

DOI: DOI: 10.4172/2472-5048.100039

# Therapeutic Applications for Integrating Rhythm and Reflection in Support of People with Co-occurring Drug and Alcohol and Mental Health Issues

**Simon C. Faulkner\***

Rhythm2Recovery Counselling Services, Melbourne, Australia

**\*Corresponding author:** Simon C. Faulkner, Rhythm2Recovery Counselling Services, Melbourne, Australia, E-mail: [simon@rhythm2recovery.com](mailto:simon@rhythm2recovery.com)**Received date:** April 23, 2018; **Accepted date:** May 04, 2018; **Published date:** May 10, 2018**Citation:** Faulkner SC (2018) Therapeutic Applications for Integrating Rhythm and Reflection in Support of People with Co-occurring Drug and Alcohol, and Mental Health issues. Dual Diagn Open Acc Vol.3 No.2: 5.**Copyright:** ©2018 Faulkner SC. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## Abstract

This article examines the use of rhythmic music in support of people managing co-occurring drug abuse and mental health conditions, and is based on the authors 15 years' experience as a group counsellor working in this field. Expressive therapies are gaining increasing traction as respected intervention techniques for this client group, as the limits of 'talk-based' approaches are exposed. This is particularly true for engaging people in treatment who find discussions confronting or who are uncomfortable with language, including many individuals from minority cultures. Rhythmic music, using hand drums and percussion, is one of the simplest forms of music to introduce into a therapeutic setting and is particularly suited to group therapy. Recent neurological research has showcased the positive impact of rhythmic music for people who have experienced trauma, improving emotional regulation and reducing stress and anxiety associated with relapse. Additionally, experiential therapies such as drumming offer an important balance in residential treatment settings where people may be attending several therapy sessions per day; the result of which can be mental exhaustion. Physical therapies such as drumming can help re-energise clients in these situations, as well as those on sedative medications.

Many services resist the introduction of music into their treatment programs due to a perceived lack of expertise or lack of confidence. This article argues that music is too important as a therapeutic healing tool to be left solely to the musical expert, and that many musical exercises, particularly those with a psycho-educational focus that utilise simple rhythmic hand drumming, can be utilised by therapists, with very little musical training, in a fun, empowering and effective way.

**Keywords:** Expressive therapy; Alcohol and drug treatment; Comorbidity; Drumming; Rhythm

## Introduction

In 2003 I moved with my family to a regional town in the 'wheatbelt' region of western Australian, a rural area similar in size to Ireland or the state of West Virginia, with an economy

heavily reliant on sheep and wheat and with one of the highest densities of Aboriginal Australians on the continent. Working in the drug and alcohol treatment field quickly brought about a realisation that the cognitive based, therapeutic approach that had served me quite adequately up until then was no longer going to suffice. That the cross cultural complexities, the differing world views, and the inter-racial suspicion, that characterised relationships between sectors of this community, meant that language itself was a hazardous and often ineffective communication medium. This combined with the inter-generational trauma, stemming from colonial dispossession and alienation that many of my clients were dealing with, made the development of a trusting clinical alliance based on dialogue highly challenging.

But there were few options! That was my training, that was my methodology, and I was floundering. Into this picture, by chance, came a colleague's suggestion to use drumming – I was not a drummer, but desperation or crises, as we know in the addiction field, is a good motivator. After a crash course in hand drumming, I started integrating rhythmic drumming exercises into my sessions; individual, family and group, and combining these with brief discussions using very simple analogies drawn from the music we made together. And so started a model of rhythm based therapy that has enabled me, and many others in the alcohol and drug treatment field, to work with those who might otherwise have passed us by.

## The Challenge of Engagement

Treatment and prevention starts with engagement, and there are a myriad of factors that make engaging those misusing substances challenging. Amongst these are the continuing stigma attached to both drug and alcohol addiction, and the mental health conditions that so often accompany it, as well as the unpredictable, often rebellious, and frequently isolating lifestyle that many users lead [1]. Additionally, in an increasingly multi-cultural society, there are often challenges associated with language comprehension, cultural attitudes towards drug taking behaviour, and differing world views [2]. Statistics show clearly that cultural minorities, low income earners and people living outside major cities have significantly less access to alcohol and other drug (AOD) rehabilitation services than other citizens [3].

