## MUS508 – Assignment Two

MUSIC THERAPY TOPIC – A REVIEW OF THE IDEAS, RESEARCH AND POTENTIAL THERAPEUTIC BENEFITS (WORD COUNT – 1950)

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## <u>Music Therapy Topic – A Review of the Ideas, Research and</u> <u>Potential Therapeutic Benefits</u>

Music therapy (MT) is a large topic pertaining to be used as a tool in many aspects of life including health, education and everyday environments. Usage is widespread however an interest in the therapeutic field has emerged, with music being both successful and unsuccessful with its uses as a complementary therapy in different branches of medicine. This essay aims to critically analyse the uses of music therapy with the therapeutic aspect being placed under scientific scrutiny. Current thinking on the topic will be considered to compare and contrast ideas surrounding music therapy.

A lot of primary research for music therapy began as anecdotal writings. In 1948, Schullian and Schoen proceeded to write sixteen essays covering aspects of usages of music in medicine. This writing can be described as non-scientific simply because it does not follow any scientific testing to prove the contents of the writing (O'Malley, 1949). It does however open dialogue to begin research on this topic. Therefore, the usage of anecdotes, while not being a testable method can be used to form a hypothesis that can become testable (Limb, 2011).

This early start to testing music therapy suggests why it is not used as widespread as other therapies and reviewing the research of the time; why when looking at the states of cognitive therapies, music therapy is still in the early stages. Cognitive behavioural therapy derived from psychologists such as Skinner (1974) and Ellis (1962) using schema in controlled trials which were scientifically correct at the time. Music theory however, used case by case trials with little scientific method (O'Malley, 1949).

A further review of the 1948 essays 'Music and Medicine' from R. M. Ogden (1948) shows the lack of scientific explanation by the authors of each essay within this book. The lack of specifics shown, although a very dated book by todays modern age shows us the issue with being too relaxed about taking a published work as whole truth; without any vigorous scientific testing anything can be pushed to be made true.

This is a common theme within music therapy, while researching for this essay, a large portion of the supporting research was qualitative. M.J. Silverman's (2008) journal about the quantitative data for music therapy states that music therapy is indeed in its infant stages and should therefore need more research before further progressing from being a support therapy to a standalone therapy. The potential therapeutic benefits from this are therefore unscientific in usage.

The omission of testable data surrounding music therapy, most notably quantitative data is a common theme upon researching (Moore 2015). Shepard (1975) discusses the uses of qualitative and quantitative data. The idea of Quasi-Experiments becomes apparent; the usage of mostly qualitative data can be used for this with the quantitative data to support. This might be more useful in a clinical view which would then distinguish music therapy as a testable therapy with data that is more scientifically vigorous.

On the other hand, there is also research by music therapists supporting the usage of qualitative data in the scientific field to create a full view of all aspects, especially as a lot of the research is for niche groups (O'Callaghan, 2005). In review of the potential therapeutic benefits, clinicians and trained music therapists must be critical of the data received from

sources as music therapy is indeed in its infant stages; a lot of the research proposed will have unresearched flaws.

A major assumption made in music therapy is the idea that music is a common language across the world. The globalisation of music therapy relies on the idea that research done into a certain style of playing will indeed translate as intended in other parts of the world. While the fundamentals of music; rhythm, pitch and harmony are a universal idea, the way they are perceived is different. As outlined in 'The Singing Neanderthals', music cannot be translated between musical cultures. This might be because of the non-referential idea of music; the notes do not mean anything on their own. Instead, it is the template that is built around the extra musical meaning that can evoke emotion. Which will be different for everyone. With this idea in place, upon reviewing the potential therapeutic benefits of music therapy, one must remember that a lot of the research will have to be focused upon a certain culture, which can be localised to even the country the study is generally from. It also makes each music therapy session different; as perception is something deeply personal for every person.

A study undertaken by McDermott et all (2016) concludes that discerning harmonic intervals by Bolivian citizens of the Tismaine village is different to the US trained musician. Dissonance for the Bolivians was perceived differently to the US musicians also. These two fundamental ideas of music mean for music therapy, certain emotions a therapist is hoping to create with their methodologies might not fully work. It does however show that music can indeed make a person feel something about the fundamentals of music. The therapeutic benefits therefore, can be researched and localised to areas of the world. While this makes music therapy less commercially viable in comparison the cognitive behavioural therapy, it does provide other options for a therapist. This can serve for a reason as to why music therapy is not as widespread; it is not the therapeutic aspect that is inherently flawed, it is the methodology that needs further refinement in order to provide a full therapeutic benefit.

