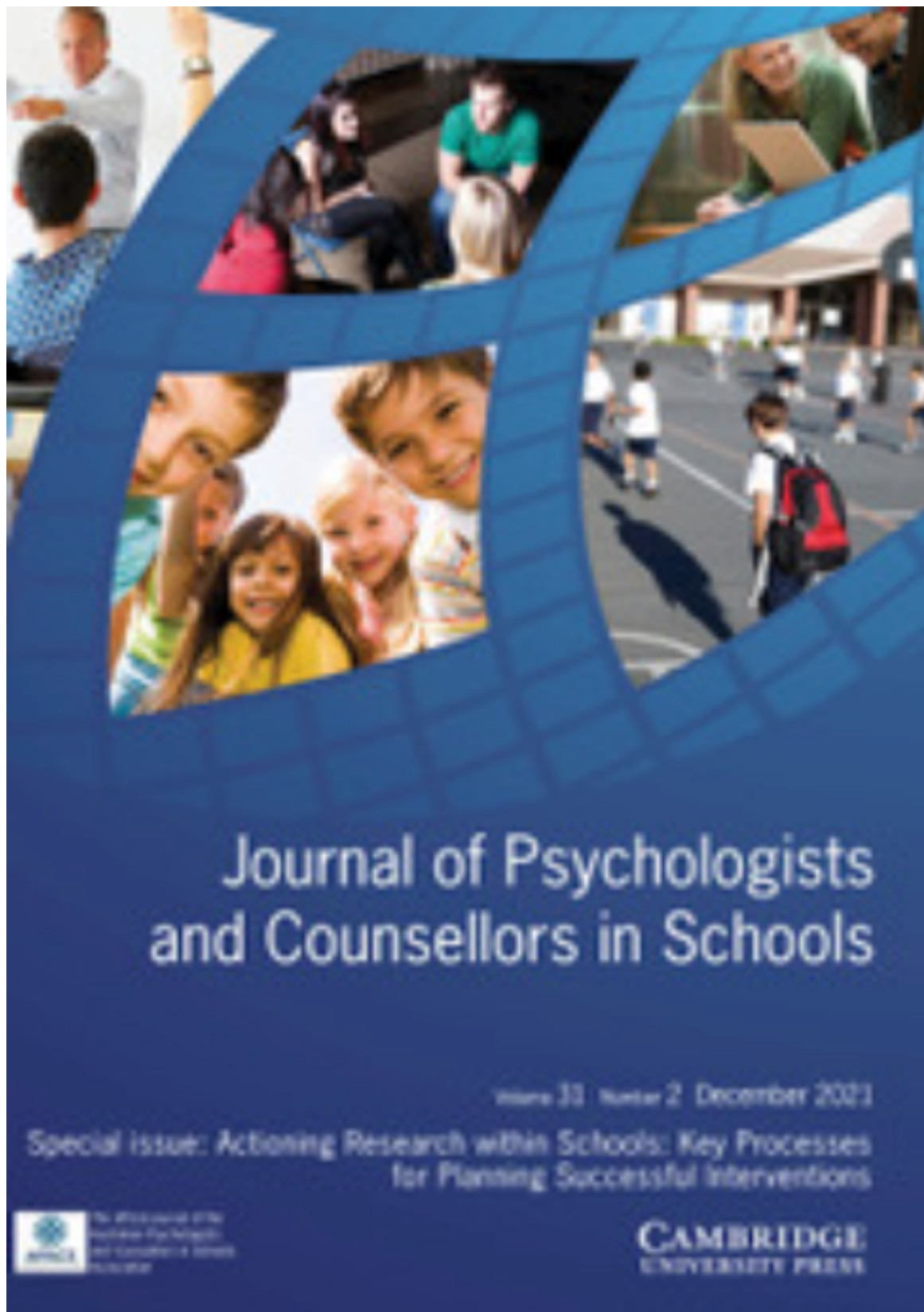


RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH



RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

Abstract

The COVID-19 pandemic has led to a significant increase in demand for mental health services for young people. This demand comes on top of a pre-existing surge in mental health presentations for our youth and places extraordinary demand on support services and the professionals who deliver them. Concurrently it is recognised that engaging and working with young people and their mental health has its own unique challenges, and that many young people find direct ‘talk based’ therapies confronting. This paper examines the use of a model of group work practice combining the benefits of rhythmic music with reflective discussions as a response to the dual challenges of workplace burnout and client engagement. It reflects on the important role music has to play in young lives and how this can be extended into therapy in a fun and uplifting manner. It draws attention to the long history of rhythmic music within traditional healing practices and the emerging scientific evidence supporting this approach.

