

The Impact of Rhythm and Reflection as a Model of Practice for Occupational Therapists in a Public Mental Health Facility

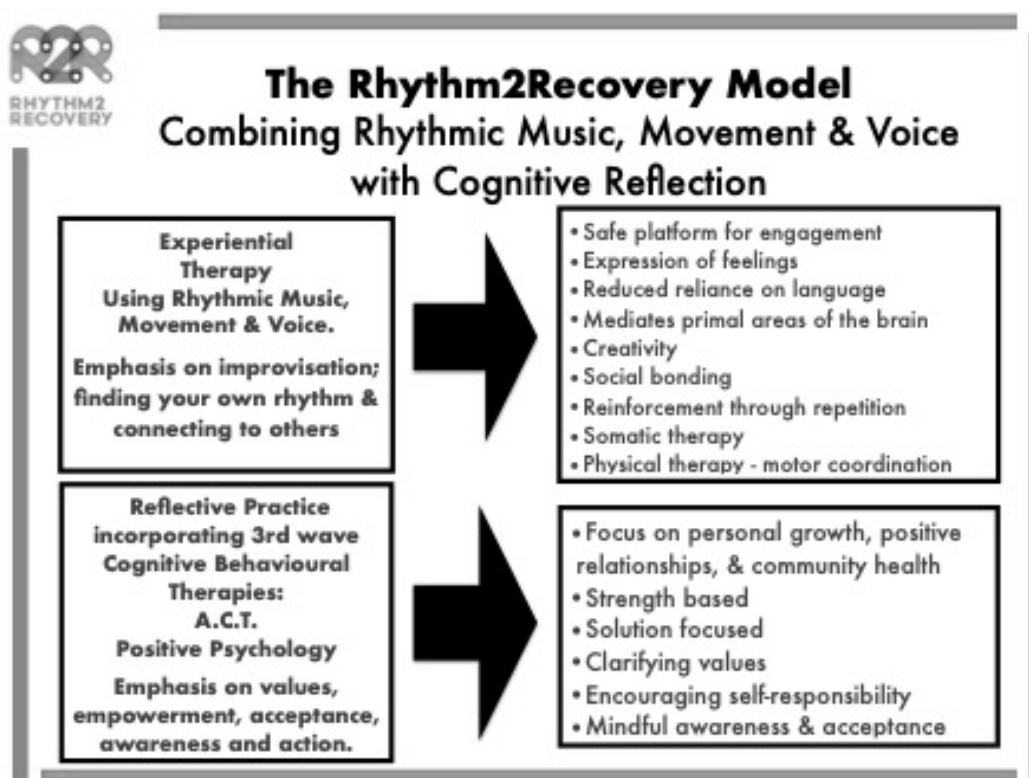
Simon C. Faulkner, 2026

There is a long history of the use of arts-based practices in mental health rehabilitation, stemming from our earliest, ancient healing rituals to modern day professions such as art-therapy and music therapy. The use of rhythmic interventions within these different modalities has often been a core component, seen in the dance, drumming and vocal traditions, that span Indigenous communities and their healing ceremonies across the world and extending to contemporary group programs found in the activity-based therapies of many mental health facilities. Research into the benefits of art-based intervention is extensive with over 30,000 empirical published papers showing positive impacts on our psychological, social, biological and behavioural health (Fancourt, 2026, p.6).

Despite the supporting evidence, music and other arts-based activities have, in recent times, taken a back seat in mental health treatment to both medication and more cognitively based therapies, in particular, Cognitive Behavioural Therapy (CBT), Acceptance & Commitment Therapy (ACT) and Dialectical Behaviour Therapy (DBT), all of which are supported through government rebates and provided by psychologists, social workers and occupational therapists. For occupational therapists, (OT's), the increasing focus on the use of talk-based cognitive therapies aligned to the growing influence of recovery orientated approaches to building functional independence, has led to a change in the balance of their work. Work which previously had seen a greater emphasis on activities – *occupational therapies*.

In response to this shift, and in recognition of the challenges many consumers faced with the talk-based, goal-orientated interventions, several occupational therapy departments in Australia have been training their staff in a model developed locally that combines the

experiential benefits of musical collaboration with associated group discussion (cognitive reflection). This model, known as ‘Rhythm2Recovery’ was first developed by the author to work with Indigenous communities who were challenged by western orientated talk-based approaches, and is now used by professionals across a range of therapeutic disciplines to support people presenting with a wide range of challenges. The Rhythm2Recovery (R2R) model (see fig 1), is an integrated approach that combines both experiential music, with hand-drums and percussion, and reflective discussions. Analogies are drawn from the musical activities to initiate reflective discussions on social and emotional themes relevant to prevention, rehabilitation, and recovery.