One of the common clashes that occurs due to differing world views revolves around the way learning is acquired. In western academic traditions learning is generally delivered through teaching, and reading, with a strong emphasis on the written word, and factual information. In many other cultures learning is multi-dimensional and often highly experiential. Learning comes through observation and repetition and may involve indirect instruction through storytelling and parables; creative therapies with less verbal emphasis have been useful in engaging people from these backgrounds in treatment for co-occurring substance misuse and mental health conditions [4].

Rhythmic music, using hand drums and simple percussion, is one such expressive therapy and can be found in the cultural healing practices of almost all indigenous societies [5]. Playing music is associated with a wide range of physiological, psychological and social benefits, including increased levels of focus and attention, improvements in memory retention and increases in a broad range of social competencies [6]. In relation to engagement, playing rhythmic music is a fun and accessible entry point to musical participation, requiring no previous experience and a high guarantee of success, which reduces the level of fear that some people carry in relation to their ability to play music at all. Music acts as a bridge between people of all backgrounds and cultures and allows the counsellor to work with people on a level playing field in a culturally sensitive way.

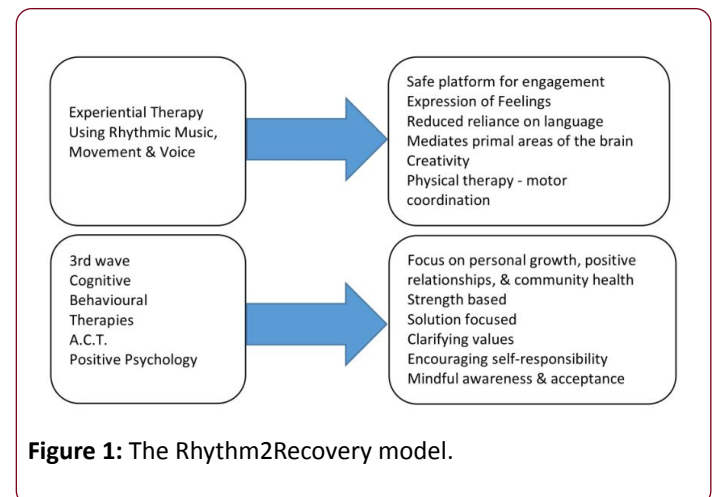
The traditional 'talk based' counselling process, and the traditional counselling environment is often a confronting one, especially for the many people whose co-occurring substance use and mental health issues have lessened their social confidence. Group work, which has a significant presence in many drug and alcohol treatment services, lessens the intensity of that experience by allowing people certain anonymity, but still requires a degree of social exposure that many seek to avoid. In expressive therapies, like a therapeutic drum-circle, that fear and self-consciousness often disappears, as participants are consumed by the immediacy of playing their instrument. The drum itself acts as a source of comfort, allowing an individual's initial anxieties to be expelled through a physical release, and serving as a symbolic shield in its position, held in front of the player.

## Why Rhythm

Not all types of music are beneficial in a therapeutic environment, and some forms of music are particularly problematic in the substance abuse treatment setting. Amongst the major problems with certain types of music is over-stimulation (sensory), hearing damage from music that is too loud and exacerbating cognitive confusion for people with psychosis, schizophrenia and other complex mental health conditions [7]. Soft, slow and harmonious drumming is encouraged with pre-intake assessment designed to assess people's tolerance to the sound. Issues of confidence and anxiety surround the use of music in therapy with many people, including therapists, embedding messages from their youth that they are not musical and have no rhythm. The association between addiction and low self-esteem has been well documented in the research literature [8] and exposure to

playing music can reinforce this if not managed properly. In many ways it can be preferable for the facilitator to have limited musical capacity, so as to reduce the potential for this form of power differential, expert/novice, to undermine the group.

Rhythmic music is popular in the therapy context because of the ease with which people can play their instrument and quickly, often instantaneously, achieve a level of success that banishes their fears and instills confidence. Rhythmic music, particularly hand drumming, is used in cultures around the world to bring people together and build community connection, in an uplifting way [9], and this rhythmic connection leaves people with a sense of belonging and the group with a sense of unity and shared purpose. When people lock together rhythmically a process of 'entrainment' occurs that describes a harmonious form of non-verbal interaction, communication, and collaboration [10]. For those with anxiety around social connection, and who find themselves socially isolated due to substance misuse, this safe introduction to inter-personal connection is often transformative (**Figure 1**).