Keywords: Music, therapy, school, counselling, psychology, rhythm, reflection, education, COVID-19.

Rhythms of Learning – A Model of Practice Supporting Youth Mental Health in the Era of COVID-19

The advent of the COVID-19 pandemic has exacerbated an already challenging level of mental health concerns for young people. Research into the impact of the virus both in Australia and overseas has revealed significant increases in presentations at mental health services and online support services (Kaleveld et al., 2020). Almost a third of the world's population has been through some form of lockdown with the consequent impacts of increased isolation, disruption to existing supports, and increased feelings of stress, frustration, anger, sadness, loss & grief (Nicholson et al., 2020). For young people who had an existing vulnerability to mental health issues, those from lower socio-economic families, Aboriginal, migrant and refugee families or who live in rural communities, the risk is exacerbated even further (Jones et al., 2020).

This new COVID reality coupled with a role that is already significantly impacted by job related stress and burnout (Earle, 2017) creates a perfect storm for school counsellors and school psychologists who will logically be tasked with the major role of supporting this increased demand for mental health support. Whilst many school counsellors and school psychologists enjoy their work there is a growing recognition within these professions of increased stress and unsustainable workloads (McCarthy et al., 2010). One simple way to reduce the demand for school psychological services is to increase the number of students a therapist can support at any one time by encouraging more group work, and reducing the current reliance on intensive one to one counselling. As well as allowing therapists to work with more students at any one time, groups directly address one of the major issues nominated by young people as impacting their wellbeing, namely social isolation (Nicholson et al., 2020).

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

Group work is a natural and effective way to engage young people who come to school with the expectation of working alongside their peers. Meta-analysis of group interventions shows their effectiveness in reducing mental health conditions (Gerrity & Delucia-Waack, 2006; Eiss et al., 2019). The emphasis on ‘natural’ extends to appreciating, normalising and destigmatising many of the issues that impact people’s mental health and the importance of social support, including from their classmates, in overcoming the challenges of these issues. However, group work in the traditional sense, that which relies solely on dialogue, faces significant hurdles in engaging young people, particularly those from vulnerable populations (Kelly & Doherty, 2016).

One response of therapists looking to increase group engagement in school settings is to combine experiential learning activities with traditional group discussions, and increasingly these activities involve the expressive modalities of music and art. In particular, the collaborative nature of group music-making lends itself to the group process, where many of the therapeutic factors of group work are evident. Young people engaged in collaborative music making linked to reflective discussions benefit from both the positive outcomes derived from playing music, including the important element of social bonding, lost to many through COVID related isolation, and those of interpersonal learning and insight associated with facilitated group discussions.

