The use of Altshuler's Iso- Principle in alleviating mood disturbances in those affected by emotional overload.

Summer G. Smith

Department of Psychology & Behavioral Sciences, Rochester University

PSY4893-VA01: Psychology Capstone Seminar

Dr. Jessica Matyas

December 9, 2022

ABSTRACT

The relationship between mood regulation through music and those dealing with less severe mental illnesses such as anxiety, chronic stress, and emotional overload is to date, not well expanded on. Mood irregularities and less severe mental disorders affect most of the population daily; music is an affordable and easily accessible tool that can be used as a tactic to maintain mental health of who would like to minimize mood irregularities. The present study aimed to explore mood regulation through music by matching musical genre to a current emotional state with attempts to regulate anxiety, stress, and less severe mental health disorders as well as acquiring an understanding for music as a mood regulator for the benefit of personal emotional improvement. This study further explored the relationship between hours of music listened to per week and the ability to influence a current emotional state with music. Additionally, exploring topics of comparison such as having a previously diagnosed mental health condition and the willingness of an individual to partake in mood matching therapy. The present research has utilized a quasi-experimental design, having one singular group for study. Participants were expected to complete an online survey, containing questions on their frequency of listening to music, emotional influence of musical composure, and ending with a question on how participants would proceed with the use of music as a mood regulator following their involvement within the study. Analysis demonstrated a trend towards significance in relation to the variables of having been previously diagnosed with a mental health condition and the willingness to use music as a mood regulator in place of prescription medications. The survey has concluded that there is no significant relationship between favored genre type and willingness to participate in mood regulation through music. The results of this study also conclude that mood matching therapy should not be overlooked as a mindfulness-style anxiety

management technique because it is easily accessible but rather turned to firsthand as a tool for recovery, for mood regulation through music is a principle of daily life that can be utilized to decrease mood irregularities of those with less severe mental health disorders.

INTRODUCTION

The research regarding music therapy is plentiful, while the information relating to mood matching music specifically is lacking and that of what is available, is dated information. In contrast to the literature available for review, a current concern is how many of these studies have been forgotten or eliminated from pursuit due to the insufficient (or inadequate) availability of current research. New exploration of the value pertaining to mood matching music as a regulatory tool for emotional overload, chronic stress, anxiety, and other less severe mental illnesses has been established, explainable through Altshuler's Iso-Principle, as independent mood regulation is possible when the tools are readily available and widely understood by the effected population. Mood regulation by matching current feeling to musical composition is an effective tool to be used as an outlet of emotional expression. Acquiring an understanding of music as a mood regulator provided the benefit of emotional improvement to willing participants. The benefit of this study is to implement the Iso-principle as a formal method of treatment for those experiencing emotional discomfort. Of the research to further be explored it is different from Altshuler's Iso-principle in way of mood matching musical composition to one's current emotional standing, instead offering fewer options of musical score than the research currently being presented.

The topics under consideration proceed to be valuable research in relation to the new ideas that have been presented. The data available regarding the Iso-principle is comprised of a data ranging in a wide span of time, as the Iso-principle was originally founded in the late nineteen-forties. Music therapy is a widely understood and respected form of clinical therapy, but there is minimal data in congruence with mood matching techniques. *Health & Medicine Week*, (Nara Institute of Science and Technology, (2022), provides a perspective on the importance of

understanding that musical experience varies from person to person. Emotional induction is a main theme of this study which reestablished the value of a customized musical experience. The importance of understanding a participants current emotional standing has been proven by previous research. Congruently, there has been a study done more recently provided by *PloS ONE*, (Mallik, A., & Russo, F. A. (2022), a publication regarding participants effects when treated with music and auditory beat stimulation for the mental illness of anxiety specifically. Such study presented the participants with two alternative sounds, one being more upbeat, while the other calm. The sound was chosen for the individual based on their emotional standing prior to the start of the clinical trial. While such tactic resembles Altshuler's Iso- principle, the variety of emotion offered was limited. By offering the participants only two options of sound the data gained was wide ranging rather than specific to an individual's specific needs.