Incumbent in the R2R model is a large degree of flexibility in the ratio between the two primary elements – the experiential music making and the reflective discussions, allowing the facilitator to lean towards whichever element is most suitable to the daily needs of the group members. Additionally, no prior musical experience is necessary for delivery of this work, and in

fact, it can be beneficial not to have a musical background in that it can reduce the power differential seen commonly in clinician/client relationships and further the empowerment of the consumer, as all meet as equals (Faulkner, 2017, p.13). The use of hand-drums and percussion and a focus on improvised play and fun, allows people of all capacities to play together, enjoy quick success, and provides opportunities for freedom of expression.

Rhythm, Resilience, and Regulation

Research from the field of neuroscience has solidified our understanding of the way rhythmic music can support emotional regulation. Researchers have demonstrated a clear link between the auditory and motor systems of the brain detailing how neurons in the ear, responding to the rhythm and tempo of music, work in synchronicity with those areas of the brain that regulate our response to stress (Thaut, McIntosh & Hoemberg, 2015). In particular, this reciprocal relationship extends to the motor function of the basal ganglia, a primal region of the brain involved in decision-making, motivation, and emotional processing, often associated with reward and risk evaluation and the associated involuntary responses of fight, flight, freeze & collapse. Dysfunction in this system can lead to poor emotional control (Hilbert et al, 2015).

This has specific implications for addressing neurological changes brought on by exposure to severe stress, recognising that shifts in the stress-response can be mediated by targeted interventions that provide rhythmic, repetitive activation of those impacted neural networks. The rhythmic musical play and specifically targeted exercises within the Rhythm2Recovery model utilises these principles to support regulation and extends this into the social/relational dynamic of group musical connection that strengthens a participant's relational neurobiology, assisting with trauma recovery and acting as a protective factor against future social & emotional challenges.

Auditory cues also influence the autonomic nervous system (ANS), a network that controls other involuntary processes like breathing and heart rate. The autonomic nervous

system is constantly alert to danger, evaluating risk and sending messages in response to sensory inputs. Communal music making, playing in time together, incorporates a process of attunement, entrainment and co-regulation, integrating the different states of the ANS so that these defensive mechanisms are neutralised, and senses of safety and security are restored (Porges & Rossetti, 2018).

Studies of drumming in mental health facilities have shown significant increases in social resilience and mental wellbeing and corresponding reductions in anxiety with these benefits sustained three months on from the completion of a program (Fancourt et al, 2016). From the same study, cytokines –inflammatory immune system markers, were measured and found to have decreased. Lower levels of these same cytokines are linked to positive emotions and improved mental health (Fancourt et al, 2016). Previous research on the impact of the Rhythm2Recovery model with prisoners has shown reductions in depressive symptoms and psychological distress (Ivery, Wood, Rosenberg & Donovan, 2009). Studies of group drumming have also noted impacts on members affective states and their associated impact on attention, perception, memory, and executive function (Thaut, 2005).

Practical Application by Occupational Therapists

The Metropolitan Health Service occupational therapy teams delivered ten themed sessions at several acute mental health inpatient services in the city of Perth, Western Australia, as well as a residential service, providing staged recovery support for people experiencing mental health issues in-between hospital settings and community living. These sessions were based on the R2R session templates provided as part of their training. Each lesson plan focused on a specific theme and provided facilitators with a schedule of rhythmic activities, and discussion points. Themed sessions included Communication, Healthy Relationships, Teamwork, Values & Boundaries, Resilience, Strengths, Managing Emotions, and Self-Belief. Flexibility was critical and session outlines were not rigid but designed as a

guide and able to be adapted to changing circumstances. It was recognised that some admissions can be brief and so every session was designed to support new entries with similar introductory exercises to familiarise group members with the purpose of the program and to gain confidence playing the drum, before beginning activities aligned to the session theme.