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

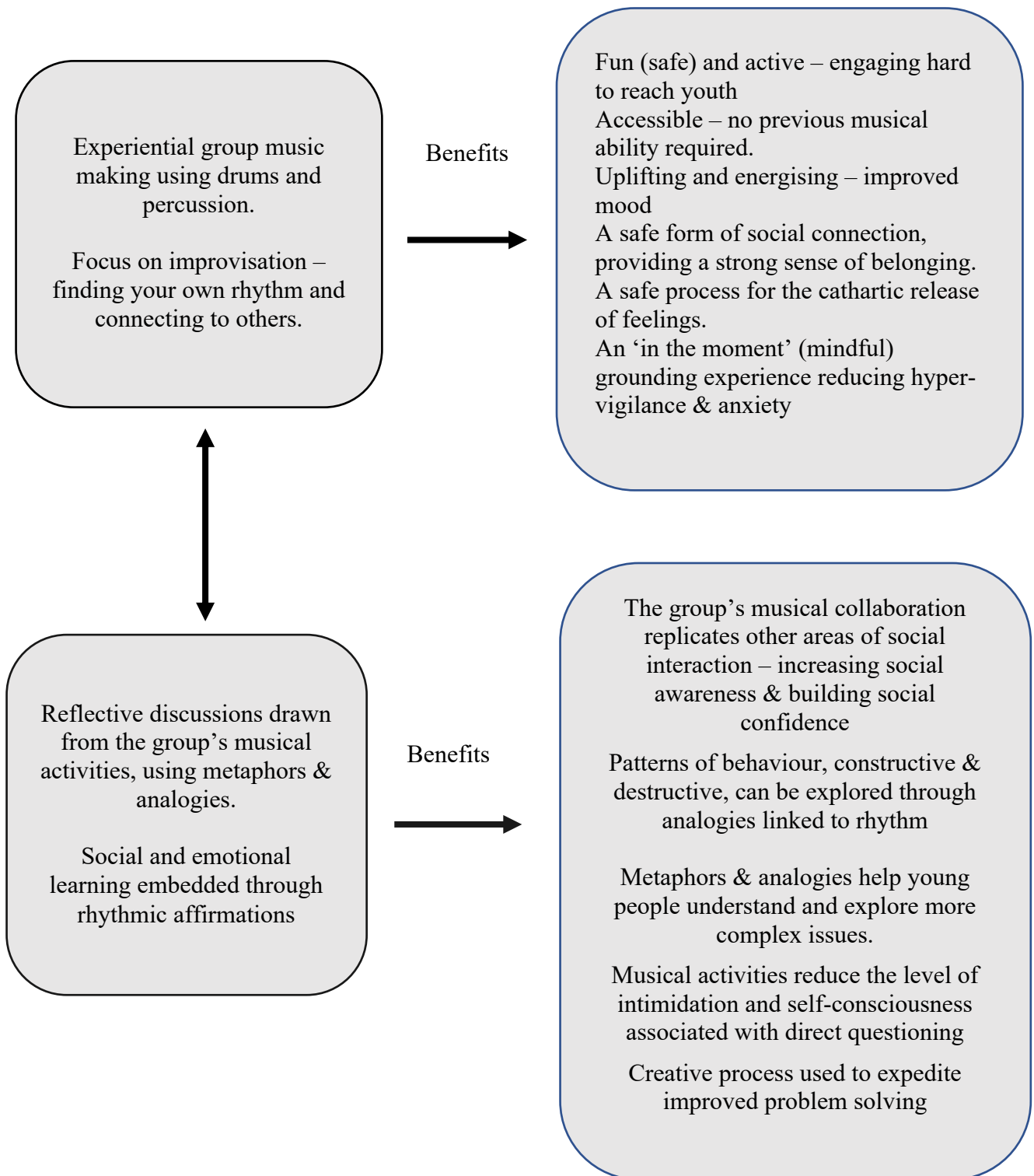


Figure 1

*A Model of Rhythm & Reflection,
Combining Experiential Group Music Making
with Reflective Practice.*

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

The role of music in the lives of many young people is significant, closely contributing to their sense of self and supporting them emotionally through times of trouble (Hallam, 2010). Young people report that music helps them in times of stress to regulate their moods, release negative emotions, problem solve and relax, and that it was a fundamental strategy they employed to enhance wellbeing (Papinczak et al., 2015). Music also has a large role to play in supporting young people's learning with research showing it can improve language acquisition (literacy), spatial reasoning (mathematics) and general intellectual capacity (Hallam, 2010). This learning may be extended to the social and emotional sphere with studies showing that memories formed in association with musical and rhythmic stimuli are embedded deeply and maintain their integrity over time (Jäncke, 2008). Despite a wealth of research evidence supporting the use of music as both an educational and therapeutic aid, the number of music programs in schools in Australia and other western countries is declining (Pascoe et al., 2005), and it is rarely utilised by therapists outside the music-therapy profession.

Many forms of music harbour barriers to inclusion and engagement and there can be resistance from students to participate in therapeutic music programmes due to anxiety from previous experience. The competitive nature of formal music instruction and the requirement to read musical notation limit access for many, and these same barriers can also prevent adult facilitators from utilising music in their practice. Rhythmic music, played on hand drums and percussion, provides therapists with one of the most accessible forms of participatory music and one that has an unbroken history of thousands of years within the traditional healing practices of cultures across the world (Kenny, 2006). These universal cultural traditions make

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

rhythmic music programs particularly useful for school populations that include students from multi-cultural and indigenous backgrounds.