Another main concern of the topic is the lack of awareness to one's ability utilize the Iso principle. Research has been provided by *PloS One*, (Sanfilippo, K. R. M., Spiro, N (2020), highlighting the willingness to incorporate music into one's daily life. The article had established that people listen to about 18 hours of musical composition on a weekly basis. Music is one of the many parts of society that have been altered by the worlds rapidly changing relationship with technology. In agreeance with another article created by PloS One, (Schafer, T. (2016), it was stated that music serves many functions. Music accessible at a nearly unlimited availability can support intellectual stimulation, coping mechanisms, and even social identity. Such study revealed that self-awareness, mood regulation and arousal were concepts of forethought to those listening to music. Acknowledging the importance and value of emotional response created by music allows individuals to comprehend the value of having an easily accessible mood regulatory tool like music at their continuous disposal in times of emotional overload.

A following issue as it relates to awareness and accessibility is the lack of research presenting successful data, contributing the diminishment of validity in terms of music therapy and the importance of such application. Music does evoke emotional on a personal level. An article provided by the Australian Journal of Music Therapy, (Smith, M. (2008), shared results that a singular session of music relaxation therapy can be beneficial to those who struggle with a multitude of anxiety levels. While the findings are noteworthy the contents of such study are far too dated to be considered significantly relevant as a current medical value. Pakistan Journal of Psychological Research, (Naz, S., Khan, M. J., (2021), presents data supporting the previous research, while elaborating on the critical value of musical preference and personality traits as it relates to music listening. Similar to Altshuler's Iso-principle, the contents of this study focused on what emotions are perceived to be induced by certain musical scores and how results may vary based on the individual participants. Overall, such study exhibited positively significant results showing an efficiency of mood regulation by effectively mood matching musical trials based on the emotions of the participants prior to emotion induction in comparison to those who did not mood match the musical composition before emotion induction.

Existing current research on music therapy fails to account for the application of Altshuler Iso- principle. Alleviating mood disturbances such as chronic stress and anxiety poses two separate issues that may both be treated through musical composition. Encouragingly, in such case vastly different mood disturbances should be treated with sound that relates specifically to their individual condition rather than a singularity generalized tone used for therapeutic relief.

PURPOSE OF THE STUDY & HYPOTHESES

The purpose of this current study is to determine that mood matching through music can be an outlet for emotion expression as an effective therapeutic tool. Such tactic will provide a way to regulate mood by matching musical composure to a current emotional state with the expectation to regulate anxiety levels, chronic stress, and less severe mental health disorders. The tactic of mood regulation by musical composition can reduce emotional discomfort and provide a basis for distress management in times of emotional overload. Acquiring an understanding that music is a tool of mood regulation for the benefit of emotional improvement regarding an individual suffering from lesser mental health disturbances. We expect a significant change in emotional comfort after the use of Altshuler's Iso-principle as a mood regulator by producing an enduring repair of mood to those exploring emotional overload. We expected a moderately large significant correlation between the implementation of music as a mood regulator by the guidelines of Altshuler mood matching principles and the alleviation of mood disturbances. If an individual suffering from a mood irregularity or emotional distress, applies Altshuler's Isoprinciple of mood matching through music technique, then said individual will experience a lessening of the symptoms related to their mood disturbances. If an individual suffering from a mood irregularity or emotional overload fails to implement the Iso-principle, then they will not feel relief to the same degree as someone who creates a musical score selection unique to their discomfort.

METHODS

Participants

The present research utilized a two-tailed Student's t test as its primary statistical measurement. This trial had one primary singular group for study, with no issue of attrition to follow therefore, we asked for an overall sample size of 72 participants. We tested 85 metro

Detroit community members in this study. Upon completion of the survey, results revealed many female participants making up 69% of the overall sample population, while the male population makes up 29.8% and the remaining 1.2% is the category of people who would prefer not to answer a gender questions. The age range of participation is well dispersed, contributing participants ranged from the ages of 18 to 65+. Within the sample population ,69% of participants claimed to have had issues in the past with anxiety, chronic stress, and lesser mental health illnesses. The remaining 31% claimed to have no experience with such mood irregularities. Participants were subject to an identical survey no matter how they answered the demographic information.