**Figure 1:** The Rhythm2Recovery model.

The fact that human behaviour itself is often rhythmic, falling into patterns that repeat themselves, allows the clinician to link rhythmic music exercises to different elements of human behaviour that might be either constructive or destructive and examine them in a fun, safe and revealing way. For example, one rhythm can be linked to a specific pattern of behaviour that may serve as a trigger to use, such as associating with specific individuals or 'hanging out' in certain locations. Another complimentary rhythm may represent a different path and clients can be challenged in a fun way with avoiding certain rhythms and holding onto others. The challenge of maintaining a specific rhythm, or pattern of behaviour, under pressure from others in the group to abandon it, can lead to enlightening conversations on how to avoid negative peer influence. Patterns of avoidance, irrational thinking, denial, impulsivity, risk taking, relapse, self-medication, and many others associated with addictive behaviour can be addressed through analogies that link rhythmic music to repetitive behaviour.

## Trauma and Emotional Regulation

There is widespread recognition of the link between exposure to traumatic events, such as physical and sexual abuse,

particularly in childhood, and substance abuse, or addiction [11-13]. It is estimated that over two thirds of those in treatment and up to eighty percent of women, have histories of abuse [14,15]. The co-occurring nature of these conditions has significant implications for treatment; particularly in recognising the way that trauma impacts the brain, and its impact on emotional regulation and the processing of speech. Neurological scans have shown that for people who have experienced trauma the area of the brain associated with speech and reasoning shuts down, while those areas of the brain associated with emotional memory, and an individual's response to stress are heightened [16].

Many leading trauma experts are recognising the limits of 'talk based' therapies, and recommending the use of rhythmic based exercises, including drumming in response to this research [16-18]. Neurons located in brain areas that drive the stress response, hippocampus, amygdala, and medial prefrontal cortex, have been shown to fire synchronously with rhythmic tempo [19], leading to theories that rhythm can be used to help realign these areas when they have become dysregulated due to exposure to traumatic events. In particular, exposure to rhythms that replicate the tempo of the mothers heartbeat at around 60-80 beats per minute (bpm) are known to assist with reducing heart rate, blood pressure and respiration levels [20], and many clients report feelings of calm and relaxation when playing at this rate.

Music is an emotional language, and can be used to transform or replicate emotional states. States of high arousal and a loss of control can be replicated by fast, discordant drumming, and states of calm represented by soft slow beats. Techniques that teach people how to move from one state to the other can assist people gain control in real life situations, particularly when these are transferred to the body. People who are lethargic due to sedative medications prescribed for their mental health conditions can be energised by faster tempos, and those with high levels of anxiety calmed by playing softly and slowly. 'Stimming', those repetitive self-soothing behaviours, such as rocking and tapping, that are commonly used to manage stress, in individuals with high levels of anxiety, work in a similar way, and can be replicated on the drum, or body, with conscious awareness, to reduce stress. Similarly drumming exercises that ask people to maintain a slow tempo on their instrument in the face of their counsellors increasing tempo can assist people to maintain calm in the face of stress. These exercises are given further value when the rhythms themselves are connected through analogy to a real life scenario relevant to an individual's life circumstances.

## Emotions

Emotions play a key role in many aspects of an individual's journey with co-occurring drug use and mental health problems [21]. Many people first turn to drug and alcohol use as a way of managing intense emotions, such as sadness, grief or anger, and these same emotions often resurface during treatment – emotional avoidance, repressing uncomfortable feelings, is closely linked to a range of psychological problems whilst emotional acceptance is associated with psychological health

[22]. Assisting people find constructive ways of expressing the strong feelings associated with their emotional states is a primary strategy for helping reduce their dependence on drugs and stabilise their mental health.

Drumming serves as a useful way for people to release their feelings and to examine other aspects of emotions that impact their recovery. In therapy the drum is introduced as a safe container for the release of feelings, and as vehicle for expressing those feelings for which a client may have difficulty finding words.

In session, the clinician's fall back phrase of "How did that feel" is replaced by "Play how that felt". In many situations, such as loss & grief, words cannot adequately describe the complexity of an individual's feelings, and are open to judgement and misinterpretation. Many people with co-occurring substance and mental health issues also struggle with Alexithymia, [23], where naming feelings becomes problematic. Allowing people the safety and freedom to express their feelings musically reduces the risks associated with emotional release through words and at the same time provides a healthy, cathartic release of the associated physical tension that may otherwise be expelled destructively.