Healthy Relationships

1. Start with free rhythm play or practicing a rhythm you may have been learning from a previous session – *always expand from a set rhythm piece to allowing & empowering participants to vary it without losing touch with their Bass.*
2. Introduce the theme with a brief focus on the importance of healthy relationship in relation to happiness and meaning in our lives – as social creatures we thrive on nurturing, supportive relationships. *Use ‘Rumble If...’ questions to help facilitate this discussion.*
3. Run the ‘Focus’ exercise with a preliminary discussion on some of the patterns (Rhythms) we can fall into that undermine healthy relationships. Then run the extension focusing on, and discussing some of the patterns (Rhythms) we recognise that support healthy relationships. Discuss at the end how hard it can be to stop falling into these destructive patterns, and the need to reinforce the positives.
4. Play the ‘Speaker’s Chair’ exercise with a focus on “One thing that supports a healthy relationship”. List these on a white-board and connect to the theme of ‘Values’.
5. Do the ‘Rhythmic Wave’ exercise and discuss how our emotions can impact our relationships – positively or negatively. What are some ways we can manage our feelings, like jealousy, shame or frustration, so they don’t negatively impact our relationships?
6. Introduce the analogy ‘Harmony Drum’ – linking musical harmony to social harmony. Play the ‘Harmony’ exercise and examine some of the things that either allow us to find harmony in our relationships or undermine them.
7. Finish by summarising the learning and allowing for the expression of feelings through free play, then fading to nothing to finish the session.

Example of a Lesson Plan

Implemented as a service improvement initiative, these interventions have received 100% positive consumer feedback and improved consumer measures for anxiety, depression, and self-esteem. Client surveys that were returned showed a 100% positive response to the sessions. Clients reported that the sessions had helped improve their mood and energy. That they felt less stressed and more present and connected than they did prior to the session and that they felt better about themselves.

Feedback was also gained from the use of a photographic affect meter (PAM) to measure both participant affect and emotional state pre and post session, as well as

qualitative staff assessments around several domains including – engagement in the drumming, the discussion and social engagement generally, mood, affect, attention and mental health cognition. Feedback was also sought from staff in relation to their level of wellness and job satisfaction showed that delivering the Rhythm2Recovery program was, for several members, one of the highlights of their week and had improved their overall job satisfaction. Only one contrary staff report was returned that commented on the challenges of engagement with clients in the acute wards.

Discussion

Response to rhythm is a naturally occurring human trait, present across cultures and developed in the womb, (Bianco et al, 2026). Rhythmic music, played on hand drums and percussion is one of the most accessible musical experiences available to individuals without formal musical training. These facets, plus the therapeutic power of group music making generally, to lift mood and foster belonging and connection, make for a useful tool for clinical engagement and support that is supported by this research.

Occupational therapists have always engaged in activity-based therapies, however, in recent years, there has been an increased emphasis on the cognitive therapies that is aligned to a renewed focus on the ‘recovery model’ and recovery goals. Risk aversion has also had an impact on the prevalence of some of these daily activities due to fears of accidents and liability. This shift towards higher-level goals such as restoring relationships, sleep hygiene and managing their own illness aims to reduce readmissions and improve health outcomes. As this balance has shifted, there has been a reduction in opportunities available to consumers who may be too unwell to work on functional goals and feel overwhelmed by the cognitive requirements of the talk-based approaches.

The Rhythm2Recovery model provides occupational therapists and other professionals working in the mental health field with access to one intervention that combines both activity-based

therapy and cognitive approaches, and the benefits inherent in both, whilst also providing flexibility that allows the practitioner to adapt the balance between these two elements to the needs of the individuals within each consumer group at any specific time. The use of analogies to connect the group drum exercises to issues pertaining to members recovery help simplify complex concepts and supports concrete imagery making abstract concepts easier to understand.

In the group music experience people are in relationship and the connection and sense of belonging, that many people dealing with mental health issues find elusive, is present as they play together, and their rhythms entrain. This musical relationship also provides participants with opportunities to practice the social skills necessary for teamwork, communication, and other elements of healthy social interactions – all in a non-threatening environment. The feedback from both clinicians and consumers highlighted this impact on social integration for participants in this study.

Of particular interest in this project was the fact that consumers with histories of psychosis, and other significant mental health concerns were able to participate actively in the sessions. Working at the acute end of mental health impairment comes with significant challenges, including behavioural volatility, self-harm, emotional dysregulation and barriers around trust and communication. Staff burnout is an ongoing issue in these wards. Feedback from this study showcasing high levels of engagement with this challenging demographic and the positive impact it had on stress levels and relaxation were noteworthy. Additionally, the beneficial impacts on staff have relevance for retention; previous studies of drum programs in mental health services have shown their potential to alleviate staff burnout (Newman, Maggott & Alexander, 2015).