Design/ Measures

The current study follows the formatting of a quasi- experimental design, and all other relationships are to be marked as insufficient findings. There was a single main group of participants, as this is an independent group study. The research method design used will be a one-time survey in the form of an online questionnaire with a varietal use of the Likert scale to accumulate specific attitudinal responses, avoid neutral options and offer a comparative analysis of quantitative data. These measures have been created to avoid confounds beyond what has been considered. The confound expected to affect the study is the overuse of musical stimulation, as such situations like musical composition heard in stores in restaurants, a form of listening that lacks meaningful relation and interpretation. The questionnaire is information seeking regarding both demographics and mood regulation through music content. The same survey will be administered to all 85 participants with no changes made between responses. There is no manipulation of the subjects, but rather emotional induction imposed upon them during the survey experience. The independent variable of this study is the implementation of the

Iso-principle in mood matching musical composition to a current emotional state. The dependent variable is the emotional change felt by the participants such as increased mood, decreased symptoms and an alleviation of overall emotional debilitation. To accompany the quasi-experimental design the primary statistical measure used was the Pearson Correlation Coefficient (r) test using the IBM SPSS statistical analysis software program. This program was used because a major aim of this study was to conclude an understanding of a positive linear correlation between mood irregularities and the application of Altshuler's Iso-principle of emotional regulation using the tactic of mood matching musical composition to the current emotional state of the participant. The survey was made available online for participants to complete for a time span of eleven days. As this is a convenience sampling, the population of this studies subjects were collected at random reflecting the overall population more closely than a specific subpopulation would reflect.

Materials

The online survey questionnaire (Appendix A) is designed to measure the improvement of emotional irregularities such as anxiety, stress, and depression after experiencing a piece of music, aligning with their current emotional standing. Altshuler's Iso-principle is a technique of mood management involves the application of music that is relevant to a person's current mood, then the tone of the musical score is shifted to help gradually enhance the individual's emotional state. To firmly grasp such concepts within the survey, such principle was applied to the participants through choice of musical composition available to them by a YouTube link. In the second section, the link directly appeared on the survey under the category of an emotional state; to be chosen based on relevance to their feelings at the time of their survey attempt. The musical score experience was follow by two final sections on the survey compiled by a set of questions

detailing inquiries about their emotional state, knowledge of music therapy, and willingness to use Altshuler's Iso- principle in times of emotional distress and overload.

There are no apparatuses to be acquired for the replication of this study. The first section of this study warranted a consent form for the participants (Appendix B). The consent form was created to protect participants from harm. Manipulation of psychological or social states (such as sensory deprivation, psychological stress, or social isolation) may be a factor of participation. In this specific study we are aware of the potential risks that can be involved in bringing up emotional issues that have been otherwise suppressed or avoided. In addition to the consent form, this study has allowed participants to skip any questions they feel are too personal or uncomfortable, and or may quit the survey at any time to ensure the chance of risk being minimal. Those who feel prolonged or excessive distress were invited to speak to someone at the university counseling center and referred to the contact information for such resources. All questions within this survey have been as to not be suggestive or harmful to the participants involved within the questionnaire. All questions were answered using a Likert scale to enhance confirmation of test- retest reliability. Validity is extremely important for this research is creating a basis for the awareness of Altshuler's Iso-principle as mindfulness-style anxiety management technique to be used in times of distress. This survey is compiled of a musical score activity, followed by 25 questions total, 9 are in reference to demographic content, while the remaining 16 questions inquire on the participants change in emotional state. In order to complete the study, the online questionnaire survey was made available to the public via online social media platforms. In addition to the use of social media, flyers were created of the QR code (Appendix C) and hung up at local businesses and college campuses. The survey was available for participants to take part in for the time span of eleven days, both online and in person. On the

eleventh day, the survey closed, and we began the next step of the experiment. Following the closing of the survey, the data could be analyzed using a Pearson's r correlation test to reflect on the relationships created by implementing the independent variable.