## Mindfulness, acceptance and stress reduction

Stress, is a common factor in the lives of those with substance problems, and co-occurring mental health challenges. Drug use is often a way of coping with the stressors of life, and often results in an on-going cycle where the cure only aggravates the cause. Stress is a significant contributor to relapse [24], and stress reduction techniques are a common feature of many treatment programs. Research into the use of mindfulness in this area has shown significant reductions in levels of cravings, drug and alcohol use itself, and relapse [25]. Additionally, mindfulness has been linked to reductions in hospital admissions for people with psychosis [26].

Drumming at certain tempos has been closely linked to mindfulness practice, with many cultural traditions, including Buddhism, from where the current practice of mindfulness originates, utilising drumming to affect altered states of consciousness and changes in awareness [27]. Studies have shown that slow rhythmic drumming induces theta brain waves that are associated with relaxation and states of calm, as well as improved mental clarity [5]. In group therapy, the physical act of drumming a slow and steady pulse reduces some of the self-consciousness that may attend a spoken directive meditation, particularly with young people, and those who are easily distracted. Additionally, many participants report that the focus of group drumming and playing specific rhythmic parts reduces their hyper vigilance, putting them in the moment and reducing anxieties associated with the past or future.

A significant part of the success of mindfulness practice stems from its ability to enable people to distance themselves from the pain, worries, and resentments that are impacting their lives; factors that often lead to drug and alcohol misuse. Mindfulness is used to develop a sense of acceptance, and reduce judgement by separating the self from one's emotional and physical needs.

This form of awareness allows people to respond in a conscious and more salutary way to unpleasant thoughts or experiences rather than revert to unhelpful reactive or avoidant behavioural responses. In the addiction context, the benefits of this response can be symbolised musically in an exercise where participants reduce the frequency of the notes they play on the drum, leaving more spaces between their beats – ‘letting go of their baggage’, and moving from a crowded and somewhat tense rhythm with no space to one that is open, calm and mindful. At the conclusion of this exercise we will sometimes ask people to think about something positive they would like to bring into their lives and to now add an extra beat or sound to represent this; recognising that it is sometimes difficult to entertain positive change until one can make space for it.

### Relationships and social support

Drug and alcohol abuse and co-occurring mental illness are among the most significant contributors to relationship breakdown, which often involves a loss of trust, as drug users prioritise their need for drugs over and above everything else in their lives. At the same time their behaviour often becomes inconsistent and unpredictable. Family, friend and workplace relationships all suffer at the hand of substance misuse, addiction and mental health challenges, representing a significant cost for society. Critically, social support in the form of nurturing care, emotional warmth and encouragement, as well as concrete action, is central to the recovery process [28]. Many people caught by addiction, and suffering mental health problems find themselves socially isolated, anxious about social interaction, and unable to form the healthy relationships they desperately need to give themselves the best chance of a successful recovery.

Playing communal, rhythmic music is a safe way for people to connect socially. Research has shown that music making releases certain neural peptides associated with increased levels of empathy and trust [29]. A number of studies have shown that this sense of belonging is a common feature of participatory music, especially when people’s rhythms entrain, and that this connection serves to increase social comfort, social acceptance and self-belief [30-32]. Additionally a sense of belonging is a key factor in determining an individual’s level of resilience - that ability to bounce back from adversity [33]. And resilience is in itself a recognised ‘protective factor’ against substance misuse [34]. Playing music with others releases the neurotransmitter dopamine, acting in much the same way as drugs do in targeting the reward centres of the brain, but without the need for the drug of addiction itself [35]. This trait provides a reasoned argument to counter the sceptical nature of many users who believe that the pleasure or relief they achieve through their drug use cannot be achieved by other means. Communal music making using simple rhythmic drumming can be fun, safe and rewarding, and serve as a pathway to increasing social connection, social support and resilience against drug misuse.

Playing music with others also brings into play a wide range of skills, and inter-personal dynamics that the counsellor can develop and explore with their clients. Attention can be drawn to the different social skills utilised including communication

skills; listening, sharing, collaborating and problem solving. In traditional societies the drum acted as a communication medium, and was used to send messages between people over long distances; in therapy this same quality enables it to be used to look at how individuals in the group are communicating with each other and expose underlying problems. The different elements that allow people to play in harmony together can be analysed in relation to how these support social harmony, in particular the importance of trust, consistency and willingness to compromise. This awareness is complimented through skill practice within the drum-circle that can lead to improved relational capacity [31]. Additionally, the presence of open community drum-circles in most large centres around the world offers an on-going opportunity for safe social connection, outside the world of therapy.