Caution must be used as a president when reading about therapeutic benefits of mediums. For many, music therapy is seen as a cheaper alternative to mainstream therapy that works on a similar level, comparisons to cognitive behavioural therapy (CBT) is very common.

A common thread while researching the both cognitive behavioural therapy and music therapy is the sheer difference in the amount of research done on both. Research undertaken by B-C. Choi. (1996) looking at the attitude towards music therapy inadvertently pointed out the lack of data surrounding it as a subject. Reviewing this, it leans towards the idea that even though music therapy might be a cheaper alternative to cognitive behavioural therapy, it is not used on its own in primary care. Instead, a lot of music therapy aims to alleviate symptoms that a patient might be facing to insight change that will then cure the underlying issue (Gallagher et al, 2018).

It is impossible to critically analyse data that does not have enough evidence or widespread usage. While Silverman (2008) did state that music therapy is in its early stages, it is counteracted by the fact that the idea of music therapy has been around for decades. While cognitive behavioural therapy is more widespread, it might therefore be worthwhile to document the therapeutic usage of music therapy in places where cognitive behavioural therapy cannot happen.

These specialist areas, while using less patients can explain why there is a lack of data. Research undertaken by Fang et al. (2017) reviews the potential of music therapy in cognition of Alzheimer's disease. The literature analysis leads to the conclusions that music therapy can indeed be considered to help reduce the effects of cognitive decline and improve neuropsychiatric symptoms. This is a glowing literature to support music therapy however, it does recognise the limits. Fang et al. concludes that patients 'should not discontinue medications during MT [(music therapy)]'.

A comparison to cognitive behavioural therapy however, are the criticisms both therapies face. Derived from behavioural therapists of the 1970s cognitive behavioural therapy is seen to be outdated in todays climate with new research on a 'Third Wave' of cognitive behavioural therapy including more up to date research and practice (. Music therapy might therefore play more of a role in distinguishing new therapies.

A lot of research also focuses on the usage of music therapy to treat depression. Depression, a mental illness commonly seen to have both biological and psychological causes has used cognitive music therapy as a means of helping the side effects; while not providing a cure, Hanser and Thompson's (1994) study argues that music therapy shows efficacy for helping clinically diagnosed depression patients.

Scientific issues exist within this study however, the small sample size (30) meaning that a generalisation of the results cannot occur. Double blind conditions did not exist leading to possible interpreter bias and results have not been replicated. Furthermore, it is worth mentioning that peer reviews of this study (Thatchil, Mohan, Bhugra. 2006) found that the non-replicable result of the small sample size leads to a lack of scientific basis.

Further research into music therapy and depression, including an NHS thinktank on the idea proposes the idea that music therapy is good for short term mood changes that can invoke change for a person; it is not however a medical alternative for CBT and medicine. The low risk associated with music therapy allows for it to be used in this way as outlined by most studies supporting its' use.

Therefore, a conclusion can be met within this research; while small scale studies exist for the usage of music therapy in many ways within the treatment of depression, no evidence or scientific study has been substantial enough to prove the efficacy in just the usage of music therapy instead of other treatments.

Another area to research when reviewing the potential therapeutic benefits is the side of music therapy that is grossly non scientific and heavily focused around curing a person in a 'quick fix'. This side of music therapy or sham music therapy largely focuses around healing a person or their soul (The Minds Journal, 2019). This leads to articles with no reliable sources or research to support the therapeutic claims. Therefore, the conclusion that no discernible therapeutic benefit of this sham music therapy can be applied. It is in fact, harmful to the viewpoints of music therapy within the medical community (Elisabeth, 2019).

While hard to research this aspect, it is worth mentioning that most of the research surrounding sham music therapy comes in the form of case studies and journal articles from people who are largely not professionals in the area of study. Music therapy in this case is thrown about like a buzzword. For example, a study undertaken comparing music therapy by a trained therapist shows efficacy of the therapy in stroke patients (Scholz et al. 2016). However, the sham music therapy, focused around movement therapy in this study has feedback showing very little improvement or even non-significant change during testing

This study's focus was to show the usage of real music therapy, providing two outcomes; the therapeutic benefits of the real music therapy provides a groundwork for further study. As outlined by the researchers, this is only an early stage study as a lot more needs to be done to finalise a fully functional therapy with fully measurable outcomes. But the idea of sham music therapy in this context show why it is dangerous to assume a music therapy will work based on no research and a non-trained therapist. This could even be harmful to patients as it prolongs the time it takes for a patient to receive curing treatment instead of the fake treatment, an ethical dilemma that overviews why studies into music therapy are important to be scientifically accurate and without any holes.