Procedures

The researcher must first obtain the survey wished to be used for the research study, the survey used for the quasi- experimental design is exhibited in (e.g., "Appendix A"). This survey is a onetime questionnaire to be administered in an identical form via an online platform to each participant. The test must have a QR code created by the researcher so that the participants will experience ease in accessing the weblink. The survey was monitored for a time span of eleven day, the amount of time was allotted as such so that we could gain an appropriate number of participants before closing the study. Upon closing, we were able to immediately analyze the data received because it was automatically recorded by the survey instrument.

The procedure of the participants of this current study are as follows: Participants were provided with a link to an online survey directing them to the questionnaire, the link will be provided either in person via QR code or accessed through a social media listing. The contents of this survey begin with a yes and no question, regarding informed consent. The following section will cover content such as basic demographic information such as age, gender, and musical preference. They will then be asked to choose from a category of clips of different musical score, encouraged to choose the best option that represented their current mood state. No matter the musical score chosen each participant will follow up with the same questions about their emotional state proceeding the mood matching therapeutic technique. After completion of the previous section, participants will move onto a final section of the survey with the basis of a Likert scale with the inquisition about the participants experience with music therapy as a coping

mechanism for emotional overload. The questions attempted to explore the willingness of a participant to continue with mood regulation through music tactics or alternatively choose to abandon the practices of music therapy in accordance to the Iso- principle all together. Upon completion of the survey participants were asked to once more to confirm consent of their active role within this study and provided with the information to the university counseling center if needed. Once submitted the participants were free to close the browser window and conclude their participation within the present research study.

RESULTS

Demographics/Participants

The demographic information collected during the online survey questionnaire was composed of questions regarding age, gender, hours of music listened to per week, and history of mental health issues. The sampling frame within this study does moderately support a representation of the sub-population in reference to metro Detroit residents. Male participation was represented in the study as 29.8 percent of the population, females having the highest level of involvement within the study at 69 percent, and the remaining 1.2 percent of the population preferred not to share their gender information (Figure 1). The age range of participants involved within this study were extremely representative of the general population. Participants were able to select their age out of 6 different options, ranging from 18 years of age to 65+ (Figure 2). Participants who had a history of mental health issues signified their experience in the form of a yes or no question, the population within the study represented the overall population moderately well. 69 percent of the sample population claimed to have had experience with mental health issues, such as anxiety, chronic stress, and depression. The remaining 31 percent of the sample population claimed to have had no prior experience with any mental health complications (Figure 3). Hours of music listened to per week was also an inquiry request made

on the participants during completion of the demographic portion of the survey. The participants had five options to choose from relating to how many hours of music they listen to in a week, the results showed there was nonsignificant relationship between the sample population and a representation of the overall population. On average, the population listens to about 18 hours of music per week, but only 41.7 percent of the sample population reposted listening to more than 10 hours of music per week (Figure 4).

Need For Greater Awareness of the Iso- Principles

The feeling of a need for greater awareness and music greatly influences one's mood were strongly positively correlated (blue) r (85) = 0.646, p<0.001. The need for greater awareness and tactics of mood regulation learned during this study will be used moving forward were strongly positively correlated (red), r (85) = .626, p<0.001. The need for greater awareness and one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications were strongly positively correlated (yellow) r (85) = .526, p<0.001. The need for greater awareness and mood matching seems to be a positive experience after a single session were strongly significantly correlated (green) r (85) = .429, p<0.001 (Figure 5).

Mood Matching Application Post Survey

The willingness of an individual to participate in mood matching music after the survey and ones feeling of being more in control of their emotions were moderately positively correlated (blue) r(85)=.240, p<0.05, The willingness of an individual to participate in mood matching music after the survey and mood matching was helpful to regulate emotion were strongly positively correlated (red) r(85)=.351, p<0.01. The willingness of an individual to participate in mood matching music after the survey and the consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression (yellow) r(85)=.337, p<0.05, The willingness of an individual to participate in mood matching

music after the survey and participants beliefs that music deeply influences their mood and emotions (green) r(85)=.362, p<0.01 (Figure 6).