Rhythm based music in this model is played on hand drums and percussion with a focus on improvisation. Students are taught the basics of the instrument and within minutes are playing together in a powerful way that would be unimaginable on any other instrument, within the same time-frame. This accessibility is fundamental to its appeal, and makes for a skill-set that can be readily acquired by any therapist. The group represent a community and their musical interactions replicate many of the social interactions they will utilise on a daily basis. The facilitator can draw attention to a range of social skills and the many links between musical harmony and social harmony. With so many students spending significant time isolated from their peers as a result of the pandemic, and concurrently experiencing a rise in social anxiety (Buckner et al., 2021), this format can provide a safe platform for resuming social connection, practicing neglected social skills, and examining a range of other issues that impact healthy social relationships.

In both music therapy and music education the benefits of improvisation are well documented (Wigram, 2004; Yun & Ji-Eun, 2013). In particular, improvisation is associated with creativity, self-expression and self-efficacy (MacDonald & Wilson, 2014). Improvisation, within the model of this paper, empowers each individual to express themselves freely, (individual identity, individual strengths) but with the proviso of finding connection to the group as a whole (social responsibility, community values). This focus, away from the traditional music instruction, where students learn set rhythm pieces, also reduces the resistance many young people feel in being told what to do (what to play) and the power dynamic between the therapist and their clients. Another key benefit is that it allows

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

for the group to incorporate students whose drumming ability and motor coordination may vary significantly.

Not only does rhythmic music provide an easy access point to music-based interventions but its therapeutic potential is supported by an increasing body of evidence with over twenty peer reviewed studies showcasing benefits across physiological, psychological and social domains (www.rhythmresearchresources.net). In particular, research from the field of neuroscience has demonstrated how rhythmic auditory cues connect to our motor systems to impact the firing rates of motor neurons that directly impact many of our primal functions including our heart rate, respiratory rate, and our stress response (Toyka, & Freund, 2006; Chandra & Levitin, 2013). This synchronisation is at the heart of the process of entrainment, where students playing the same beat and tempo connect not only socially but on a biological level, and through this shared process, empathy and people's positive regard for each other is increased (Overy, & Molnar-Szakacs, 2009).

Fear and anxiety have been amongst the most common issues reported by young people in response to COVID (Nicholson et al., 2020). Music provides a safe conduit for responding to the emotional needs of young people impacted by lockdown and the disruption of the pandemic, and can be used to help identify their feelings and assist in regulating them. Young people often struggle to articulate the complex nature of their feelings and words alone can fail to convey what they are truly feeling, leaving them open to misjudgement. Using music avoids these issues and also the self-consciousness and shame that often accompanies revealing one's feelings - the response between students asked to 'describe their feelings' or 'play their feelings' can be marked. Therapists can also use the stimulating nature of music, played loud and fast, to replicate emotional arousal and practice regulating activities in

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

response. One common regulation exercise involves holding onto a steady tempo (remaining calm and in control), whilst those around you get faster and louder – these techniques are often initiated on the drum but can also be transferred to the body in times of stress.

Rhythm is fundamental to learning on any level with repetition at the heart of skill acquisition. In ancient Greece, Aristotle highlighted the role of repetition in learning by saying, ‘it is frequent repetition that produces a natural tendency’. In oral cultures learning is passed down across successive generations using rhythm and song. In all areas of learning, repetition and practice are central to levels of attainment and skill (Campitelli and Gobet, 2011). Learning through repetition strengthens neural connectivity through myelination, which is central to the development of specific cognitive functions, including memory (Hasan et al., 2019). The importance of repetition extends to learning new behaviours, through repeated observations and practice, and thus is particularly relevant to the counsellor or psychologist working with behavioural issues.

This link between rhythm, repetition and behaviour is amplified when we consider the patterned nature of much of human activity. We are creatures of habit and fall quickly into patterns or routines that may be constructive or destructive. Counsellors and psychologists using rhythm-based interventions can readily draw on this connection to initiate group discussions on a myriad of topics drawn through analogy from the experiential rhythmic musical exercises. A simple example would be to name one particular rhythm as a positive behaviour (perhaps standing up against bullying or not drinking when driving) and then represent the more problematic behaviour (bullying or drink-driving) with another rhythm and have students test themselves to maintain the positive rhythm against the pull of the rest of the group playing the ‘negative’ pattern. Exercises like these, lead naturally into group

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

discussions; in this example on the issue of negative peer pressure and the skills and strategies that can avert it. And do so in an engaging manner that makes participation and learning fun.

