good services that can help them if they are sexually assaulted.

So we really want to hear their ideas.

Mandy, not everybody knows what sexual assault is. Could you tell us a bit about what it is?

Sexual assault is when someone gets you to do sexual things that you don't want to do. So, for example, it could be touching your private parts or making you touch their private parts.

And it's not ok for someone to do that to you, and it's not your fault.

But sexual assault can be a hard thing to deal with.

It can make you feel upset or angry or confused. And that's why we want to hear from people about helps them to feel better after sexual assault.

So people can meet you for an interview, which is like a conversation where you will ask questions. Can you tell us a bit more about what happens in the interview?

We can do the interview on the phone.

Or we can use a video chat program like what you and I are using now.

Or you can come and talk to me in person at a support service.

When we start the interview, I will put on my tape recorder [show recorder] and I will record what you say.

But if you don't want it recorded that's ok, we can just take notes instead. And in the interview, I will ask you to talk about what's helped you to feel better after you were sexually assaulted.

And what help you might need that could help you feel better.

But I'm not going to ask you to talk about what happened when you were sexually assaulted. It's really about what you need that will help you to feel better.

It can be hard sometimes to talk about these things though.

So if you do need a break or want to stop, that's ok.

You can just say "I need a break" and we can stop.

And you can say no if you don't want to answer a question. And if you want to you can have someone you trust in the room, that can help you to talk to me.

If you need other support to take part in the interview you can just let us know about that.

The interview might take about 45 to 60 minutes.

And we will give you a $40 dollar gift voucher to thank you for your time.

So it's really your choice if you want to do an interview.

And noone will be angry if you decide you don't want to do it, or even if you say yes, you can change your mind later and stop the interview.

Thanks for that Mandy. And what happens next after the interview?

Well, we will think about what you told us in the interview.

And we will also think about what other people told us in their interviews.

And then we write up what we heard from people. And we will put it in a report, like that. And in the report we might share some things that you told us that have helped you.

But we won't use your name or anyone else's name.

We won't say where you live, so it will be kept private.

And noone will know that it was you who talked to us.

We will store the information you told us on a computer, a private computer folder, and we will keep it for 5 years after the report is published.

If you would like we can send you a copy of the report, or we can send you a summary of what we wrote. [show a report]

And we can talk with you to help you understand the summary. We will give the report to government.

And we will also give it to support services.

Because we really want them to learn from what people told us in the interviews about what can help them to feel better.

And how can people contact you if they want more information or if they want to take part in an interview?

Well, you can click the link which we will put at the end of this video, and it will take you to a form that you can fill in.

Or you can email me.

And if you need to you can ask a support person to help you contact me.

So, we hope to hear from you.

Thanks Mandy. And thanks everyone for your time.

Appendix 4. Participant expression of interest form (online)

The REACH project: Information and expression of interest form
Please note: We recommend you fill in this form on a computer that is private and safe. If you are worried that someone can see what you are doing on your computer or online, see the E-safety website*)*

What is the REACH project about?
The aim of the REACH research project is to find out how services in Victoria can best support people to feel better after sexual assault. Sexual assault is when someone pressures, tricks or forces you to do sexual things that you don't want to do (more information about sexual assault can be found on the website 1800Respect).

We want to talk to people who have experienced sexual assault about: what feeling better or 'recovery' means to them what has helped them to recover after sexual assault what approaches or services would help.

The 'REACH' research project is being done by the University of Melbourne, Sexual Assault Services Victoria and Women with Disabilities Victoria. (Ethics approval ID no. 2022-25080-35029-3)

Who is it for and what is involved?

We are interviewing adults of any gender, who are aged over 18, living in Victoria and who have experienced sexual assault that happened more than 6 months ago (either as a child or as an adult, or both).

In the interview we want to hear about people's experiences of recovering or healing from sexual assault over time, the services they may have used and what would help them to recover or heal after sexual assault. The interview will involve talking to Mandy, a researcher from the University of Melbourne. It can be over the telephone or a video chat program (for example, Zoom), or in person at the University. The interview will take between approximately 45 and 60 minutes.

The information you share will be confidential. When we report on the findings, no real names or identifying details will be used.

Interview participants will be given a $40 gift voucher to thank them for their time.

How can I get more information about participating?
Please fill in your contact details below (click the arrow at the bottom of the page).

We may contact you to provide more information about what the interview involves and to answer any questions you may have about the research. You can then decide if you want to take part in an interview.
***Please note:** we are only interviewing 25 people for this project, so we may not contact everyone who expresses interest in this research.

Alternatively, for more information, please contact or email: womens-health@unimelb.edu.au or contact Mandy McKenzie (03) or Elizabeth McLindon (03) at the University of Melbourne

Where can I get more information about sexual assault?
For resources and information see https://www.saferfamilies.org.au/healthyrelationship-tools or go to Sexual Assault Services Victoria's information on sexual assault

FORM Screening questions:

Q1 Are you over 18 years old?

Yes (1)

No (2)

Q2 Do you live in Victoria?

Yes (1)

No (2)

Q3 Have you experienced sexual assault that happened more than 6 months ago?

Yes (1)

No (2)

Contact details

Q2 What is your first name?

Q3 Please provide a safe email address for us to contact you (ie. one that any person you are afraid of does not have access to):

Q4 Please provide a safe phone number (ie. one that any person you are afraid of does not have access to):

Additional demographic info

The questions below provide us with a little bit more information about you (it's is ok not to answer them if you don't feel like it).

Q11 My gender is ... ______________

Q12 My age is ... ______________

Please tick which applies to you:

Q15 I am from Aboriginal and/or Torres Strait Islander origin

Yes (1)

No (2)

Q16 I was born outside of Australia

No (2)

Yes - The country I was born in is: (1) ______________

Q17 My first language is a language other than English

Yes (1)

No (2)

Q18 I live in a regional or rural area

Yes (1)

No (2)

Q19 I have a disability and/or a long-term medical condition

Yes (1)

No (2)

Q26 Do you have any access needs for the interview?

Please let us know if there is anything that would help you communicate or be supported in the interview. We aim to cover costs for access needs.

No (1)

Yes - please tell us what you require (2)
____

Q20 How did you hear about this research project?

From a counsellor or service that I use (1)

On Facebook/Twitter/Other social media (2)

Somewhere else (3) _________________

Appendix 5: Interview and focus group questions

A. Survivor interviews

Interview questions (with prompts used to draw out details)

1. How has the sexual assault(s) affected you and your life?
2. What does ‘recovering’ or ‘feeling better’ mean to you?
3. What have you done to help you recover or feel better?
4. What kind of help or support do you need to recover or feel better?

B. Practitioner focus groups and key informant interviews

Focus group and interview questions (with prompts used to draw out details)

1. What do you think ‘recovery’ means for survivors of sexual assault?
2. What are your experiences of delivering services to support recovery? What has worked and what hasn’t?
3. How effective do you think the overall service system is in supporting recovery – including for survivors with diverse and different backgrounds or experiences, such as people with disabilities, from migrant and refugee backgrounds, First Nations people and LBGTIQA+ people?
4. What innovative approaches to recovery are currently available in Victoria? Are there any promising approaches you know of that could be implemented?
5. What are the barriers and challenges that prevent services from delivering effective and innovative responses to recovery? What would make it easier to deliver effective responses?
6. What information and tools are needed to support Victorian services to deliver more effective responses to recovery?

Appendix 6: Survivor interviews – participant demographic details

	N (total = 25)
Gender	
Female/Woman	18
Male/Man	4
Non-binary or Agender	3
Age (years)	
18-29	9
30-39	4
40-49	6
50-59	5
60-69	1
Location in Victoria	
Metropolitan	21
Regional/rural	4
First language	
English	22
Other	3
Country of birth	
Australia	20
Outside of Australia (Thailand, Peru, Philippines, New Zealand, UK)	5
Aboriginal/TSI	
No	24
Yes	1
Disability or long-term illness	
No	7
Yes	18
Education	
Secondary school	5
Diploma or certificate	4
Degree or higher degree	16
Employment	
Fulltime	9
Parttime/casual employment	11
Unemployed	4
Retired	1
Income	
Wages/salary	14

Pension/benefit	9
Other	2
Experiences of SV (based on data shared in interview)	
Childhood	10
Adolescence/early adulthood	15
Adulthood	4
Perpetrator of SV (based on data shared in interview)	
Family member/carer	7
Friend/acquaintance/colleague	7
Teacher/priest	3
Stranger	4
Partner/date	7

Appendix 7: Additional information relevant to the Synthesis of reviews

An overview of specific trauma-focused interventions: While a detailed explanation of all trauma-focused interventions is beyond the scope of this report, we will provide a brief overview of some of the most commonly cited. Cognitive Behavioural Therapy (CBT), including Trauma-Focused CBT (TF-CBT), Eye Movement Desensitization and Reprocessing therapy (EMDR), Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT) are all examples of trauma-focused psychosocial interventions. **CBT** is an approach that focuses on restructuring maladaptive beliefs and thought patterns linked to behaviour that a survivor wants to change (Brown et al., 2018; O'Doherty et al., 2023). **TF-CBT** was developed to support children and adolescents through the creation of a preferred trauma narrative (i.e. involving drawing, writing, dance, etc) and mastery of trauma-reminders (Neelakantan et al., 2019). **EMDR** is a therapeutic approach that targets past experience, current triggers, and future potential challenges while activating both brain hemispheres (via eye movements or other forms of bilateral stimulation) (Shapiro, 1995). **PE** involves gradual imaginal or in vivo exposure to feared cues (American Psychological Association, 2020), while **CPT**, which was first developed as an intervention for victim-survivors of SV, involves challenging and modifying unhelpful beliefs through detailed writing about traumatic experiences (American Psychological Association, 2017). Trauma-focused interventions often follow a strict protocol and require specialist training.

Whether trauma- or present-focused, interventions can be categorised by their mode of delivery and approach:

Individual ‘talking’ interventions: Within the synthesis of reviews chapter, this term is used to refer to one-to-one counselling-type approaches that may be trauma- or present-focused.

Group interventions: There are two main types of group interventions – those with a therapeutic focus and those with an advocacy, support and/or education focus (Heard & Walsh, 2023). This synthesis of reviews focuses on (trauma- and present-focused) therapeutic groups that have the broad aim of reducing the impact of SV on survivors through sharing and validating their experiences in a group setting (Brown et al., 2022; Heard & Walsh, 2023; Kim & Kim, 2020; Konya et al., 2020) and in some cases, memory processing (Burmester, 2019; Melton et al., 2020; Sepeng & Makhado, 2019).

Mind-body interventions: are aimed at improving physical and psychological well-being by involving the body to target interactions with the brain and behaviour (Lee et al., 2022; Muehsam et al., 2017). Mind-body interventions include therapeutic dance (Lee et al., 2022), mindfulness and meditation (Scott Tilley et al., 2023; Westerman et al., 2020), physical activity/therapy (Brown et al., 2022; Pebole et al., 2021), trauma-sensitive yoga (Nolan, 2016) and art therapy among others.

Appendix 8. Characteristics of 25 included reviews of interventions for adult survivors of sexual violence [1]

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
Brown et al. (2022) United Kingdom	Primary aim was to explore experiences of child & adult victim-survivors (V-S) of SV regarding psychosocial interventions for reducing negative health outcomes	Qualitative evidence synthesis (Cochrane Review)	37	*Qualitative*	Supportive counselling, TF counselling, psychoeducation (individual and group)	Main finding themes: interventions improved V-S understandings of trauma, mental health, physical health and relationships. Organisational and practitioner factors affected V-S engagement and experience of intervention.
Burmester (2019) New Zealand (NZ)	To assist the NZ Ministry of Social Development to understand post-crisis support services for V-S of SV in NZ	Rapid review (Qualitative)	35	*Mixed* [2]	Supportive counselling, EMDR, SIT, PET, CPT (individual and group)	*Positive:* Findings indicated that individual trauma-focused interventions have strongest evidence, especially when delivered over 4-5 months. Supportive counselling well received by V-S, but did not demonstrate strong evidence for reducing PTSD, depression, anxiety. Specialist SV training for practitioners associated with improved awareness and fewer misconceptions.
Byrne (2022) Ireland	To investigate the effectiveness of EMDR & CBT in reducing PTSD among children & adults with intellectual disability [3]	Systematic review	11	*Mixed* Case study: 4 Case series: 3 Multiple baseline: 1 RCT: 1 Quasi-experimental: 1	CBT & EMDR (individual)	*Preliminary promise:* tentative evidence that CBT & modified EMDR protocol reduced PTSD for survivors of SV with intellectual disability.

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[1] Across all reviews, the majority (≥50%) of study participants are adult victim-survivors (V-S) of SV (experienced at any time during the life course), unless otherwise specified in footnotes

[2] Design of included studies not specified

[3] 6/11 studies with V-S of SV

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
				Single group design: 1		
Chen et al. (2018) Italy	To investigate the efficacy of EMDR for reducing negative mental health impacts with V-S of Complex childhood trauma [4]	Systematic review	6	*Quantitative* RCT	EMDR (individual) compared to CBT, supportive individual/group counselling, fluoxetine & control	*Positive:* Findings indicated EMDR associated with reduced PTSD, depression & anxiety compared with all other interventions & control.
Coates et al. (2022) Australia	To conduct a review of reviews of the effectiveness of crisis and post-crisis responses V-S of SV on reducing negative mental health impacts	Review of reviews (Overview)	9	*Mixed* [5] Qualitative meta-analysis: 2 RCT: 1 Quasi-experimental & RCT: 1 Mixed non-systematic rapid review: 1 Quantitative evidence synthesis: 1 Systematic review with Narrative synthesis: 5	CPT, EMDR, SIT, PE, Psychoeducation, (individual)	*Positive:* Efficacy indicated that TF-interventions (CPT, EMDR, SIT & PE) reduce depression, anxiety & PTSD. EMDR, CPT and SIT particularly effective for V-S of CPTSD. *Mixed* evidence for efficacy of supportive counselling (present-focused intervention), although *positive* qualitative findings from V-S.

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[4] 3/6 studies with adult V-S of CSA

[5] All review (not individual) studies, 6/9 were of post-crisis services

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
Coventry et al. (2020) **United Kingdom**	Investigate efficacy of psychological & pharmacological interventions in reducing negative mental health impacts following complex trauma	Systematic review & component network meta-analysis	116	*Quantitative* 94/116 RCTs	TF-CBT, EMDR, DBT, IPT, CBT & present-focused counselling (individual or group)	*Positive:* Findings indicated EMDR & TF-CBT are most effective (compared to other psychological/pharmacological interventions), at reducing PTSD, depression, anxiety, negative self-concept, emotional regulation & connection to others *especially when combined* with skill-building.
Hardeberg Bach et al. (2023) **Denmark**	To provide initial insights into the advantages and disadvantages of eHealth modalities in targeting the psychosocial needs of adult V-S of SV	Scoping review	85	*Mixed* Qualitative: 18 Quantitative: 46 Mixed: 21	eHealth modalities including web-sites, video therapy, intervention videos, mobile apps, virtual reality (individual)	*Positive:* Findings indicated eHealth can reduce aspects of PTSD and some evidence that video therapy may be as effective as interventions delivered face-to-face. V-S generally found eHealth acceptable and some favoured eHealth modalities compared to face-to-face because of increased sense of privacy, availability and flexibility. However, some V-S felt uncomfortable using eHealth.
Heard and Walsh (2023) **Australia**	To explore the potential usefulness of group therapy for adult V-S of SV and to inform the design and implementation of future group therapy interventions	Scoping review	32	*Mixed* Quantitative and qualitative: 26 Qualitative: 6	TF (including EMDR, art therapy and drama therapy) and non-TF groups (including support and education), mostly running for 8-12 weeks lasting 2 hours in length (group)	Group therapy appears to have the potential for helping V-S feel more connected and supported. Group topics it could be important to cover include self-esteem, trust, power, control, guilt, anger, sexuality, relationships, normalising responses, social isolation, strengths and coping strategies. Groups included in this study were professional led.
Kim and Kim (2020) **South Korea**	To assess the effects o psychological interventions in	Meta-analysis	10	*Quantitative* RCTs	CBT (any), SIT, psychotherapy or	*Positive:* Findings indicated reduced PTSD (up to 12-months later) and depression (up to 6 months later), but not anxiety or social functioning (at

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
	reducing negative mental health impacts for adult V-S of SV				PE (individual: 6 or group: 4)	intervention end). Median 14 sessions across interventions (most of which were CBT).
Konya et al. (2020) United Kingdom	To explore the potential benefits of peer-led, group-based, interventions in the care of adults V-S of SV and to describe the experiences of group participants	Systematic review	8	*Mixed* Qualitative: 5 Quantitative: 3	Peer and professional-led support groups	Among main finding themes: V-S qualitatively reported positive psychological impacts from participating in V-S peer groups including in terms of being able to voice experience, reorganise core beliefs about self, experience positive health outcomes, behavioural change and social connection including emotional connectedness. Issues with time-limited groups and a lack of consensus about most effective group models. Participants preferred to have longer-duration groups and to remain connected to other group members.
Lange et al. (2020) United Kingdom	To explore efficacy and experience of interventions for mothers who are V-S of CSA	Systematic review	4	*Mixed* Qualitative: 2 Quantitative: 1 Mixed: 1	Parenting/mothers groups	Some quantitative evidence for efficacy of group intervention in reducing shame, guilt, improvements in parenting, increased self-esteem and reduced social isolation. Qualitatively, V-S positively described the experience of participating in the groups. Of particular note, the methodological quality of the studies was low and 2/4 studies were (unpublished) Masters Theses.
Lee et al. (2022) United States	To review existing evidence on the effects of therapeutic dance interventions for female and male V-S of SV [6]	Systematic review	11	*Mixed* Qualitative: 3 Single observation studies: 6 Quantitative: 2	Therapeutic dance (individual and group)	Qualitative and observational finding themes included participants improved emotional self-awareness, expression and regulation. Positive benefit experienced by participants in both individual and group therapeutic dance interventions. Participants felt improved sense of safety, interpersonal relationships and optimism

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[6] 8/11 studies with adult V-S

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
						about the future. Of particular note: Methodological quality of some studies was low; 6/11 studies included in this review were detailed observations of one participant.
McCalman et al. (2014) **Australia**	To understand responses (services, programs, strategies) to the sexual assault of Indigenous Australians	Systematic review	23	*Mixed*	Service evaluations (varied)	Review found no intervention studies so there is no evidence about how to effectively respond to First Nations V-S, with only a few program descriptions having been published.
Melton et al. (2020) **United Kingdom**	To investigate the effectiveness & acceptability of psychological &/or pharmacological interventions to reduce negative mental health impacts following complex traumatic events	Systematic review including qualitative synthesis & quantitative meta-synthesis	184 [7]	*Mixed* Qualitative: 105 Quantitative: 79	TF-CBT, CBT, supportive counselling, multicomponent interventions	*Positive:* Findings indicated that TF-CBT, multicomponent interventions & supportive counselling may be effective for reducing PTSD & depression and improve negative self-concept & sleep. *Results do not support* efficacy of (non-TF) CBT for reducing PTSD. Phase-based interventions that included stabilisation work before exposure may be more effective for emotional regulation & relationships.
Nolan (2016) **United States**	To investigate: (1) whether trauma-sensitive yoga (TSY) is effective in reducing PTSD, (2) what if any other benefits does TSY provide for women who have experienced trauma, and (3) What	Narrative review	5 [8]	*Mixed* Qualitative: 1 Quantitative: 4	Trauma-sensitive yoga	*Tentative support:* for reduction in trauma symptoms for TSY and control group, with greater decline for TSY versus control. No significant between group difference for depression. V-S positively evaluated the intervention and felt increased sense of safety and feeling of being in control. TSY found to be safe and inexpensive.

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[7] 14/184 studies were with adult V-S of CSA

[8] The authors advise that V-S of interpersonal trauma had experienced childhood physical/sexual abuse, IPV, or adult sexual abuse, but proportions of participants/studies by trauma type not specified

Review & country of lead author	**Review aim**	**Review approach**	**Number of review studies**	**Design of included studies**	**Intervention/s (individual/group)**	**Main review findings (including outcome/s measured)**
	role can TSY play in the treatment of trauma					
O'Doherty et al. (2023) **United Kingdom**	To investigate psychosocial interventions (and whether some were more helpful than others) to relieve the mental health impacts experienced by V-S as a result of SV in adulthood	Systematic Cochrane Review)	36	*Quantitative*	Trauma and present focused psychosocial interventions	*Positive:* Findings indicated an improvement in mental health at three months favoring trauma-focused interventions. The review suggests that among those who are safe, have trauma symptom stabilisation and have expressed a preference for such approaches, offering trauma-focused intervention may be helpful. For others, and those that opt to exit trauma-focused treatments early, structured non trauma- focused approaches are a viable alternative.
Parcesepe et al. (2015) **United States**	To investigated the effects of mental health interventions on adult female V-S of SV (and whether some were more helpful than others).	Systematic review	9	*Quantitative*	Trauma-focused (several approaches including EMDR, AT, CPT, SIT, supportive psychotherapy plus information etc) and present focused interventions (supportive counselling)	*Positive:* Findings indicated that trauma-focused interventions appeared more effective for reducing PTSD, depression and anxiety with no efficacy difference between them. AT, CPT and EMDR among others were associated with reducing PTSD; CPT and EMDR with reducing depression, and AT and supportive psychotherapy + information with reducing anxiety. Supportive counselling was not found to be associated with a reduction of mental health symptoms.
Parry and Simpson (2016) **United Kingdom**	To synthesise qualitative studies on the experiences of adult survivors of CSA in relation to talking therapies	Systematic review – line by line thematic analysis	23	*Qualitative*	Nonspecific and trauma-focused talking therapies	*Main finding themes*: therapeutic process was a means for developing new options within interpersonal relationships through the experience of trust and the experiential learning of control and choice. The therapeutic process helped survivors develop a renewed sense of self.

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
Pebole et al. (2021) **United States**	To identify information relevant for promoting and designing exercise interventions that can integrate into clinical treatments for adult V-S of SV	Comprehensive narrative review	18	*Mixed* Qualitative: 4 Quantitative: 14 (observational)	Physical activity (meditation, yoga, weights, boxing etc)	*Unclear:* Observational studies in this review broadly indicated that the impact of SV on physical activity is unclear. Qualitative findings indicated that V-S found physical exercise positive and that it improved their mental health.
Regehr et al. (2013) **Canada**	To investigate the efficacy of psychological or psychosocial interventions for adult V-S of SV	Systematic review	6	*Quantitative*	EMDR, CPT, PE and SIT	*Positive:* Findings indicated that CPT, PET, SIT and EMDR were associated with decreased symptoms of PTSD, depression and anxiety.
Scott Tilley et al. (2023) **United States**	To review the types of mindfulness-based interventions that have been researched with adult V-S of SV and their outcomes	Scoping review	5	*Mixed*	Mindfulness, guided meditation, yoga, art therapy (most studies combined interventions)	*Positive:* Findings indicated statistically significant improvements in some or all outcomes measured (PTSD, depression, anxiety). Some evidence for combined intervention although study reporting made it difficult to know which approaches were more helpful than others.
Sepeng and Makhado (2019) **South Africa**	To summarise the evidence on psychological interventions with V-S of SV	Brief exploratory systematic review	5	*Quantitative*	Trauma and present focused psychosocial interventions (Individual and group)	*Positive:* Findings indicated efficacy for trauma-focused interventions. Further, individual interventions appeared to be more effective than group interventions.
Sousa-Gomes et al. (2022) **Portugal**	To review the effectiveness of interventions with adult V-S of CSA for reducing negative mental health impacts	Systematic review	7	*Quantitative* Controlled & RCT	DBT, CBT, SGT, AGT, IPT	*Positive:* findings indicated that DBT and CBT were most effective in reducing PTSD, depression and anxiety.

Review & country of lead author	Review aim	Review approach	Number of review studies	Design of included studies	Intervention/s (individual/group)	Main review findings (including outcome/s measured)
Stobbe et al. (2021) **Netherlands**	To provide an updated overview of prevention and intervention programs targeting V-S of SV with intellectual disability	Systematic review	12 (4 intervention studies)	*Quantitative*	Trauma and present focused psychosocial interventions (Individual and group)	*Tentative support:* Some evidence that group interventions were effective in reducing feelings of anxiety and negative beliefs, while improving self-esteem and assertiveness skills. However, there were methodological issues including very small sample size.
Westerman et al. (2020) **United Kingdom**	To establish the effectiveness of mindfulness and compassion-based programs to reduce shame and other negative mental health impacts among adult V-S of CSA	Systematic review	9	*Mixed* Quantitative: 8, Mixed: 1	Mindfulness-based programs and compassion-based programs (individual and group)	*Positive:* findings with 8/9 studies indicated significant decreases in shame. In 6/7 studies, depression was also reduced. Promising (although comparably minimal) evidence that programs may reduce symptoms of PTSD, self-criticism and self-hatred and increase self-compassion.

‘Complex’ and ‘diverse’: Meaning-making and affirming practices as healing justice

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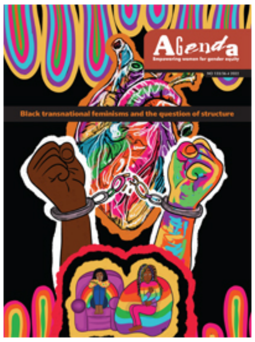

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‘Complex’ and ‘diverse’: Meaning-making and affirming practices as healing justice

Chenai Mupotsa-Russell

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perspective

‘Complex’ and ‘diverse’: Meaning-making and affirming practices as healing justice

Chenai Mupotsa-Russell

abstract

This perspective draws from my insights in advocacy and therapeutic practice as an African art therapist in Australia. Along with my own positionalities, I have often been involved specifically producing projects related to LGBTIQA + people, migrant communities, First Nations people and other minoritised people in advocacy work. As a therapist, it is not only necessary to be attentive to the ways intersectionality operates as it relates to people who are frequently framed as ‘complex’ and diverse’, these locations and the often pathologising framework of our positions are amplified by where and how neurodiversity is understood for people in the position of therapeutic work. The national sentiment in Australia often frames engagement with those who are complex and diverse through intentions around social inclusion, so multiculturalism and diversity shape the sociocultural as well therapeutic space precisely because they fail to capture the connected structures of power people are engaging, and a transformative ethical intentionality. That is, that questions related to power, and the force of cis-heteronormativity, neurotypicalness, white supremacy, classism and ableism.

More specifically, in therapeutic practice, the onus is often on me to confront what sickness, trauma, pain, or even treatment mean when we decentre the biomedical models of mental health that frame our operations. I reflect on how I moved from state-operated practice to build my own practice intended to intentionally make a safer space for Black, indigenous and people of colour, LGBTQIA+, neurodivergent and disabled communities. I engage with the continued complexities of building multiple processes of meaning-making as a form of healing justice. I also explore my practice as it is shaped and informed by a transnational, decolonial and feminist praxis. Finally, I engage with the ways that even in attempting to invent this space of dwelling, coming up and against a broader sentiment of an ‘even’ and inclusive national sentiment, and a denial of the operational and constitutive forms of difference that are echoed in law and policy and have affective and structural effects in how we move and live in the world, is a practice that routinises my own exhaustion.

keywords

social inclusion, difference, neurodiversity, healing justice, therapeutic art practice, intersectionality

Complex and diverse: The question of difference and the biographical self

I am an African art therapist living and working in Australia. When I moved to Australia from Zimbabwe I learned that I was ‘CALD’ – culturally and linguistically diverse. Although I was predominantly educated in hegemonically white epistemic spaces, I had always been part of the numerical majority, which placed a different kind of emphasis on my cultural identity. As a result of this and my other intersecting identities, I am framed as ‘complex’ and ‘diverse’ in the Australian context, and this is something that has come to hold particular weight and meaning as I have developed

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my personal and professional practice. Along with my own positionalities, I have often been involved in specifically producing projects related to LGBTIQA + people, migrant communities, First Nations people and other minoritised people in advocacy work. I gravitated towards this work as a community development practitioner and as a therapist, and through this work have come to strongly identify and develop new praxes from these experiences.

My professional experience has relied on a praxis of working through systems with an optimistic openness to how I could facilitate healing and justice. This means that as I have understood the operation of structures and systems with intentions to advocate for groups, usually framed in the terms of 'diversity', and where interventions were framed towards inclusion within a broader notion of a normative, or normalised collective 'we'. My intuition was to first connect to the ways that people's daily experiences of the world related to mental health, so I was guided towards practices where I could understand healing as a process related to my own being in the world and even the conditions from which I work, or how 'work' was constructed, but also how necessary healing as process was incredibly connected to advocacy. Moving towards an arts-based praxis, and a strong sense of the body, not only as a repository of trauma but also a tool from and through which in playing and making we might find capacities that uncondition us from binaries like mind/body. This conditioning normalises systems that inform stratified gendered, ethnicised and racial dichotomies that reproduce white, colonial cis-heteronormativity, which in principle always pathologises those who operate as minoritised others. As this relates to questions of justice, this conditioning supports a carceral system which also criminalises those who are different. This affective 'we' also advocates a sense of wellness conditioned around our capacity to best approximate a way of being neurotypical.

The discourse in Australia often frames engagement with those complex and diverse through intentions around social inclusion, and as such discourses surrounding multiculturalism and diversity shape the sociocultural as well therapeutic space, precisely because they not only fail to capture the connected structures of power that people are engaging, but these systems are designed to fail in producing a transformative ethical intentionality. Australia has a colonial history that includes the genocide of First Nations Australians. The estimated resident Aboriginal and Torres Strait Islander (ASTI) population of Australia as of June 2016 was estimated at just under 800,000 people, or 3.3% of the total population. Although a dominant white narrative is pervasive in all colonised nations, the particular effect that whiteness has had in Australia compounds the ideology of whiteness as the default norm, and other of all others include the actual land owners. Incorporating intersectional frameworks in arts-based therapeutic practice (see Sajnani, 2012, and Talwar, 2010, for example) allows one to unveil the force of racism.

My master's thesis titled *Look at All the Rainbows: My Journey through the Implementation of an Arts in a Youth Program Mental Health Setting* (Mupotsa 2018) was an incredibly powerful culmination of this experience and intuition. I looked to strategies that affirmed the experiences of people and how these experiences were coincident with the ways they faced how their bodies operate and move within the affective and structural spaces they operate in. This process of research and reflection, operating with the figurative 'rainbow' still in principle operated within the broader national sentiment and policy frameworks of diversity, multiculturalism and social inclusion in one valence of its operation (Gipson 2015). In diversifying our conception of a collective 'we', perhaps in some ways what operates as normative could be reshaped, and this might in turn produce affirming processes and practices of being in the world.

When I founded Rainbow Muse (see https://www.rainbowmuse.com.au/) in 2019, it was in response to observing a need for culturally inclusive mental health support specialising in working with people at the intersections of cultural diversity, neurodivergence and gender diversity. Rainbow Muse started off as just myself, but now in addition to a co-director we employ multiple staff, including art therapists, play therapists, general We have Art therapists, and

Artistic representation of ‘complex’ and ‘diverse’: meaning-making and affirming practices as healing justice by Chenai Mupotsa Russell.

educational and developmental psychology, general psychology, clinical psychology, and psychotherapy services. Rainbow Muse also offers support workers, allied health assistants and yoga. We work from a decolonial anti-racist framework with a reflective practice that demands constant work around unpacking privilege (Sajnani 2021). We also have a strong passion for advocacy and action outside of the therapy setting to support our clients. This practice really embodies all of the ways in which I have tried to cultivate healing practice across my professional career, including selecting a physical location that is accessible to communities who often cannot access mental health services and support.