Willingness to try Alternative forms of Mood Regulation

Participants who claimed that they will implement the mood matching techniques they learned during the survey about the importance of mood matching as a vital tool of regulation and one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications were strongly positively correlated (blue) r(85) = .503, p < 0.001. Participants who claimed that they will implements the mood matching techniques they learned during the survey about the importance of mood matching as a vital tool of regulation and the consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression (red) r(85) = .558, p < 0.001 (Figure 7).

Correlation between Happiness and Positive Experience

Participants responses of feeling happier after mood matching music to emotional state and mood matching is an overall positive experience were significantly positively correlated (blue) r (85) = .522, p<0.001. Participants responses of feeling happier after mood matching music to emotional state and ones feeling of being more in control were strongly positively correlated (red) r (85) = .470, p<0.001. Participants responses of feeling happier after mood matching music to emotional state and current emotional feeling were moderately positively correlated (yellow) r (85) = .287, p<0.05 (Figure 8).

Tactic of Mood Regulation

The belief of the participants that matching musical content to emotional state is a progressive tactic in mood regulation and mood matching music as a form of therapy can be very helpful to regulate emotions were strongly positively correlated r (85) = .328, p<0.01 (Figure 9).

Productivity of the Previously Diagnosed

There is a strongly significant correlation between participants prior experiences with mental health issues such as extreme stress, anxiety, and depression and music has previously influenced the participants mood r (85) = .351, p < 0.001 (Figure 10).

Feeling of Emotional Control

Ones feeling of being more in control of their emotions after mood matching music to their emotional state and mood matching was helpful to regulate emotions were moderately positively correlated r 85) = .386, p<0.001, (Figure 11).

Ease of Accessibility

There was a significant positive correlation between the factors of music being an easily accessible tool and the ability music has in altering one's mood and emotional state r (85) = .813, p<0.001 (Figure 12).

Emotional regulation through alternative treatments

The consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression and ones willingness to participate in mood matching therapy as an alternative to the use of prescription medications were significantly positively correlated r (85)= .756, p<0.001 (Figure 13).

DISCUSSION

Need For Greater Awareness

The need for greater awareness about mood matching music as an emotional regulatory tool is a variable that is significantly related to few other variables. The feeling of a need for greater awareness and music greatly influences one's mood were strongly positively correlated. Music had the induction ability to alter the emotional state of an individual in distress, and it is a tactic of therapy that can be managed in an isolated situation. The need for greater awareness and tactics of mood regulation learned during this study will be used moving forward were strongly

positively correlated. Participants benefited from their singular experience with emotional regulation through use of Altshuler's Iso principle. In addition to their personal benefit, they also felt the urge to take initiative and share the benefits of what they learned about mood matching music as a regulatory feature to others in need of relief from mental strain. The need for greater awareness and one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications were strongly positively correlated. The relationship between a need for greater awareness of the Iso-principle and participants willingness to substitute such music therapy techniques instead for prescriptions medications, represents a willingness to move away from medications that may not be otherwise as helpful as the natural response created by music. Music is a widely accessible, which is not to say for prescription medication. The Isoprinciple may be able to cater to the needs of more of the population than that of what is offered in a medical setting. The need for greater awareness and mood matching seems to be a positive experience after a single session were strongly significantly correlated. Participants were not only pleased with their increased feelings of happiness, but also impressed by the ability music carries to alter one's mood in a such a short period of time, only conditioning involved is to recall that mood regulation through music is a possible source in dealing with emotional overload (Figure 5).