From these points, it is easy to conclude music therapy with its ideas, research and potential therapeutic benefits has a lot more research needed to be completed for it to be considered a fully formed therapy. A distinction between music therapy and sham music therapy also needs to be outlined so that the medical community fully recognised its usage within the medical world. More research would also be beneficial for the therapeutic aspects to be fully defined. The current thinking for music therapy leads to an open investigation into how it might be defined later down the process, as it is still early days for music therapy.

## Reference list

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington Dc: American Psychiatric Association.

Choi, B.-C. (1997). Professional and Patient Attitudes about the Relevance of Music Therapy as a Treatment Modality in NAMT Approved Psychiatric Hospitals. *Journal of Music Therapy*, 34(4), pp.277–292.

Darnley-Smith, R. and Patey, H.M. (2003). *Music Therapy*. London; Thousand Oaks, Calif.: Sage Publications.

Elisabeth, N. (2019). An Exploration into the Perception of Music Interventions in Hospitals Amongst Healthcare Professionals. *Voices: A World Forum for Music Therapy*, [online] 19(1). Available at: https://voices.no/index.php/voices/article/view/2711 [Accessed 30 Dec. 2019].

Fang, R., Ye, S., Huangfu, J. and Calimag, D.P. (2017). Music Therapy is a Potential Intervention for Cognition of Alzheimer's Disease: a Mini-Review. *Translational Neurodegeneration*, [online] 6(1). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5267457/ [Accessed 9 Dec. 2019].

Gaudiano, B.A. (2008). Cognitive-Behavioural Therapies: Achievements and Challenges. *Evidence-Based Mental Health*, [online] 11(1), pp.5–7. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673298/ [Accessed 11 Dec. 2019].

Limb, C.J. (2011). The Need for Evidence in an Anecdotal World. *Trends in Amplification*, [online] 15(1), pp.3–4. Available at:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4040832/ [Accessed 22 Dec. 2019].

Magill-Levreault, L. (1993). Music Therapy in Pain and Symptom Management. *Journal of Palliative Care*, 9(4), pp.42–48.

McDermott, J.H., Schultz, A.F., Undurraga, E.A. and Godoy, R.A. (2016). Indifference to Dissonance in Native Amazonians Reveals Cultural Variation in Music Perception. *Nature*, [online] 535(7613), pp.547–550. Available at:

https://www.nature.com/articles/nature18635?error=cookies\_not\_supported&code=37fdc319 -5709-4997-8d98-47d7be785678 [Accessed 28 Dec. 2019].

Mithen, S.J. (2006). *The Singing Neanderthals: The Origins of Music, Language, Mind, and Body*. Cambridge, Massachusetts: Harvard University Press, pp.11–27.

Moore, S.A. (2015). Quantitative and Qualitative Research of Music Therapy Interventions with Adult Mental Health Populations: A Descriptive Analysis to Guide Future Research and Clinical Practice. *Florida State University*, pp.13–15.

NHS Choices (2011). *Music Therapy "Helps Treat" Depression - NHS*. [online] NHS UK. Available at: https://www.nhs.uk/news/mental-health/music-therapy-helps-treat-depression/ [Accessed 30 Nov. 2019].

Ogden, R. (1948). Review Reviewed Work(s): Music and Medicine. *The American Journal of Psychology*, 61(4), pp.595–598.

O'Malley, C. (1949). Review Reviewed Work(s): Music and Medicine. *The University of Chicago Press*, 40(3).

Schoen, M. and Schullian, D.M. (1948). Music and Medicine. Freeport.

Scholz, D.S., Rohde, S., Nikmaram, N., Brückner, H.-P., Großbach, M., Rollnik, J.D. and Altenmüller, E.O. (2016). Sonification of Arm Movements in Stroke Rehabilitation – A Novel Approach in Neurologic Music Therapy. *Frontiers in Neurology*, 7(1664–2295).

Silverman, M.J. (2008). Quantitative Comparison of Cognitive Behavioral Therapy and Music Therapy Research: A Methodological Best-Practices Analysis to Guide Future Investigation for Adult Psychiatric Patients. *Journal of Music Therapy*, 45(4), pp.457–506.

Skinner, B.F. (1974). About Behaviourism. Vintage.

The Minds Journal (2017). *This Is How You Know If Your Soul Is Tired and Ways To Fix it*. [online] The Minds Journal. Available at: https://themindsjournal.com/know-soul-tired-ways-fix/ [Accessed 27 Nov. 2019].