Working with dedicated optimism from this location I still observe enduring constraints we face in articulating something that activists and scholars in various parts of the world are articulating as a ‘feminist healing justice framework’ (see Carruthers 2018, Green et al. 2018, and Pyles 2019). Based on my own various positionalities as a neurodivergent, black, migrant person I am confronted with the operational powers of difference as a red thread across my career, and these continue to show up in the daily interactions with my colleagues, many of whom are empathetic, kind, and ethically committed to the convictions of the practice. But it remains a daily project to interrupt the pervasiveness of 'diversity' and multiculturalism, because what they promise are reforms that are often nonperformative:

> The failure of the speech act to do what it says is not a failure of intent or even circumstance, but it is actually what the speech act is doing. In other words, the nonperformative does not 'fail to act' because of conditions external to the speech act: rather, it 'works' *because* it fails to bring about what it names. (Ahmed 2006, p. 105, emphasis original)

Nonperformative speech acts rely on the continuous work of the one who embodies difference, but also it is not only the work to constantly 'bring it up', but in calling attention to the problem, you come to also embody the problem itself:

> Our arrival is read as evidence of commitment, of change, of progress. Our arrival is noticeable. […]
>
> When our appointments and promotions are taken up as signs of organisational commitment to equality and diversity, we are in trouble. Any success is read as a sign of an overcoming of institutional whiteness. […]
>
> Our talk about whiteness is read as a sign of ingratitude, of failing to be grateful for the hospitality we have received by virtue of our arrival. It is this very structural position of being the guest, or the stranger, the one who receives hospitality, which keeps us in certain places, even when you move up. Diversity becomes both a problem and a paradox for those who embody diversity. (Ahmed 2009, pp. 41–42)

This is something that operates within interpersonal and professional relations, and in aspects of my personal experience there are times where in pointing to the problem, I have then been moved elsewhere because I have now become the problem. This means that this is structural, but also conditioned into the national imaginary as a critical element of 'belonging' to the nation itself. This makes work where, at least in my own practice, it is not my intention to 'fix' someone so that they are better conditioned to approximate normativity, but instead to create the conditions of keeping a person well, safe and perhaps occasionally even joyful.

Decolonial thinking and practice (see Dupois-Rossi 2021, Horn 2020, and Kessi & Boonzaier 2018) have become critical buzzwords and terms, as people of colour, colonised people all over the world, First Nations people and others have attempted to demonstrate that the progressive temporality of a colonial period that is passed is simply not true, as its structuring systems and its structural traumas remain with us. In this way decoloniality allows us to see how the notion of the 'human' has been constructed on the basis of the terms of propertied, able-bodied, cis-heteronormative white men, making all others, minoritised others, inherently pathological. These traces are of course evident in what has been constituted as pathological in the *Diagnostic and Statistical Manual of Mental Disorders*, which is constantly revised as identarian politics seeking representation and justice have taken shape in our various presents. This means that while there could be a multiple/multiplied view of the body, or illness, we are often relegated to this normative and universal viewpoint. This approach to decoloniality also directs us to understanding how disciplinary knowledge is all shaped and informed by this normative and normalised sense of 'the human', which also normalises not only a pathological status of difference, but in turn supports systems than normalise carceral systems that also criminalise difference.

The promise of intersectionality as a term developed by black women to think about how multiple positionalities shape our experiences, and in particular in Kimberle Crenshaw's (1990, also see Ogundipe-Leslie 1994) account of it, reveals the real consequences that intersectionality produces as it relates to black women's experience of the criminal justice system. The term is taken up and then trafficked in ways that remove from its initial confrontation in systems and structures of power (see Lewis 2013, Sajnani 2012, and Talwar 2010). As a therapist it is not only necessary to be attentive to the ways intersectionality operates as it relates to people who are frequently framed as 'complex' ad diverse', these locations and the often pathologising framework of our positions are amplified by where and how neurodiversity is understood for people in the position of therapeutic work.

Being a therapist can feel like gaslighting individuals into taking responsibility for systemic oppression. The complex and diverse must comply and develop the best approximation of 'normal' as a condition of acceptance and a perceived wellness and belonging. As I further unpack social constructs, I also known that the same 'complexity' and 'diversity' attributed to racialised people is also present for gender-diverse people, people with disabilities and people in lower socio-economic demographics. The separation of groups deemed complex has led to individualised service provision for each group. When someone falls into multiple groups they are then too complex, and none of the services will take them. An organisation for LGBTQAI + people will want to refer that person to a refugee and asylum-seeker service should they tick that box as well. Holistically working with individuals and celebrating their full identities without the deficit-based model categorising their existence becomes impossible.

What this system produces is what Jasbir Puar (2017) describes as 'debility', the deliberate debilitation of populations that is so pervasive: from the hyper-presence of 'self-care' discourse and its embeddedness with neoliberalism and individuality, to social justice-oriented approaches coming out of critical disability studies. Puar's (2017) critique of the disability rights movement draws from the insight that "access to the identity of disability in this regard is a function, result, and reclamation of white privilege" (p. 15), "populations (institutionalized, incarcerated, racialized) for whom claiming the term and identity of disability is difficult given many are already stigmatized as nonnormative, and deemed in need of fixing, by the medical-industrial complex" (Puar 2017, p. 15). The inclusive agenda of this movement space then in turn confirms the processes of eugenics, and what is simultaneously veiled in this process is "debility as endemic, perhaps even normative, to disenfranchised communities: not nonnormative, not exceptional, not that which is to come or can be avoided, but a banal feature of quotidian existence that is already definitive of the precarity of that existence" (Puar 2017, p. 16).

The national sentiment in Australia often frames engagement with those who are complex and diverse through intentions around social inclusion, so multiculturalism and diversity shape the sociocultural as well as the therapeutic space. Questions related to power, and the force of cis-heteronormativity, neurotypicalness, white supremacy, classism and ableism are hidden. More specifically, in my personal experience working within this therapeutic practice, the onus is often on me to confront what sickness, trauma, pain, or even treatment means or is defined as, when we decentre the biomedical models of mental health that frame our operations. Diversity and inclusion are operational powers echoed in law and policy, with structural and affective effects on how we live and are well in the world. My own turn is towards 'difference' as an operative practice that might offer another frame of space of dwelling that does not routinise mental health processes that rely on the continued exhaustion of minoritised subjects like myself, in all aspects of mental health systems and procedures. Minoritised people often cannot truly heal within the very systems complicit in their traumatisation; naming this and intentionally working against this is the foundation of healing justice.

The hold: Structural violence and scales of trauma

In *The Politics of Memory: Truth, Healing and Social Justice* (2000), volume editors Ifi Amadiume and Abdullahi An-Na'im note that often the work of achieving social justice is key to the process of healing. A critical example would be the relationship to land, expropriated through violent genocide from First Nations people. It is not only a return of the land, but a reconstitution of a relation to it, one that also fundamentally renegotiates our very notions of the person that bears healing potential at all scales of trauma: acute, chronic and collective. Difference, as an operation or orientation, perhaps like intersectionality is a placeholder at these levels of scale. For instance, CALD as a placeholder becomes a position to consolidate shared identities and establishes the terms to build solidarity and connection to various social movements.

In 2022 I extended my own practice by founding an NGO to support the work of Rainbow Muse Tandara pa Rainbow (see www.tandaraparainbow.org) from my recognition of the connection between healing and justice. Kutandara, in my native ChiManyika, is to visit, spend time with and share in community with others – a space to co-create support and to build on this sense of the collective. This is particularly relevant from observing the ways that discrimination operates for CALD persons, for instance, the evidence that refugees and asylum-seekers experience tremendous social isolation and often verbal abuse that make it difficult to feel part of a community (see Cuneen 2019, Vogl & Methven 2020, and Zuffrey 2016, for example). This isolation is a key driver to being unwell. At the level of scale, collective trauma is often situated in the centre of acute and chronic trauma – but also related to the ways that people can access care that does not lead to their incarceration or further subject them to other forms of marginality. Difference as related to building from CALD as collective identity or in the least provisional solidarity does not mean a stable or singular and universal identity, even while this might be a useful identity marker in the case of working towards the aims of justice. What I instead wish to propose is a means of engaging this marker and difference to highlight the invisible status that whiteness, cis-heteronormativity, ableism and neurotypicalness often operate from as a universal standard and expectation.

My practice has become an explicitly anti-racist, anti-discrimination, anti-ableism, anti-stigma and anti-oppression space. Before people engage in the space they are aware of this. There are not a lot of spaces that centre the experiences and needs of communities that have been minoritised, marginalised, oppressed, underserviced, silenced and even erased. There are multicultural organisations within Australia that are completely white-governed and -run. Even with words like ‘multicultural’ in their titles, they still start from a premise of othering those they seek to serve. Inclusion is equated to assimilation in explicit and implicit ways. So even the multicultural sector is an extension of colonial structures with the white saviourism it enacts. These services do not challenge the rigidity of the existing hegemonic structures but rather reinforce them with brochures in different languages. Rather than community-driven and -led initiatives which put focus on the perspectives, lived experiences and identities of minoritised people, we have better-packaged iterations of the same oppressive structures.

Amadiume and Na’im (2000) highlight that processes of truth and reconciliation, mediated with the intentions of generating social justice and healing, often occur following a violent conflict. This process, as related to how collective memory is formed, relies on understanding history as made up by historical breaks where national narratives often co-opt the present into something good, or even progressive. The use of multiculturalism as a means to engage with difference has generally been problematic within the Australian national frame. Support services that do not name discrimination and aim to promote healing justice, liberation and equity are deeply problematic, yet are the standard. Instead, creating a healing justice process is underpinned by examining internal and external prejudice, calling out harm, silencing, micro-aggressions, and all barriers. In addition, it involves celebrating intersectional identities. Joy, rest, creativity, connection and healing are all forms of resistance. As we work to not internalise the impact of harmful structures, we also celebrate all identities and abilities in all bodies.

Working in various organisations, where on the basis of my own embodiment I would be tasked with maintaining processes for CALD, ATSI and LGBTQAI + people, and other categories of persons like ‘youth’, my role would be to mediate between courts, schools and family structures, from the implicit assumption that I could access their customs and values while also modelling 'appropriate behaviour'. Refugee youth, for instance, sit at the centre of a lot of these approaches within the multiculturalism industry and the mental health system. When asylum-seekers arrive, they are forced into mandatory and indefinite detention under the conditions of the Migration Act of 1958. In their report on a submission at the level of Senate in 2019, the Refugee Council of Australia (2019) pursued the commitment to multiculturalism, beginning their report with the frame that Australia has had a long history of multiculturalism, and it is only recent political shifts specifically related to immigration and evidenced in the violent and inhumane policies related to asylum-seekers that undermine this prior legacy. These recent changes include the proposed requirement of an English language test and directives for migrants to show their capacity to demonstrate 'Australian values'. These changes are of course in the context of long-standing conditions of entry into national belonging, even while employment can be enabling because of the violence of socio-economic exclusion; to be employed is incidentally also a means to not only 'be included', or model 'appropriate behaviour', but to stay out of a cycle between court, school, prison, and the mental health institution, etc.

Unlike the notion that processes to mediate healing follow a conflict, what I would argue is that the sustained relationship between mental health systems and their connection to national belonging reveal the ways that it is not true that "anybody within the nation could inhabit this 'you' [… as statements within these processes] depend on longer histories of articulation, which secure the white subject as sovereign in the nation" (Ahmed 2004, pp. 1–2). These processes suture a hold, borrowing the use of 'the hold' from Christina Sharpe (2016): "holding centres" (p. 83); "Black children are not seen as children and the corral of 'urban youth' holds them outside of the category of the child, they are offered more trauma by the state and state actors" (p. 89); "the absence of personhood indicated by space in the hold" (p. 94); "Where is the breaking point, the breath, the pause, where the circulation, production, and reception of images of Black suffering and, the pleasure in them concerned?" (p. 127). This is the paradox of a system that acknowledges the pain of others, and even holds the commitment to multiculturalism simultaneously with notions like 'cultural values' as systems of belonging, even intelligence in a hold, endowing particular value or non-value on the very people whose pain is acknowledged within the same processes.

Regarding this kind of use of the pain of others, Sara Ahmed (2004) is instructive about this form of address: "what is promised is not so much the overcoming of the pain of others, but the empowerment of the reader" (p. 20, here implied as the 'we' who already belong to the nation), "So the reader, whom we can name inadequately as the 'Western subject', feels better after hearing about individual stories of success, narrated as the overcoming of pain as well as the healing of a community" (p. 20). Ahmed (2004, p. 21) states that this reader

> … is also elevated into a position of power over others: the subject who gives to the other is the one who is 'behind' the possibility of overcoming pain. The overrepresentation of the pain of others is significant in that it fixes the other who 'has' pain, and who can overcome that pain only when the Western subject feels moved enough to give.

A kind of New-World-making map

> "An account of *care* is shared risk between and among the Black trans*asterisked." (Sharpe 2016, p. 131, emphasis original)

In their article and manifesto '#BlackHealingMatters in the Time of Black Lives Matter', Kai M. Green, Je Naé Taylor, Pascale Ifé Williams and Christopher Roberts (2018) point to the power of storytelling, regarding it as a roadmap that intuitively drives their individual and collective work in healing justice; "our work is both prevention and intervention" (Green et al. 2018, p. 913). Healing justice for me is informed by my understanding of the constructions of race, class, gender, disability and sexuality. Through the creation of these categories and enforcement of the hierarchies that dominate them and assign value to people based on where they land, the status quo is maintained. As a black settler on this land, I understand that continued oppression of First Nations people is a battle that must be fought with higher priority than my own experiences of marginalisation. How can I expect the colonisers of this nation to treat a foreign black person they owe nothing to with a respect they cannot show the owners of the land they call Australia? Indigenous sovereignty, advocating for land back and not being complicit with the colonisers that granted me Australian citizenship is foundational to healing justice. There is no justice for anyone while we continue to allow harm to the custodians of this land. Decolonising my practice requires consultation with the group colonised on this land and a humility in being directed and guided. It is a privilege to do work within First Nations communities and get to learn culture and language. My early career was in remote Indigenous Communities where I was 'adopted' into a family and lived in the community. Starting in community development and then transitioning into mental health means I sit with people and learn, listen, eat and laugh before I dare think I can impose any knowledge I learnt in a textbook.

Aisha K. Finch (2022) talks about care as it operates in black feminist practice. Care can be a range of things: simply being in the world, to be related to it, to pay attention, to look after, to protect, to resist. To care is also the care of the self, a different relation to self-care; attentiveness to my own body, my own healing is part of being in relation with others and a part of collective. For Finch (2022), this is also the process of self-critique, so when I speak to my responsibility as a migrant on exploited and expropriated land, it is this process of care as well. Jameta N. Barlow (2016) proposes this as a self-evaluative mode of perception – and this tool of self-critique; collective processes, as well as processes of documenting personal narratives can generate and strengthen our relation to each other and the world. Self-critique and self-evaluating processes build our tools for resistance, and they also generate vocabularies and models of agency and health and behaviours rooted in liberation.

The largest component of healing justice lacking in mental health is the aspect of collective care. The idea of therapist and client is itself hierarchical. The inventors of the biomedical model are the same inventors of the very notions I wish to disrupt. Most diverse people come from spaces with their own knowledge bases and knowing. These have often been taken from them, and in some instances repackaged and sold to them as whitewashed versions. Collective care and looking at members of communities as experts allows frameworks that harness the strengths and knowledge of people to co-create meaning, healing and new ways of being in the world. What if being a therapist is really being a facilitator that amplifies strengths? Firstly, a therapist must have done their own personal work and have enough knowledge to create and maintain safety, as well as to teach tools and resource people. But from there we sit to collaborative and create transparent processes. Healing justice is moving away from doing therapy to people, and co-creating with them. Nisha Sajnani (2012) describes this as 'response/ability'. Collectively we can deconstruct what has been imposed upon us and rebuild. This involves naming and removing what has been internalised by the harmful systems that define 'complex' and 'diverse', and moving towards a reframe and shifting of responsibility. It is not the responsibilities of people to learn to put up with oppression, it is the responsibility of those with access to vulnerable people to empower them to heal from the appropriate things and shift focus on change to the cause where this harm is being perpetuated.

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Feedback feeds self-identity: using art therapy to empower self-identity in adults living with a learning disability

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Feedback feeds self-identity: using art therapy to empower self-identity in adults living with a learning disability

Kevin O'Farrell

ABSTRACT
Although there has been little systematic research on the subject of feedback, this article attempts to explore the concept, use and function within art therapy and its potential in the learning disability population to create and reawaken self-identity. The author uses case material to illustrate how self-identity may be enhanced through amplification of the image, use of 'third hand' approaches and therapist engagement and feedback. The article is written in the form of a road map to identify key areas of research. Reflections on art therapy, resilience and implications for practice are discussed at the end. Pseudonyms, with consent, have been agreed for all client names except one person who wanted to use his first name. In an unorthodox manner, the author starts this article by exploring his own experiences of feedback and his knowledge of the learning disability setting to make up for a lack of research on this topic.

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Monitors give feedback

I'm at a festival watching musicians playing on a stage. I notice some small rectangular speakers at the band's feet pointing towards them. These, I'm reliably told, are called monitor speakers—they let the musicians hear what they sound like through the speaker system so they can perfect the tone and sound of the song. It is here and now feedback for the band's quality and performance. Neat! And then there's the paying crowd, many of whom are dancing and singing along. The atmosphere is exciting and the band is getting another type of feedback that returns to them. And then there's me with my arms crossed, knee high in mud, wondering what all the fuss is about. Feedback gets a bit more complicated when it involves an inter-personal dynamic.

Feedback within culture

A mobile phone company has just texted me to ask how they did with a query I had. It involves only three questions, they tell me. They weren't really able to help me but they were polite and made an effort. I click ok. After completing one text, I get another and then the last one. By that time, I'm wondering who is being of service to whom? Like a lot of feedback, it's neither brilliant nor bad and doesn't give me the options I'd like. 'They' always set the frame. Later that evening, I get another feedback request from another provider. I'm feeling slightly weary and abused reporting back on how others have performed. I'm starting to wonder if everyone is jumping on this bandwagon and, at the expense of feedback fatigue, has it really been thought through? It's all about improving services, so I'm told. The fact that I rarely see or feel these improvements is a fact overlooked, I fear. There is little here and now response from these providers, except an impersonal 'thank you' text and 'we'll enter you into a prize draw you have no chance of winning'. And even when they do spell my name correctly, I still feel like a slave to their system. Although studies on feedback are few and feature in educational contexts (Hattie & Timperley, 2007), it's implicitly recognised as a powerful learning tool when it is carried out effectively.

Is there a drawback to this culture of feedback?

Feedback, within health services, is mostly understood and experienced as service user feedback and, like utility providers, its function is towards evaluating services and improving quality. What concerns me is the person being overlooked in preference for a better system that fits round them. In a technologically driven society that has created saturating levels of information, where feedback has gone viral, we're in danger of being soldered to our chairs, responding to emails that rob us of connecting with people, face to face, in the here and now. Using technology requires wisdom, some common sense and remembering that humans are social interactive beings. This latter ingredient has proved instrumental in terms of our social development, survival and sense of identity. Oh, and we don't come with hard drives.

Arguably, electronic feedback is being over-used, with its anonymised tick boxes making people feel more isolated and socially disconnected, but is there

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also a danger of believing feedback only flows one way? In fact, could this unlock our current thinking on the subject into a wealth of improved outcomes, especially where people experience psychological distress? What if feedback from therapists and caring professionals was found to be important and beneficial to the service user? Professional books often acknowledge clients and patients as sources of learning, but did this ever get fed back in the here and now of therapy?

One example of therapist feedback

Here's a little clip from a case: it's my closing session with Elizabeth. Previously, she'd made a diagrammatic, single lined and single colour image (Figure 1) on a whiteboard the size of an ice rink. It's big. When I show her, the following week, an exhibited art work that looks similar, she begins to see her image differently, stops rocking and gives me full eye contact. Today I tell her the way she has used these whiteboards has changed my practice. I thank her and go on to tell her that while driving to see her I was feeling sad about something. But then I thought of her and how she has happy thoughts. One of her happy thoughts is Shakin' Stevens doing his dancing! I tell her how her happy thoughts changed my mood and made me laugh. I thank her again for helping me. Again, she stops her rocking and says to me: 'All my life I've not been able to read or write. I've felt like a burden to everyone. No-one has ever told me that I've helped them before'. She is 42 years old. She has lived with her parents pretty much all her life and tells me she has no close friends. She is described as someone with a learning disability. There is a short pause in the conversation. She then leans forward and says, 'I know something else you don't know about me—when I was younger I could play the theme music to Star Wars on the keyboard'. I respond with praise, but inside I'm only just waking up to something that fills me with hope. As I drive home, I imagine dormant neurons in her brain connecting and reactivating a lost memory of herself through those words—'know about me'. The feedback I'd consistently given Elizabeth, throughout the sessions, completed a circuit and seemed to help her reclaim a sense of self-identity. We'll return to Elizabeth later.

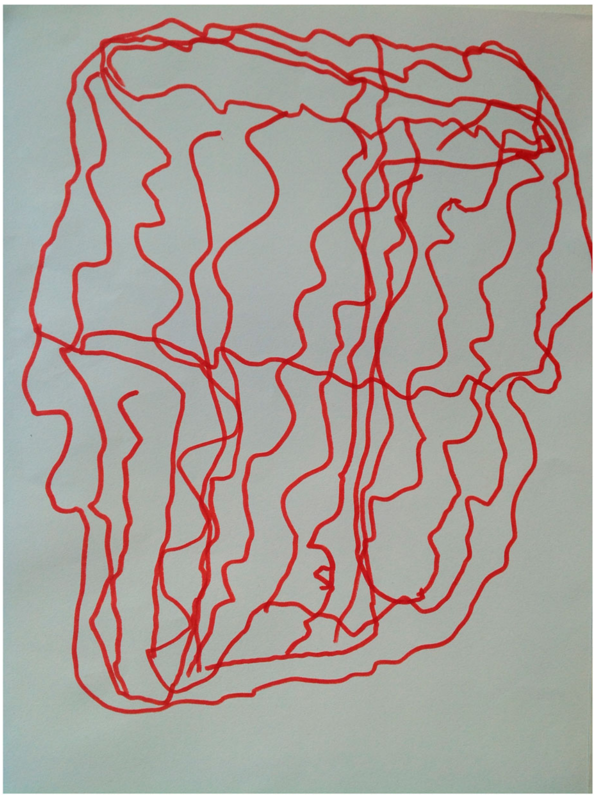

Figure 1.

So is there such a thing as therapist feedback?

There seems little, if any, reference about this kind of feedback in literature searches. The only article I could find that specifically talks about 'feedback', within a 1:1 therapy context, is 'Supershrinks' (Miller, Hubble, & Duncan, 2007). This paper concludes that therapists who consistently extract and act upon feedback (did they ask the right questions or respond in a supportive manner?) in the here and now have the best clinical outcomes. Well that's what we want: game over, right? Perhaps so, but the research does not clearly include those with learning disabilities, who may find feedback that relates to them equally beneficial.

Since reading the article, I routinely enquire how the session went for the client: what worked and what didn't? But I'm also asking myself what impact did the person have on me in a positive way? How did I see them and how can I help them see who they are in an authentic way?

Researching and refining this further, within 1:1 therapy, Charles Gelso (2011) has argued the effectiveness of noticing and attending to 'The Real Relationship in Psychotherapy' (the meeting of two human beings) alongside the working and professional relationships. This third aspect of the therapeutic encounter tended to occur at the beginning of therapy, during moments of crisis (either in the patients' or therapist's life) and at the end of treatment. The research Gelso conducted suggests that participants whose therapists paid attention and responded to the real relationship had better outcomes. The work I did with Elizabeth echoes the 'real relationship' in many ways, and the little clip described earlier happened at the end of therapy.

Of course, these types of interactions with clients give rise to debates about self-disclosure. Researching this further, I quickly discovered a lot of literature about self-involving statements. This was very new to me. Among the first to make distinctions between self-disclosing and self-involving statements were Danish, D'Augelli, and Hauer (1980). The latter implies real, authentic responses in the here and now that the therapist has in relation to the client, whereas self-disclosing statements originate from outside the session and are used to mirror, empathise and attune. An overview of the literature suggests that both types can be useful, but self-involving statements are generally beneficial and carry less risk to the therapeutic relationship. However, there still remains a distinct lack of guidance or principle in knowing when and if to apply either. Framing guidance in terms of therapist feedback, with the explicit purpose of enhancing the self-identity of the client, may prove to be a safer, more effective principle.

Identity within the learning disability landscape

Much research and literature within the learning disability setting speaks of self and identity either explicitly or implicitly (Beart, Hardy, & Buchan, 2005; Davies & Jenkins, 1997; Bull & O'Farrell, 2012). The book *Drawing on Difference* (Rees, 1998) draws out the pervasive experience and impact of feeling different within the learning disability landscape. This feeling different is the resulting message that the learning disability population somehow receive from the outer world (Beart et al., 2005). This is amplified by Valerie Sinason's (1992) review of the language surrounding this client group, which implies that, on average, there has been a change to the label (for this population) every 10 years or so since the seventeenth century (O'Farrell, 2012). This struggle to be seen as more than someone living with a learning disability is poignantly illustrated in the case study of 'David B' and his desire to be viewed as a gay man and not just someone with Down's Syndrome (Bull, 2012).

A major source of identity is expressed and defined in culture by one's occupation. I'm an art therapist, who are you? However, within the learning disability population, very few people have jobs. Despite many people wanting a job, the 2011 national survey recorded a figure of just 6.6% for those in some form of paid employment (Emerson et al., 2011). Unemployment and social isolation are clear risk factors to mental health. It's perhaps not so surprising, then, that those living with learning disabilities are more likely to experience mental health problems in comparison to the general population. The research suggests a prevalence rate of 27–40% (Raghaven & Patel, 2005, p. 38), meaning approximately one in three people with a learning disability will experience some mental health episode. In support of this, Ingham, Clarke, and James (2008) reflect on the tendency within learning disability services to interpret mental health through the framework of challenging behaviour. These findings suggest that the learning disability population might be struggling with how they get their identity and how they experience a sense of self. There are bigger fish to fry, but the aim here is to focus on what art therapists may *implicitly* be doing that fosters self-identity within this client group.

An elephant in the room

However, before we examine practice that fosters self-identity, we need to be aware of relationship dynamics and limitations that lie within the learning disability landscape. Understanding this context is needed in order to consider the potential in the therapeutic relationship.

There is always the possibility for an elephant to go unnoticed in a room if we assume this room is like any other. When I leave work, return to my family and go out with my friends, I may, at least unconsciously, assume that everyone else in the world roughly does or has done the same. To assume that everyone also includes my clients may turn out to be a huge oversight. The difference in this client group involves two aspects that inextricably combined create barriers to self-identity. Understanding this may inform art therapists to exploit their practice more explicitly.

Firstly, it must be recognised that many service users have very low-level friendship activities (Emerson & McVilly, 2004; Robertson et al., 2001; Stancliffe, 2007) and experience comparatively higher levels of loneliness (Gilmore & Cuskelly, 2014). The research suggests between 1 and 1.5 authentic relationships/friendships. It's very low. In fact, it's incredibly low.

Secondly, in contrast and effectively in the vacuum of equal friendships and relationships, this population experience a dynamic we can describe as a cared for and carer relationship. The duty of care, with anything up to 24-hour care in the community, is a significant and substantial aspect of the landscape. In fact, in light of such low levels of friendship activity, we can argue this cared for and carer relationship is the predominant source of social interaction for people with learning disabilities. So what impact does this have on self and identity? If long-term caring and support primarily equates to meeting health and social needs (typically housing and day service), this may, conversely, serve to reinforce what service users notice about their limitations and dependence on others. Writing in the context of narrative and systemic therapy, Coles, Caird, and Smyly (2012) conclude that those with disabilities tend to be viewed as needing to be cared for, while stories of their strengths and qualities are often not seen or heard.

Self-empowered?

One of the underlying themes in the 'Valuing People' papers (Department of Health, 2001, 2009) is empowerment. Since the Human Rights Act (1998), there has been a long list of legislation produced in learning disabilities (Bull, 2012) that has politically sought to empower this population. However, has the political landscape changed the inter-relationships people have with the carers employed by the service providers? It's very difficult to answer this, but it would be fair to say that the changes in legislation, commissioning and restructuring of services have also meant ongoing changes in the actual people doing the caring. The cared for and carer relationship no longer has the longevity and sense of containment it once may have had. As Gilmore and Cuskelly (2014, p. 195) comment, loss continues to be a significant theme in the landscape, evidenced by the high turnover of support staff. So how does the development of the self, learnt through the modelling and containment of an other, have opportunity to grow in the light of low-level friendships and the cared for and carer relationship?

It may be an awareness of these limitations that led Siobhan Burns, art therapist, to respond to a client in the way she did when asked about her experiences of loss. The amnesty article in *Newsbriefing* (Burns, 2014) is written in the context of personal disclosure. Siobhan is working with a man living with a learning disability who is struggling with bereavement. If we use the monitor feedback analogy, he's making a sound, perhaps a painful one, but he does not know if this is acceptable, if others have experienced it and if he can survive it. Siobhan, by offering her own personal experience of loss, completes a circuit, which feeds back and confirms that it is very human to feel this way and that in time he can survive it. This pain, manifesting emotionally and physiologically, acts as indicator of self and confirms a human quality that is shared and echoed by another.

The underlying query and wonder is if he could have explored this with someone else or even if he had someone else to explore this with. The truth, I think, is hidden in the language of political empowerment that, in its economic goal of supporting people to be independent, has moved further away from the emotional and, dare I say it, friendship-like caring that occurred when the landscape was less susceptible to change. Nevertheless, the trap for the carer and professional is to assume that people living with learning disabilities have friends and relationships through which they can grow and experience their self. This is the elephant we all need to see.

Consider Elizabeth again

Elizabeth had no friends. The friends she once had now lived far away. She was aware that she could not read or write. She was reliant on others (parents, day service workers and professionals) explaining information to her. She'd felt like a burden to everyone her whole life. Elizabeth could remember the first or last words spoken, but could easily misunderstand the whole statement. It was not clear if this was due to slow processing speed or her anxiety. In talking with her I needed to be clear, calm and concise. Short sentences helped! Feedback needs to be clear and comprehensive.

'The single biggest problem in communication is the illusion that it has taken place' (George Bernard Shaw, playwright and essayist, 1856–1950)

Feedback in ordinary adult to adult exchanges is often subtle and abstract. But body language, facial expressions and language selection will all operate as forms and layers of feedback. Is the person interested in me and what I'm saying? Did they really like my flowery shirt or were they simply being polite? We learn to read and evaluate this without the other needing to explicitly communicate in comprehensive, concrete language. Even so, it's very common to discover we have misinterpreted what another said or was thinking and vice versa. They smiled, but when asked directly they admit they actually don't like my shirt. Really?! This phenomenon can also apply to our viewing and understanding of images. It is only through 'dialoguing' with the image (that is, the therapist and client giving voice to multiple associations and chains of thought), not interpreting it with a comprehensive meaning, that we begin to fully understand. Malchiodi (1998) makes the point that by not interpreting we can become witness to images and statements of resiliency. It can be argued that the process of noticing and teasing out, highlighting images and wrapping up with positive statements is feedback that feeds the self.

As a young art therapist, my default was to focus on the art, but when I encountered service users who did not and/or could not engage with art work, the more I considered how to empower this person, acknowledge aspects of resiliency and foster self-identity before discharge.

Applied aids and amplification

For me, it has often felt a taboo to make art works in therapy that are not from the raw materials available on the shelf. We're talking paper, pencils, pastels, paint, play-dough and clay, if it hasn't all dried up. Because of a need to find more efficient and effective ways to empower clients, coupled with service changes and economic considerations, our service has embraced the use and function of templates and 'ready mades', a term attributed to Cubism at the start of the twentieth century. Also, in recent years, I've paid attention to the use of the word 'amplification' and its associations. Most vividly, I'm reminded of the way a mother will accentuate her baby's sounds and movements. The video of the interaction preceding the 'still faced experiment' (Tronick, 2009) is a good example of this. What can this amplification, which helps the baby locate the self and exercise control, look like in art therapy?

There are a range of tools and aids that our service has adapted that support engagement and self-identity. The following two have emerged from service development and pushed the boundaries of local, established practice.