The use of rhythm and rhyme is also a common strategy for enhancing learning across cultures. Traditional nursery rhymes often conveyed social messages or moral lessons (Kulshreshtha, 2017), just as rhythm and rhyme are used to teach children the letters of the alphabet, days in each month, or their multiplication tables. Memories lodged through music are known to be long-lasting and robust as is evidenced in people with dementia and Alzheimer's disease who hold on to these musical moments well after others have disappeared (Vanstone, 2010). In supporting social and emotional understanding with young people, exercises that pair rhythmic music to rhyming affirmations on these principles can be deeply embedded in the same way. Students can compose, and play along to, simple raps that articulate social and emotional learning concepts thus incorporating a popular contemporary music style into an engaging and fun, therapeutic activity

The integration of the experiential and the cognitive allows the counsellor or psychologist to draw upon the benefits of both models and deepen the learning outcomes for the student. The use of analogy reduces the confronting nature of overt personal exposure within the group process and is extended by the freedom of each individual to draw their own associations and meaning from this symbology as it relates to their own life experience. Analogies help facilitators develop rapport and help students clarify concepts that otherwise remain beyond their understanding by shifting perspective, removing blockages and opening doors to growth (Blenkiron, 2005). At the same time the experiential nature of accessible rhythmic music allows the therapist to work non-verbally when required, drawing on the

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

social, creative, and expressive benefits that arise from playing music collaboratively with others, and so essential to recovery from the deprivations brought about by lockdown.

The use of rhythmic music also allows the therapist to work somatically with young people and assist them process the pain of their experiences held internally within the body, and release this safely. The resonance of the drum permeates the body and can help loosen the rigidity that is often seen in bodily responses to trauma (American Psychological Association, 2001). The drum is also a useful tool for advancing mindfulness and grounding exercises with young people. Drumming at specific tempos is used by many cultural traditions to enhance states of calm and reflection with studies showing increased levels of theta brain waves that are linked to improvements in mental clarity (Winkleman, 2000).

Whilst there is a significant evidence base for the benefits that young people derive from these therapies (Ho et al., 2011; Wood et al., 2013; Martin & Wood, 2017), there is also research that demonstrates a positive impact on the therapist themselves. A study by Bittman and his colleagues (2003) with long term care workers using group drumming showed a significant reduction in multiple burnout and mood dimensions. Many counsellors and psychologists know the limitations and accompanying frustrations of working with ‘talk based’ therapies and young people (Bradford, 2018). Burnout is a significant issue in the profession (McCarthy et al., 2010), with up to 60% of those working in the mental health professions as a whole reporting emotional exhaustion and feelings of burnout (Morse et al., 2012). These frightening statistics are likely to grow with the demand placed upon these professions in the wake of the COVID crises. Introducing therapies that are engaging, pleasurable and impactful for students and their therapists is a logical way to reduce such indicators.

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

After the dislocation and uncertainty brought on by the impacts of the global pandemic, COVID-19, and with ongoing uncertainty into the years ahead, young people will be needing additional support from those within the school system charged with looking out for them. This growing demand, and the limited availability of professional mental health clinicians, makes the use of evidence-based group programs that positively impact mental health and reduce psychological distress an important option for the school therapist. The use of an integrated model combining rhythmic music and reflective discussions offers many positive benefits to both the students and the practitioner. In particular the joy and sense of connection and belonging that playing music with others can bring. Thankfully there are now several well-researched, therapeutic programs utilising this model that are available to therapists and educators.

In the past we have learned costly lessons by ignoring the knowledge of those who have come before us. Many continue to view music, particularly rhythmic music, as a simple vehicle for fun and entertainment. Much of the power of music cannot be measured according to the scientific method but research is increasingly validating what our indigenous ancestors have known for thousands of years; that the healing properties of rhythmic music are significant and have a central role to play in our mental health and that of our youth. Now, in the face of the significant challenges brought on by the disruption and uncertainty of the pandemic, this traditional form of community music offers young people a path to healing, connection and regeneration, and school therapist - a practical, effective and rewarding option to support them.