### Rhythmic learning, memory and affirmation

Repetition is at the heart of learning; we practice and our skill level increases. Across cultures, much of early learning is enhanced through melodic rhythm. We may learn the days of each month or our maths time tables this way, just as we may learn values and cultural norms through songs and poems. Research into memory retention has shown that musical memories are amongst the most deeply embedded of all and encoded across multiple regions of the brain. A visit to a dementia ward will further demonstrate this as people retain the songs of their youth, after almost all other memories have disappeared [36].

In social psychological research, the use of affirmations has been shown to have lasting effects. Affirming one’s self-worth can overcome threats from other life domains, [37]. Combining affirmations with a rhythmic loading has the potential to extend the value of this process further by embedding it deeper within the memory structures of the brain. Musical exercises that utilise this feature include those drawn from the field of Positive Psychology, and ask participants to identify the strengths they harbour that may be used to support them overcome adversity, as well as those that reinforce the autonomy they have over their own lives and the importance of taking responsibility for their actions.

### Conclusion

In several drug and alcohol rehabilitation centres I visited in Canada, a traditional drumming room, sat comfortably alongside the clinical counselling rooms of counsellors and psychologists. There was a comfortable coexistence between the power of an ancient healing tradition and a western treatment approach that relied more heavily on discussion. In the past we have readily dismissed the learning of traditional peoples, only to discover at our cost the value of that understanding. The use of rhythm in helping support psychological and social healing for those with addiction and mental health challenges is one of these areas where we stand to learn from those who came before us. More and more research is recognising the power of music to heal and support social and emotional growth. It reaches where words cannot, and has broad application, yet still the number of counsellors or AOD treatment organisations actively integrating



music into their practice remains small. Many therapists believe that they are not musical (irrational thinking) or that music in a therapeutic setting is a specialist field, and certainly qualified music therapists carry a deeper knowledge of the use of music in this way; yet this should not preclude others with a different set of skills, from drawing on its benefits to serve their clients. Many simple musical exercises exist that can help people managing or recovering from co-occurring drug and mental health conditions, and these can be utilised without risk; particularly those that focus on the psycho-educational elements of recovery. In fact, counsellors and other psychotherapists may bring to this field a significant skill from their training as reflective practitioners - marrying the discussion element to the musical exercises in order to deepen psycho-social understanding.

As counsellors or therapists we work to extend the perspective of our clients, to show them new ways to address their issues, and this same focus might well apply to the use of music in therapy, in order to extend the reach of our support to those who might benefit from it.