Using whiteboards in practice

From blackboards to whiteboards: technology has advanced. Three years ago, our art room was abandoned. As a community service with a wide geography, it had been under-used. The team moved to new local council offices, equipped with large whiteboards in their meeting rooms. Lovely, I thought: looks a bit like an art gallery. It wasn't long before my invitations to draw on these large canvases were taken up. Elizabeth was one of the first pioneers (see Figure 1). At first I acknowledged her hesitation. 'Will I get into trouble?' she asked. Connections were made with school, authority and discipline but, with assurance, Elizabeth began to enjoy making large squiggles, which became warming-up exercises. Understanding that the images would be wiped out seemed to provide a safe environment, leading to the creation of Figure 1. Sitting back down and viewing the image together, its size (approx. A1, perhaps larger) was impressive. It had become integral to the fabric of the room. It also reminded us of graffiti art and the 'tags' the artists leave to identify themselves. Drawing like this also meant Elizabeth naturally stood up and engaged her whole body. She could stand back or move within centimetres of the board, giving her a comprehensive body-self experience. It was during these times that Elizabeth began telling me of her inner world, particularly her happy thoughts that she used to soothe her anxieties. Together with increased eye contact and happier mood, observed by parents outside of sessions, Elizabeth seemed to be noticing herself and growing confident in who she was. When I presented her with a modern art work that was very similar to Figure 1, she began to make comments about herself being 'good at art'. In the following sessions she made more graphic, recognisable images, using a range of colour, which she readily spoke about. Having used whiteboards more widely since, it would seem the scale and value experienced from 'drawing on the wall' enables and aids an amplification of self. This in turn reawakens and unveils the client's inner world. Of interest is research by John Wang (2011) using a kinaesthetic, motion-sensing drawing tool that facilitates whole body movement that is projected onto a large screen. Findings suggest that people with impaired verbal communication are finding this tool beneficial.

One of the limitations with the whiteboard has been the need to wipe the image away after the session. This is explained at the onset and is compensated partly by taking photos of images together and printing them off for the next week. This forms another layer of valuing and a re-presenting back of self.

However, photos are different from the experience of producing an art work that can leave the therapy environment and be taken home. In part, it was this that led me to become interested in portrait painting (Carr, 2014) and using the therapist's 'third hand' (Kramer, 1986).

Portrait painting and use of 'third hand'

It was Sinason (1992) who said: 'When there are people who cannot think, remember, speak or write it matters that others take up the scribe function' (p. 3). I would argue, we could also add 'who cannot make art'. My first telling experience of this was a service user who lived with left-hemiplegia, making it incredibly difficult for him to hold paper in his left hand and use a pair of scissors at the same time. He wanted to make an installation of his life that would also be a 'project'. Later, reflecting on his work, Mark said, 'Art therapy has helped me to see that I can do things for myself. Before, people would tell me you can't do it' (see Figure 2). With support, he was able to bring to life that which previously existed in his imagination and through it tell his story and notice himself.

As Susan Carr points out, there are many clients who struggle with the classical, traditional art therapy model of engagement, creation and dialogue with images. In an effort to avoid 'talking therapy', Carr has upheld the art within the therapy by using portraits to support self-identity that has been lost through illness. Referencing Catherine Moon (2002), Carr reflects on portraiture being

> one of the most direct ways in which art therapists can 'witness' their clients, and through the portraits see

Figure 2.

> themselves as the therapist has seen them … and that taking the time to do someone's portrait is perceived as taking the time to notice and, at some level, to care. (2014, p. 215)

Increasingly, I've used the third hand approach and produced large canvases (see Figure 3) with several clients who've contributed in small ways but have actively taken on the role of director. In this sense, the art therapist's role becomes that of technician or apprentice: the third hand. This process, through the size and quality of materials, can be viewed as an amplification of feedback, an acknowledgement from the art therapist that they have valued, seen and are familiar with who the service user is. Anecdotal comments suggest the life of the portrait beyond therapy continues to be valuable and significant to the client.

Trauma and self-identity

Trauma accounts for roughly half of the service's referrals; about half of these again may indicate elements of Post-Traumatic Stress Disorder (PTSD). Even when the art therapy service has completed a specific PTSD model (Raby, 2010) and demonstrated tangible outcomes using the CRIES-8 tool/measure (Perrin, Meiser-Stedman, & Smith, 2005), we found the service users' identity fragile and in need of restoration. In many cases, significant parts of their lives have been overshadowed and lived in response to trauma events. Making portraits about how they see themselves now, after the trauma work, is one tool that seems to support identity reformation and be a permanent marker of resilience in their life journey. More research is needed, but portraits, perhaps, are resilience buoys: reminders to service users that they can and have bounced back.

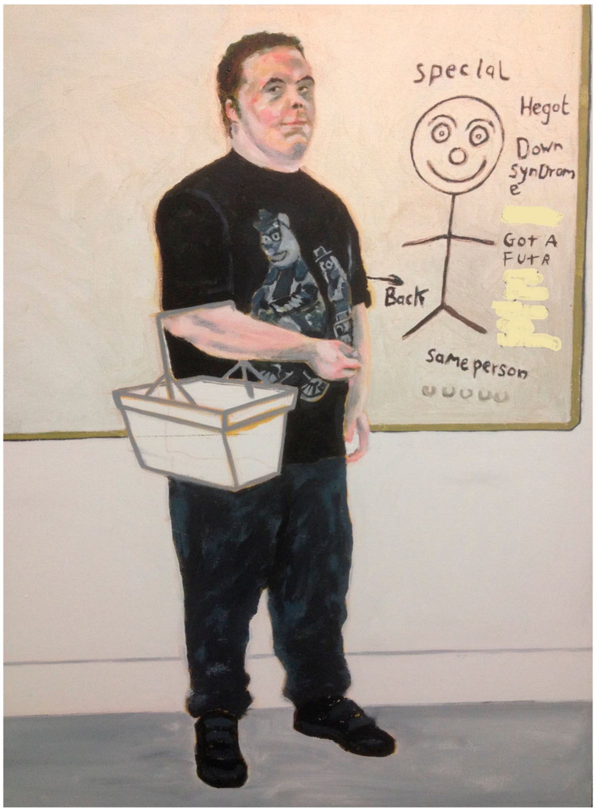

Figure 3.

A problem with empowerment

These aids (including whiteboards and third hand applications) have helped empower service users. The experience, control and accessibility to direct have led to a more tangible experience and concrete sense of self-identity. The ability to view and review ourselves and others is a key factor in the research of resilience. A problem, and the elephant alluded to earlier, is how the service user is empowered to view themselves through others; how the feedback circuit is completed when their 'friendship activities' are so low (Emerson & McVilly, 2004; Robertson et al., 2001; Stancliffe, 2007). As members of the caring profession, employed to find a solution to the service user's psychological distress, how do we avoid reinforcing the message that the person living with a learning disability is (to use Elizabeth's words) 'a burden all [their] life'? It's this question that warrants some exploration and review of the way clinicians and therapists engage with service users.

Do we dialogue or engage with the person?

Art therapists engage and dialogue with the image. However, as Carr (2014) points out, to exclusively dialogue with the person would take us into 'talking therapy'. It's a fine line but it seems important to keep these distinctions alive in our awareness. The image has long been seen as a vehicle of change. In dialoguing with it, the image moves us from the unconscious and into the conscious. I would like to propose that it also forms a bridge, the hyphen between self and an identity that can be experienced through a group[1] and/or therapeutic relationship.

Engagement perhaps fits better in terms of supporting the process. It would be difficult to dialogue with the image while it is being made, although some internal dialogue may well take place. In the traditional art therapy model, engaging with the materials is the foundational platform. However, there have been ongoing debates about if and when the art therapist should make images alongside or in response to the service user (Havsteen-Franklin, 2015; McNiff, 2009; Moon, 2000, 2007; Springham, 2013). How helpful or unhelpful could this be? In Figure 3, the portrait made between sessions seemed to mirror the value that Connor devoted to making his own, weekly self-portraits on the whiteboard. Connor would work intensely, evidenced in a mixture of self-talk, thinking and scribing his portraits. Because these images needed wiping out, a canvas portrait seemed a better amplification and valuing record than a photo (although many were taken). Within Figure 3, there is a direct, concrete mirroring present, through my painting of Connor and his drawing on the whiteboard. In effect, it's an explicit amplification. As noted earlier, there is also the offer, through the therapist's portrait, for the service user to 'see themselves as the therapist has seen them' (Moon, 2002). As Connor's goal was to reclaim his identity, lost through two trauma events, this seemed an appropriate approach. Through the process of drawing his own weekly portraits, he began talking about a new future ('FUTR') and would often suggest edits to the canvas portrait I was working on. One day, about session 12, he declared 'it's done'. With positive changes noted by his family and network, discharge was agreed. He left the room with portrait in hand.

Intensive interaction

The mirroring aspects in Connor's case echo the practice of intensive interaction, an approach that many art therapists working in learning disability have had training in. If one looks up intensive interaction on the internet, one will find a plethora of before and after videos, sometimes achieved within hours. First developed in specialist education in the 1980s, it is used widely with adults living with learning disability who have profound problems communicating. There is no agenda in intensive interaction other than engagement and interaction (Nind & Hewett, 2012). To see adults who have never been known to smile or hug someone actually laughing and seeking eye contact with another person is deeply moving. The videos speak for themselves. Intensive interaction works with the practitioner noticing the language of the service user. This can typically start with body movements or may involve rhythms of the breath. As with the sound system analogy, the practitioner becomes a monitor who completes a circuit of feedback that flows back to the service user. Feedback through a relationship helps the service user locate the self and grow in awareness of another. Although it begins with a mirroring component, intensive interaction is careful to shift focus onto a playful dialect. This is achieved by breaking into the rhythm of the feedback and introducing a small variation: an outside component. The invitation is to try and reclaim the original rhythm or to play with this new feature and discover more. Ultimately it is outside of ourselves, through the relationship with another, that we also experience who others view us to be. As author and essayist Siri Husdvedt comments, 'I become myself through the eyes of another' (2012, p. 268). In other words, to be sure of who we think we are, we need affirmation from others. We may need a mirror at the start but, developmentally, we grow by seeing ourselves through the other.

In most online clips of intensive interaction, we become witness to many first-time events such as smiling, hugging, singing and even talking. Although intensive interaction is predominantly described as a non-verbal engagement approach, why should it stop when words are formed? If, as noted earlier, an 'illusion' of communication regularly exists in adult–adult relationships, how can service users, who predominantly experience cared for and carer relationships, profit from verbal language and interaction?

Back to Elizabeth

Feedback is not self-disclosure. In the feedback I gave Elizabeth, I did make a disclosure about my emotional state before the appointment. However, this was not done to be real, attune or make a connection with her—as helpful as these may be. It was done to tell her how her language of happy thoughts had affected me. As a result, she wasn't remotely interested in my sadness but focused on my 'thank you'. The conversation led Elizabeth to re-appraise who she was. It changed, in the here and now, from being a 'burden' to being someone who had helped someone else (me), and with that came a reawakening of lost skills and abilities (playing the piano as a young girl); self-identity was being reclaimed. My focus was to help Elizabeth see other parts of herself and not just someone who needed my support. My intention was to leave her feeling empowered.

'Good artists copy, great artists steal'—Pablo Picasso (artist, 1881–1973)

This is a fun and fascinating comment that invites you to think. In it there's a sense of self-confidence that is provocative and subversive. Equally, could this be a humble acknowledgement from a great artist that he took his ideas from others? Was this his feedback to the art world of his time? In similar fashion, I stole Elizabeth's happy thoughts, applied them to my mood and purposefully gave her credit in my feedback. Art therapists, with their history of personal therapy (a requirement of many training courses in the UK) that enhances self-awareness, should be skilled at doing this well: making the implicit explicit.

Reflections about art therapy and resilience

For many years now, there has been an interest in resilience. Why is it that some people who've been through traumatic or sustained neglect and abuse are able to survive while others, seemingly, don't? A comprehensive review of the literature has concluded that art therapy supports and activates resiliency through creativity, mastery and control, self-esteem and growth in social connectedness (Worrall & Jerry, 2007). In a collaborative article about disability and trauma (Learmonth & Gibson, 2010), the art therapist considers resilience theory, suggesting that a focus on this might lead to better, more effective therapy processes. The service user (Kathy), through painting, talking to the art therapist and writing, is able to reclaim her story. Reflecting on this process of art therapy, Kathy concludes: 'I feel like I know who I am now' (p. 64). Self-identity is implicit within resiliency theory, evidenced through a list of self-variables (i.e. self-esteem, self-efficacy, self-agency etc.) connected with a diversity of identities (i.e. sexual, professional, ethnic and cultural). What the learning disability population might benefit from is a more explicit model of art therapy that, supported by resiliency research, invests in amplifying self-identity through the image and therapeutic relationship: in essence an art therapy-based treatment with an emphasis on noticing and giving feedback.

Implications for practice (within a feedback framework)

The following is a list of implications.

- Use of amplification techniques, such as third hand.
- Encouraging the service user to engage their whole body where possible.
- Make positive comments about a person's image and personality.
- Attend to and acknowledge images and statements of resiliency.
- Give feedback about how the person has positively affected the therapist and changed aspects of practice.
- Write simple feedback letters with short sentences, embedded in or alongside closing reports, saying how they will be remembered.
- In terms of ending—while reiterating the therapist–client boundaries, consider/comment on the quality of relationship possible if the therapist was not the therapist and simply someone living next door. The aim being to give feedback on the qualities of friendship the person has.
- Alongside images, consider systemic and narrative approaches to strengthen both carer's and service user's image of their self-identity, story and life.

Areas of research

The following is a list of areas that may benefit from and contribute to further research.

- Long-term study, post therapy, of portraits and third hand approaches and how they impact on self-identity and self-resilience.
- Development of outcome measures that explicitly link self-identity to the process of art therapy.
- Investigation into third hand use of technology (including kinaesthetic), within art therapy treatment and what impact this has on self-identity.
- A survey within the Art Therapy Learning Disability Specialist Interest Group about the use of therapist feedback and third hand approaches and their impact on the service user.
- Although not covered in this article, further research into 'third wave therapies' could prove useful. These new branches of behaviour therapy, which are values based, have ventured into dialectics, spirituality and mindfulness (Hayes, 2004). These aspects, with a here and now function, also appear in resiliency theory and literature. The interface of these with art therapy and their relevance within the learning disability setting is worthy of research.
- Experience-based design: researching with service users about self-identity, resilience and art therapy.
- Carry out a positive-control study.

Note

1. Groups within the service are rare. In part, this is to do with the geography across a large county. Outside of densely populated areas, transport can prove a barrier. Another barrier is the varying range and level of cognitive ability, making it difficult to find a language that all the members understand and can engage with. Narrative and systemic therapy approaches (Smyly, 2006) that involve working with carers and family, a group of sorts, can also lead to the witness and creation of stories about self.

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Notes on contributor

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Original Article

The Effect of Art Therapy on Motor Skills of Children with Autism

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Abstract

Background and Aim: Autism spectrum disorder is the most common behavioral disorder in children that is associated with communication deficits and stereotyped behaviors. This study aimed to determine the effectiveness of art therapy on the motor skills of children with autism.

Materials and Methods: The research method was quasi-experimental with pre-test, post-test and a control group. The statistical population of the study included preschool and elementary school students in Tehran in 1395-96 school year. Among them, 30 children with autism were selected by purposive sampling and randomly assigned into experimental and control groups. Data collection tools were the Gilliam Autism Rating Scale (Garz) and the Lincoln-Ozertsky Motor Skills Test. Painting-based art therapy was performed in 18 sessions of 20 minutes for the experimental group. Data analysis was performed by analysis of covariance.

Results: The results showed that art therapy affected fine motor skills, the balance and flexibility of the joints ($P<0.001$).

Conclusion: According to the findings, art therapy can improve motor skills in these children by reducing stereotyped movements and coordinating hand and finger movements.

Keywords: Autism spectrum disorder, Fine motor skills, Gross motor skills, Art therapy

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Introduction

Autism Spectrum Disorder (ASD) has increased over the last two decades. (1). The prevalence of autism spectrum disorder is currently estimated to be 1 out of 88children. According to available statistics in Iran, the prevalence of autism is 6.26 per 10,000 children (2).

Autism spectrum disorders are classified in the group of neurodevelopmental disorders (3). Neurodevelopmental disorders are a set of conditions that interfere with individuals' social, emotional, educational, and/or occupational functioning, beginning in the developmental period (4). Abnormal motor functioning, motor deficiencies, impaired fine motor skills, and inflexibility are some of the features associated with autism spectrum disorder (3). The main features of autism spectrum disorder include deficits in communication, social interaction, repetitive and stereotypic behaviors, and delayed language skills. (4). These symptoms usually appear before the age of three and limit child's daily functioning (2). Boys are four times more likely to develop this disorder than girls (1). The first signs of autism may be in the form of repetitive and stereotyped movements such as, fluttering, moving the fingers in front of the eyes, inattentive behaviors, resistance to change, limited and specific interests, hypersensitivity or hyposensitivity to stimuli (5). Signs of autism may also appear as a delay in communication, which is the first sign that parents report (6).

Significant developmental delays in motor skills are among the most common problems in children with autism spectrum disorder, which can cause difficulties in learning and acquisition of individual skills of the child, including gross and fine motor skills,perceptual-motor skills, eye and hand coordination. (7, 8). These skills are the basis of academic learning. For example, learning to write, requires motor skills, motor planning, fine motor coordination, and eye-hand coordination (9). Motor skills allow the child to gain more control over his or her living environment (10). Autism spectrum disorder is usually associated with a general deficiency in planning and performing purposeful movements (11). Findings have shown a direct relationship between motor skills deficits and the severity of autism. (12).

Art therapy is a form of expressive therapy that uses the creative process of making art to improve a person's physical, mental, and emotional well-being (13). Art therapy is ideally suited for addressing sensory processing disorder, a pervasive problem associated with autism that contributes to emotional difficulties and problem behaviors. The art therapist communicates with children with autism to help them overcome their isolation, cope with their sensory issues and emotional dysregulation (14, 15). Therefore, this process can lead to an increase in self-esteem among affected children. The use of different colors, chalk pastels, or sculptures with clay and pottery involves tactile stimulation which can improve tactile processing and increase these children's attention (16).

The first tool of art therapy is painting, and it is a window to the use of other arts (17). In many complex developmental disorders, such as autism spectrum disorders, painting can improve communication, social interactions, and stereotypic behaviors (18). Fine motor skills include directional, distinct, precise, and skillful movements that require the use of small, delicate muscles (20). Delicate activities require coordination between the eyes and physical movements (21). Fine motor coordination is directly related to the growth and development of the hand's small muscles, which are used to perform tasks such as writing, drawing, threading, mounting beads, and scissors (22). Moghadam (14) research showed that creative art therapy, including painting, music, and pottery, could help in reducing some of the symptoms associated with. Another finding showed that art therapy could contribute to more psychological flexibility, better self-image, and improved communication and learning skills in children with autism (16). Conventional art therapy elements such as, sensory engagement with sight and touch may improve social behavior, flexibility, and attentive behaviors of children with autism (23).

Therefore, according to studies on art therapy and its effect on the symptoms of autism spectrum disorders, the present study seeks to examine whether painting-based art therapy can improve fine and gross motor skills among affected children.

Methods

The present study was quasi-experimental with pre-test, post-test and a control group. The study's statistical population included preschool and elementary school students diagnosed with autism spectrum disorder in Tehran. By purposive sampling method, 30 students were identified as having autism spectrum disorder and with motor disabilities; They were randomly selected in the experimental and the control groups (15 people in each group). Inclusion criteria wereage range of 6 to 12 years, moderate socio-economic status of the family, delayed learning skills associated with autism. Also, with autism spectrum disorder according to the cut-off score of Garz questionnaire (score 85 or more = probability, score 52-84 = average chance and score 52 or less = unlikely) and have a motor impairment according to Lincoln-Ozertsky questionnaire score (from 0 to 159). Exclusion criteria included other

Table 1: Content of painting-based art therapy sessions (27)

Session	Title Sessions	Content Sessions	Objectives
1	Warming: The first session with the subjects was done with an A4 paper and a crayon.	Main exercise: Painting with contrasting colors. For the main exercise, three shapes of triangle, square, and circle were drawn by the tester. The children painted with contrasting colors (green-red), (yellow-purple), (blue, orange), (black-white) (to increase Attention and Focus and to improve stereotyped and repetitive interests, and establishing optimal communication with the examiner in the first session).	1) Increasing the Attention and focus of the subjects 2) Improving stereotyped and repetitive interests in them 3) Establishing optimal relationships with the examiner. 4) To strengthen the fine motor skills of the hands
	Warming: Tearing the paper and crumpling it, and then the subjects were asked to throw the crumpled paper in the trash.	Basic Exercise: Copy simple to complex images Step 1: Draw jumbled lines without restrictions; Step 2: Line with crayons; Step 3: Purposefully draw lines together and create simple geometric shapes; Step 4: Give the kid or the two geometric shapes of the rat to pull together and combine them.	1) Increase understanding of spatial relationships; 2) Improve social; interaction with peers; 3)Increase attention and focus; 4) Increase motivation
3	Warming: Tearing and crumpling paper. Main exercise: working with pottery	Rolling the dough and then pressing the fingers into it and creating a shape like a cup helps to target the movements of the hands and fingers of autistic children and reduce stereotyped movements. This step is called the finger or push method. Subjects were then asked to place the dough on the pastry molds and press and flatten all the parts with a finger.	1)Increase understanding of spatial relationships; 2) Increase Attention and concentration 3) Improve social interaction with peers; 4) Improve interpersonal communication; 5)Increase motivation; 6) Target hand and finger movements and reduce stereotyped movements 7) Reduce sensory defense (touch)
	Warming: Stripping on paper with colored pencils. Main exercise: making handicrafts.	Watercolor painting (drawing a tree) and cutting it with scissors and sticking cotton (fruit on the tree) and then painting the fruits.	1) Increase Attention and concentration 2) Improve the movements of the hands and fingers 3) Reduce stereotyped movements in the hands and fingers 4) Emotional evacuation 5) Improve interpersonal communication 6) Reduce tactile (sensory) defense 7) Increase creativity.
5	Warming: Spool the thread.	Main exercise: 1)Cut lines with scissors 2)Practice stains and paint The main exercise: 1) Draw vertical and horizontal lines on the paper and then cut them from the lines with scissors. 2)Practice stains and paint (brushing in watercolor and tapping on paper) and painting the ball drawn by the tester.	1) Target behaviors 2) Improve stereotyped hand movements 3) Reduce tactile defense 4) Eye contact 5) Increase Attention and concentration.
	Warming: throw the ball. Main exercise: Impact and purposeful coloring.	The examiner mounted a large piece of paper on the wall and drew a large circle. The subjects were asked first to remove the brush from the table and then dip it into the gouache paint and then tap inside the process and not outside it with a brush (increase attention and Focus).	1) Improve eye contact 2) Increase attention and concentration 3) Increase eye-hand coordination 4) Improve target behaviors 5) Visual perception 6) Visual memory.
	Warming: Throwing the ball between the subject and the examiner. The main exercise: coloring in the form of a	Subjects were asked to pick up the brush and turn it around, then dip it into the paint and tap on the paper on the table. It was slowing down.	1) Improve eye contact 2) Increase attention and concentration 3) Increase eye-hand coordination 4) Improve target behaviors 5) Visual perception 6) Visual memory.

	beat in harmony with hearing slow and fast rhythms.		
8	Warming: Ball game tester and subjects. The main exercise: making a collage.	In this way, the subjects were shown the photos of the magazines, and they chose each of the images that the children liked, then they cut the image with scissors and glued it on the cardboard paper, and then with the watercolor of each painting that They wanted to add to the college (even tapping with a brush)	1) Improve fine motor skills of hands and fingers 2) Reduce stereotyped movements 3) Increase attention 4) Improve interpersonal communication 5) Discharge emotions 6) Increase self-confidence.
9	Warming: Twisting the thread around the spool. Main exercise: Music practice - painting.	In this way, happy music (due to the negative emotions and sometimes the isolation of children with autism spectrum disorders, a piece of music with a comfortable rhythm and melody) was played for the subjects, and they were asked to close their eyes and each The painting they want to draw (with crayons and watercolors). For those who did not know how to draw, the model was drawn to paint or draw on the model.	1) Improve interpersonal communication 2) Enhance eye contact 3) Improve verbal communication 4) Increase attention and concentration 5) Discharge emotions 6) Improve mental image

disorders such as blindness, deafness, motor disability, and cerebral palsy.

The experimental group underwent an art therapy intervention while the control group did not receive any intervention. Immediately after one month of intervention, participants’ symptoms in the experimental and control groups were Written consent was obtained from participants’ parents. They were informed about the purpose of the research prior to the study. The personal information of the volunteers was protected.

Materials

The Gilliam Autism Rating Scale (GARS)

The Gilliam Autism Rating Scale (GARS) was developed by Gilliam in 1995. GARS is a measurement tool for the assessment of autism and estimating its severity. The GARS gathers information about specific characteristics typically noted in children with autism spectrum disorders in three areas (Stereotyped Behaviors, Communication, and Social Interaction). This scale has three categories of 14 questions, and the score of each question is between 0 and 3. High scores indicate the severity of the disorder, and low scores indicate its mildness (24). Studies have shown an alpha coefficient of 0.90 for stereotyped behaviors, 0.89 for communication, 0.93 for social interaction, 0.88 for developmental disorders, and 0.96 for autism semiotics. The validity of the test has also been confirmed by comparison with other autism diagnostic tools. In Iran, the reliability of this scale was confirmed with a Cronbach's alpha coefficient of 0.89 (25).

Lincoln-Ozertsky Motor Skills Test

Ozertsky designed the Lincoln-Ozertsky Motor Skills Scale to assess the motor ability of children ages 5 to 14 years. This scale has four subscales of gross motor skills, fine motor skills, balance, and flexibility.Also, 36 itemsto measures various motor skills such as finger skills, eye, and hand coordination. Although this scale's primary purpose is to assess motor development, other information such as social, emotional, and physical development can also be obtained. This test's reliability was obtained through Cronbach's alpha and its validity by correlating the score of subscales with the total score of the trial, 0.73 and 0.82, respectively. A study (26) found this test to be standard; in Iran, its validity and reliability have been reported as 0.99 and 0.88, respectively.

Procedure

After obtaining the necessary permission and coordination with the school principal and the relevant teachers, an art therapy program based on painting therapy was implemented on the experimental group subjects. This research was conducted by SepidehSabet for 18, one on one sessions of 40 minutes three days a week in Mehrvarzi religion school. After the parents' consent, a painting-based art therapy program was performed for the members of the experimental group. The control group participated in the regular school programs, including math and Persian exercises. The art therapy program consisted of two parts: warming exercises and core exercises for each session. Painting-based art therapy intervention was from the book "Introduction to Family-Based Art Therapy and Children with Autism Spectrum Disorders" by Dr. KavehMoghadam (27), a member of the Canadian Art Therapy Association. Data were analyzed by analysis of covariance and SPSS 22.

Results

The highest age group of children were 9 years old and 12 years old with 28.3% and the lowest age group was 7 years, 10 years and 11 years old with 14.3%. The software used in this section is SPSS 22. The mean and standard deviation of the data are reported in Table 2 .

According to the table above results and a comparison with the score description table in the pre-test stage, there is a large difference between the means of the dependent variables of the experimental and control groups in the post-test phase.

Analysis of covariance was used to test the research hypotheses. The results of the Shapiro-Wilk test show that the research variables have a normal distribution. In the assumption of homogeneity analysis of variances, the results of the Levin test confirmed this hypothesis. Assuming the homogeneity of covariances, the M-box index showed the equality of covariance matrices of dependent variables between

groups. After examining the assumptions of multivariate analysis of covariance, the results of this test showed that there was a significant difference between the two groups in the dependent variables (Wilk's Lambda = 0.066, $F_{(4,\ 21)}$ = 74.45, P <0.001). Univariate analysis of variance was performed to evaluate which of the dependent variables were significantly different from the experimental and control groups.

According to Table 3, F statistics are significant for the

Table 2: Scores of motor skills in the experimental and control groups.

		Pre-test		**Pot-test**	
Variable	**group**	**M**	**SD**	**M**	**SD**
Fine motor skills	Control	10.00	1.41	6/60	1.99
	Experiment	9.93	2.24	19.93	4.78
Gross motor skills	Control	4.20	2.36	4.53	1.88
	Experiment	4.00	3.02	3.93	2.96
Balance	Control	5.40	3.90	5.13	3.90
	Experiment	9.46	7.32	12.46	5.52
Flexibility	Control	3.53	2.58	7.33	2.19
	Experiment	11.13	4.95	19.20	4.95

Table 3: Distinctive results of the effects between the subjects of the experimental and control groups on the scores of fine and coarse motor skills, balance, and flexibility.

Dependent variables	**Group**	**M**	**M-changes**	**SD**	**F**	**P**	**Eta**
Gross motor skills							
	experimental	4.05	-0.37	0.216	1.35	0.256	0.05
	control	4.42					
Fine motor skills							
	experimental	19.59	12.65	0.717	138.79	0.001	0.85
	control	6.94					
Balance							
	experimental	11.66	5.72	0.665	32.97	0.001	0.75
	control	5.94					
Flexibility							
	experimental	18.21	9.9	0/662	99.60	0.001	0.80
	control	18.31					

variables of fine motor skills (138.79), balance (32.97), and flexibility (99.60) at the level of 0.05. The results of table 3 were shown that the mean of the experimental group in fine motor skills (19.59), balance (11.66), and flexibility (18.21) is higher than the standard of the control group. Table 2 shows no statistically significant difference between the experimental and control groups in the variable of gross motor skills. Based on these findings, it can be said that art therapy based on the painting has improved the motor skills of preschool and primary school children with autism.

Discussion

This study aimed to evaluate the effectiveness of art therapy on motor skills and social interaction and other symptoms associated with autism.The results showed that art therapy improved fine motor skills and social interaction.

This result is consistent with Davari Nia et al. (25) and Moghaddam's (27) studies. The researchers found that children with intellectual disabilities were less likely to be socially accepted and less likely to participate in games with their peers. As a result, the lack of experience in motor skills causes weakness in motor skills and social constraints and distance from peers in them. Additionally, Behpajouhet al. (28), in their research, showed that art therapy is one of the most effective ways to communicate with children. In its context, a child of self-destruction can discover something valuable for himself.

The results showed that the experimental group, after painting-based art therapy intervention had a significant difference in fine motor skills scores compared to the control group. Thus, art therapy is useful for the fine motor skills of children with autismMotor deficits in children with autism are classified as symptoms associated with the disorder (31). Studies acknowledge that aspects of movement play a role in the early development of communication skills and that disruption in this area can contribute to the main manifestations of autism (32). Movement disorders can affect a person's experience of life, others' perceptions of the person, and affect the underlying characteristics of autism. In this study, the use of art therapy training improved the fine motor skills of the subjects' hands and caused them to improve the performance of actions related to the fingers and hands (33).

Another result obtained in this study showed that painting-based art therapy intervention did not improve gross motor skills. This result can be explained by the fact that gross motor skills require precise coordination of muscles when performing exercises. Force plays a significant role in these movements. These skills are performed by the body's large muscles and muscles and cause general movements, posture, and balance (28). The better motor skills performance in children with autism is associated with increased social adequacy (34). Motor activities develop the perceptual system and, with their essential role in learning, provide the basis for developing further meaningful understanding such as academic and social skills (35). After the emergence of motor skills, the perceptual system also grows. Therefore, any disturbance in the motor process affects the perceptual system, and consequently learning and causes failure and problems in other areas (36). Therefore, painting-based art therapy could not affect gross motor skills due to more involvement with the hands and fingers.Maintaining balance on a large scale is a task that requires fine motor control.

Recently, a theory that has attracted the attention of researchers is that the body's ability to maintain balance depends on the complicated exchange between the nervous, skeletal, muscular systems and the importance of each of these systems depending on the purpose of movement and environmental position. In this model, the central nervous system uses deep, atrial, and visual methods to be aware of the body's center of gravity relative to the level of reliance during the appropriate response production (36).