Mood Matching Application Post Survey

The willingness of an individual to participate in mood matching music after the survey and ones feeling of being more in control of their emotions were moderately positively correlated. In relation to mood matching was helpful to regulate emotion, participants had felt that they gained an increased sense of control over their emotions and would like to pursue mood matching music as a regulatory tool for their less severe mental health issues. The willingness of

an individual to participate in mood matching music after the survey and the consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression. Such influence was created on the participants that they had reported the consideration of using the Iso- principle as a regulatory tool instead of tactics they've learned in the past. The resources they are being used may be outdated and lack the beneficial realities of music therapy. Participants reported that they are deeply influenced by music. A tool that connects with an individual on a deeper level is going to hold validity in the success of eliminating their symptoms more greatly than a tactic they do not feel personally represents their issues. Participants claimed that they will proceed to use the Iso- principle in times of emotional distress as a regulatory tool to minimize symptoms of mental health issues (Figure 6).

Willingness to try Alternative forms of Mood Regulation

Participants who claimed that they will implement the mood matching techniques they've learned during the survey about the importance of mood matching as a vital tool of regulation and one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications were strongly positively associated with one another. The participants believed that they had learned enough about the subject to continue with the contents to continue with the Iso- principle as a regulatory tool. As much of the sample population had claimed to have a history with mental health issues, it is possible to conclude that they found more assistance was offered through music than some of their previous offered regulatory treatments (Figure 7).

Correlation between Happiness and Positive Experience

There was a significant interaction between happiness and positive experience.

Participants responses of feeling happier after mood matching music to emotional state and

mood matching is an overall positive experience were significantly positively correlated. The participants of the survey felt that their mood had increased, and they were surprised by the success of the Iso-principal techniques experienced during the survey questionnaire. As treatments are not always successful, participants seemingly were enlightened. Participants felt happier and more in control of their emotional state. A feeling of helplessness can be avoided, and symptoms can be immediately treated by implementing the tactic of mood matching music to current emotional state (Figure 8).

Tactic of Mood Regulation

A belief of the participants that matching musical content to emotional state is a progressive tactic in mood regulation and mood matching music as a form of therapy can be very helpful to regulate emotions were strongly positively correlated. After participant experience most of the sample population represented that of individuals who believed mood regulation through music was a progressive tactic that had a valuable place within the clinical field of music therapy, because of the value it possessed to participants during and after completion of the survey (Figure 9).

Productivity of the Previously Diagnosed

There is a strongly significant correlation between participants prior experiences with mental health issues such as extreme stress, anxiety, and depression and music has previously influenced the participants mood. Participants who claim to have had past issues with mental health disorders also claim that music greatly has influenced their emotional perception in the past. If individuals have found something meaningful to them, that influences them deeply enough to influence grounded feelings, it must be pursued as a tactic of mood regulation for the benefit of all who have dealt with mental illness, either within themselves or someone they care

for. Further expansion on the significance of mental illnesses and the influence of musical score on the psyche should be a precedented issue within the field of music therapy (Figure 10).

Feeling of Emotional Control

Ones feeling of being more in control of their emotions after mood matching music to their emotional state and mood matching was helpful to regulate emotions were moderately positively correlated. As the participants listened to their chosen musical selection, they felt their moods being matched, rather than challenged by their surroundings. This tactic of emotional expression led the participants to feel more in control of their emotions and achieved a greater ability to regulate symptoms in times of emotional overload (Figure 11).

Ease of Accessibility

There was a significant positive correlation between the factors of music being an easily accessible tool and the ability music has in altering one's mood and emotional state. One hundred percent of participants within the sample population for this study claimed to have ease accessing and listening to music. Acknowledging that access is not limited to one type of music or genre, but rather offered a nearly unlimited ranging supply of musical score by online musical platforms and several other musical resources available to the public today, such as radio and vinyl (Figure 12).

Emotional regulation through alternative treatments

The consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression and one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications were significantly positively correlated. Participants are unsatisfied with the treatments that are readily available to minimize their symptoms. Additionally, Altshuler's Iso- principle can be utilized free of charge

and at times of convince for the individual suffering with mental health irregularities. (Figure 13).