## References

1. Appel PW, Ellison AA, Jansky HK, Oldak R (2004) Barriers to enrolment in drug abuse treatment and suggestions for reducing them: Opinions of drug injecting street outreach clients and other system stakeholders. *Am J Drug Alcohol Abuse* 30: 129-153.
2. Castro FG, Alarcon EH (2002) Integrating cultural variables into drug abuse prevention and treatment with racial/ethnic minorities. *J Drug Issues* 32: 783-810.
3. Pullen E, Ossen C (2014) Barriers to substance abuse treatment in rural and urban communities: A counselor perspective. *Subst Use Misuse* 49: 891-901.
4. Center for Substance Abuse Treatment (2004) Substance Abuse Treatment and Family Therapy. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); Treatment Improvement Protocol, 39.
5. Winkelman M (2000) In Shamanism: The Neural Ecology of Consciousness and Healing. Westport, Conn: Bergin & Garvey.
6. Hallam S (2010) The power of music: Its impact on the intellectual, social and personal; development of children and young people. *Int J Music Edu* 28: 269-289.
7. Dickinson SC, Hakvoort L (2014) The clinicians guide to forensic music therapy, UK: Jessica Kingsley Publishing.
8. Alavi HR (2011) The role of self-esteem in the tendency towards drugs, theft and prostitution. *Addict Health* 3: 119-124.
9. Hart M (1990) Drumming at the edge of magic: a journey into the spirit of percussion. New York: Harper Collins.
10. Trost WJ, Labbe C, Grandjean D (2017) Rhythmic entrainment as a musical affect induction mechanism. *Neuropsychol* 96: 96-110.
11. Wu NS, Schairer LC, Dellor E, Grella C (2010) Childhood trauma and health outcomes in adults with comorbid substance abuse and mental health disorders. *Addict Behav* 35: 68-71.
12. Mills KL, Teesson M, Ross J, Peters L (2006) Trauma, PTSD, and substance use disorders: findings from the Australian National Survey of Mental Health and Well-Being. *Am J Psychiatry* 163: 652-658.
13. De Bellis (2002) Developmental traumatology: a contributory mechanism for alcohol and substance use disorders. *Psychoneuroendocrinology* 27: 155-170.
14. Swan N (1997) Exploring the Role of Child Abuse in Later Drug Abuse. National Institute on Drug Abuse.
15. Najavits LM, Weiss RD, Shaw SR (1997) The link between substance abuse and post-traumatic stress disorder in women: a research review. *Am J Addict* 6: 273-283.
16. Van der Kolk (2014) The Body Keeps the Score: Brain, mind, and body in the healing of trauma. New York: Viking.
17. Ogden P, Minton K, Pain C (2006) Trauma and the body: A sensorimotor approach to psychotherapy. New York: W.W. Norton.
18. Perry BD (2006) Applying principles of neurodevelopment to clinical work with maltreated and traumatised children, in N.B. Webb, Working with Traumatized Youth in Child Welfare, New York: Guilford Press, 27-52.
19. Bernardi L, Porta C, Casucci G, Balsamo R, Bernardi NF, et al. (2009) Dynamic interactions between musical, cardiovascular, and cerebral rhythms in humans. *Circulation* 119: 3171-3180.
20. Griffiths TD, Uppenkamp S, Johnsrude I, Josephs O, Patterson RD (2001) Encoding of the temporal regularity of sound in the human brainstem. *Nat Neurosci* 4: 633-637.
21. Elster J (2009) Strong Feelings: Emotions, addiction, and human behaviour. Cambridge, MA: MIT press.
22. Schpancer N (2010) The Good Psychologist, New York: Henry Holt & co.
23. Morie KP, Yip SW, Nich C, Hunkele K, Carroll KM, et al. (2016) Alexithymia and addiction: A review and preliminary data suggesting neurobiological links to reward/loss processing. *Curr Addict Rep* 3: 239-248.
24. Sinha R (2007) The role of stress in addiction relapse. *Curr Psychiatry Rep* 9: 388-395.
25. Bowen S, Witkiewitz K, Clifasefi SL, Grow J, Chawla N, et al. (2014) Relative efficacy of mindfulness-based relapse prevention, standard relapse prevention, and treatment as usual for substance use disorders: A randomized clinical trial. *JAMA Psychiatry* 71: 547-556.
26. Chadwick P, Taylor KN, Abba N (2005) Mindfulness groups with people with psychosis. *J Behav Cogn Psychother* 33: 351-359.
27. Drake M (2012) Shamanic drumming. Talking Drum publications.
28. Stevens E, Jason LA, Ram D, Light J (2014) Investigating social support and network relationships in substance use disorder recovery. *Subst Abus* 36: 396-399.
29. Chanda ML, Levitin DJ (2013) The neurochemistry of music. *Trends Cogn Sci* 17:179-193.
30. Fancourt D, Perkins R, Ascenso S, Carvalho LA, Steptoe A, et al. (2016) Effects of group drumming interventions on anxiety, depression, social resilience and inflammatory immune response among mental health service users. *PLoS One* 11: e0151136.
31. Wood L, Ivery P, Donovan R, Lambin E (2013) To the beat of a different drum: Improving the social and mental wellbeing of at-risk young people through drumming. *J Public Ment Health* 12:70-79.
32. Camilleri V (2002) Community building through drumming. *Arts Psychother* 29: 261-264.

33. Roffey S (2013) Inclusive and exclusive belonging – the impact on individual and community well-being. *Education and Child Psychology* 30: 38-49.
34. Spooner C, Heatherington K (2004) The social determinants of drug use. Technical report no 228, National Drug and Alcohol research centre, University of Sydney.
35. Salimpoor VN, Benovoy M, Larcher, K, Dagher A, Zatorre RJ (2011) Anatomically distinct dopamine release during anticipating and experience of peak emotion to music. *Neurosci* 14: 257–262.
36. Baird A, Samson S (2009) Memory for music in Alzheimer’s disease: unforgettable? *Neuropsychol Rev* 19: 85-101.
37. Sherman DK (2013) Self-affirmation: Understanding the effects. *Social and Personality Psychology Compass* 7: 834-845.