The present study had some limitations. Due to the limited statistical population of the study caution should be exercised in generalizing the results. Also, the lack of research in art therapy, especially painting therapy was evident and future studies should extend the current findings. Despite these limitations, the present study has enhanced our understanding that painting-based art therapy may be an appropriate treatment to improve fine motor skills and social interaction among children with autism.

Conclusion

Art therapy exercises based on painting therapy were able to affect the balance of the Lincoln Oseretsky scale. The function of flexibility is one of the executive actions that weakness in this component is characterized by stagnation, repetitive movements and difficulty in adjusting and modifying motor activities and the ability to change thoughts and actions against environmental changes. In this study, art therapy exercises based on painting therapy was able to affect the flexibility and motor complexity of the Lincoln Oseretsky test.

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None.

Conflict of Interest

The authors declare that they have no conflict of interest.

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Music improves social communication and auditory–motor connectivity in children with autism

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Abstract

Music has been identified as a strength in people with Autism Spectrum Disorder; however, there is currently no neuroscientific evidence supporting its benefits. Given its universal appeal, intrinsic reward value and ability to modify brain and behaviour, music may be a potential therapeutic aid in autism. Here we evaluated the neurobehavioural outcomes of a music intervention, compared to a non-music control intervention, on social communication and brain connectivity in school-age children (ISRCTN26821793). Fifty-one children aged 6–12 years with autism were randomized to receive 8–12 weeks of music ($n = 26$) or non-music intervention ($n = 25$). The music intervention involved use of improvisational approaches through song and rhythm to target social communication. The non-music control was a structurally matched behavioural intervention implemented in a non-musical context. Groups were assessed before and after intervention on social communication and resting-state functional connectivity of fronto-temporal brain networks. Communication scores were higher in the music group post-intervention (difference score = 4.84, $P = .01$). Associated post-intervention resting-state brain functional connectivity was greater in music vs. non-music groups between auditory and subcortical regions ($z = 3.94$, $P < .0001$) and auditory and fronto-motor regions ($z = 3.16$, $P < .0001$). Post-intervention brain connectivity was lower between auditory and visual regions in the music compared to the non-music groups, known to be over-connected in autism ($z = 4.01$, $P < .00001$). Post-intervention brain connectivity in the music group was related to communication improvement ($z = 3.57$, $P < .0001$). This study provides the first evidence that 8–12 weeks of individual music intervention can indeed improve social communication and functional brain connectivity, lending support to further investigations of neurobiologically motivated models of music interventions in autism.

Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by social communication difficulties and restricted and repetitive behaviours among strengths in varied domains[1]. ASD is highly prevalent but there is considerable heterogeneity in its aetiology, clinical presentation and underlying brain connectivity[1,2]. Consequently, a variety of behavioural and psychosocial treatments are sought by families[3]. However, there is little consensus on which treatments are most effective[4]. Thus, a diagnosis of ASD is associated with substantial costs to the individual, the family and the community[5].

ASD is a lifelong condition with a median age of diagnosis >4 years[6], although most current intervention strategies target children <6 years to promote early behavioural change[3]. Individuals with ASD and their

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families face significant challenges during developmental transitions[7]. School-age children in particular often remain unengaged in social settings, reducing opportunities for socio-communicative development[8,9]. This has led to investigations of alternate and creative means of expression such as music that might improve social communication, increasing prospects for meaningful relationships. Furthermore, cross-culturally applicable music-based interventions hold potential for scalability at home, school and global community settings[10].

Previous randomized controlled trials (RCTs) of music interventions for ASD have reported positive effects of music on emotional engagement, social interaction, communication and parent–child relationships[11,12], suggesting that musical activities in a therapeutic context can promote measurable behavioural changes in children with ASD. Strengths in music processing have been noted since the first description of ASD[13] and many studies have reported intact or enhanced musical skills such as absolute pitch, enhanced melodic memory and contour-processing in children with ASD[14–16]. Greater brain responses to song versus speech in fronto-temporal brain regions[17,18] and intact emotional responsiveness to music have also been demonstrated[19]. Supporting anecdotal reports from parents and caregivers have described the profound effects music has had on children with ASD[20].

The positive impact of music on social skills has been demonstrated beyond ASD[21,22]. Typically developing children are more likely to play with another following a shared musical experience[23] and joint musical interactions can enhance emotional empathy, prosociality and bonding in children[24–26]. More recently, neuroimaging studies have shown that participating in musical activities engages a multimodal network of brain regions involved in hearing, movement, emotion, pleasure and memory[27–31], thus allowing transfer of music-related therapeutic effects to non-musical domains[32] through structural and functional brain changes[33,34]. However, a direct link between effects of music interventions and changes in the brain is yet to be demonstrated in autism[35,36] and was our aim here.

Altered intrinsic brain connectivity is a hallmark of ASD. Both over-connectivity and under-connectivity have been reported, in particular, under-connectivity of fronto-temporal and cortico-subcortical networks and over-connectivity of sensory networks may be considered potential treatment targets[37–40] given their associations with verbal and social communication skills in autism[18,41]. Resting-state functional magnetic resonance imaging (rsfMRI) allows measurement of intrinsic brain connectivity by computing temporal correlations of spontaneous blood-oxygen-level-dependent (BOLD) signals among spatially distributed brain regions and may be a promising target of music-induced neuroplasticity[40,42]. The use of resting-state functional connectivity (RSFC) as an outcome measure for intervention studies, particularly for clinical populations, has been recommended since it affords the advantage of being task-independent, has high test–retest reliability, limited practice effects and can provide reliable estimates of functional brain connectivity corresponding to underlying anatomy[43].

Currently, evidence for effectiveness of music interventions is limited and there is no neuroscientific basis for its use in ASD. However, given the impact of music on social functioning and brain connectivity, alongside atypicalities in these areas in ASD, music-based activities may restore altered brain connectivity and social difficulties in ASD. Synthesizing findings from previous research, two possible mechanisms for such music-induced neuroplasticity and its impact on social functioning may be proposed:[32,36,44,45] (1) top–down reward-based cortical modulation to reinforce learning of non-musical behaviours such as social interactions through the intrinsic reward value of music, (2) bottom–up sensorimotor integration through sound and auditory–motor entrainment of neural networks through synchronization leading to modulation of atypical sensory processing, which in turn may improve social communication[41,46]. Our goal was to investigate whether music-based interventions can indeed alter spontaneous rsfMRI signals, leading to improved functioning in ASD based on one of the above hypotheses.

The specific aim of this RCT was to investigate whether 8–12 weeks of a music-based intervention (compared to a non-music control intervention) can improve social communication, family quality of life (FQoL) and functional brain connectivity in school-age children with ASD. This would provide evidence for an effective, inexpensive, easy-to-administer and relatively non-specialized strength-based intervention that may be scaled in varied settings across cultures, addressing the need for globally applicable ASD intervention models[10].

Materials and methods

Study design

We report an assessor-blinded, parallel-group RCT[47,48] of a music intervention (MT) compared to a non-music control intervention (NM) for improving social communication and fronto-temporal brain connectivity in school-age children with ASD. The trial (isrctn.org: ISRCTN26821793) was conducted between April and December 2016 in Montreal, Canada with ethics approval from the Montreal Neurological Institute (MNI) at McGill University. Written informed consent was obtained from parents/guardians of participants.

Participants

Children aged 6–12 years, meeting Diagnostic and Statistical Manual of Mental Disorders, Fourth edition

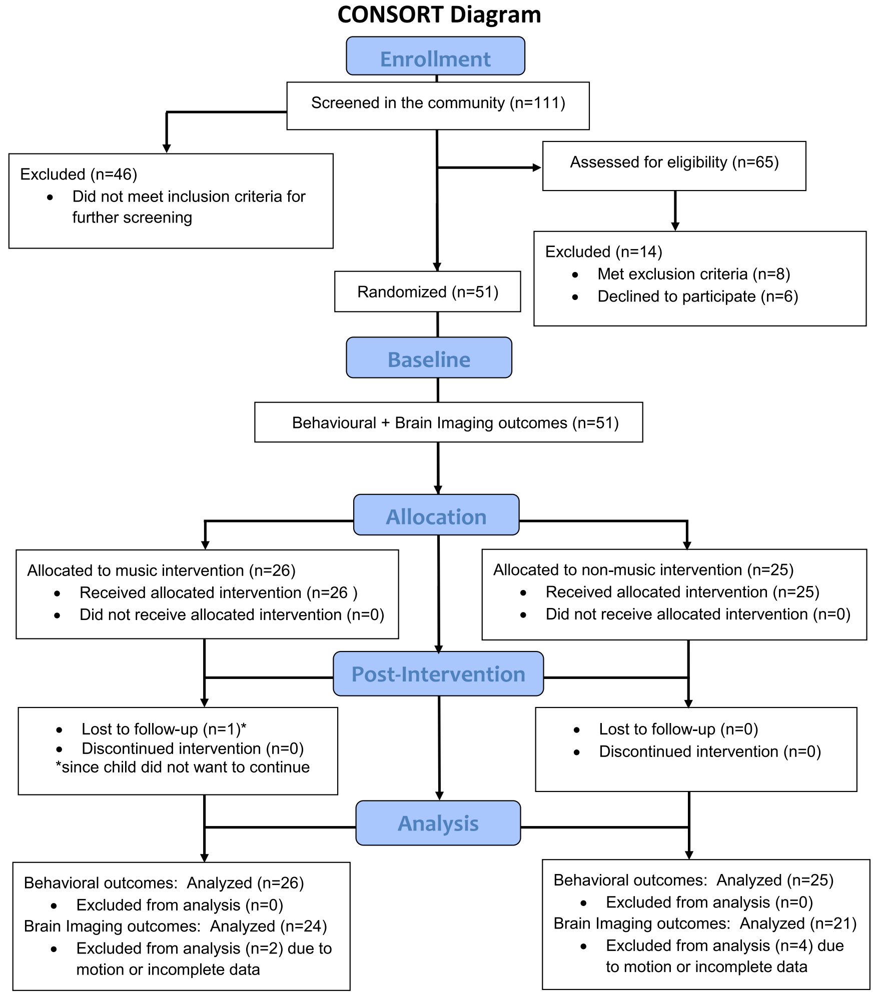

Fig. 1 CONSORT study diagram. CONSORT study diagram study comparing neurobehavioural outcomes of a music intervention compared with a non-music intervention for children with Autism Spectrum Disorder

criteria for ASD[49], were screened from January to August 2016 (Fig. 1). Exclusion criteria were (1) individual music therapy within 6 months prior to study, (2) private musical lessons for a cu mulative period of 1 year prior to study, (3) group music therapy in school; (4) <35 weeks of gestation, (5) hearing disorders or (6) a medical history of neurological disease. Power analysis using evidence-based effect size estimation[11] suggested that for a large effect ($d = 0.8$) of music therapy on social communication, detectable with 80% power at $P < .05$, a sample of $n = 50$ (25 per arm) would be required.

Baseline assessment

Assessment at baseline consisted of two sessions. In the first session, detailed demographics on socioeconomic status[50] (SES), handedness[51], music experience history and past and current intervention history of the child were obtained. Participant diagnosis was confirmed using a best-estimate diagnosis of ASD supported by an ADOS (Autism Diagnostic Observation Scale[52]), Autism Diagnostic Interview–Revised[53] or Childhood Autism Rating Scale[54] and detailed clinical assessment report. Additionally, parent-reported behavioural outcomes on Social Responsiveness Scale (SRS-II[55]), the Children's Communication Checklist (CCC-2[56]), the maladaptive behaviour subscale of the Vineland Adaptive Behaviour Scales (VABS-MB[57]) as well as the Beach Family Quality of Life Scale (FQoL[58]) were obtained. Children's cognitive ability was assessed using the Wechsler's Abbreviated Intelligence Scale (WASI-II[59]). If the child had completed an intelligence quotient (IQ) test (WASI-I/II/WISC-IV/V) within 2 years of the study, available scores were used. Children's language ability was assessed using the Sentence Repetition subtest of the Clinical Evaluation of Language Fundamentals (CELF-4[60,61]) and receptive vocabulary was measured using the Peabody Picture

Table 1 Baseline characteristics of participants

Measure	Music			Non-music			*P* value
	n	Mean	SD	*n*	Mean	SD	
Participant characteristics							
Age (in years)	26	10.30	1.91	25	10.20	1.87	.85
Sex (male:female)	26	21:5	0.40	25	22:3	0.33	.75
Social Communication Questionnaire	26	21.31	5.90	25	19.68	5.50	.31
ADOS total[a]	22	15.64	5.50	13	14.84	4.62	.65
Language impairment[b]	26	13/26	—	25	14/24	—	.53
Parent-reported sentence level speech	26	23/26	—	25	19/25	—	.29
Verbal IQ[c]	25	94.72	21.40	23	87.30	23.47	.26
Nonverbal IQ[c]	24	110.79	18.15	21	102.38	18.22	.13
Full-Scale IQ[c]	25	102.00	18.82	24	94.00	18.18	.14
MacArthur SES (Ladder)[d]	26	5.38	1.83	25	5.72	2.28	.57
Annual income (in $)	25	39760	30847	25	43300	30145	.68
Handedness (augmented laterality index)[e]	26	71.12	51.63	25	73.28	52.74	.88
Musical ability (MBEMA)[f]	23	0.72	0.14	22	0.69	0.14	.57
VABS gross motor skills[k]	26	13.5	2.2	25	13.24	2.08	.67
VABS fine motor skills[k]	26	15.92	3.09	24	15.21	2.6	.38
Number of therapy sessions completed	26	10.50	1.61	25	10.16	1.70	.47
Outcome measures							
SRS-II T-score[g]	26	70.15	9.62	25	72.24	11.43	.48
CCC-2 general composite[h]	25	76.84	14.44	23	77.65	13.35	.46
PPVT-4 standard score[i]	26	94.58	26.18	25	85.48	29.42	.25
Family Quality of Life[j]	26	102.38	13.62	25	104.08	13.79	.66
VABS maladaptive behaviours[k]	25	19.80	1.50	23	20.00	1.86	.69

P values are calculated using independent samples *t* tests for continuous variables and chi-square tests for categorical variables between groups

SD standard deviation

[a] ADOS: Autism Diagnostic Observation Scale Total score from ADOS or ADOS-2. Higher scores mean greater symptom severity

[b] Number of participants meeting criteria for language impairment based on scaled scores 1 SD or greater below the mean (=10) on the Sentence Repetition subtest of Clinical Evaluation of Language Fundamentals (CELF-4)[60,61]

[c] IQ was measured using the Wechsler's Abbreviated Scale of Intelligence (WASI-II) or the WISC-IV/V when scores were available from the past 2 years. Full-scale scores have a mean of 100 and SD of 15

[d] Socioeconomic status (SES) was measured using the MacArthur SES Ladder

[e] Handedness was measured using the augmented 15-item index of the Edinburgh handedness inventory

[f] Musical ability was measured using the global accuracy score on the Montreal Battery for Evaluation of Musical Abilities (MBEMA)[63]

[g] SRS-II: Social Responsiveness Scale. Range: higher scores mean poorer skills

[h] CCC-2: Children's Communication Checklist. Details provided in Supplementary text

[i] PPVT-4: Peabody Picture Vocabulary Test. Details provided in Supplementary text

[j] Family Quality of Life was measured using the Beach Questionnaire. Details provided in Supplementary text

[k] VABS: Vineland Adaptive Behaviour Scales. Estimated v-scale scores with mean of 15 and SD of 3 for the gross motor skills, fine motor skills and maladaptive behaviours subdomains are reported. Scores between 12 and 18 estimate performance in the average range

Vocabulary Test (PPVT-4[62]). Musical ability was assessed using the Montreal Battery for Evaluation of Musical Abilities[63]. Detailed baseline characteristics of participants are provided in Table 1.

In the second session, participants completed a 20-minute MRI scan in a 3 Tesla Siemens Magnetom Tim-Trio scanner with a 32-channel head coil at the MNI. During this scan, participants were asked to fixate on a cross-hair on the screen. Resting-state BOLD echo-planar images were obtained in 38 slices with a 3.5 mm^3 voxel resolution, covering the entire brain (TR = 2340 ms, TE = 30 ms, matrix size, 64 × 64; field of view (FOV), 224 mm; flip angle 90°). One hundred and forty volumes were obtained in 5 minutes 32 s. Participants also completed a high-resolution sagittal T1-weighted anatomical scan with a voxel resolution of $1\,\text{mm}^3$ and an acceleration factor of 2. Participants with their parents underwent a detailed orientation procedure before the MRI scan to ensure comfort and compliance and to maximize good quality outcomes[64]. Audio-visual media aids and mock scanner trials were used in most cases to motivate the participants. Participants' wakefulness and motion during the actual scans was monitored using an MRI-compatible infra-red camera.

Randomization and blinding

Fifty-one participants were randomized to MT ($n = 26$) or NM ($n = 25$) using the covariate-adaptive method[65] where the first 20 participants were randomized using simple coin toss and remaining 31 by the MinimPy software (http://minimpy.sourceforge.net/) by the first author (M.S.), who was not involved in assessing behavioural outcomes. MinimPy is a free, open-source, desktop program implemented in Python, which allows random allocation of subjects to treatment groups in a clinical trial using a stochastic covariate-adaptive minimization algorithm[66]. The success of randomization was assessed by comparing baseline similarity of intervention groups. All other assessors and authors were blind to group allocation information. Our attempt to blind parents (who assessed parent-rated outcomes) was only partially successful, with 31 out of the 51 parents reporting awareness of group allocation. Data were independently double entered to ensure accuracy and stored on an electronic server with restricted, password-controlled access.

Interventions and fidelity

Both interventions (Fig. S1) involved 45-minute individual weekly sessions conducted over 8–12 weeks by the same accredited therapist (M.T.) using established approaches. Using a child-centric approach, MT made use of musical instruments, songs and rhythmic cues while targeting communication, turn-taking, sensorimotor integration, social appropriateness and musical interaction[47,67–69]. NM was designed as a structurally matched "active comparison" play-based intervention to control for non-specific factors, such as positive treatment expectancies, intervention support, therapist attention and emotional engagement. Both interventions were conducted in the same setting and targeted similar outcomes using theoretically motivated approaches[70] such as creating a shared experience, building meaningful relationships and emphasizing self-expression[71] through the use of varied activities targeting common goal such as verbal and social communication, multisensory integration and emotional regulation (SI Table S1). The primary difference was the use of music as a central component in MT. All sessions were video-recorded to assess treatment fidelity[72] (Supplementary Information).

Outcomes

Behavioural outcomes

Primary behavioural outcomes included a social communication battery consisting of the CCC-2 to measure pragmatic communication, SRS-II to measure symptom severity and PPVT-4 to measure receptive vocabulary. Secondary outcomes were FQoL and the maladaptive behaviours subdomain of the VABS. Outcomes were selected to provide both direct and parent-reported evaluations of treatment-related change using measures that have good psychometric properties, limited practice effects and applicability to a wide range of individuals[73,74] and were collected at baseline and post-intervention for $n = 50$ participants (Supplementary Information).

Statistical analysis

Behavioural outcomes were analysed by fitting linear mixed-effects models (LMEMs) with restriction maximum-likelihood estimation to cope with missing data, inhomogeneity of dependent-variable-variance across factor levels and unequal group size. LMEMs with treatment group (MT, NM), timepoint (baseline, post-intervention) and their interaction as well as participant intercept as random effect were estimated for all primary and secondary behavioural outcomes[75]. Prior to analysis, data were checked for normality. A group×timepoint interaction indicating a change in MT vs. NM post-intervention at $P < .016$ (Bonferroni-corrected from alpha-level of $P = .05$ to account for three primary behavioural outcomes) was considered significant. Clinical significance was limited to changes from baseline to post-intervention within MT or significant difference between MT and NM post-intervention as confirmed by post hoc Tukey tests at alpha-level of $P = .05$. An intention-to-treat analysis was carried out, whereby missing data from any drop-out participants was replaced with data at baseline. Both unstandardized (beta-coefficients and mean difference) scores[76] and standardized effect sizes (standardized mean difference, Cohen's d) are reported since standardized effect sizes are often influenced by study design and complexity of models used. Standardized effects sizes are calculated as the difference in change scores between groups divided by the pooled within- and between-group standard deviation[77]. The unstandardized measure is a simple effect size (with 95% confidence intervals (CIs)) in terms of mean difference and does not depend on variance estimates[78]. All statistical analyses were done in R v3.3.4[79].

Neuroimaging outcomes

Primary neuroimaging outcomes were intrinsic functional brain connectivity of fronto-temporal brain networks measured using rsfMRI at baseline and post-intervention. RSFC methods provide an approach for investigating how musical engagement may alter functional connectivity among several brain regions. RSFC metrics of inter-regional correlations specifically afford the advantage of being task-independent, have high test–retest reliability and provide reliable estimates of brain functional connectivity[80]. RSFC metrics also have limited practice effects and may provide an objective method to measure response-to-intervention[40]. Here we tested the extent to which music alters fronto-temporal RSFC in six fronto-temporal seed regions.

Image preprocessing

Resting-state images were first preprocessed using FSL (v. 5.0.9; www.fmrib.ox.ac.uk, FMRIB's Software Library, FMRIB, Oxford, UK)[81,82] via the SeeBARS pipeline developed at the Center for Research on Brain, Language and Music[83]. Image preprocessing steps consisted of removal of the first five volumes in each scan series as well as removal of non-brain tissue using BET[81], slice-time correction, motion correction (using a six-parameter affine transformation implemented in FLIRT, global intensity normalization, spatial smoothing (Gaussian kernel of FWHM = 6 mm), temporal high-pass filtering (100 s) and temporal band-pass filtering (0.01–0.1 Hz). To achieve the transformation between the low-resolution functional data and standard space (MNI152: average T1 brain image constructed from 152 normal subjects), two transformations were performed: (1) T2*-weighted image to T1-weighted structural image (using a 7 degree of freedom (DOF) transformation) and (2) T1-weighted structural image to average standard space (using a 12 DOF linear affine transformation, voxel size = $2 \times 2 \times 2\ \text{mm}^3$). In addition, physiological noise was removed using the method described by Vahdat and colleagues[83]. The global signal was calculated by averaging the time series over all voxels in the brain. In total, 18 nuisance regressors were used: white matter, cerebrospinal fluid, global signal and their derivatives, and six motion parameters and their derivatives in the first-level analysis[84,85]. Additional motion scrubbing was done using guidelines in Power et al. (2012)[86]. Volumes with framewise displacement (FD) = 0.5 mm or DVARS = 50 (the spatial root mean square of the data after temporal differencing) were masked from whole-brain analysis. Participants with >35% volumes censored at either timepoint were excluded from further analysis ($n = 6$, MT = 2, NM = 4).

Statistical analysis

Seeds were defined as 6 mm spheres around coordinates in the left and right Heschl's gyrus (HG; ±46 −18 10), left and right inferior frontal gyrus (±50 18 7) and left and right temporal pole (TP; ±38 10 −28; Fig. S3). These seeds are known to anchor fronto-temporal networks involved in language and communication and altered in ASD[87]. The timeseries for each of the six seeds was used to generate individual participant-level maps using whole-brain general linear models at baseline and post-intervention. The unthresholded participant-level maps were then entered into a group-level analysis. To assess potential differences between groups at baseline, independent sample t tests were computed for maps from all seeds. No baseline differences between groups on any of the six RSFC networks was found (all $P > .05$). To compare groups post-intervention, we used adjusted analysis of covariance (ANCOVA) with post-intervention RSFC as the dependent variable and intervention group, mean-centred baseline RSFC, age, IQ and mean FD[86] as covariates. Using covariate-adjusted ANCOVA models are more powerful as they can account for baseline imbalance and correlation between baseline and post-intervention measures, increase statistical power and minimize biases[88–92]. Z-scores of parameter estimates were used to measure connectivity strength. In RSFC maps where a difference between groups was observed, we evaluated whether post-intervention RSFC was related to improvement in behavioural outcomes (measured by difference scores) in a whole-brain analysis. Z-statistics were extracted for each participant from the post-intervention RSFC maps and used in a linear regression model to evaluate strength of the association between RSFC and behavioural improvement. To account for multiple comparisons, random-field theory using a cluster-forming threshold of $P < .001$ was applied[93]. To account for six seeds, a Bonferroni correction was used and a final alpha-level of $P = .00016$ was used for significance testing. All locations are described in MNI coordinates.

Results

Participants

One hundred and eleven children meeting diagnosis for ASD were screened in the community, of which 60 did not meet study criteria or declined to participate (further details are provided in Fig. 1). Fifty-one participants in the age range 6–12 years (mean age = 10.25 years, 8 females) were assessed at baseline and randomly assigned to music (MT; $n = 26$) or non-music (NM; $n = 25$) intervention groups (Fig. 1,S1). Assessment at baseline consisted of two sessions: (1) first, detailed demographics, diagnostic reports and baseline measurements of behavioural outcomes were obtained (Table 1). (2) In the second session, anatomical and rsfMRI brain images were obtained on a

3 Tesla MRI scanner. Participants did not differ at baseline on age, sex, language, motor skills, IQ, SES or musical ability and completed an average of 10.3 therapy sessions ($n = 5$ participants had <10 sessions) during the study (Table 1). Fifty participants completed follow-up assessments with one drop-out whose baseline data was used for analysis.

Treatment fidelity

Treatment fidelity[72] of delivery of both interventions was assessed using 103 out of the 527 video-recorded intervention sessions by two raters blind to session order, not involved in the trial and demonstrating high inter-rater reliability (intraclass correlation coefficient = 0.91, $P < .001$). There was high adherence to treatment protocols, process fidelity (80–100% with no difference between groups; $P = .24$) and content fidelity (>75% with no difference between groups; $P = .16$) of delivered intervention with no difference in implementation fidelity across MT and NM (Supplementary Information).

Behavioural outcomes

Using LMEMs, we found that MT, relative to NM, showed improvements in communication on the CCC-2, indicated by a significant group×timepoint interaction corrected for multiple outcomes ($\beta = -1.35$, $P = .01$; $\mathrm{MT}_{\text{Post-intervention}} - \mathrm{MT}_{\text{Baseline}}$: post-hoc Tukey test, $t = 1.43$, $P = .024$, Fig. 2a). The simple effect size calculated as a mean difference between MT and NM scores from baseline to post-intervention was 4.84 (95% CI: 0.76–8.92) with a larger proportion in the MT group (15/26) compared to the NM group (5/24) showing an improvement. An exploratory analysis of scaled subtests of the CCC-2 (not subjected to correction for multiple comparisons) revealed that these differences stemmed from tests of structural language, Speech ($P = .01$) and Semantics ($P = .046$); a pragmatics subtest, Inappropriate Initiations ($P = .006$); and two autism-relevant subtests (not included in the CCC-2 composite): Social Relations ($P = .048$) and Interests ($P = .02$). There was no group×timepoint interaction on the SRS-II[55] *t*-scores ($\beta = -0.04$, $P = .92$; mean difference = 0.65, 95% CI:−3.25 to 4.1), or PPVT-4[62] standard scores ($\beta = 0.15$, $P = .78$; mean difference = 0.03, 95% CI:−4.32 to 4.38; Fig. 2b, c). There was, however, a significant group×timepoint interaction on parent-reported FQoL ($\beta = -1.9$, $P = .01$, Fig. 2d) with mean difference = 7.06 favouring MT (95% CI: 0.79 to 13.33) even though no post hoc tests were significant. Additionally, both groups showed reduction in maladaptive behaviours on the VABS post-intervention ($\beta = 0.22$, $P = .01$, Fig. 2e, Table 2, SI Table S2).

Brain connectivity outcomes

There were no baseline differences between groups on any of the six RSFC networks (all $P > .05$). Using covariate-adjusted ANCOVA models, we found greater RSFC post-intervention in the MT group compared with NM between auditory seeds (left and right HG) and striatal and motor regions (right HG: $z = 3.94$, $P = .000019$, left HG: $z = 3.79$, $P = .00009$, Fig. 3a, b, SI Table S3) and reduced RSFC in MT between auditory seeds (left HG and right TP) and visual regions (left HG: $z = 3.39$, $P < .00001$, right TP: $z = 4.01$, $P < .00001$, Fig. 3d, e, SI Table S3).

To evaluate whether changes in RSFC were related to improvements in behavioural outcome, we tested whole-brain models with CCC-2 improvement ($\text{CCC-2}_{\text{Post-Intervention}} - \text{CCC-2}_{\text{Baseline}}$) as covariate of interest for the three seeds (left HG, right HG and right TP) where significant differences between groups was found. Greater RSFC post-intervention between left HG and subcortical thalamic and striatal regions was related to greater improvement on CCC-2 scores ($z = 3.57$, $P < .0001$, Fig. 3c). Lower post-intervention RSFC between right HG and visual areas was related to greater improvement in CCC-2 scores ($z = 3.64$, $P < .001$, Fig. 3f).

Discussion

Individuals with ASD have a unique profile of strengths amid limitations, which can be harnessed to design treatment paradigms that improve functional outcomes[94]. Given their universal appeal, intrinsic reward value and ability to modify brain and behaviour, musical activities have been proposed as a potential strength-based rehabilitation tool for ASD[22,36,95]. In the current trial, we demonstrate that 8–12 weeks of music intervention can indeed alter intrinsic brain connectivity and improve parent-reported outcomes in social communication and FQoL in school-age children with ASD.

Improvements in social communication were found on the CCC-2 from baseline to post-intervention in MT vs. NM, with a medium-sized positive effect ($d = 0.34$). Improvements were specific to pragmatics, reduction of inappropriate initiations and better social relations and interests. These findings are consistent with the idea that music employs a structured approach to social communication, which may otherwise be hindered by sensory and social difficulties[12,36]. Despite being modestly sized, these effects are highly specific to MT given the comparable structure of the control intervention and may have promising clinical and policy implications[96]. No MT-specific improvements were found on SRS-II or PPVT-4. Despite convergence between the SRS-II and CCC-2 and similar susceptibility to assessor-blinding biases, the SRS-II is a

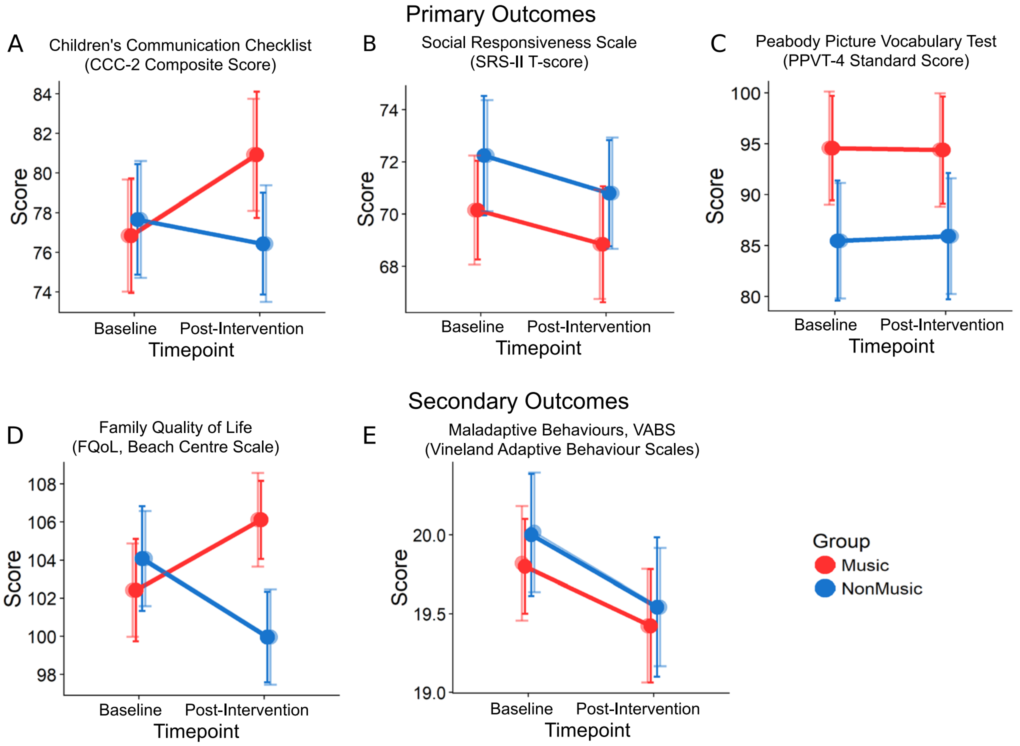

Fig. 2 Behavioural outcomes. Line graphs represent effects of Music (MT) vs. Non-music (NM) intervention at baseline and post-intervention timepoints for primary (top panel) and secondary (bottom panel) behavioural outcomes. **a** Higher CCC-2 composite scores for Music Group at Post-intervention (group×timepoint: $\beta = -1.35$, $P = .01$). **b**, **c** No significant interactions for SRS-II ($\beta = -0.04$, $P = .92$) and PPVT-4 ($\beta = 0.15$, $P = .78$). **d** Better FQoL (family quality of life) in the Music Group at post-intervention (group×timepoint: $\beta = -1.90$, $P = .01$). **e** Reduced VABS Maladaptive Behaviours for both MT and NM post-intervention ($\beta = 0.22$, $P = .01$). MT is shown in red and NM in blue; darker shades represent observed values and lighter shades represent predicted values. Errors bars represent standard error (SE)

measure of ASD symptom severity, whereas the CCC-2 is a pragmatic communication measure, indicating limited effects of MT on reducing ASD symptom severity or improving receptive vocabulary.