Conclusion

Interest in the arts in general, and music in particular, in mental health rehabilitation, has a long history, and is supported by a significant and expanding body of research. Feedback from these service improvement initiatives in Western Australia add one more endorsement to the weight of

that evidence and shows that even brief interventions can improve the daily experience of clients dealing with the most debilitating illnesses. Music reactivates the reward systems that are often nullified by mental health conditions and makes us happy. It provides a social experience that connects us to others, reducing feelings of isolation and involves us in an uplifting and energising physical activity that reduces the lethargy commonly associated with depressive illnesses and their medications. Combined with opportunities for reflection and insight into their daily lives, the R2R model offers clients, and the professionals that support them, a useful tool across the recovery journey.

References

- Bianco, R., Tóth, B., Bigand, F., Nguyen, T., Sziller, I., Háden, G. P., Winkler, I., & Novembre, G. (2026). Human newborns form musical predictions based on rhythmic but not melodic structure. *PLoS biology*, 24(2), e3003600. <https://doi.org/10.1371/journal.pbio.3003600>
- Fancourt, D., Perkins, R., Ascenso, S., Carvalho, L.A., Steptoe, A., & Williamon, A. (2016). Effects of Group Drumming Interventions on Anxiety, Depression, Social Resilience and Inflammatory Immune Response among Mental Health Service Users. *PloS ONE* 11(3): e0151136. Doi:10.1371/journal.pone.0151136
- Fancourt, D., Perkins, R., Ascenso, S., Atkins, L., Kilfeather, S., Carvalho, L., Steptoe, A., & Williamon, A. (2016). Group Drumming Modulates Cytokine Response in Mental Health Services Users: A Preliminary Study. *Psychotherapy and psychosomatics*, 85(1), 53–55. <https://doi.org/10.1159/000431257>
- Fancourt, D. (2026). *Art Cure*. Cornerstone Press. DOI: 10.48558/1b5j-ks17
- Faulkner, S. (2017). *Rhythm to Recovery*. Jessica Kingsley Publishers. ISBN 9781785921322
- Hilbert, K., Pine, D. S., Muehlhan, M., Lueken, U., Steudte-Schmiedgen, S., & Beesdo-Baum, K. (2015). Gray and white matter volume abnormalities in generalized anxiety disorder by

categorical and dimensional characterization. *Psychiatry research*, 234(3), 314–320.

<https://doi.org/10.1016/j.psychresns.2015.10.009>

Ivery P, Wood L, Rosenberg M and Donovan, R. (2009). *An Evaluation of a Therapeutic Intervention using Music “DRUMBEAT” Discovering Relationships Using Music -Beliefs, Emotions, Attitudes, & Thoughts with Alienated Youth*. Health Promotion Evaluation Unit, School of Sport Science, Exercise and Health in conjunction with School of Population Health, The University of Western Australia, Perth. ISBN 9781740521826

Newman, G. F., Maggott, C., & Alexander, D. G. (2015). Group drumming as a burnout prevention initiative among staff members at a child and adolescent mental health care facility. *South African Journal of Psychology*, 45(4), 439-451.

Porges, S.W., & Rossetti, A. (2018). *Music, music therapy and trauma*. *Music and Medicine*, 10(3), 117–120.

Thaut, M. (2005). *Rhythm, music and the brain: Scientific foundations and clinical applications*. Routledge. ISBN 9780415973700

Thaut, M. H., McIntosh, G. C., & Hoemberg, V. (2015). Neurobiological foundations of neurologic music therapy: rhythmic entrainment and the motor system. *Frontiers in psychology*, 5, 1185. <https://doi.org/10.3389/fpsyg.2014.01185n>

Simon’s Bio

Simon Faulkner, BSocSc. (Psychology & Addiction), MCouns., is a leading practitioner in the design and delivery of evidence-based interventions utilising rhythmic music to assist with social and emotional learning and recovery from trauma. He is the author of the book ‘Rhythm to Recovery’ and has contributed to over a dozen published papers and research studies on rhythm-based interventions within therapeutic and educational settings.

Simon has worked with a broad range of clients including young people ‘at risk’, people dealing with drug and alcohol addiction, mental health challenges and developmental disorders, refugees working through trauma and prisoners.

When working in regional Australia with Aboriginal people Simon conceived the multi-award-winning DRUMBEAT intervention as a means to engage clients who were averse to talk-based

therapies. He later went on to design the world's first rhythm-based computer game for the development of social and emotional skills - DRUMBEAT Quest — both programs are used by health and education services in countries across the world.

Simon has extensive experience working cross culturally and has delivered therapeutic interventions and training programs to Aboriginal and Torres Strait Islander communities across Australia as well as 1st Nations communities in both the USA and Canada. Simon has also worked closely with trauma services supporting refugee populations from a wide range of backgrounds.