References

- American Psychological Association (2001). *Stress effects on the body*.
<https://www.apa.org/helpcenter/stress/effects-musculoskeletal>
- Bittman, B., Bruhn, K. T., Stevens, C., Westengard, J., & Umbach, P. O. (2003). Recreational music-making: a cost-effective group interdisciplinary strategy for reducing burnout and improving mood states in long-term care workers. *Advances in Mind-Body Medicine*, 19(3-4), 4–15.
- Blenkiron, P. (2005). Stories and analogies in cognitive behaviour therapy: A clinical review. *Journal of Behavioural and Cognitive Psychotherapy* 33(1), 45-59.
- Bradford, S. (20128). Engaging young people in therapy. *InPsych*, 40(4)
<https://www.psychology.org.au/for-members/publications/inpsych/2018/August-Issue-4/Engaging-young-people-in-therapy>
- Buckner, J. D., Abarno, C. N., Lewis, E. M., Zvolensky, M. J., & Garey, L. (2021). Increases in distress during stay-at-home mandates during the COVID-19 pandemic: A longitudinal study. *Psychiatry research*, 298, 113821.
<https://doi.org/10.1016/j.psychres.2021.113821>
- Campitelli, G. and Gobet, F. (2011) Deliberate practice necessary, but not sufficient. *Current Directions in Psychological Science* 20, 5, 280–285.
- Chandra, M.L. & Levitin, D.J. (2013). The neurochemistry of music. *Trends in Cognitive Sciences* 17(4), 179–193.
- Earle, Kym-Myree, Burnout in NSW School Counsellors: Relationships between mindfulness, career-sustaining practices and work setting, *Journal of Student Engagement: Education Matters*, 7(1), 71-96.

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

- Feiss R., Dolinger S.B., Merritt M., Reiche, E., Martin, K., Yanes, J.A., Thomas, C.M., & Pangelinan, M. (2019). A systematic review and meta-analysis of school-based stress, anxiety, and depression prevention programs for adolescents. *Journal of Youth Adolescent*, 48(9), 1668-1685. <https://doi.org/10.1007/s10964-019-01085-0>
- Gerrity, D., & Delucia-Waack, J.I. (2006). Effectiveness of groups in schools. *The Journal for Specialists in Group Work* 32(1), 97–106.
<https://doi.org/10.1080/01933920600978604>
- Geyer, P., & Woods, A. (Eds). (1999). *The critique of pure reason: The Cambridge edition of the works of Immanuel Kant*. University Press. ISBN 978-0-5216-5729-7
- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education* 28(3), 269-289. <https://doi.org/10.1177/0255761410370658>
- Hasan, M., Kanna, M.S., Ramkrishnan, A.S., Iqbal, Z., Lee, Y., & Li, Y. (2019). Schema-like learning and memory consolidation acting through myelination. *The Federation of American Societies for Experimental Biology Journal*, 33(11).
<https://doi.org/10.1096/fj.201900910R>
- Ho, P.L., Tsao, J.C., Bloch, L., & Zeltzer, L.K. (2011). The impact of group drumming on social-emotional behavior in low-income children. *Evidence-Based Complementary and Alternative Medicine*. <https://doi.org/10.1093/ecam/neaq072>
- Jäncke L. (2008). Music, memory and emotion. *Journal of Biology*, 7(6), 21.
<https://doi.org/10.1186/jbiol82>
- Jones, B., Woolfenden, S., Pengilly, S., Breen, C., Cohn, R., Biviano, L., Johns, A., Worth, A., Lamb, R., Lingam, R., Silove, N., Marks, S., Tzioumi, D., & Zw, K. (2020). COVID-19 pandemic: The impact on vulnerable children and young

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

people in Australia. *Journal of Paediatrics and Child Health*, 56, 1851-1855.