We also found a positive effect of MT on FQoL ($d = 0.57$). The family is the primary support system for individuals with ASD throughout their lifespan. However, parents of children with ASD experience high levels of stress that can negatively impact well-being[97], making FQoL a critical component in evaluating treatment outcomes. Although both groups received a form of interventional support, only parents of children in MT reported increases in FQoL, particularly on items on family interaction, cohesion and coping and benefits of disability-related supports.

Recently, Bieleninik and colleagues[98] published a multicentre trial of improvisational music therapy for children aged 4–7 years and found no reductions in ASD symptoms on the ADOS Social Affect domain after 5 months of therapy, compared to standard care. The authors suggest that this could be due to variability across therapists, clinical assessors[99] and the choice of ADOS as outcome measure, particularly because no previous well-controlled and blinded intervention studies[3] have found treatment effects on the ADOS. While this trial demonstrates the global feasibility of implementing music therapy in large-scale international settings, it also indicates the importance of choosing appropriate outcome measures for psychosocial interventions in heterogeneous neurodevelopmental populations. The focus should not only be on symptom reduction but also on overall quality of life and functional improvements. In turn, outcomes that are malleable through intervention can inform future targets of research.

To complement behavioural improvements, we present the first evidence that music intervention alters functional brain activity in ASD leading to functional communication gains. Specifically, MT, relative to NM, increased functional connectivity between bilateral primary auditory cortex and subcortical and motor regions (often reduced in ASD)[100] and reduced over-connectivity between auditory and visual-association areas[38]. Importantly, changes in brain connectivity were related to improvements in children's communication skills after MT (Fig. 3c–f).

Brain connectivity in ASD has often been conceptualized as a trade-off between bottom–up and

Table 2 Behavioural outcomes

Outcomes	Observed values						Effect size		
	Music			Non-music			Mean difference	±95% CI	Standardized effect size (*d*)
	n	Mean	±95% CI	*n*	Mean	±95% CI			
Primary outcomes									
CCC-2							4.84	4.08	0.34
Baseline	25	76.84	5.64	23	77.65	5.45			
Post-intervention	24	80.46	6.43	23	76.43	5.02			
Changes from baseline	25	3.62	0.78	23	−1.22	−0.43			
SRS-II							0.65	3.45	0.06
Baseline	26	70.15	3.68	25	72.24	4.47			
Post-intervention	26	69.36	4.39	25	70.8	3.98			
Changes from baseline	26	−0.79	0.71	25	−1.44	−0.49			
PPVT-4							0.03	4.35	0.00
Baseline	26	94.57	10.05	25	85.48	11.52			
Post-intervention	26	95.04	10.66	25	85.92	12.11			
Changes from baseline	26	0.47	0.61	25	0.44	0.59			
Secondary outcomes									
FQoL							7.06	6.27	0.57
Baseline	26	102.42	5.25	25	104.08	5.39			
Post-intervention	26	105.36	3.86	25	99.96	4.65			
Changes from baseline	26	2.94	−1.39	25	−4.12	−0.74			
VABS-MB[a]							0.08	0.65	0.04
Baseline	26	19.8	0.59	24	20	0.74			
Post-intervention	26	19.42	0.71	24	19.54	0.86			
Changes from baseline	26	−0.38	0.12	24	−0.46	0.12			

CCC-2 Children's Communication Checklist Composite score, *SRS-II* Social Responsiveness Scale T-Score, *PPVT-4* Peabody Picture Vocabulary Test Standard score, *FQoL* Family Quality of Life total score measured using the Beach Centre Scale, *CI* confidence interval

[a] VABS-MB Vineland Adaptive Behaviour Scales–Maladaptive behaviour subdomain v-scale score. Scores <18 are average, scores of 18–20 are elevated and scores 21–24 are clinically significant

top–down processing. However, it is still not clear whether an increased reliance on bottom–up sensory processing and hence, sensory over-connectivity, is a cause or consequence of atypical top–down cortical modulation[41,46]. As a result, social communication impairments may result from alterations not just in the brain's "social" network" but in domain-general disconnections in sensorimotor and cognitive functions, which are building blocks of later social skills[46]. In line with this idea, we find that engaging in musical activities can directly influence auditory–motor connections in the brains of children with ASD similar to effects of musical training in neurotypical populations[27,30,31]. Previous studies have reported that early motor difficulties are often predictive of later social communication impairments in ASD[101]. Thus interventions targeting motor skills may impact later social outcomes. It is important to note that our participants did not exhibit significant motor deficits and that the two intervention groups did not differ in their range of motor skills (Table 1). Thus any gains observed in auditory–motor connectivity in the MT group are not driven by group differences in motor skills and are specific to the music intervention. Furthermore, our findings show that music might play a modulating role in reducing the over-connectivity between sensory cortices, subsequently improving communication processes[102,103]. In light of mechanisms of music-induced neuroplasticity introduced earlier, our findings support bottom–up integration of sensorimotor brain networks leading to improved social functioning rather than top–down music-based reward[36].

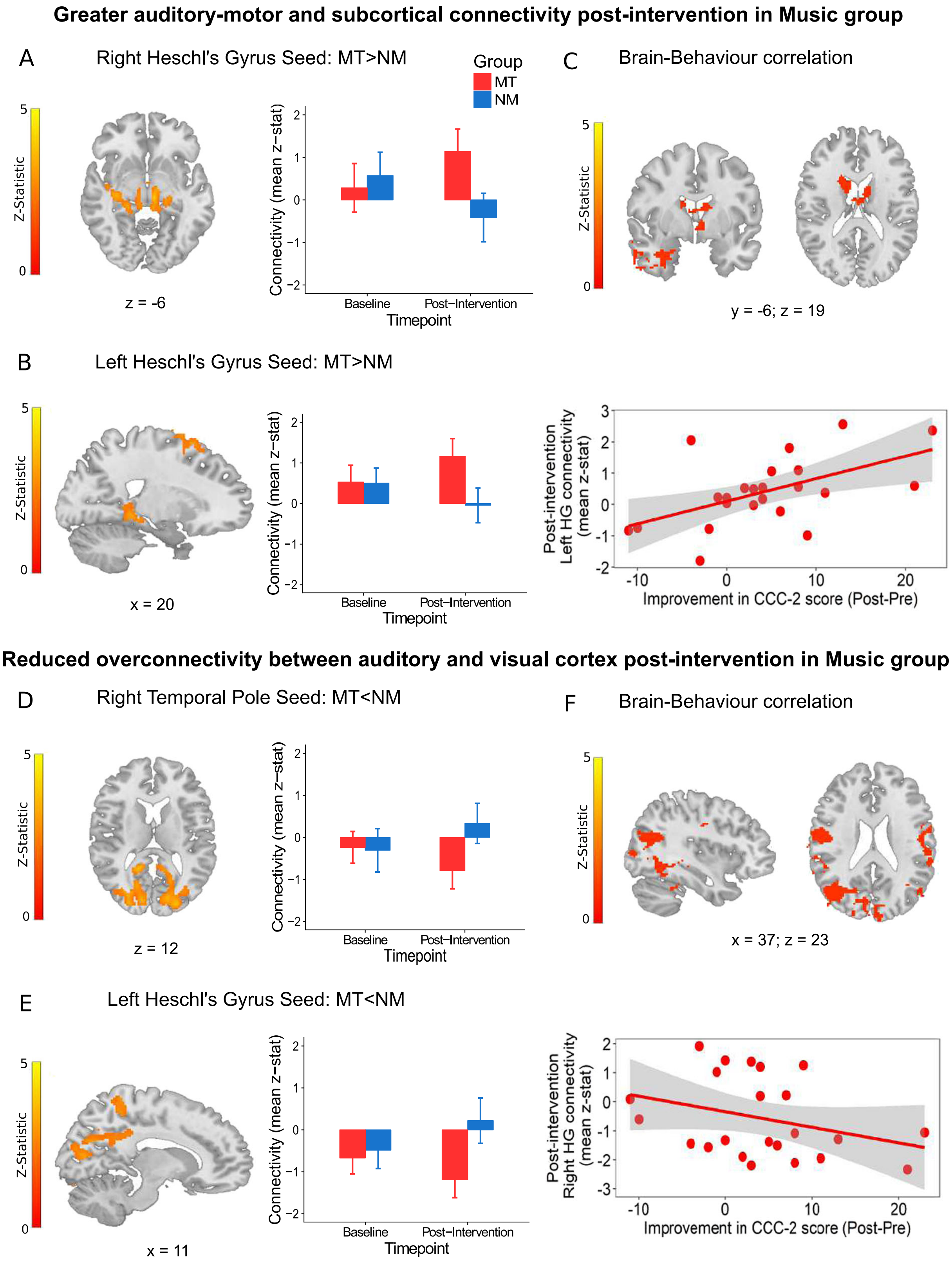

Fig. 3 (See legend on next page.)

Fig. 3 Brain functional connectivity outcomes and correlation with behavioural improvement. The top panel shows regions of increased resting-state functional connectivity (RSFC) post-intervention in the Music (MT) vs. Non-music (NM) groups between **a** Right Heschl's gyrus seed and subcortical regions such as the hippocampus and thalamus ($z = 3.94$, $P < .0001$) and **b** left Heschl's gyrus seed and fronto-motor regions ($z = 3.16$, $P < .0001$). **c** Connectivity between auditory and subcortical thalamic and striatal regions post-intervention is directly related to improvements in communication measured using the change in CCC-2 composite score in MT ($z = 3.57$, $P < .0001$). The bottom panel shows regions of decreased RSFC post-intervention in MT vs. NM groups between **d** right temporal pole seed and occipital regions ($z = 4.01$, $P < .00001$) and **e** left Heschl's gyrus seed and bilateral calcarine and cuneus regions ($z = 3.39$, $P < .00001$). **f** Connectivity between auditory and visual sensory cortices post-intervention is inversely related to improvements in communication measured using the change in CCC-2 composite score in MT ($z = 3.64$, $P < .001$). MT is shown in red and NM in blue. Errors bars represent standard error (SE). All brain images are presented in radiological convention and coordinates are in MNI space

Music interventions may thus have a positive influence on social functioning, possibly though modulation of domain-general sensory and cognitive processes, which are often atypical ASD[41,46]. Future research should focus on better understanding the neural mechanisms underlying music-related changes in brain connectivity and its impact on social behaviour.

Evidence-based behavioural and psychosocial interventions for school-age children have received limited attention[3]. Neuroscience-informed support for such interventions offers the opportunity to integrate brain development with behavioural approaches, allowing development of individualized treatment paradigms[104]. A strength of the current study is the use of neuroimaging to support improvements in behavioural outcomes resulting from MT. Consequently, the sample size ($n = 51$) is quite modest. Future work should focus on identifying individuals whose profiles may benefit most from music and integrate neuroimaging in multisite trials of such interventions. Inclusion of more direct observation-based outcomes and the role of mediators and moderators (e.g. quality of therapeutic relationship, cognitive, language and motor profiles, symptom level and musical interest of the participant) on short- and long-term outcomes will also be crucial to further the evidence base for music-based interventions.

In conclusion, the present study demonstrates that 8–12 weeks of music intervention (relative to non-music behavioural intervention) can improve parent-reported social communication, FQoL and intrinsic brain connectivity in school-age children, thus supporting the use of music as a therapeutic tool for individuals with ASD.

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Conflict of interest

M.T. was a contractual employee of Westmount Music Therapy during the course of trial. The other authors declare that they have no conflict of interest.

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The Healing Power of Art in Intergenerational Trauma: Race, Sex, Age and Disability

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Abstract

Throughout this paper, I use a political and activist lens to think about disability arts and its potential role in opening up a necessary conversation around how madness is produced by experiences of racism, poverty, sexism, and inter-generational trauma within the Black community. I begin by explaining how the Black body has a history of being the site of medical experimentation. From the perspective of my own experience, I suggest that this history of medical abuse has caused Black people to be suspicious and wary of the healthcare system, including the mental healthcare system, which forecloses discussions around the intersection of Blackness and mental health. I go on to argue that this discussion is further silenced through the trope of the ‘strong Black woman,’ which, in my experience works to perpetuate the idea that Black women must bear the effects of systemic racism by being ‘strong,’ rather than society addressing this racism, and she must not admit the toll that this ‘resilience’ might have on her mental health. I close with a discussion of how my art practice seeks to open up a conversation about madness in the Black community by suggesting that madness is political.

Keywords

Blackness, madness, anti-Black racism, disability arts

The healing power of art in intergenerational trauma: Race, sex, age and disability

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Introduction

There is no argument that being a Black woman is stressful. In addressing institutional systemic racism, I critically reflect on my lived experience. The continuities of systematic racism are evident in the recent police encounters with Black women today and are a continued example of how violence against Black women and their rights as citizens are ignored. This leads me to review violence against Black women who face devastating amounts of violence because of race, sex, age and disability. In looking at how systemic oppression and emotional trauma can produce madness, I look to historical racism and income inequality affecting me as a member of the Black community. As a Black woman living in poverty, who is part of a community that experience racism, police violence and brutality, unemployment, unaffordable housing, and gaps in mental health services, and as someone who carries the history of generations of oppression and pain in my body, my depression is deeply political. My depression is political; it is the direct result of anti-Blackness and all the cruelty that has been shown to Black people. My art practice, which animate the connection between madness and anti-Black racism is political and also therapeutic; the two do not cancel each other out.

Throughout this paper, I use a political and activist lens to think about disability arts and its potential role in opening up a necessary conversation around how madness is produced by experiences of racism, poverty, sexism, and inter-generational trauma within the Black community. I begin by explaining how the Black body has a history of being the site of medical experimentation. From the perspective of my own experience, I suggest that this history of medical abuse has caused Black people to be suspicious and wary of the healthcare system, including the mental healthcare system, which forecloses discussions around the intersection of Blackness and mental health. I go on to argue that this discussion is further silenced through the trope of the ‘strong Black woman,’ which, in my experience works to perpetuate the idea that Black people must bear the effects of systemic racism by being ‘strong’, rather than society addressing this racism, and she must not admit the toll that this ‘resilience’ might have on her mental health. I close with a discussion of how my art practice seeks to open up a conversation about madness in the Black community by suggesting that madness is political.

A history of the use of mad Black bodies in medicine

The history of human medical experimentation includes disadvantaged, marginalised, Mad and enslaved Black women. During slavery, many Black female bodies were used for scientific and medical experimentations that led to medical breakthroughs that aided in cures for white women. For example, Sara Baartman, a Black woman, was put on display from 1810 until 1815 across Europe as part of a freak show. Baartman was referred to as “Hottentot Venus,” a racist term that was then used to refer to Khoi people. After her death on December 29, 1815 at age 26, researchers kept her sexual organs and her brain and placed them on display at the Musee de I’Homme in Paris (Gordon, 2014). On August 9th, 2002, Baartman was finally laid to rest 187 years after she died (Davis, 2012). Another example of how Black women have been used within medical experiments throughout history is the medical research on Henrietta Lacks. Lacks was born Loretta Pleasant on August 1, 1920 in Roanoke, Virginia and died of cervical cancer on October 4, 1951 at thirty-one years of age. Her cancer cells were taken without her knowledge or consent in 1951 (Zielinski, 2010). Her cells proved to be important in cancer research even after her death (Skloot, 2017). This is an example of how the healthcare system in the United States has violated the rights of Black women and therefore Black women are still mistrustful of this system. These examples demonstrate some of the historical ways that Black women have been mistreated by medical institutions, which points to the need to search for alternative ways of healing. It is no surprise that because of this history, many Black women continue to mistrust the healthcare system.

The trope of the ‘strong Black woman’

In this section, I investigate the stereotypes which have led to and are imbedded within the cultural troupe of the ‘strong Black woman.’ Because of the history of slavery and the way in which Black women were told just accept sexual and physical abuse and move on, history has made mental disability a taboo subject in the Black community. The denial of mental disability in North America is particularly prevalent among African-American women (Bhui, et al, 2005). As someone who has been characterized as a ‘strong Black woman’ myself, I know that this term tells Black women, as well as the rest of society, that instead of confronting systemic anti-Black racism and its violent effects instead Black women must be ‘strong,’ resilient, and bear this violence on behalf of ourselves and our families. The term also depoliticizes Black women’s resistance by suggesting that it is inherent to our nature to be “strong” and “indestructible.” The strong Black woman narrative dictates that Black women must be strong and not address the pain or the fact that throughout history no one ever addressed the mental health of Black women. Being a strong Black woman is killing Black women because we are remaining silent and suffering because we believe we must take care of others before taking care of ourselves. Along with the ways that this trope affects our lived experiences of encountering and resisting oppression, this may make Black women continue to not use services because of the history of racist practices in healthcare and expectations of ‘just dealing with it.’ This combination of expectations and understandings underlines my point that the concept of the strong Black woman is killing Black women. Because of the history of subjugation, openly suffering from ‘mental disability’ is taboo, which only puts more pressure and stress on Black women who live with madness. Growing up with statements like, “we don’t get depressed, we went through slavery” just means that the trauma is passed down from generation to generation. We need to look at how slavery affected the Black community and why it’s so difficult for us to discuss mental health without fear or shame. As a Black woman in the healthcare system, I continue to face barriers and experience a lack of access to preventive healthcare services and programs, according to Deramus (2015). I have also noticed a lack of support and cultural sensitivity in the Black community surrounding mental health and treatment.

For example, I personally experience a barrier when I cannot access art therapy with Black therapists. For me, as a patient, it’s important to be listened to and not judged because of my race, gender, and class and it is often difficult to share one’s experiences with someone who does not look like or understand what you are going through. Elkins and Deaver (2013) write, “While clients are diverse in race, ethnicity, gender, and additional identities, practitioners are predominantly white and female.” While similar cultural roots may not guarantee a better understanding and relationship between therapist and patient, therapists who share the same identity tend to understand what the patient is experiencing without making assumptions.

I have spent time in and out of hospitals with consistent and unexplainable joint pain and have been sent home without a diagnosis, but with a prescription. I was later diagnosed with chronic joint disease. And prior to being diagnosed with a chronic blood disorder, I was passed around from specialist to specialist and was finally misdiagnosed. I was informed that my blood disorder was because I was mixed with European and Black blood. And when I received my first diagnosis of depression in 2002, my doctor informed me that if she wrote a prescription for anti-depressants, she would have to report me to children's services. At that time, I was a single mother on social assistance with a small child and it was a requirement for the physician to report such cases for the safety of the child. Because of this practice, it is no wonder Black women don't feel comfortable talking openly about their experiences of depression; it is no wonder they do not reach out for support. Thus, I suffered alone and in silence with a diagnosis of depression which was later diagnosed as manic bipolar disorder in 2004 as a Black woman living in a low-income situation.

My experiences as a Mad Black woman who encounters systemic oppression more often than systemic support prompts me to ask the question: what does healing in mental health look like for Black women in low-income communities? Levin and Becker (2010) argue that preventive mental health services in the Black community should be resource-intensive, which includes components such as emergency relief and access to childcare. For me, the very opposite was the case. Instead of offering help with childcare, I was threatened with losing my child. At the time, my family physician informed me that if she wrote me a prescription for depression, she was required to report me to Children's Services to protect my small daughter. These services would benefit Black women who use community organizations and address social issues by helping to remove pressure and anxiety in securing financial assistance and resources.

I have always been an artist. As a child who felt excluded and depressed, I used art as a way to escape childhood trauma. And so, when I was experiencing such a lack of support from the mental health system, I turned to art. Making art was, and still is, therapeutic: it helps me cope with the oppression I experience daily. At the same time, my art is political: it animates my experience as a Mad Black woman, an experience that is not often, or adequately, represented in our culture, as I suggest further along in this essay. When I was depressed and going through difficult times, I found that art helped me get through some difficult predicaments. Using art as therapy and as an outlet for mental health issues could help other people who are finding it difficult to cope with their situations. Art was a way out for me and I started to put all my thoughts and feelings into my artwork. There are many ways out of darkness. Art became a way, for me, to deal with intergenerational trauma and a way to uplift other Black women who also struggle with mental health issues. I am currently on a journey of discovering and telling my own story through my work. I believe that using art, as an approach to expressing your emotions, could help others who may be struggling in silence. A report from the online publication, Arts Council England (2007), suggests that arts participation has an impact on the determinants of health. Thus, art funding and resources in health initiatives should be increased.

Possibilities and limitations of disability arts

I am a Black woman and a Mad disabled artist who uses disability arts to share and politicize my experiences. My art practice connects my lived experience of madness to the broader social and political conditions which create it. My art practice allows me to develop ways to address adversity and to create events and spaces which might create positive change in families and communities. By talking openly about my own personal and political experiences of madness, I hope to draw attention to how madness and Blackness intersect; an issue that has kept Black people silenced, excluded and ignored around mental health conversations. Through the critical lens of a Mad, disabled, Black woman artist, my art practice explores the experiences and identities of Black women that intersect with experiences of racism, sexism, classism, poverty and colonialism.

My art practice strongly focuses on the complexities of mental disability in the Black[1] community where we experience racism, sexism, classism and prejudice, especially against Mad Black women, like me. Disability arts reflects my experience with disability and creates a new way of looking at art and artists in relation to disability and how disability is understood, which is necessary for challenging negative stereotypes about disability that contribute to health inequities. Through disability arts, we can address problems of misrepresentation. For example, when the Bell Let's Talk campaign only portrays wealthy white people as having mental health issues, Black people are not given a voice in this conversation and, as a result, do not receive services, support and recognition. My art highlights these health inequities. My counter-campaign – Bell Let's Actually Talk – gave voice to mental health in the Black community because those who are marginalized are not prioritized in mainstream campaigns and dialogue.

In my own artistic practice, I explore ideas of race, gender, sexuality and disability to create spaces to talk about the intersection between madness and Black mental health. But as an aging Black female artist with a disability, I am unable to locate a specific community where I can hold space. Therefore, I create art-making spaces and places that ask, "What does your creative space look like?" I create this art-making space to address my concerns about mainstream disability arts, which promotes accessibility and inclusion in a way that privileges white able-bodied and disabled men the art world, which I see as a continuation of racism and settler colonialism. I think that the art world in general privileges able-bodied white men and, similarly, the disability art world privileges white disabled men because the majority of existing

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[1] I use the capital B in Black as I do see it as merely a colour of skin pigmentation, but as a heritage, an experience, a cultural and personal identity.

spaces are white art spaces. Based on my personal experience, as an aging Black feminist artist, I have witnessed first-hand knowledge of the mass presence of white able-bodied male artists in Toronto's art spaces. In an online article written by Brian Sherwin, he states:

> The 'art world' shares the same prejudice we face in the real world. That said, the illusion of togetherness that has been constructed around the art world makes said reality even more toxic. Forms of sexism, racism, and ageism dominate art culture just under the surface-- which dictates our collective knowledge of art history. This is a topic that few gallery owners want to discuss-- because it is a topic that, more often than not, reveals a world of bigotry and unnecessary challenges placed before artists. (2011)

Sherwin's comments speak of the experiences of many Black, Indigenous, and people of colour artists who are uninvited and not seen in many mainstream art spaces. And the rise in cultural appropriation in the mainstream art world is a strong indication that colonialism continues to strip away the identities of Black and Indigenous artists and art forms. For example, Indigenous activists in Canada forced the cancellation of an art show in Toronto by non-Indigenous painter Amanda PL in 2017. PL's first solo exhibition, at the new Visions Gallery in Toronto's Leslieville district, appropriated a form of Anishinaabe painting known as the Woodlands style. (Nazaryan, 2017). Another example of cultural appropriation in art galleries is the painting Open Casket by white artist Dana Schutz displayed this year (2017) at New York's Whitney Biennial Museum. This installation included a gruesome image of fourteen-year-old Emmett Till who was lynched in 1955 in Mississippi (Helmore, 2017), which was heavily protested by the Black community. These are just a few examples (and there are many more) of art galleries that exhibit artwork engendered with cultural appropriation, exhibits which are not questioned until Black, Indigenous, People of Colour communities protest them. The fact that these protests must be mounted again and again evidences the pervasiveness of white supremacy in the arts.

Because of my passion for the arts, I have turned to disability arts to reach other Black women living with mental health disabilities. I argue that using disability arts for social change, practiced through a critical race and Black feminist perspective, can offer a more effective method for healing than harsh experimental prescription drugs, which can be abusive. My own ability to use art to heal is because art opened community conversations about systemic oppression and intergenerational trauma in a way that drugs were not able to. But I also consider that what works for me may not work for others and drugs and other forms of therapy might help in those cases. My own return to art could address my mental health issues in a way that prescription medication could not. While I was on various medications for several years I did not feel in control of my own thoughts. I would often burst into tears inside elevators, I was afraid to ride a crowded subway alone, and I had completely lost the confidence to stand in front of a crowd and speak. Yet, art gave me back my ability to laugh. I'm no longer afraid to ride the crowded subway car. I'm now able to stand in front of a crowd and share personal narratives about my lived experience with my mental disability. And all of this is because, for me, art is therapeutic and transformative. By using my art to talk about my journey with mental health, I can raise awareness of centuries of oppression and work to illuminate some of the shame that comes with Black women speaking about their mental disabilities.

My disability art, an important part of my healing process, focuses on my Blackness, mental health, disability and self-care. My work invites viewers into my journey with depression. It also allows me to develop relationships and collaborate with other Mad Black women. My art has informed my activism in such movements as Black Lives Matter Toronto, OccupyINAC, supporting Black cis and trans women and my contribution to the Say Her Name Campaign. For example, art has become a central component of the occupation for BLMTO and OccupyINAC because it was the tool that brought people and cultures together within these movements.

Mad Room

Conversations and organizations within the mainstream art world do not typically include access and inclusion for disabled artists. As an aging Black woman artist with a mental disability, I have personally encountered such barriers as inaccessibility of art education and training, inadequate resources and support, and the lack of welcoming spaces for disability and Mad aesthetics. Tangled Art + Disability is a non-profit organization in Toronto, Ontario that has been cultivating disability art in Ontario since 2003 by supporting the work of disability, Deaf, and Mad-identified artists through professional development workshops and holding cost-free and accessible disability art programming (Tangled Art + Disability, 2017).

In 2016, Tangled opened the Tangled Art Gallery (TAG), Canada's first art gallery dedicated to showcasing disability, Deaf, and Mad art and advancing accessible curatorial practices (Tangled Art + Disability, 2017). All of TAG's exhibitions and programming offers audio description, American Sign Language (ASL) interpretation, and personal support workers. All of their events are wheelchair accessible, they welcome service animals, and the art is hung at accessible levels. These practices, which are in no way common practices in mainstream galleries centred on white, cis-male, non-disabled subjects, are important for the way that they centre disabled, Deaf, and Mad artists and audiences.

In 2016, I was the Sharon Wolfe Artist-in-Residence[2] at Tangled Art & Disability, which was an opportunity that increased my own understanding of disability and the definition of Mad art. In this residency, I created over 50 paintings to fill the Tangled Gallery for my solo exhibition, *Mad Room*. In the exhibition's title, I use the term 'mad' in a Foucauldian[3] sense to refer to how anti-Black racism impacts my mental health. I spent two and half months and over three hundred hours working on my art exhibition titled, *Mad Room*. The paintings featured mixtures of vibrant textured shapes and colours that created a relaxing environment and all the paintings were 'touchable' which allowed people to embrace the work. Along with the paintings, this exhibit had a bed containing two blank canvases and a white textured mask with blue eyes, a monitor featuring the artist statement with visuals, a small table with re-labelled empty pill bottles and a coat hook with white clothing hanging on it. My artist statement was in the form of a short video which was closed captioned. The artwork was divided into sections: healing space, stigmas, traumatic, perseverance, demeanour, secrets, violence and mental disability sharing my journey with depression and anti-Black racism. The whole exhibition was audio described.

As a disabled, Mad Black female artist whose experience has taught me that art can be a refuge from the intense emotions associated with illness, disability and disablement (Collie et al, 2006), I feel it is important to share opportunities, resources and space in the healing process. Disability arts allow an outlet for my pain and I can share lived experiences with other Black

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[2] The Sharon Wolfe Artist in Residency (SWAIR) is named in honour of the organization's founding director. The SWAIR offers a disability-identified artist the rare opportunity to devote themselves fully to a creative project, while making an important contribution to the broader cultural community. The residency at Tangled was launched with the support of the Canada Council for the Arts and is currently funded through individual donations.

[3] Madness for Foucault (1971) has a complex relationship to unreason; it is both part of unreason and separate from it. It is essentially constructed and controlled by the intellectual and cultural forces that operate within society. The treatment of the mad person depends fundamentally on how they are perceived, Madness in the middle ages was associated with dark secrets and visions of the end of the world; in the classical period, it was confined along with other forms of social deviance and lost its exclusive status. The modern idea of madness as a treatable mental disease developed from nineteenth century ideas of madness as a kind of moral evil.

women. And so, along with being an art exhibition, I wanted *Mad Room* to be a community space by and for other Black women to talk about mental disability. This began during my residency as I invited other Black artists to visit me in my studio. In these visits, I showed these artists my work-in-progress and they could give me feedback. This also gave me the opportunity to introduce these artists to Tangled. Throughout it all, I could use my art-making space to open up opportunities for often-quieted conversations about mental health disabilities in Black communities and the connection between madness, colonialism, intergenerational trauma, and state-sanctioned anti-Black racism, like police brutality. These conversations continued after the exhibition as I held 16 (true!) artist talks—an unprecedented number of artists talks at Tangled. Many of these artist talks created space for my community to talk about the experience of madness in Black communities. This was also an opportunity for me to disrupt the 'strong Black woman' trope and focus on healing from intergenerational trauma[4]. It was exciting and heart-warming to see how relaxed people were when they entered the space.

Sharing my story through disability arts opened up conversations wherein people could speak freely about their own struggles with racism, ableism and how these systems of oppression intersect with and amplify experiences with mental health disabilities. *Mad Room* represented madness differently than it is represented in mainstream culture. For example, in the Bell Let's Talk campaign this left me feeling that my mental health was not important and that I was invisible. The amount of discussion and community building that happened during my time at Tangled offered an opposite and alternative approach.

Disability arts continue to create community, raise political consciousness and bring action to social issues. My *Mad Room* exhibit was well received and successfully opened

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[4] Intergenerational trauma is the transmission of historical oppression and its negative consequences across generations.

dialogue about older Black women and mental health issues and I continue to have these conversations today with other Black women through my art.

Conclusion

As I reflect on my artistic contributions within disability arts, I conclude with a final example of how my art practice is political for how it opens up conversations about mental health in Black communities. I was an active member of the Black Lives Matter Toronto tent city in protest of the 2015 killing of Andrew Loku, a Black man with a history of mental health issues, by Toronto police. This tent city coincided with the eight-day occupation of the Indigenous and Northern Affairs Office (occupyINAC) in response to the Attawapiskat youth suicide epidemic, part of an ongoing mental health crisis that exists on Canadian reservations. Both protests called attention to the lack of support for Indigenous and Black people who experience mental health issues.

Disability arts played a major role in creating community in solidarity and bringing political consciousness to police violence and mental disability. My art brought attention to Blackness, disability, madness and self-determination while the work of Syrus Ware, Vanier Scholar, visual artist, community activist, researcher and member of Black Lives Matter Toronto, explored social justice and Black activist culture. The artist-led interventions in movements like Black Lives Matter Toronto and the Indigenous and Northern Affairs Office occupations centered around Black people, Indigenous people, and people of colour with experiences around madness and disability and illustrated the role of disability art in bringing awareness and creating change.

My art practice, specifically my work in *Mad Room*, focused on my identity as a Mad Black woman with experiences in the mental health system. It is my hope to use art to debunk the trope of the 'strong Black woman' and begin to politicize experiences of madness. *Mad*

Room was a deliberate way of inviting viewers into my mad space to raise awareness, open conversation and promote coping strategies and self-care for madness in the Black community.

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Online Music Therapy Groups During COVID-19: Perspectives from NDIS Participants and Caregivers

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In plain language:

This article shows the results of a survey where adults with intellectual or learning disabilities and their family member or support worker gave feedback about their participation in online music therapy groups that were started during the COVID-19 pandemic. Group members said that they enjoyed the group, that they liked connecting with other people online, and provided feedback about things they liked and disliked about the format of the group.

Research Article

Online Music Therapy Groups During COVID-19: Perspectives from NDIS Participants and Caregivers

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Abstract

Purpose: This paper reports findings from a project that sought to evaluate a series of online music therapy groups that were established to support adults who have intellectual or learning disabilities during the 2020 COVID-19 pandemic and subsequent lockdown-restrictions in Naarm (Melbourne), Australia. Method: Group members and their family members or paid support staff who assisted them to attend the group were invited to complete an anonymous online survey about their experience of participating in the online groups. The survey consisted of both multiple choice and short answer questions. Data was analysed using descriptive statistics and thematic analysis. Findings: Survey results suggested the groups were well-received and enjoyed by participants. Thematic analysis of short-answer questions resulted in three themes: 1) The online music therapy groups were a positive experience; 2) The groups provide opportunities for social engagements; 3) Positive and negative aspects of group design. Conclusion: The online music therapy groups were seen as a positive, accessible space for participants to connect during the COVID-19 pandemic. Further research is needed to establish how such groups are received when face-to-face services are also available.

Keywords: NDIA, online music therapy, online music group, intellectual/cognitive disability, COVID-19

Introduction

The COVID-19 global pandemic has necessitated many music therapists take their practice online (Gaddy et al., 2020; Knott & Block, 2020). Working in the context of the National Disability Insurance Scheme (NDIS) in Australia, music therapists and other allied health professionals have had to adapt service delivery to support NDIS participants to continue to work towards their goals during a time of global crisis. For NDIS participants, there have been both challenges and benefits in accessing Allied Health support via telehealth (People With Disability Australia, 2020), with many reporting increased accessibility of service with the increase of telehealth options. However, for many adults with a cognitive or intellectual

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disability[1], access to regular activities that are not primarily 'therapeutic' (such as social or community-based activities) has been restricted (People With Disability Australia, 2020).

There have been few studies that investigate telehealth formats for music therapy. Case studies have demonstrated that online telehealth formats can be accessible for individual therapy sessions (Baker & Krout, 2009; Spooner et al., 2019), and recent papers demonstrate success in the transition of both music therapy and community music groups to an online format (Datta, 2020; Fancourt & Steptoe, 2019). Group music therapy via telehealth has been found to be acceptable and positively received; evidence of psychosocial benefits and increased attendance has been reported for some clinical populations, including children with hearing loss (Fuller & McLeod, 2019), people with spinal cord injury (Tamplin et al., 2020), veterans (Vaudreuil et al., 2020) and people experiencing mental health challenges (Sasangohar et al., 2020). However, to our knowledge, there have been no published studies that explore online music therapy groups for adults who have cognitive or intellectual disabilities.

Background

The online music therapy groups were established in response to the COVID-19 pandemic restriction measures in Naarm (Melbourne), Australia, that saw the suspension of usual community-based supports for adults with cognitive or intellectual disabilities, such as day-programs. The initial aim of the groups was to offer an online program where they could connect with others, express their emotions about the pandemic, and to offer opportunities for building skills, including personal goals (such as individual communication skills), social connection, or musical skills. The groups were established by the first author and advertised through her workplace, a large disability service provider, and other local disability providers where possible. Groups were open to anyone who wished to join as long as they were over 18 years of age and able to connect to Zoom, either independently or with assistance.

Following the initial call-out, three groups were formed based on member interest and availability, with roughly 4-8 members per group (numbers varied weekly due to individual circumstances such as illness or technology issues). Group members were aged between 18-71 years old, and had varied interests, abilities and musical experience (including communication abilities and styles, musical preferences, and experience with music therapy and other music groups). Some members were known to each other prior to the formation of the groups, however, several had not previously met each other, and became acquainted during the group programs. Some were known to the facilitators prior to joining through attending the day service where the facilitators work (although they may not have participated in group music therapy before), and five of the group members were either attending or had previously attended individual music therapy with one of the facilitators. Several members attended more than one group each week.

The format of each group was collaboratively designed with members, through trying new activities, discussing what everyone's preferences were, and through group members selecting the repertoire. Group A focused primarily on dance and movement to music, with participants sharing their favourite music and

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[1] We have chosen to use the terms cognitive and/or intellectual disability throughout this article, in accordance with current best-practice language guidelines in Australia (Australian Network on Disability, 2021; People With Disability Australia, 2019) . We acknowledge that many disabled people advocate for the use of identity-first language when discussing disability, and support this preference. However, we also acknowledge that the language currently used when talking about people who have a cognitive, learning, developmental or intellectual disability is still evolving, and person-first language is currently suggested in this instance.

teaching each other dance moves. The second, Group B, included some dance/movement elements, but focused more on instrumental play and song writing; while Group C incorporated song writing, dance, and instrumental play. Zoom was selected as the online platform for the groups following a brief trial using other platforms, due to the superior audio/visual quality, and user-friendly interface. Spotify and YouTube were used at times to share music with participants, and Microsoft PowerPoint slides were used to share lyrics and visuals during songwriting activities. Group members were generally placed on 'mute' during song singing to accommodate the asynchronous nature of Zoom audio, although for some participants, this wasn't possible due to their computer settings and 'unmuting' being inaccessible for them to do independently.

The groups were facilitated by the authors, who are both Registered Music Therapists (RMTs); generally, only one RMT was present for the whole group, however, on occasions where internet connections were poor, both RMTs were present and co-facilitated the sessions. Groups ran from April 2020 to December 2020, and culminated in a virtual concert, followed by Christmas Carols, to celebrate the end of the year and International Day for People with Disability.

Method

Study Design

The purpose of this project was to obtain participant perspectives about the groups for the purpose of evaluating the project and collecting preliminary data that may inform future research. An anonymous online survey was selected as the method, as we felt this would be the least intrusive option for participants, particularly as we were still in lockdown at the time of application. Although the survey consisted of quantitative and qualitative data, we did not adopt a true mixed-methodology approach (Pluye & Hong, 2014) due to the brief, evaluative nature of the design.

Participants

We invited all members from the three groups (11 in total) and their family members or professional caregivers who support them to attend each session, to complete an anonymous online survey about their perspectives of the group. Inclusion criteria were people who were: a) a member of one or more group; or b) a family member or professional caregiver who supported a group member to participate in the groups; and c) able to provide informed consent, or have a guardian provide informed consent. A purposive sampling method was used to recruit participants, in which all members of the groups were invited. To avoid potential coercion, members of the group were invited to participate in the survey via an email that was sent by an independent third party who had no pre-existing relationship with the group members. The emails were sent to the primary contacts of group members, who were either family members or professional care staff[2], all of whom either regularly attended the online group sessions themselves, or supported the group member to log in and were present in the background to support with technical challenges (in instances where group members attended the groups independently). All caregivers invited to participate were familiar with the group members' communication styles and support needs, and therefore able to assist during the consent process and with completing the survey.

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[2] For the purpose of this paper, we will refer to these participants as caregivers

As the communication abilities and preferences of group members varied (including participants who identified as non-speaking and used visual communication systems or keyword sign), a version of the plain language statement (PLS) with Easy English and visuals was created. This was informed by the authors' prior knowledge of the group members and their communication access needs, and included visual symbols that were commonly used by group members (such as Picture Exchange Communication System symbols or emojis) and photographs (such as photos of the researchers and of group members on the Zoom screen). This version of the PLS was included in the email invitation so that the primary contact could assist the group members to make an informed decision about participating. Easy English/visual formats of the survey questions were created using the same methods and visuals, and these were also emailed out with the invitation to participate, as the software used to administer the survey was unable to include options for visuals. Caregivers were advised in the invitation email that these resources could be printed out and used to assist group members to respond to the survey questions where required.

Data Collection

Data was collected via an anonymous online survey, created using Qualtrics software. It was designed to be completed together by group members and the person that supported them to attend the groups. For group members, there were five multiple choice questions and three short answer questions (Appendix 1), and for family or professional caregivers, there were five short answer questions about their perspective. As mentioned above, a copy of the survey questions (and response options) with Easy English/visuals was sent to participants so that caregivers could assist group members who were non-speaking or who found verbal language challenging to understand. Ethics approval to conduct the survey was granted by the St John of God Healthcare Human Research Ethics Committee (Approval Number 1740).

Data Analysis

Quantitative data from the multiple-choice questions was analysed using descriptive statistics (Huck, 2008). For the qualitative data from the short-answer questions, a six-step thematic analysis method (Braun & Clarke, 2006) was used: First, the short-answer responses were exported as an Excel-spreadsheet, then imported into MAXQDA data analysis software. Data was then coded systematically, line by line. Initial codes were grouped together under themes based on their similarity; these themes were then reviewed, refined and defined during a naming process (Braun & Clarke, 2006). As we held a dual role of researcher-clinicians, we employed reflexive practices (including journaling and peer supervision) in order to ensure trustworthiness of the analysis.

Results

Survey Results

Six participants completed the survey, which indicated a response rate of 55% of total population invited to participate. However, there were several questions with missing data, where participants had not entered a response. Due to the low sample size and missing data across all survey responses, we have chosen not to exclude responses. For quantitative data, we will report the number of respondents for each question. Microsoft Excel was used to generate graphs for these results. For short answer questions, on average 50% for group participant responses and 59% for caregiver responses were received. Although questions were divided into categories for group members and caregivers to respond to separately, it was evident from some survey responses that two caregivers answered on behalf of their group member rather than asking them for a response. This was evident based on the wording of the responses; some responses to questions for group members were written in third-person, indicating that the caregiver was speaking on behalf of the participant. It is unclear whether this was due to caregivers deliberately choosing not to include the group member, or if the group member declined to respond to those questions. For the two survey responses where it was apparent that a caregiver had responded to the short answer question (based on the wording of the response), we have added their answers to the category of responses from caregivers (CG). Other survey responses are assumed to be from group members (GM), as they were written in first person.

Multiple Choice Responses

All participants responded to questions 1–3 (N - 3). 83% of participants reported that they ‘liked’ the groups, with one group member responding ‘maybe’ (Figure 1). 67% of participants rated the groups as ‘excellent,’ while 33% gave a rating of ‘good’ (Figure 2). Figure 3 depicts the various aspects of the group that participants enjoyed; only one participant reported enjoying songwriting, however, all other activities were rated equally by participants.

Figure 1

Responses to Q1. Do you like the group? (n=6)

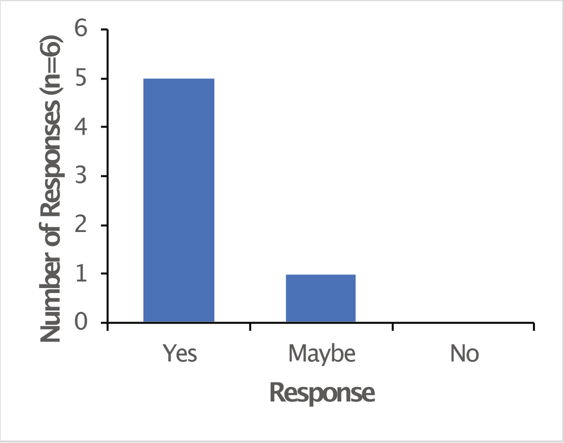


Figure 2

Responses to Q2. How do you rate the group? (n=6)

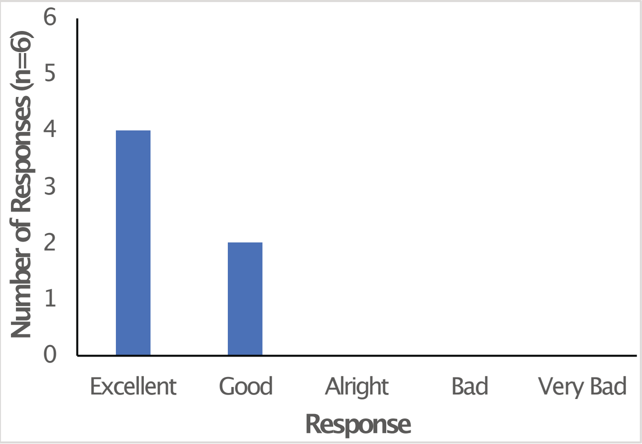


Figure 3

Responses to Q3. What do you like about the group? (n=6)

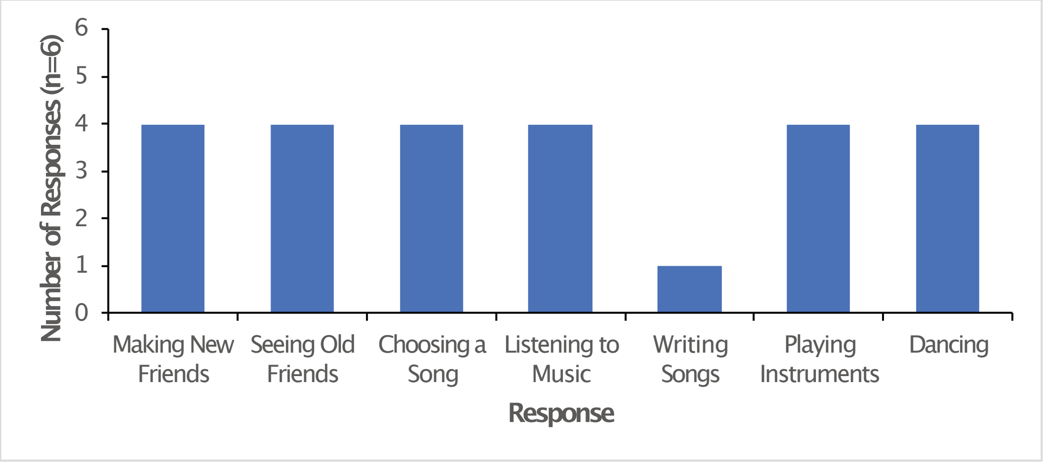
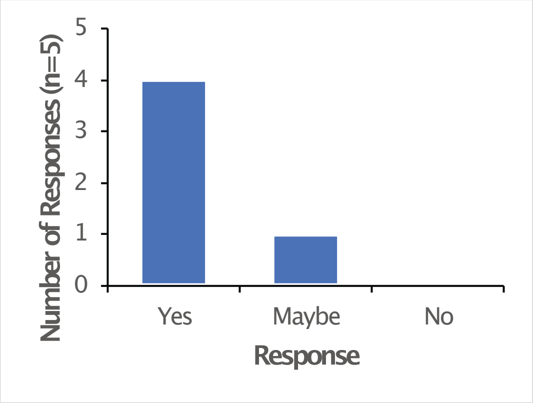


Figure 4

Responses to Q4. Do you look forward to the group? (n=5)



The fourth multiple choice question asked whether participants looked forward to the group; 5 participants completed this question, with 80% responding 'yes', and 20% responding 'maybe' (Figure 4). Only three participants responded to question five, which asked what participants found challenging about the groups (Figure 5). These responses reflected challenges relating to communication that were perceived by participants (i.e. not being heard, hearing others, and expressing choice), although the low response rate to this question may indicate that some participants found it difficult to understand or answer.

Short Answer Responses

Responses from the group members to the short-answer questions were generally brief, and as mentioned above, on average 50% and 59% of responses were completed for group members and caregivers respectively. As it was apparent that some caregivers responded on behalf of the group members (due to the wording of responses), these responses were attributed to caregivers during the analysis process. Thematic analysis of short-answer responses resulted in the formation of three themes:

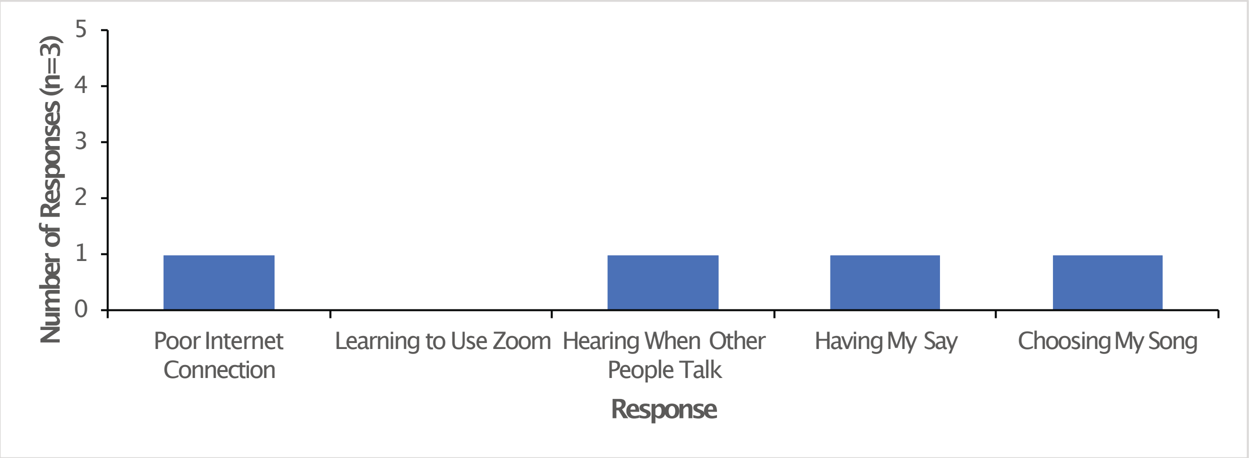
1. The online music therapy groups were a positive experience;
2. The groups provide opportunities for social engagements; and
3. Positive and negative aspects of group design.

Participants will be represented using the identifiers Group Member (GM) and Caregiver (CG).

Theme 1: The online music therapy groups were a positive experience. Both caregivers and group members described the group as a happy and positive experience. Most caregivers responded with one- or two-word answers, indicating that they perceived the groups as "enjoyable" and "very good."

Figure 5

Responses to Q5. What has been hard about being in the online music group? (n=3)



One caregiver felt that the group "makes the participants very happy" (CG4), while another reported that the group was "going wonderfully" (CG3). Group members described the group as a fun experience:

GM1: "The music is fun"

GM2: "I like…having fun"

One group member felt that the group "gives [them] comfort" (GM3). A caregiver similarly reported that they felt that the group had a comforting impact for themselves, stating "in a way, it was also an outlet [for me]"(CG2).

Theme 2: The groups provide opportunities for social engagement. The social aspect of the group was the most commonly reported in the short-answers from both group members and caregivers. Three participants commented on the interactive nature of the group, and how this enabled opportunities for social engagement. One caregiver described the group as "a great interactive platform" (CG1), while another felt that "participating, turn-taking" were notable benefits of the group (CG2). One group member similarly commented that they felt an important aim of the group was about "sharing and being your best" (GM3).

Staying connected during the lockdown was also seen as an important social benefit of the group. Two group members noted that they liked that the group provided opportunities to continue "seeing friends" (GM1) or "having friends" (GM2). One caregiver also described the group as a way to help "[group members] stay connected with friends" (CG2). Two caregivers also reported how the group helped them to stay connected to the disability organisation (CG1 and CG2). Caregiver 1 commented: "for my child it was a way to show that [the organisation] is still part of [their] life."

Theme 3: Positive and negative aspects of group design. Participants were asked what they liked/disliked about the group, and what could be improved. This resulted in the final theme, which represented the positive and negative aspects of the group design. Two group members (GM1 and GM2) reported that the group facilitators were one of the aspects of the group that they enjoyed the most. One caregiver felt that the Zoom was a "good, interactive platform" (CG1). However, another caregiver felt that the online format made selecting repertoire challenging for some participants who could not easily express their preferences. They suggested that the group could be improved by: "not [playing] the same songs over and over" and to "help client[s] choose different songs" (CG4). Two caregivers (CGs 1 & 2) and one group member (GM3) commented that they didn't feel there was anything about the group that they felt needed improvement.

Continuing Post-COVID

At the conclusion of the survey, we also asked caregivers whether they thought the group member they support would be interested in continuing the groups once restrictions eased and community-based services resumed. Two caregivers responded "yes, definitely," although one clarified that they would only be able to do so if sessions did not clash with community-based groups. Another participant responded "maybe," and one "no."

Discussion

This study was intended as a small-scale, evaluative research project, set to inform future practice. The results reveal that the group was positively received by participants, and provide some brief suggestions for what worked well and what could be improved. The positive reception of the group aligns with the preliminary findings from research with other populations, and supports the idea that transferring to an online format can be successful (Sasangohar et al., 2020; Tamplin et al., 2020; Vaudreuil et al., 2020).

However, it is important to note contextual factors that may have influenced this positive response. As the majority of opportunities for adults who had previously attended community-based day-programs had ceased due to COVID-19 restrictions (People With Disability Australia, 2020), the online music therapy groups were some of the few social opportunities that participants were able to access. Sasangohar et al. (2020) speculated that the improved attendance at their online art and music therapy groups may have been due to lack of other opportunities and increased need to connect with others due to isolation measures, and that the online format may not be as attractive once other services resume. In our study, only four participants responded to the question of whether they would continue in 2021, once the community-based day-programs were re-opened, with a generally enthusiastic response. Since the conclusion of the study, we are pleased to report that two groups have continued to run on Zoom, although with slightly less participants than during 2020. This may be due to a greater option for activities available following easing of restrictions in Australia. Further research is needed to understand how participants feel about the online format as an addition to their usual routines, as opposed to a novel experience during a time when other opportunities are limited.

The findings relating to the social benefits that the online groups afforded participants is consistent with past research that has demonstrated that music therapy groups can support adults with cognitive and intellectual disabilities to foster social connections (Murphy & McFerran, 2017; Pavlicevic, O'Neil, Powell, Jones, & Sampathianaki, 2014). Although the responses to this survey are short and we are therefore limited in our interpretation, they do support our observations as facilitators that the group played an important role in providing opportunities for participants to maintain social connection during the lockdown.

The comments from two caregivers regarding how the group enabled their family member to remain engaged with the disability organisation raises an interesting perspective. Many adults with intellectual or learning disabilities may have limited opportunities to develop social groups and friendships (Emerson & McVilly, 2004; Gilmore & Cuskelly, 2014), and community-based day-programs may represent one of the few places where they have strong social groups. Additionally, during the group sessions, some group members mentioned frequently that they not only missed their friends from day-program, but also regular support staff, who they no longer saw due to COVID-19 restrictions. Research indicates that staff and other service users can often make up a large portion of a person with an cognitive or intellectual disability's social circle (Verdonschot et al., 2009; Witsø & Hauger, 2020). The relationship between staff and the people they support can be complex and at times ambiguous (Giesbers et al., 2019), and COVID-19 restrictions significantly impacted the amount and types of support that staff could provide (Scheffers et al., 2021). The comments from our participants, although brief, allude to the extent to which day-programs can influence the social lives of the people they support, and the potential distress that may arise if/when these supports are suddenly ceased.

While our findings are too small to generalise, they do warrant further investigation into a) how disability services (such as day-programs) can better understand and support social opportunities for adults with intellectual or learning disabilities, and b) how online groups may provide an alternative space for developing friendships and social supports outside of day-programs, both within and outside of the pandemic context.

Limitations and Future Research

The small-scale and evaluative nature of the current study necessitates that the results cannot be generalised, and should be interpreted with caution. Although we attempted to make the anonymous online survey accessible for group members to complete, the nature of the survey required assistance from caregivers. Based on the short-answer responses, it was evident that some caregivers responded on behalf of the group members, or provided no response to the questions for group members, which may indicate that they were not asked, or that their response was not able to be discerned. Due to the anonymous nature of the survey, it is also impossible to determine whether the responses to the multiple-choice questions were also the group members' responses and not that of caregivers. This has resulted in an underrepresentation of the perspectives of the group members in this study. It is also possible that the reliance on caregivers to enter group members' responses may have skewed the data, as some group members may have been reluctant to provide criticism in front of their caregiver (who may have been encouraging them to participate). Despite a growing effort to include people with lived experience in research, there remains a paucity of literature representing the perspectives of adults with cognitive or intellectual disabilities, and there is a need to develop more accessible data collection methods (Li et al., 2015). In-person surveys or qualitative interviews, supported by a trained research assistant or person independent of the group programs, may be more accessible for future research designs.

Conclusion

This study evaluated three online music therapy groups that were formed during the COVID-19 pandemic in 2020 for adults with cognitive or intellectual disabilities. Findings suggest that participants found the groups to be a positive experience and provided some insights into the social benefits of the groups, aspects of the design that were successful, and what could be improved to enhance accessibility. The perspectives of both group members and caregivers who were involved in the groups highlighted the importance of social connection and positive experiences during the COVID-19 pandemic, which resulted in the reduction of existing social opportunities and typical supports. The positive response to the groups indicates that this format can be accessible and beneficial for disabled adults with intellectual, developmental, cognitive, or learning disabilities. Further research is needed to understand the perspectives of group members and caregivers in more depth, and to investigate the role of such groups in post-lockdown contexts.

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Art therapy with an autistic person with learning disabilities: communication and emotional regulation

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RESEARCH PAPER

Art therapy with an autistic person with learning disabilities: communication and emotional regulation

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ABSTRACT

Background: Art therapy with an autistic person with learning disabilities: communication and emotional regulation.

Context: This study focuses on a six-week art therapy programme with an autistic adult, who also has a learning disability, anxiety, and sensory processing disorder. Can art therapy be an effective therapeutic modality to help them develop their communication and emotional regulation abilities?

Approach: A single-case study approach was used and contextualised using the 'Interactive Square approach' introduced by Bragge and Fenner ([2009]. The emergence of the 'interactive square' as an approach to art therapy with children on the autistic spectrum. *International Journal of Art Therapy*, 14(1), 17–28.). An open-ended interview was conducted and utilised an arts-based narrative inquiry to code the data from the interview. Using Lieblich et al. ([1998]. *Narrative research: Reading, analysis, and interpretation*. Sage Publications, Inc.) model of narrative analysis.

Outcomes: The study found that art therapy could contribute to the development of communication skills for the client and assist with emotional regulation strategies. While humour and the spontaneous element of the art materials also had a beneficial impact.

Conclusions: Art Therapy can thus reduce the need for avoidant coping strategies and cognitive suppression, which lead to increased anxiety and externalising behaviour.

Implications for Research: These findings highlight important conclusions, and more art therapy research with autistic people with learning disabilities is warranted.

Plain-language summary

This article examines the initial impact of art therapy with an adult diagnosed with Autism Spectrum Disorder (ASD). The study investigated whether art therapy could be an effective way of helping that person with communication and managing their emotions.

The first part of the research was to gather data from the art therapy sessions. Based on the interactive square analysis method introduced by Bragge and Fenner ([2009]. The emergence of the 'interactive square' as an approach to art therapy with children on the autistic spectrum. *International Journal of Art Therapy*, 14(1), 17–28.). The second part of the research was to hold an audio interview with the client and analyse the recording using Liebmann's ([2008]. *Art therapy and anger*. Jessica Kingsley Publishers.) model of narrative analysis.

The findings found that art therapy contributed to the development of communication skills. The sensory qualities of the art materials encouraged communication. Art therapy could help a person to understand and manage their emotions.

This study highlights important conclusions that can help autistic people with learning disabilities.

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Art therapy; autism; communication; emotional regulation; sensory

Introduction

This article describes a qualitative research project undertaken for an MRes from the University of London, examining the impact of a short-term art therapy intervention on an autistic adult with a learning disability.

This study responds to the pressing need in the UK to develop effective strategies to support autistic people with learning disabilities (Autism Act, UK Government legislation, 2009), as many have co-morbid conditions such as mental health difficulties.

Reports in the mainstream media have highlighted an urgent need for more effective psychological treatments for autism, learning disabilities, and complex needs. After a BBC Panorama investigation into one assessment and treatment unit (ATU) (BBC news article, 23rd of May 2019).

On the 21st of May 2019, the Care Quality Commission published an interim report which found many hospital environments and community placements to not be suitable, with staff lacking the training to work with patients with complex needs (CQC Interim Report, 2019).

So investigating treatment modalities that cater to these complex needs is urgent, with a lack of research on autistic adults with learning disabilities that suffer from emotional problems (Sarris, 2017). Autistic young people have increased risks of psychiatric hospitalisation because of aggressive and self-injurious behaviour (Gupta et al., 2018). There is also the risk that when community placements break down, this can give rise to even greater stresses, with the risk of PTSD.

According to the UK National Autistic Society, autistic people make up 58 percent of people in in-patient hospitals

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(National Autistic Society, UK, 17th of February 2022), and they call for investment in services that meet the needs of autistic children and adults. In the US, autistic children are six times more likely to be admitted to psychiatric hospitals than children without ASD (McGuire et al., 2015). They discuss that standard verbal therapies provided in some units are less effective for autistic children with ASD and intellectual disabilities.

Traditionally research on autistic people has focused on identifying 'deficits' such as difficulties in socialisation, empathy, and restrictive behaviours (Mazefsky et al., 2012; Wing & Gould, 1979). This research can pathologise autistic populations and ignore their subjective lived experience (Milton & Bracher, 2013). Researchers have argued for studies on maladaptive emotional responses such as heightened anxiety and anger (Mazefsky et al., 2012; Samson et al., 2014). So switching the focus to investigating subjective experiences can lead to developing more practical therapeutic strategies to improve psychological well-being (McLeod, 2011).

Therefore, this study aims to examine the real-life experiences of the participant and the practitioner and link them to theoretical perspectives. With the core action research aim of developing 'more efficient and effective practice' (Noffke & Somekh, 2005, p. 90). The role of the practitioner-researcher in this study links theory to practice (Costello, 2003, pp. 19–20), testing approaches in the working environment, away from the standard artificial experimental setup. Focusing on the concepts of communication skills and emotional regulation has developed from understanding more about the individual's presenting challenges and experiences.

Research question

In this study, I have examined the impact of art psychotherapy with an autistic adult diagnosed with Autism Spectrum Disorder (ASD). What aspects of this treatment modality can aid communication difficulties and emotional regulation? Does art therapy help to address some of the co-morbidities associated with ASD, such as learning disabilities, anxiety, and sensory difficulties?

The study focused on the processes during the art therapy sessions, engagement with the art materials, and analysis of the interactive components and whether they facilitate the development of communication abilities and emotional regulation strategies.

Literature review

Understanding autism spectrum disorder

Autistic Spectrum Disorder (ASD) is a neuro-developmental condition characterised by persistent problems in social communication, social-emotional reciprocity, and maintenance of relationships, as well as restricted patterns of behaviour and interests, with a high degree of rigidity to fixed routines and rituals (American Psychiatric Association, 2013).

This definition acknowledges sensory sensitivity and emotional issues related to communication and resistance to change but does not acknowledge that autistic people present problems with anxiety, depression, emotional regulation, and anger. (Cai et al., 2018; Fenning et al., 2018; Mazefsky et al., 2012; Samson et al., 2014)

Often challenges with communicating and understanding the feelings of others (Baron-Cohen et al., 1985) can lead to less interaction and social issues (Mundy, 1995; Spence, 2003), social camouflaging (Hull et al., 2017), with increased manifestations of mental health difficulties for autistic people with learning disabilities (Davis et al., 2011; Vasa et al., 2018). Anxiety can trigger task avoidance, obsessions, fixations, and emotional outbursts. (Nadeau et al. 2013; Sarris, 2018).