<https://doi.org/10.1111/jpc.15169>

Kaleveld, L., Bock, C., & Maycock-Sayce, R. (2020). *COVID-19 and mental health*. Centre for Social Impact.

https://www.csi.edu.au/media/uploads/csi_fact_sheet_covid_and_mental_health.pdf

Kelly, B.L., & Doherty, L. (2016) Exploring Nondeliberative Practice through Recreational, Art, and Music-Based Activities in Social Work with Groups, *Social Work with Groups*, 39 (2-3), 221-233. <https://doi.org/10.1080/01609513.2015.1057681>

Kenny, C. (2006). *Music and life in the field of play: An anthology*. Barcelona Publishers

Kulshreshtha, C. (2017). Nurse rhymes: A linkage between society and culture.

International Journal of English Language, Literature & Humanities, 5(9).

Retrieved March 19, 2021 from

<https://www.ijellh.com/OJS/index.php/OJS/article/view/2299>

MacDonald, R.A., Wilson, G.B. (2014). Musical improvisation and health: a

review. *Psychology of Well-Being* 4, 20. [https://doi.org/10.1186/s13612-014-0020-](https://doi.org/10.1186/s13612-014-0020-9)

[9](https://doi.org/10.1186/s13612-014-0020-9)

Martin, K.E., & Wood, L.J. (2017). Drumming to a new beat: A group therapeutic drumming and talking intervention to improve mental health and behaviour of disadvantaged adolescent boys. *Children Australia*, 42(4), 268-276.

McCarthy, C., Kerne, V., Calfa, N., Lambert, R. & Guzmán, M. (2010). An exploration of school counsellors' demands and resources: Relationship to stress, biographic, and caseload characteristics. *Professional School Counselling*, 13(3), 146–158.

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH MENTAL HEALTH

- remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, 39, 341–352. <https://doi.org/10.1007/s10488-011-0352-1>
- Nicholson, S., Newell, S. & Collyer, B. (2020). *Impacts of COVID-19 on children and young people who contact Kids Helpline*. Australian Human Rights Commission. <https://humanrights.gov.au/our-work/childrens-rights/publications/impacts-covid-19-children-and-young-people-who-contact-kids>
- Overy, K. & Molnar-Szakacs, I. (2009). Being together in time: Musical experience and the mirror neuron system. *Music Perception* 26, 489–504.
- Papinczak, Z., Dingle, G.A., Stoyanov, S.R., & Hides, L. (2015). Young people’s use of music for wellbeing. *Journal of Youth Studies* 18(9). <https://doi.org/10.1080/13676261.2015.1020935>
- Pascoe, R., Leong, S., MacCallum, J., Marsh, K., Smith, B., Church, T., & Winterton, A. (2005). *National review of school music education: Augmenting the diminished*. Australian Government Department of Education, Science & Training https://researchrepository.murdoch.edu.au/id/eprint/9459/1/music_review_reportFINAL.pdf
- Sommerlad, A., Marston, L., Huntley, J., Livingston, G., Lewis, G., Steptoe, A., & Fancourt, D. (2021). *Social relationships and depression during the COVID-19 lockdown: longitudinal analysis of the COVID-19 social study*. Cambridge University Press. <https://www.cambridge.org/core/journals/psychological-medicine/article/social-relationships-and-depression-during-the-covid19-lockdown-longitudinal-analysis-of-the-covid19-social-study/C4EC01109B848D2306416BFDC33787C5>
- Toyka, K.V. & Freund, H-J. (2006). Music, motor control and the brain. *Brain*, 129(10), 2794 – 2798. <https://doi.org/10.1093/brain/awl231>

RHYTHMS OF LEARNING – A MODEL OF PRACTICE SUPPORTING YOUTH
MENTAL HEALTH

- Vanstone, A.D., & Cuddy, L.L. (2010). Musical memory in Alzheimer disease, *Journal of Neuropsychology, Development, and Cognition, Section B, Aging, Neuropsychology and Cognition* 17, 108-128.
- Wigram, T. (2004). *Improvisation: Methods and techniques for music therapy clinicians, educators, and students*. London: Jessica Kingsley Publishers.
- Winkelman M (2000) *In Shamanism: The neural ecology of consciousness and healing*.
Bergin & Garvey. ISBN-13: 978-0897897044
- 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. *Journal of Public Mental Health* 12(2), 70-79.
- Yun, Y-B., & Ji-Eun, K. (2013). The effects of the Orff approach on self-expression, self-efficacy, and social skills of children in low-income families in South Korea. *Child Welfare* 92(4), 123-158