What is emotional regulation?

Emotional regulation is the process of evaluating and regulating our emotional reactions according to the social needs of the environment or context (Goldsmith & Kelley, 2018; Laurent & Rubin, 2004; Weiss et al., 2014), with strategies including cognitive re-appraisal and suppressive measures (Gross, 1998). Autistic people use less adaptive re-appraisal and more maladaptive ER strategies such as suppression and withdrawal (Weiss, 2people015).

Sensory processing difficulties

Sensory Processing Disorder (SPD) refers to problems processing sensory stimuli from the body or the outside environment (Owen et al., 2013). Dysfunctional sensory responses are more common for autistic children (Kientz & Dunn, 1997) and include hyper (oversensitive), hypo (under-sensitive), and sensory seeking (Posar & Visconti, 2018; Thye et al., 2018).

Sensory difficulties can exacerbate ASD symptoms and impair emotional regulation with the internalisation of stress (Rieffe et al., 2008). A review of treatments found that sensory integration treatments for children had positive effects and sensory interventions for adults had mixed results (Case-Smith et al., 2015), highlighting a need to find new strategies for adults to complement existing techniques.

Broadening approaches to people with ASD

Treatments that cater to people with ASD and co-morbid mental health challenges include Cognitive Behavioural Therapy (CBT) and recommended by NICE guidelines. Although, researchers have suggested that there is a need for additional treatment for heightened arousal and aggressive outbursts (Samson et al., 2014; Mazefsky et al., 2013; Weiss et al., 2018). CBT may not always be suitable for people with ASD and learning disabilities due to difficulties identifying and describing feelings and grasping abstract concepts (Irvine & Beail, 2016). So it is imperative to investigate how non-verbal therapeutic strategies can help to address their communication and sensory needs to facilitate effective emotional regulation.

Art therapy with people with ASD

Art Therapists advocate art therapy as a valuable addition to treatment options, citing it as an effective and non-threatening way for autistic people with LD. to communicate and express their emotions (Gazeas, 2012; Malchiodi, 2003; Martin, 2009b). The benefits of art therapy outlined are that it can make abstract concepts more concrete (Elkis-Abuhoff, 2008), facilitate communication and aid emotional regulation

(Richardson, 2015), and assist developmentally with symbol formation and socialisation (Martin, 2009a)

Emery proposes that art-making can help develop object constancy and a sense of self that can help one relate to others (Emery, 2004, p. 144; Gazeas, 2012). The use of art materials thus can help an autistic child move beyond repetitive behaviours and encourage sensory-perceptual and cognitive development (Evans, 1998; Evans & Dubowski, 2001: Gilroy, 2006; Haque & Haque, 2015; Regev et al., 2013).

The hands-on materials and creative process can stimulate the need to communicate with the outside world (Osborne, 2003), and provide a way of building social relationships without the difficulty of verbal language processing (Alter-Muri, 2017). Art Therapy can provide sensory experiences that meet sensory integration needs (Wallace, 2015), facilitating communication and aiding emotional regulation (Richardson, 2015).

For people with learning disabilities, art therapy can also enhance the capacity to reflect and express feelings through different forms of communication (Rees, 1995), enabling interaction and communication (Hackett et al., 2017).

Malhotra (2019) discusses the common misconception that autistic people cannot empathise, highlighting research that people with ASD have difficulties processing emotional material and showing empathy due to a lack of flexibility and cognitive memory. They demonstrate the role of puppets and mirroring in improving social interaction and self-awareness (183).

Art therapy and emotional regulation

Emotional regulation strategies in art therapy equate to a conscious focus and reflection before and after art-making (Haeyen et al., 2018, p. 10). Emotional content can be explored and processed through cognitive re-appraisal when reflecting on themes, metaphors, and the process.

Gruber and Oepen (2018) found that art-making is more effective for ER than other psychological therapies, with the distraction strategy (Gross, 1998) being more successful. They point to research that expressing emotion through art is more beneficial than 'venting'.

So art therapy may be more valid as an emotional regulation strategy for autistic people with learning disabilities as it relies less on cognitive capabilities for re-appraisal and provides an immersive distraction technique. Incongruous and spontaneous processes in the art can be humorous and reduce rigidity, as research has shown that autistic people can enjoy visual, incongruent humour where unexpected things happen (Kana & Wadsworth, 2012; Samson et al., 2013; Weiss et al., 2013).

Other research related to emotional regulation includes Springham et al. (2012), who found that art therapy can assist in helping clients develop mentalization capabilities. Art Therapists have also documented their work with anger management (Liebmann, 2008; Malchiodi, 2003), which has benefits for autistic people who can struggle with anger.

Further art therapy research with ASD

Case descriptions of art therapy with autistic people were reviewed by Schweizer et al. (2014, 2017), with art therapy contributing to a more flexible attitude; with sensory experiences improving attention; assisting with social-communicative problems, and reducing restricted patterns of behaviour.

Regev et al. (2013) research investigated the work of 10 art therapists, with common themes of art assisting communication; and activating senses. The artwork is a third-party mediator in the client-therapist relationship, with joint drawing allowing communication and joint attention.

Van Lith et al. (2017) recommend a top-down approach related to the Expressive Therapies Continuum (ETC) (Kagin & Lusebrink, 1978), gradually moving toward using more sensory and kinesthetic materials after the relationship-building phase (184).

Art therapy, ASD and the attachment system

According to attachment theory, successful child and caregiver bonding is crucial for psycho-social development (Bowlby, 1968; Nolte et al., 2011). Art Therapists have proposed that art therapy can help to restore attachment systems impaired by adverse childhood experiences, which can help develop communication skills and emotional regulation; (Naff, 2014).

We have seen that sensory dysfunction and a lack of self-regulation can inhibit the development of attachments. Durani (2014) describes an autistic child blocking sensory input as a defense against unpleasant sensations. Art activity and attunement with an art therapist can improve sensory dysfunction and self-regulation.

Art therapy, social communication, and the triangular relationship

In art therapy, the art object provides a third space for the client to 'project' thoughts and feelings, provides a transitional space (Winnicott, 1972), and can be a space for the client and therapist to interact without direct verbal interaction (Isserow, 2008, p. 34). This triad of patient, art object, and therapist is a fundamental concept in art therapy, (Case, 2000; Dalley et al., 1993; Schaverien, 2000; Wood, 1990)

For autistic people, this reciprocal and sensory interaction can be a way of tolerating the presence of another and regulating sensory input (Evans & Dubowski, 2001, pp. 97–98; Regev et al., 2013). Joint art making encourages interactive sensory experiences and strengthens the sense of self (Regev et al., 2013; Sarah Furneaux-Blick, 2019).

Materials and methods

Participant information

The participant in the study was a 27-year-old adult with a diagnosis of autism and learning disabilities. He has anxiety, a sensory processing disorder, and externalising behaviour. I have called him Stephen for this study.

Stephen lives in a residential service and receives excellent support from staff and a behavioural support team. Stephen gave his consent with help from his parents, with accessible information provided.

Procedures

The weekly art therapy sessions took place in a familiar activity room in the residential home. The participant got to know the therapist before the sessions, helping them to feel more confident. The video recorder was in a visible place.

The session structure drew on recommendations by Van Lith et al. (2017) with clear beginning and endings to the sessions, with space to be spontaneous and to access sensory tolerance. Directive and non-directive approaches would be at the client's own pace.

The researcher utilised a research journal and wrote notes reflecting on the process of the art making, artwork created, the space, the non-verbal and verbal interactions, and considerations of transference and countertransference (Dalley & Case, 2003; Poensett, Parker, Hawtin, & Collins, 2006, p. 83).

The interview happened after the sessions with a clear gap between the two. The interviewer did not bring any new ideas or interpretations and was not a therapy session. An interview observer was asked to ensure this and reassure the client if needed. The interview was audio-taped and transcribed using the standard verbatim method and with notes to indicate expressive verbal tones from the participant.

Analytic methods

The enhanced methods of the video based interactive square and arts-based narrative analysis were added to the case study and the interview analysis to add rigour to the study. See Table 1.

Case studies

This study uses a case study methodology to investigate the impact of the art therapy sessions. Art therapy case studies examine the visual material and the client's responses to the art-making in the socio-cultural and institutional context. They analyse the material retrospectively from the clinical notes and the therapist's subjective comments (Gilroy, 2006; Kapitan, 2015).

Art Therapy case studies can lack rigorous methodologies (Edwards, 1999), omit the client input (Malchiodi, 1998), and have biases (Kapitan, 2015, pp. 104–111; Nisbet & Watt, 1984). While advantages are they fit an inquiry into a real-life context, as opposed to the contrived contexts of an experiment or survey (Yin, 1994), and can highlight best practices in therapeutic interventions.

Kapitan recommends Stake's (1995) triangulation strategies to improve the validity of case studies, using multiple perceptions to clarify meaning and verify the repeatability of an observation (Stake, 1994) (Kapitan, 2015, p. 111), with some degree of objectivity (Noffke & Somekh, 2005, p. 190).

A case study by (Hanevik et al., 2013) is an example of a multiple case study methodology aiming to add rigour and minimise biases.

Theory and methodological triangulation are utilised, with theoretical knowledge informing the interactive square analysis of the video recording and the arts-based narrative analysis of the interview with the client. Data gathering and analysis took place after the art therapy sessions and the interview and cross-checked with the clinical supervisor.

The interactive square analysis

The Interactive square concept, developed by (Bragge & Fenner, 2009), was used to identify interactive components from video recordings of the sessions that could facilitate communication and emotional regulation. The elements of the interactive square are summarised below in Table 2.

Video research methods

The video allowed the therapist to engage in the art-making process promoting joint attention and concentration with the client Isserow (2008), providing a less pressurised environment where an autistic person is free to withdraw and re-engage when they feel like it (Evans & Dubowski, 2001).

The video gives the practitioner-researcher an outsider's view and another frame of reference in addition to the therapist's subjective responses and notes (Bragge & Fenner, 2009, p. 20).

Narrative analysis

Narrative inquiry is thus well suited to this study as it explores subjective experience (Bruner, 1990) in the shape of a recollected interpersonal account (Guignon, 1998), shaped by the sociocultural context. This approach contextualises the material more effectively than thematic analysis (Riessman, 1994, p. 2) and gives vulnerable populations a voice (Connelly & Clandinin, 1990).

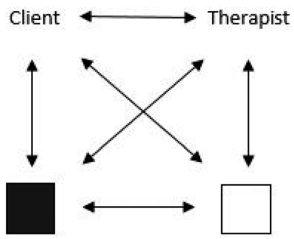
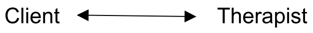
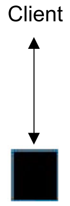
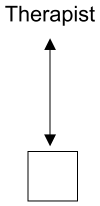
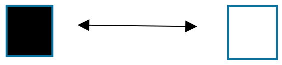
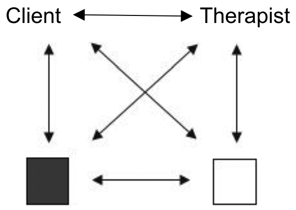
Arts-Based narrative inquiry

Art therapists enable people to express narratives, process feelings and understand experiences. With expertise in picking up non-verbal cues of communication to help a client interpret and reflect on their thought processes and behaviour (Gilroy, 2006; Kapitan, 2015).

Table 1. Structure of the research project.

Part 1 Case study:			
(A) Research Material Art Therapy Sessions	(B) Data Collection Video Recording Case Notes Therapist Responses Visual Material	(C) Data Analysis Interactive Square Analysis of Video	
Part 2: Arts based narrative			
(A) Research Material Interview	(B) Data Collection Audio Recording and Transcript of Interview	(C) Data Analysis Holistic- Content Narrative Analysis	
Part 3: Results and conclusion			
(A) Research Material Interactive Square Analysis Visual Material Wider Literature	(B) Data Analysis Triangulation Categorical- Content Narrative Analysis	(C) Results & Discussion Results Presented	(D) Conclusion Research Hypothesis Tested

Table 2. Interactive square analysis.

Components of the Interactive square  	**Interaction 1** Introduction to client and general interpersonal relationship. 
Interaction 2 Client media response and visual expression. with the art materials  	**Interaction 3** Therapist media response and visual expression. 
Interaction 4 Comparative view of client and therapist's artwork. 	**Interaction 5** Art therapy interactions – totality of therapeutic reactions within this form of art therapy, 

Video research methods

So the potential of creative art forms as a tool of analysis to understand individual experiences (McNiff, 1998) is pertinent to this study as it can be a tangible way for an autistic person with learning disabilities to understand the sessions. While the interview aimed to help an autistic person re-appraise their experiences in a structured way as a tool for emotional regulation.

One model of arts-based narrative analysis is Barbee's (2002) study, which identifies common themes in images, interviews, and narrative transcripts.

Holistic and categorical content analysis

I have used an adapted form of Lieblich et al. (1998) method of narrative analysis to construct a text from the interview, using the holistic content approach to analyse as a whole and the categorical approach to identify specific components that impacted communication and emotional regulation. This approach, was also used in Collie et al. (2006) study.

With the holistic-content approach, a narrative formed from the interview transcript, with questions looking at how the client was at the beginning and the end, with the themes emerging related to the whole set of the art therapy sessions.

The categorical-content approach highlighted passages in the personal narrative that dealt with the research question. These new data subsets were triangulated with the interactive square video and visual material analysis, drawing on relevant literature to define categories that deal with the impact of art therapy on communication and emotional regulation.

The interview

A semi-structured interview with open-ended questions took place that allowed space for the participant to reflect on their experience. It began with accessible questions about art experiences, the individual sessions, and what was challenging. The artwork was available through the interview as a reference (Springham & Brooker, 2013) and session visual aids to help the client recollect and re-appraise their experience, with a staff observer present during the interview.

Ethical considerations

Safeguarding and respecting rights were the priority of this research (Kapitan, 2015, p. 155; Kvale, 2003). There was clear information to all parties to minimise anxiety (University of Manchester, 2007), with care taken to ensure the client did not feel coerced. The art therapy sessions and the interview were in a private, familiar room, with the video recordings stored on a password-protected laptop.

Methodological considerations

In this study, the art therapist combined the roles of practitioner and researcher, specified throughout the research (Myers-Walls, 2000), to avoid blurring boundaries. There was the issue of research bias as the client knew the therapist in the service, although this did make the participant feel more comfortable. The video analysis and the interview transcript were cross-checked (Kvale, 2003) with the supervisor, while a research journal increased reflexivity (Cresswell, 2007).

Results and conclusion

Outlined is a summary of the Interactive Square Analysis from the case study and the arts-based narrative analysis from the interview.

Interaction 1: Introduction to client and general interpersonal relationship

Client ⟷ Therapist

Stephen is a 27-year-old man diagnosed with Autism Spectrum Disorder (ASD), learning disability, anxiety, and sensory processing disorder. He is hypersensitive to sensory stimulation, with body awareness (proprioception) and body orientation (vestibular) challenges. He uses cognitive strategies and has a history of seeking-out restraint for proprioceptive input when in a high state of arousal.

In the sessions, Stephen presented as verbally proficient, enjoying social interaction with an understanding of slapstick humour and verbal puns. Structured elements at the beginning and the end of the sessions included a feelings board of emoticons and friends, family, and places activity to finish.

Stephen found the activity about how emotions can affect your body difficult but enjoyed choosing emoticon images such as 'silly' (Figure 1) and 'cheeky' (Figure 2) for how he was that day. In session three, he said he was sad earlier but was silly later, and in session 4, wondering why he was angry with some staff and liked the funny staff.

The 'Friends, Family and Places' board had different visual sections on the board and he used puns saying that the word 'section' not being the same as the word 'sectioned', referring to past experiences in in-patient metal health units.

Figure 1 'Silly' emoticon.

Figure 2. 'Cheeky' emoticon.

Interaction 2: Client media response and visual expression

Client

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■

In session one, Stephen completed a collage artwork using fine motor skills to apply shapes and tissue paper (Figure 3). He enjoyed the visual aspect of the bright colours and used rollers, sponges, and brushes to apply paint.

In sessions one, two, and six, Stephen squirted paint and laughed at the 'squishing' sound from the paint containers. In the video analysis, he would put paint on his hand and face when the therapist was not looking, as he enjoyed the humorous reaction when the therapist noticed.

Stephen completed an action painting activity **(**Figure 4), where he had to drip paint onto a canvas. He enjoyed the bright colours and the unpredictable process of squirting paint straight from the containers onto the canvas.

In sessions three and four, Stephen did not enjoy the touch of plaster and clay but did enjoy the visual experience of mixing plaster with a brush.

Interaction 3: Therapist media response and visual expression

Therapist

↕

□

In sessions one, two, and five, the therapist modelled to Stephen how to use the roller, sponge, and squeeze paint. The therapist would help to prepare the art materials during the sessions. Sometimes Stephen would need a break, and the therapist would continue for a short time, enabling less pressurised interaction. In sessions four and five, the therapist pre-prepared a canvas mixing blue, pink, and purple colours that the client enjoyed in the previous sessions.

Figure 3. 'Rainbow collage'.

Interaction 4: Comparative view of client and therapist's artwork

In sessions one and two, Stephen completed a life-size portrait activity (Figure 5) with the art therapist, lying down on a large sheet of paper, with the therapist drawing around him on a large sheet of paper. The body outline was painted, with the client doing the top right and the therapist doing the bottom half.

For the action painting' Stephen selected bright luminous colours to drip on the canvas while the therapist used more muted colours. In session three, Stephen and the therapist created a textured artwork, and he enjoyed dripping plaster onto the board.

Interaction 5: Art therapy interactions – totality of therapeutic reactions, summation of client's art therapy process

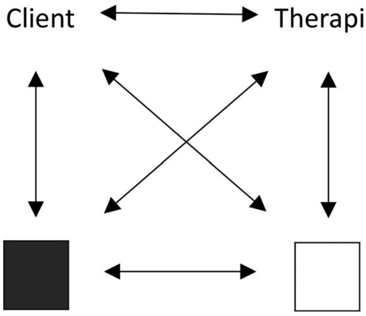

Figure 4. 'Messy' acrylic paints on canvas.

Figure 5. 'Life size portrait'.

Through analysing the video footage, Stephen enjoyed working collaboratively on making art, and the process allowed for non-intrusive interactions and exchanges. The qualities of paint provided interest and engagement, and he laughed when the paint splashed onto his shoes and floor.

The personalised emoticons (Figure 6) developed together in the first session and were an effective way of beginning each session and 'checking in' with Stephen. Silly and cheeky were positive emotions for him, relating to his love of humour and having fun with the staff.

The friends, family, and places board became a comfortable way to end each session and related to an emotional regulation distraction strategy, where he talked about favourite things and people when he felt anxious. It also stimulated some reflection about why he was calm with some staff and not others.

Holistic-content analysis

Stage 1 foci global summary

The interview took place two weeks after the art therapy sessions. The interview lasted for 20 min, with artwork available as a visual aid. The interview questions invited Stephen to talk about his past experience of art, how he found the sessions, and to look at what he enjoyed and found difficult Table 3.

Figure 6. 'How am I feeling today'.

Table 3. Holistic content analysis.

Holistic content analysis themes	
Theme name/	Description
🟪 'Messy' Materials	Positive sensory experience in the session's
🟫 'Foul' Materials	Negative sensory experience in the sessions
🟦 Tone of voice	Communicating positive and negative experiences
🟧 Difficult things	Things that did not work for the participant
🟨 Worry	Indications of worry and a need for reassurance
🟥 Anger	Fears of losing control.
🟪 Humour	Use of humour as a coping strategy and to communicate positive emotions

Holistic content analysis themes

🟪 'Messy' Materials

Stephen enjoyed using paint and being 'messy' seemed to indicate a positive sensory experience for him. Referring to messy early on in the interview:

> 00:00.
> IV: Ok this is the interview … to tell us about the art therapy session
> IE: Yeah but I enjoyed them
> 00:15.
> IV: So why did you enjoy them?
> IE: Because they were lovely
> 00:35.
> IE: Andy I like getting messy.
> IV: OK
> IE Because that is one of the things that I do enjoy

When talking about his favourite art activities at school he again mentioned messy.

> 01:35.
> IV: So what did you like about painting?
> IE: I like … getting messy.

🟫 'Foul' Materials

Art materials that were a negative sensory experience, such as plaster and clay, were called 'foul', and Stephen enjoyed saying 'foul' humorously. He enjoyed mixing plaster, so he likes the visual quality rather than the tactile.

> 10:39.
> IV: Then we had a go at plaster and bandages. What did you think about doing plaster on your hand?
> IE: I did not like that at alllllll
> IV: Why didn't you like that bit?
> IE: I didn't like that it was a bit foul
> IV: Foul ok, that's a good word to say

🟦 Tone of voice

In the interview, Stephen used different tones to communicate and emphasise positive and negative feelings about his experiences. So it seems that voice tones are just as important as the actual meaning for Stephen.

Softer tone:
About the sessions: 'Because they were lovely' (00:15); 'Andy I like getting messy'.

High pitched tone:
When asked whether he like doing art, he said 'yeah' in a higher pitched tone (02:10); 'yeahhhh' when asked whether he enjoyed the 'friends, family and places board' (16:42).

He responded in a high pitched 'squeal' of delight pointing to 'silly' and 'cheeky' when asked about the emoticons.

Neutral or low tone:
Not enjoying some art materials on his hands, he emphsised 'Noooo' in a tone low (11:10).

'Not very well' in low tone when he said he did not understand about the 'Emotions and the Body' activity (16:10).

When talking about negative experiences that had happened that day, he used a low voice. 'Andy I did not mean to do that' (12:00) or saying 'because I was a bit anxious' when we referred to a session that could not be undertaken (12:57).

🟧 Difficult things

In the interview, Stephen communicated things he found difficult in the art therapy sessions, such as the abstract concept of the 'Emotions and the Body' activity. There were also difficulties in understanding complex words such as 'concentrate' (05:32) and the context of words when he answered 'cheerful' (02:41).

🟨 Worry

Occasionally, Stephen would need reassurance, referencing an incident where he became angry. With the missed session, he said he was anxious, and it was excellent that he could say before the session.

🟥 Anger

In the interview, Stephen communicated fears about losing control and exhibiting aggression, relating to him having favoured staff who work with him, indicating a need for control in response to his anxiety.

> 12:00.
> IE: Andy this morning I did not mean to do that.
> IV: Ok that's alright, let's talk about this then.
> IV: And you did say you don't always understand why you feel angry with some staff and happy with others.
> IE: mmmmm.
> IV: That was a very good thing that you said.
> (All nod and agree).

🟪 Humour

Humour in the interview was a way for Stephen to communicate positive emotions and a coping strategy. He relates to clumsy comic characters, as he can struggle with motor skills and everyday tasks. He also liked the references to unexpected things happening in the sessions, such as paint squirting on his shoes and the therapist by mistake.

Categorical-content analysis

The categories highlight different forms of communication, the impact of sensory responses, and the link between anxiety and rumination. The unexpected qualities of art materials and humour were positive factors for emotional regulation Table 4.

Communication

Stephen would struggle to understand complex words and appeared to understand more than he appeared, demonstrating social camouflaging (Hull et al., 2017).

Table 4. Categorical content analysis.

Categorical content analysis themes	
Theme name	Description
🟨 Communication	Aspects that facilitated communication
🟩 Sensory Aspects	Sensory experiences that were related to communication and emotional regulation
🟦 Emotional Regulation	Aspects that related to and facilitated emotional regulation
🟪 Humour and Spontaneity	Humour and unexpected factors that facilitated communication and emotional regulation

Processing input can be overwhelming for autistic people with LD. (Davis et al., 2011), so when Stephen disengaged and re-engaged from an activity, this allowed him to regulate stimuli. An approach used by art therapists such as Evans and Dubowski (2001) and Bragge and Fenner (2009) and highlights the value of art therapy in enabling less-pressurised interactions (Alter-Muri, 2017), with sensory experiences providing the tangible flow to communication (Osborne, 2003), facilitating periods of concentration and frustration tolerance. It was interesting during the interview that repetitive communication related to anxiety, while the more positive communication was around sensory experiences and humour.

Sensory

Sensory aspects of the art materials in the art therapy sessions resonated strongly with Stephen during the interview. With positive feelings equated to the word 'messy', associated with the visual stimulation of paint, the unexpected drips, and splashes. In contrast to the visual sensory experiences, Stephen described tactile experiences with plaster and clay as 'foul', indicating a hypersensitivity to touch. When he did touch paint, it was to generate a humorous reaction.

The large artworks enabled Stephen to move comfortably around them, increasing his confidence about his coordination. The colourful collage activity was visually stimulating and helped Stephen maintain increased concentration with the motor tasks that can be difficult for people with autism (Posar & Visconti, 2018).

In the interview, he mentioned an animal art therapy activity, humorously reminding himself that he was like an animal that lived in water, referring to his use of baths as a calming activity giving him proprioceptive input. So sensory art activities can help stimulate communication and provide sensory integration that positively impacts emotional regulation.

Emotional regulation

In the sessions, the emoticons activity gave Stephen a concrete way of describing his feelings (Elkis-Abuhoff, 2008) and the friends, family, and places reduced anxiety. During the sessions and the interview, Stephen would worry about controlling himself, reflecting on why he gets angry with some staff and not others.

We have discussed how suppressive defenses, 'projection' (Freud, 1918), and externalising behaviour is prevalent for autistic people with LD. (Laurent & Rubin, 2004; Mazefsky et al., 2012; Samson et al., 2014) and distressing manifestations of anxiety (Vasa et al., 2018). Stephen uses maladaptive emotional regulation strategies such as suppression, which increases his anxiety and arousal.

During supervision, I discussed my countertransference manifesting in the sessions with a worry that I would lose 'control', and that he would exhibit aggressive behaviour. For one session, Stephen did not take part, and he confirmed in the interview that he felt too anxious, demonstrating a level of self-awareness when re-appraising (Gross, 1998).

Humour

A great deal of the communication in the sessions was about humour, with Stephen appreciating people who have a sense of fun. In the video footage, Stephen enjoyed when unexpected things happened, such as pain squirting onto the therapist and to his shoes.

Stephen enjoys slapstick visual comedy and wordplay that is not reliant on intellectual concepts or social awareness. This preference for incongruent humour with unexpected things, relates to research about ASD and humour. (Kana & Wadsworth, 2012; Samson et al., 2013; Weiss et al., 2013).

Stephen demonstrated wordplay by switching the word 'section' to 'sectioned' illustrating how he used humour to refer to the experience of mental health hospitals.

Limitations of study

As the sole researcher and therapist, there are inevitable issues with objectivity and reflexivity in the research with the single case study approach, despite attempts to include triangulation methods. The therapist had a pre-existing work relationship with the client which brings inevitable bias, although existing rapport did benefit in helping the client feel comfortable.

Due to the client's presenting needs, there were limitations with the number of sessions conducted, as there were times that the participant struggle with anxiety and behavioural challenges so care was taken to make sure his wellbeing was the priority.

Conclusions

Analysis indicates that art therapy enabled non-intrusive communication for the client, building relationships, as described in the literature (Alter-Muri, 2017). The client benefited from a non-pressurised method of attuning where the client can choose to withdraw or engage (Bragge & Fenner, 2009; Evans & Dubowski, 2001).

There was evidence that art therapy helped Stephen improve his concentration and communication abilities. The collaborative art process helped with attention, and he could regulate his distance from the therapist through art making and 'sensory' breaks. With the video analysis providing a third viewpoint, the therapist could be freer to engage in art-making with the client, working on joint attention skills (Isserow, 2008).

During the interview, Stephen would communicate and engage more when discussing the art materials and the artworks made, commenting on what sensory experiences he liked and disliked, and this concretised abstract concepts for him (Elkis-Abuhoff, 2008) with the sensory, inviting engagement with the outside world (Osborne, 2013).

In the art therapy sessions, Stephen enjoyed the visual properties of paint and the unexpected nature of the 'messy' art materials. These sensory experiences could be 'visceral feelings' stimulated by art-making, engaging the senses, enabling communication and emotional awareness. According to the Collins dictionary, visceral feelings are '"feelings' that you feel deeply … . not the result of thoughts"' (Collins Dictionary, 2019). I am proposing that his sensory and self-regulatory systems are both 'visceral' systems that are difficult to manage.

Visceral sensations and sensory information are processed by somatosensory systems (Dougherty, 1997), and these sensory-motor systems develop alongside emotional and relational systems (Elbrecht & Antcliff, 2015, p. 211). We have seen that sensory sensitivities for an autistic person can impact the ability to mirror and attune with a caregiver and to develop emotional regulation capabilities.

Stephen would have strong reactions to the materials, as either 'messy' (positive) or 'foul (negative), indicating hyperactivation of sensory input (Malchiodi, 2020). He struggled with coordination and interoception, with difficulties with vestibular balance and proprioceptive body awareness. Encountering these different materials helped him to balance his sensory input (Wallace, 2015), stimulating less rigid thinking and minimising the sensory dysfunction that can contribute to avoidant behaviours, increased arousal, and aggressive behaviour.

These insights point to the value of a bottom-up therapeutic approach (Elbrecht & Antcliff, 2014, p. 22) that involves kinesthetic and motor impulses stimulation which can restore the ability to integrate sensory, emotional, and relational information impaired due to adverse childhood experiences (Elbrecht & Antclif, 2014, 2015, p. 219). Research has found that art-making can reduce stress (Kaimal et al., 2016) and access those parts of the brain that code trauma (Carr & Hass-Cohen, 2008; Perry & Pollard, 1997; Schore, 2013). Gendlin (1982) and Levine (2010) describes this as the 'felt sense, a physical experience of getting in touch with your body that can transform trauma, as trauma can remain trapped in the body (Van Der Kolk, 1987).

With emotional regulation, the 'friends and family activity helped to enable the 'distraction' strategy (Gruber & Oepen, 2018). Whilst, the action painting allowed Stephen to 'sublimate' (Kramer, 1971) his energies into a productive activity (Mango & R; Richman, 1990), suggesting that the artwork could function as the 'container' as described by Bion (1961).

During the sessions and in the interview, Stephen reflected on why he was angry with some staff and not others, an example of re-appraisal, a processing system essential for emotional regulation (Gross, 1998), stimulated by the sensory art-making, non-invasive approach, and the artwork referenced in the interview. Lobban (2014) tells us that unconscious unprocessed material expressed through image-making, then decoded using cognitive appraisal mechanisms, involves reduced avoidance and increased tolerance of emotions which leads to improved insight (p.41).

These findings demonstrate elements of the art therapy sessions assist with emotional regulation, providing a non-verbal communication method to interact and express oneself and process feelings (Haeyen et al., 2018). These strategies are an alternative to avoidance and cognitive suppression, which lead to anxiety and externalising behaviour.

D'Amico and Lalonde (2017, p. 176) point to art therapy allowing autistic individuals to learn information through sensory experiences, addressing feelings of anxiety, depression, and frustration. Incongruent and fluid qualities of art materials can have unexpected effects that surprise, like humour, highlighted in the analysis as a coping strategy for Stephen. So humorous wordplay, interaction, and spontaneous sensory experiences distract from ruminations and serve to decrease anxiety and arousal levels for Stephen. Another tool developed in the sessions was an emotion board using emoticon signs. The humorous aspect of the images was engaging and a concrete representation of abstract concepts.

We know that art and humour can express repressed thoughts and feelings and strengthen the ego (Mango & Richman), equalising relationships and building rapport and social cohesion (Lobban, 2014). Stephen uses humour to identify with comedic characters and the unexpected things that can happen in art. So combined with creative expression can help the cognitive processing of emotionally charged memories (Kopytin & Lebedev, 2015). He also used humorous wordplay to refer to his experience of being 'sectioned' and staying in in-patient mental health services.

So Incongruous humour and expressive spontaneity can release anxiety and dissipate aggression, an excellent emotional regulation strategy for autistic people with learning disabilities like Stephen.

Art Therapy can thus assist with expressing unprocessed material and decoding using cognitive appraisal mechanisms. Autistics hold many memories without having the cognitive skills to re-appraise and move past them. Sensory engagement promotes communication and emotional awareness, reducing the reliance on maladaptive emotional regulation strategies such as suppression and avoidance.

Recommendations for further research

The multiple analysis of the interactive square and the arts-based narrative analysis has provided additional triangulation methods to add depth to the study. As well as the thoughts and feelings of the participant,

Although in a large study, 'Investigator Triangulation' where different observers consulted would uncover alternative viewpoints (Kapitan, 2015, p. 111; Stake, 1995), with a research team checking analysis and conclusions.

The holistic and categorical lens does have some repetition with one participant, although this could be a model to apply to larger sample sizes. Therefore, holistic content analysis could be used for each participant in the study, and categorical analysis could extrapolate categories from the data and provide conclusions that apply to the larger autistic populations. Thematic analysis could be used on collections of interview transcripts to provide a wider lens of analysis.

A research 'facilitator' (Noffke & Somekh, 2005) would lend another level of objectivity reflexivity to the research Carr and Kemmis (1986), and the cyclical nature of action research could be more coherent.

Investigating the research with individuals across the ASD spectrum including people who are non-verbal and people with Asperger's syndrome. would be valuable. Including parent insight, interviews participants to take on the roles described in participation-based action art therapy research (Spaniol, 2005).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Andrew C Wright is a trained Art Psychotherapist, UK licensed and registered, who trained at Goldsmiths College, University of London UK in 2002 and he has completed a Masters in Educational research at the University of London in 2019. Andrew has worked in London, Singapore, and Dubai. He is now based in Bournemouth, Dorset, working in private practice, and provides art therapy services to children, adolescents, and adults. He is also an approved private practitioner and clinical supervisor for BAAT.

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Journal of Rural Medicine

Review

Effects of music therapy on functional ability in people with cerebral palsy: a systematic review

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Abstract

Objective: This review aimed to investigate the effects of music therapy on functional ability in people with cerebral palsy.
Materials and Methods: An electronic search of the CENTRAL, MEDLINE, and EMBASE databases was conducted. Randomized controlled trials that examined the effects of music therapy in patients with cerebral palsy were included.
Results: Eight trials were eligible for inclusion in this study. We found a low risk of bias in random sequence generation and allocation concealment in all trials. The risk of bias in blinding of the outcome assessment was low in all studies. We found that music therapy had a significant effect on the Gross Motor Function Measure score (standardized mean difference [SMD] −0.42), Functional Independence Measure for Children score (SMD 0.38), and Goal Attainment Scale score (SMD −1.43). Music therapy had no significant effect on any of the other items.
Conclusion: There is limited evidence that music therapy improves gross motor function and activities of daily living in patients with cerebral palsy. However, this was insufficient to allow for generalizable conclusions. Further studies with larger sample sizes are required to confirm the effects of music therapy in this population.

Key words: music therapy, cerebral palsy, systematic review, disability, physiotherapy

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Introduction

Cerebral palsy (CP) comprises a heterogeneous group of early onset, non-progressive, neurodevelopmental disorders caused by an insult to the developing brain, most often before birth. CP is a leading cause of disability in children, with a prevalence of approximately 2 per 1,000 live births[1]. Globally, an estimated 17 million people living with CP[1]. In general, CP causes impaired movement associated with abnormal reflexes, floppiness or rigidity of the limbs and trunk, abnormal posture, involuntary movements, unsteady gait, or a combination of these. The effect of CP on function varies widely. Some affected individuals can walk, whereas others require assistance.

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The use of music in neurorehabilitation is grounded in neurophysiological theory and research on the influence of music on cognitive processes and motor learning principles and has been applied to neurological disorders, including CP[2, 3]. The therapeutic approach called neurologic music therapy (NMT) was established 20 years ago in the US and is known to be effective in neurorehabilitation[4]. Conceptually, NMT is based on three main sensorimotor techniques, with the improvement of motor skills as the overall goal. The first technique is rhythmic auditory stimulation (RAS), which aims to develop and maintain physiological rhythmic motor activity (gait) using rhythmic auditory cues. The second is patterned sensory enhancement (PSE), the objective of which is to facilitate movements associated with the activities of daily living. PSE is not necessarily rhythmic in nature and uses complex elements of music, such as pitch, dynamics, harmony, meter, and rhythm, to enhance and organize movement patterns in time and space and to improve activity, muscle coordination, strength, balance, postural

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control, and range of motion[5]. The third technique is therapeutic instrumental music performance, in which playing a musical instrument is used as an orientation training task to simulate and facilitate functional movement. This technique most commonly uses percussion instruments played in a traditional or non-traditional manner to improve range of motion, limb coordination, postural control, dexterity, body perception, and sensation[6, 7]. NMT has been shown to improve walking performance in patients with neurological diseases, and musical training with instruments allows interrelationships between movement, emotions, and cognition for task-based learning to improve motor control[8–10].

Several clinical trials have examined the use of music therapy in patients with CP. One randomized controlled trial investigated the effects of a combination of PSE music and resistance exercise in children with spastic diplegia and found that those who exercised with PSE music showed statistically significant improvements in gross motor capacity compared with controls who exercised without music, and that these effects lasted at least 3 months[8]. However, there have been no systematic reviews of the findings of available studies on the effect of music therapy in the CP population. It remains unclear whether music therapy is useful in patients with CP. Moreover, studies on music therapy tend to include small sample sizes. Therefore, a systematic review of trials is required to evaluate the effectiveness of music therapy. This study aimed to investigate the effect of music therapy on the functional ability of people with CP.

Materials and Methods

Search strategy

We searched the MEDLINE, Cochrane Central Register of Controlled Trials (CENTRAL), and EMBASE databases from January 1980 to December 2020. The review protocol, including the search strategy, was registered before starting the review[11]. We also searched the reference lists of included studies to identify additional relevant trials.

Eligibility criteria

Participants

CP describes a group of permanent disorders of movement and posture that limit activity, and are attributed to non-progressive disturbances in the developing fetal or infant brain. Motor disorders in CP are often accompanied by disturbances in sensation, perception, cognition, communication, behavior, epilepsy, and secondary musculoskeletal problems.

Interventions

Music therapy is an evidence- and art-based discipline that uses musical experiences within a therapeutic relationship to address clients' physical, emotional, cognitive, and social needs[12]. Music therapy includes the following interventions: listening and moving to live, improvised, or prerecorded music, as well as RAS; therapeutic use of music and rhythm as a driving force to facilitate better quality of movement and PSE; performing or creating music using an instrument and therapeutic instrumental music performance; improvising music spontaneously using voice, instruments, or both; singing or vocal activities set to music; composing music; and music combined with other modalities.

Comparator

No intervention, usual care, or alternative intervention.

Study design

Randomized controlled trials, quasi-randomized trials, and cluster randomized trials were included. The Crossover trials were excluded.

Outcomes

The main outcome was gross motor function, which was assessed using the gross motor function measure (GMFM), energy expenditure index, gross motor performance measure (GMPM), or simple motor test for Cerebral Palsy.

Additional outcomes were as follows: muscle strength, assessed by grip strength or the Medical Research Council scale score; spasticity, assessed by the Modified Ashworth Scale or (Modified) Tardieu Scale score; respiratory function, evaluated by vital capacity or forced expiratory volume in 1 s; physical fitness, assessed by the 6-min walk test and cardiopulmonary exercise testing; lower limb function, measured by gait velocity (cm/s) and the Timed Up and Go test; upper limb function, assessed by the ABILHAND-kids Scale, Shriners Hospitals for Children Upper Extremity Evaluation, Melbourne Assessment of Unilateral Upper Limb Function, Assisting Hand Assessment, or Quality of Upper Extremity Skills Test (QUEST); activities of daily living, measured by the Functional Independence Measure for Children (WeeFIM), Pediatric Evaluation of Disability Inventory (PEDI), Goal Attainment Scaling (GAS) score, Canadian Occupational Performance Measure, Assessment of Motor and Process Skills, or School Function Assessment; participation, assessed by the Participation Survey/Mobility tool; quality of life, assessed by the Pediatric Outcomes Data Collection Instrument; and secondary complications. We explored the outcomes at the end of treatment and at the end of the scheduled follow-up.

Data extraction and quality assessment

Two researchers (SY and TY) independently selected the reviews included in the analysis. One researcher (SY) extracted the data and a second researcher (TY) independently checked the data extraction forms for accuracy and completeness. Any discrepancy was resolved by discussion, with the final decision made by a third investigator (RM). Two authors independently assessed the risk of bias using the Cochrane risk of bias' tool[13]. Any disagreements concerning the risk of bias or quality of evidence in the included studies were resolved by discussion.

Statistical analysis

We performed a quantitative synthesis of the findings of the included studies and a summary of the effects of intervention for each study by calculating the risk ratio (RR) for dichotomous outcomes and standardized mean difference (SMD) for continuous outcomes. We anticipated that there would be a limited scope for meta-analysis because of the range of different outcomes measured across a small number of existing trials. However, when studies had used the same intervention, comparator, and outcome measure, we pooled the results using a random effects meta-analysis with SMDs for continuous outcomes and RRs for binary outcomes and calculated the 95% confidence intervals and two-sided *P*-values for each outcome. Heterogeneity in the measures of effect between the studies was assessed using the χ^2 test and I^2 statistic. An I^2 value >60% indicated substantial heterogeneity.

Results

After screening the 314 records, 25 potentially relevant studies were identified. Eight of these 25 studies met the study inclusion criteria[8, 14–20] (Figure 1). The details of each study are presented in Table 1.

Study characteristics

Two of the eligible studies included patients with a Gross Motor Function Classification System score of I–IV[8, 14, 15]. None of the studies included participants with conditions other than CP. In almost all studies, the participants were under 20 years of age. The sample sizes ranged from 11[14] to 120[15]. Three studies used RAS provided by music therapists[14, 18, 20]. The intervention involved listening to music in two studies[15, 19], a music therapist using PSE in two studies[8, 17], and a patient playing an instrument in one study[16].

Almost all studies included some form of gross motor function as an outcome[8, 14–20]. Three studies included limb function measures[14, 16, 20], three included activities of daily living[8, 15, 19], one study included WeeFIM[15], another included PEDI[8], and another included the GAS T-score as an outcome[19]. Only one study assessed upper limb function (using QUEST). Three studies included lower limb function as an outcome[8, 18, 20], three studies included velocity, two included cadence[18, 19], and one study included grip strength[19].

Study quality

Six trials included the appropriate sequence generation (Table 2). Two studies that did not report the methods used for random sequence generation were classified as unclear[16, 18]. Three studies did not report allocation concealment[16–18]. Fifty percent of the trials included blinding of

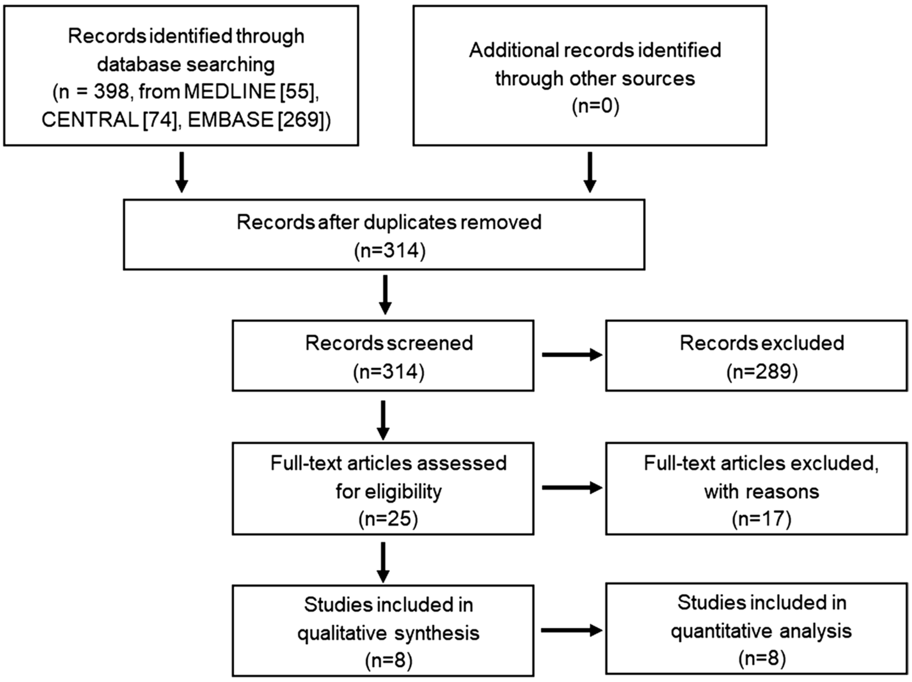

Figure 1 Study flow diagram.

Table 1 Characteristics of included studies

Study	Country	Participant characteristics	Number (I/C)	Intervention group	Control group	Outcomes
López–Ortiz 2016[14]	USA	GMFCS score of II–IV Age 6–15 years Ability to follow two-step directions Medically stable No history of surgery or seizures within past 6 months	11 (5/6)	TDC for 1 h three times weekly for 4 weeks + physical therapy and occupational therapy	Physical and occupational therapy	Changes in clinical balance Upper limb function
Duymaz 2018[15]	Turkey	Age 5–11 years Diagnosis of spastic-type CP Able to understand and cooperate with commands Not using technical or mobility aids No hearing problems GMFCS level I–III	120 (60/60)	NDT while listening to a classical music disc for 45 minutes	NDT only	GMFM-88 WeeFIM FACES
Wang 2013[8]	Taiwan	Age 5–13 years Spastic diplegia, GMFCS score I–III Able to stand independently without falling Able to follow and cooperate with verbal instructions Parental commitment to supervise the training program without altering current therapy or activities	36 (18/18)	PSE music combined with sit-to-stand exercise	Exercise with no music	GMFM dimensions D and E Daily mobility and self-care functions Functional strength Walking speed
Yu 2009[16]	China	Diagnosis of CP Age <14 years No severe organic disease, acute or chronic infection or coagulopathy, severe visual or hearing impairment, or progressive brain disease (brain tumor, moyamoya disease, etc.)	60 (30/30)	Playing a musical instrument for children	Needle therapy	Scoring for comprehensive functions Scoring for gross motor function
Teixeira–Machado 2017[17]	USA	Diagnosis of CP Age 15–29 years Increased muscle tone No physical activity during the study protocol No cardiopathy or neoplasia	26 (13/13)	Global range of motion with coordinated and rhythmic dynamic floor exercises Motor coordination Body image Skill and agility	Traditional kinesiotherapy exercises	FIM WHODAS GMFCS
Kwak 2007[18]	USA	Spastic-type CP Age 6–20 years	18 (9/9)	Conventional gait training enhanced by RAS provided by both a physical therapist and a music therapist	Conventional gait training by a physical therapist while a music therapist observed	Neurological damage How RAS could affect gait training
Ben–Pazi 2018[19]	USA	Age 2–18 years Hypertonia interfering with daily functions Ability to use headphones for at least 10 min	18 (9/9)	Exposure to audio stimulation for at least 10 min; each session lasting preferably for 30 min four times a week	Music alone	CCHQ GAS GMFM-88 QUEST
Kim 2012[20]	Korea	No discernible hearing deficit Able to walk at least 10 m without a walking aid or a helper Able to understand the command to walk following rhythmic auditory stimulation	28 (15/13)	Rhythmic auditory stimulation using a combination of a metronome beat set to the individual's cadence and rhythmic cueing from a live keyboard	NDT	Gait pathology Kinematic data for the pelvis, hip joint, knee, ankle, and foot

C: control; CCHQ: Care and Comfort Hypertonicity Questionnaire; CP: cerebral palsy; FACES: Wong-Baker Faces Pain Rating Scale; FIM: Functional Independence Measure; GAS: Goal Attainment Scale; GMFM: Gross Motor Function Measurement; GMFCS: Gross Motor Function Classification System; I: intervention; NDT: neurodevelopmental treatment; PSE: patterned sensory enhancement; QUEST: Quality of Upper Extremity Skills Test; RAS: rhythmic auditory stimulation; TDC: Training Dance Control; WHODAS: World Health Organization Disability Assessment Schedule.

Table 2 Risk of bias summary

López–Ortiz 2016[14]	Duymaz 2018[15]	Wang 2013[8]	Yu 2009[16]	Teixeira–Machado 2017[17]	Kwak 2007[18]	Ben–Pazi 2018[19]	Kim 2012[20]	
Low	Low	Low	Unclear	Low	Unclear	Low	Low	Random sequence generation
Low	Low	Low	Unclear	Unclear	Unclear	Low	Low	Allocation concealment
Low	Low	Low	High	High	High	Low	High	Blinding of participants and personnel
Low	Unclear	Low	Unclear	Unclear	Unclear	Low	Low	Blinding of outcome assessment
Low	Low	Low	Low	Low	Low	Low	Low	Incomplete outcomes data
Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	Low	Unclear	Selective reporting
Low	Low	Low	Low	Low	Low	Low	Low	Other bias

Table 3 Summary of results of meta-analysis for outcomes

Outcome	Studies, n	Participants (intervention/control), n	SMD (95% CI)	Inconsistency value I^2 (%)
QUEST	1	18 (9/9)	−0.07 (−0.99, 0.86) *P*=0.87	-
WeeFIM	1	120 (60/60)	0.38 (0.01, 0.74) *P*=0.04	-
WeeFIM (after follow-up)	1	120 (60/60)	0.39 (0.03, 0.75) *P*=0.04	-
GMFM	3	174 (87/87)	0.42 (0.12, 0.72) *P*=0.01	0
GMFM (after follow-up)	2	156 (78/78)	0.58 (0.26, 0.90) *P*=0.0004	42
Velocity	3	82 (42/40)	0.29 (−0.16, 0.74) *P*=0.21	71
Velocity (after follow-up)	1	36 (18/18)	0.17 (−0.49, 0.82) *P*=0.62	-
Cadence	2	46 (24/22)	0.20 (−0.39, 0.79) *P*=0.51	40
PEDI	1	36 (18/18)	0.05 (−0.61, 0.70) *P*=0.89	-
PEDI (after follow-up)	1	36 (18/18)	0.14 (−0.52, 0.79) *P*=0.68	-
Grasp	1	18 (9/9)	0.08 (−0.84, 1.01) *P*=0.86	-
GAS T-score	1	18 (9/9)	−1.43 (−2.49, −0.36) *P*=0.01	-

CI: confidence interval; GAS: Goal Attainment Scale; GMFM: Gross Motor Function Measurement; PEDI: Pediatric Evaluation of Disability Inventory; QUEST: Quality of Upper Extremity Skills Test; SMD: standardized mean difference; WeeFIM: Functional Independence Measure for Children.

both study participants and observers, and were judged to have a high risk of bias[16–18, 20]. Half of the studies did not include blinding of the outcome assessors[15–18]. Incomplete outcome data bias was judged to be low in all studies. Study protocols were not available for any of the included studies. No other potential sources of bias were identified in the available data. Outcome data were missing for three studies and could not be obtained. Therefore, only five studies were included in the quantitative analysis (Table 3).

Effectiveness

Gross motor function

Three trials (including 174 participants) included GMFM data[8, 15–19]. Meta-analysis showed that music therapy had a significant effect on the GMFM score (SMD, −0.42; 95% CI, −0.12, 0.72; *P*=0.01; I^2=0%).

Activities of daily living

Only one trial (120 participants) reported the WeeFIM data[15]. It was found that music therapy had a significantly positive effect on the WeeFIM score (SMD, 0.38; 95% CI 0.01, 0.74; *P*=0.04). Only one trial (with 36 participants) assessed the PEDI[8], and no significant effect of music therapy was found (SMD 0.05; 95% CI −0.61, 0.7; *P*=0.89). Another trial (with 18 participants) assessed the GAS T-score[19] and found a significant effect of music therapy (SMD, −1.43; 95% CI, −2.49, −0.36; *P*=0.01).

Upper limb function

One trial (with 18 participants) assessed upper limb function using QUEST[19] and did not find any significant effect of music therapy (SMD, −0.07; 95% CI, −0.99, 0.86; *P*=0.87).

Lower limb function

Three trials (including 82 participants) reported data on velocity[8, 18, 20]. Meta-analysis showed that music therapy had no significant effect on walking velocity (SMD: 0.29; 95% CI: −0.16, 0.74; *P*=0.21; I^2=71%). Two trials (including 46 participants) included data on cadence[18, 20] and found no significant effect of music therapy (SMD 0.20; 95% CI −0.39, 0.79; *P*=0.51; I^2=40%).

Muscle strength

Only one trial (with 18 participants) investigated grip strength[19] and found that music therapy had no significant positive effect (SMD 0.08; 95% CI −0.84, 1.01; P=0.86).

Discussion

Eight trials (with 317 participants) were eligible for inclusion in this review on the effects of music therapy in patients with CP. We found a low risk of bias for random sequence generation and allocation concealment in all the trials. However, the risk of bias in the blinding of the study participants was high in half of the studies. However, the risk of bias in the blinding of the outcome assessment was low in all studies. This meta-analysis found that music therapy had a significant effect on WeeFIM and GMFM scores and on the GAS T-score but not on any other items in participants with CP. No adverse events were observed.

In terms of study heterogeneity, the music therapy content varied widely, and one study[17] included adults with CP. The sample sizes in the included studies were small, ranging from 11 to 120 participants, which may have resulted in inadequate statistical power to detect the significant effects of music therapy in the CP population.

We did not find a high risk of selective reporting, other biases, or any major problems with the overall certainty of the evidence. However, due to insufficient sample size, the results of this meta-analysis may come into question when the results of larger-scale studies become available in the future.

To the best of our knowledge, there has been no comprehensive review of the effects of music therapy in patients with CP. We found only one limited systematic review of the effects of music therapy in neurorehabilitation of children and adults with CP[21]. This review showed that dance and RAS have a potentially positive impact on body function, emotional expression, social participation, and attitudinal change. However, only RAS and dance have been investigated, and no meta-analysis has been performed.

Although music therapy for CP is used in actual clinical practice, the main reason for the lack of randomized controlled trials is probably the lack of researchers studying both CP and music therapy. However, research on music therapy has been increasing in recent years[22], future scholars are focusing on the clinical significance of music therapy. In the rehabilitation of children with CP, music therapy is an alternative tool for making the process more enjoyable and improve exercise adherence[23]. Further studies are needed to investigate the effects of music therapy on adherence to exercise in patients with CP. In addition, music therapy does not require special equipment or skills, which makes it easy to introduce in rural areas where human medical resources are limited. The recent pandemic of coronary infections has made face-to-face interventions more difficult, and music therapy using virtual reality (VR) technologies has been implemented[24]. Since virtual reality technology can intervene remotely, we believe that it can easily be utilized in rural areas.

Finally, despite our literature search strategy, the possibility of a selection bias cannot be excluded. This review did not include unpublished data, articles in the press, studies published in languages other than English, or studies for which only an abstract has been published.

Conclusions

We found limited evidence that music therapy could improve gross motor function and activities of daily living in the CP population. However, we could not find sufficient data to allow generalizable conclusions regarding the effects of music therapy in this population. No randomized controlled trials have used singing or vocal activities in music therapy for CP. Furthermore, there have been no randomized controlled trials on music therapy for spasticity, physical fitness, participation restrictions, or quality of life as outcomes of CP. Future studies with larger sample sizes are needed to determine the effects of music therapy in patients with CP.

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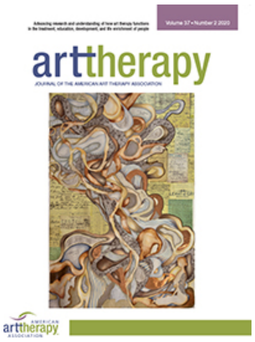

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Art Therapy and Disability Studies

Chun-shan (Sandie) Yi & Catherine Hyland Moon *Guest Editors*

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editorial

Art Therapy and Disability Studies

Chun-shan (Sandie) Yi and Catherine Hyland Moon, *Guest Editors*

Disability is a socially constructed experience of physical, mental, cognitive, sensory, and developmental conditions resulting from injury, illness, or aging. In the United States, the women's and civil rights movements paved the way to asserting disability identity, rights, and pride. The use of self-claimed, identity-first language—Sick (chronically ill), Mad (psychiatrically disabled or mentally ill), Autistic, Disabled, and Deaf people—signifies social, cultural, and political affiliation with disability culture and its subcultures. The need to bond over shared experiences—such as being subjected to stereotypes, possessing knowledge about pain mitigation, managing microaggression, and developing resilience and resistance against ableism—continues to drive the formation of disability culture. However, the stigma and shame associated with disability and the pressure to *overcome* have caused many disabled people to maintain their distance from those who identify as disabled; still others may not associate their impairment or illness with disability.

Disability studies emerged in the 1990s as a multidisciplinary and interdisciplinary field that examines how disability has been defined and constructed through history, culture, economics, politics, technology, and the arts. By foregrounding a social model of disability, it counters the deficit-oriented, individualistic focus of the medical model and instead calls out the environmental, attitudinal, and systemic barriers that undermine the rights, access, and empowerment of people with disabilities. Critical disability studies further examines power, privilege, and oppression in relation to bodily and mental norms and extends beyond the academy to seek social transformation through grassroots activism. Contrary to traditional academia, which privileges white, middle and upper class, non-disabled people—who have access to education and the associated right to express themselves and be listened to—critical disability studies has worked to decolonize knowledge production and pedagogy by including work by activists and artists with marginalized identities and lived experience of disability.

Coeditor Reflections

As coeditors, who represent different social and cultural locations in relation to disability, we conceptualize this special issue as an opportunity to challenge the way disability is constructed within art therapy.

Sandie Yi

I knew the medical model of disability by heart long before I became an art therapist; each of my only-two digits on each limb were described as "an unfortunate abnormality" that could be remedied by hard work and perseverance. Anything I did with my "residual" fingers was viewed as *inspirational* and people romanticized my physical differences as *special. Disability* became an unspoken, dirty word. While attempts to normalize my *differences* were well intended, the use of euphemisms inevitably erased the complexity of my lived experience as someone who is a second-generation carrier of a genetic impairment.

Unconsciously and naively, I believed in the possibility of being accepted as *normal* if I followed social scripts. Yet, when I encountered one of my colleagues, a chief plastic surgeon, in the staff lounge and he asked to examine my hands, I realized that no matter how hard I worked for recognition as a professional I would always be seen as a patient. The imposition of *overcoming narratives* did not end merely by my refusing to see myself as disabled.

Upon meeting a group of disabled artists, activists, and disability studies scholars in 2006, I began unpacking my internalized ableism and learning the value of disability as a cultural, social, and political identity. Since then, I have co-created disability culture with other politicized disabled people, whom I consider my *Crip* family. As I encountered other art therapy practitioners

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with disabilities, I recognized our shared struggle with navigating disability experiences within the field and became aware of their desire for *Crip* connections. I eagerly shared the knowledge of disability studies and disability culture to support my fellow disabled and non-disabled art therapists.

Cathy Moon

At my first job as an art therapist in a psychiatric day treatment program for adults, the bathroom for staff was on the top floor of a two-story building. There was no sign on the door, but everyone knew it was *only* for staff. The one for the clients was in the basement. At the time, I thought little of this arrangement. I didn't even recognize it as an *arrangement*. But something about it bothered me, a sliver of recognition festering just below the surface. The message eventually became clear: therapist-client, privileged-marginalized, powerful-powerless, elevated-banished, normal-abnormal.

Early experiences like these and the troubling questions they raised were what eventually led me to disability studies. Though I do not currently identify as a person with lived experience of disability, my mental and physical state are always tentative and conditional. I don't perceive ability and disability as binary, but rather as a continuum that varies over time, and—on a relational level—necessitates mutual caring and exchange of resources.

During my professional life, I have been troubled by the false separation between mental health services users and providers. The unspoken hierarchy of professional self-disclosure makes it permissible to reveal some mental health challenges (e.g., depression), but not others (e.g., recent psychiatric hospitalizations). As a co-facilitator of conference workshops and open forums on the stigma and discrimination faced by user-providers, I am acutely aware of the potential harmful impacts on professional reputation, status, and wellbeing resulting from disclosure of psychiatric disabilities. Colleagues who have dedicated their professional lives to serving people with disabilities are sometimes threatened or offended when their work is critiqued from a disability culture or politics perspective. Such critique is what I find so valuable about disability studies, as it demands that I set aside my expert role and listen intently to the lived experiences of people with disabilities.

Disability Studies and Art Therapy

Though the art therapy field has long provided services for people with disabilities, it has not fully engaged with the underlying conditions that lead to social exclusion, mental distress, disempowerment, and discrimination. Disability studies provides a means to challenge and broaden art therapy theory and practice in relation to three areas that resonate through this issue.

Structural Oppression

Disability oppression is deeply embedded in social structures and perpetuated through taken-for-granted assumptions and everyday practices. The absence of sign language interpretation, ramps or Easy Read materials for people with cognitive disabilities cause impediments just as much as conveyed messages, such as Moon's aforementioned example about bathroom assignment. It is crucial to question, disrupt, and complicate received knowledge related to disability.

As a mental health field, art therapy has positioned the study of disability and madness within medicine, rehabilitation, and psychology frameworks. Disability studies challenges these perspectives—which tend to frame disability as a personal tragedy or problem to be solved—and shapes ideas about who is in need of assistance, what it means to provide help or care, and whose voices, concerns, and perspectives are prioritized. Further, disability studies destabilizes the ability-disability binary and provides opportunities for examining how ableism impacts education, culture, and practice.

Chris Wood introduces the Hearing Voices Movement, which disrupts the dominance of pharmacology by privileging individuals' rights to determine the significance of the voices they hear. Noel King addresses the barriers faced by the Deaf community in accessing art therapy. Sadie Wilcox challenges deficit narratives by elevating the visibility of lived experiences through participatory arts. Sara Miller argues for disability arts as an alternative, disability-led and disability-centered framework.

Intersectionality

The discrimination experienced by people with disabilities intersects with, and is amplified by, other marginalized identities. The perspectives of art therapists of color and queer art therapists are beginning to gain representation in the field. More authors are intentional about addressing the way power plays out through their own and their clients' intersecting social, cultural, racial, gender, class, sexual, religious, political, and other locations. It is critical for art therapy practitioners, educators, and researchers to reflexively engage with disability as an intersecting facet of identity. In Yi's aforementioned example, when a disabled art therapist of color becomes a medical curiosity in the eyes of a surgeon colleague, she is effectively stripped of her professional identity and status. Likewise, Roxie Ehlert addresses sanism from her intersectional identity and Brianna Beck cautions against overgeneralizing the experiences of disabled people by considering multiple aspects of identity.

Intra-Professional Stigma and Discrimination

Literature on art therapy and disability is dominated by the perspectives of therapists who are non-disabled, yet hold the position of expert in relation to people with mental illness or disabilities. Evidence of stigma and discrimination within the field is brought into sharp focus by the reluctance of many art therapists to publish or present on their own experiences. This occurs despite the obvious value their perspectives could bring to the field and how frequently lived experience is a motivating factor in pursuing a helping profession.

Sick, Mad, Disabled, and Deaf people are seldom considered as consultants and decision-makers within institutional and organizational diversity agendas. The silencing of disabled art therapists' politicized voices and the marginalizing of their perspectives discourages active participation and leadership in the field by the very people who are most qualified to advance a critical understanding of disability. To interrogate such attitudes, assumptions, and policies, Roots and Roses detail their experiences of stigma as wounded healers. Sara Miller, Julie Ludwick, and Cassandra Colucy Krcmar propose a de-stigmatizing, relational approach to working with people with intellectual disabilities. Jennifer Radil's cover art is a testament to reclaiming one's vibrant voice post-injury, in contrast to stereotypes.

Conclusion

The authors contributing to this issue theorize meanings of disability based on their lived experiences, which have been largely absent from the social sciences-based discipline of art therapy. We hope the articles stimulate ongoing discussions, research, curriculum design, and publications that serve to integrate disability studies and disability culture within art therapy education and practice, thereby improving the experiences of disabled recipients of art therapy services.