CONSLUSIONS & FUTURE DIRECTIONS

Mood regulation through music is an imperative tactic within music therapy, aiming to be recognized as a mindfulness anxiety management technique. The use of Altshuler's Iso-principle makes the possibility of an alleviation of mood disturbances in those affected by emotional overload a reality for many who struggle with the use of traditional forms of mood regulation such as medication, talk therapy, or mediation. The benefit of this study proceeds to be the improvement of understanding self-care and the ease involved with completing such goals. This study demonstrated the effectiveness of music as a mood regulator to achieve emotional improvement apart from clinical therapy sessions and prescription medications. Based on the participant response claiming to have valued their experience implementing the Iso-principles into their lives it remains a pertinent issue that a greater awareness is made about the ability one must regulate their own emotions and mood irregularities. The population is increasingly interested in mental health awareness and the care that people deserve when dealing with said disturbances. A purpose of this studies efforts is to determine further outlets of emotional expression as a way to regulate mood by matching musical score to a current emotional state as a way to regulate anxiety, chronic stress, depression and less severe mental health disorders. The negative stigma associated with mental health issues are rapidly fading, the sample population of this study is an overall representation of the curiosity about alternative and progressive treatments. Participants shared a willingness to partake in research for the sake of progress as it relates to mood regulation through music. Ideally the contents of this study will help in the efforts of producing an enduring repair of mood to those experiencing emotional overload by implementing the Iso- principle created by Altshuler to decrease emotional discomfort.

E&xid=4ca85c06

References

- Gerstgrasser, S., Vigl, J., & Zentner, M. (2022). The role of listener features in musical emotion induction: The contributions of musical expertise, personality dispositions, and mood state. *Psychology of Aesthetics, Creativity, and the*Arts, https://doi-org.portal.oaklandcc.edu/10.1037/aca0000468
- Naz, S., Khan, M. J., Kamal, A., & Bibi, H. (2021). Music Preference Dimensions and Personality Traits Among University Students. *Pakistan Journal of Psychological Research*, *36*(3), 357+.

 <a href="https://link.gale.com/apps/doc/A681131997/AONE?u=lom_oakcc&sid=bookmark-AONE&u=lom_oakcc&sid=bookmark-AON
- New Digital Health Study Findings Recently Were Reported by Researchers at Nara Institute of Science and Technology (Applying Meta-Learning and Iso Principle for Development of EEG-Based Emotion Induction System). (2022, June 24). *Health & Medicine Week*, 3327.

 https://link.gale.com/apps/doc/A707595349/AONE?u=lom_oakce&sid=bookmark-AON
- Odell-Miller, H. (2013). A response to Garrido & Davidson's article, including a tribute to

 Denise Grocke (AJMT 2013 Vol 24). *Australian Journal of Music Therapy*, 24, 109.

 <a href="https://link.gale.com/apps/doc/A367075249/AONE?u=lom_oakcc&sid=bookmark-AONE&u=lom_oakcc&si
- Sanfilippo, K. R. M., Spiro, N., Molina-Solana, M., Lamont, A., & Munce, S. E. P. (2020). Do the shuffle: Exploring reasons for music listening through shuffled play. *PLoS ONE*, *15*(2), e0228457.

https://link.gale.com/apps/doc/A613315792/AONE?u=lom_oakcc&sid=bookmark-AON
E&xid=ece039b6

- Schaefer, L. A., & Pick, L. H. (2022). Considerations and suggested practices for psychological assessment and intervention when working with older adults with disabilities. *Professional Psychology: Research and Practice, 53*(5), 446-457. https://doi-org.portal.oaklandcc.edu/10.1037/pro0000472
- Schafer, T. (2016). The Goals and Effects of Music Listening and Their Relationship to the Strength of Music Preference. *PLoS ONE*, *11*(3).

 https://link.gale.com/apps/doc/A453470986/AONE?u=lom_oakcc&sid=bookmark-AONE&xid=6393daae
- Smith, M. (2008). The effects of a single music relaxation session on state anxiety levels of adults in a workplace environment. *Australian Journal of Music Therapy*, 19, 45+.

 <a href="https://link.gale.com/apps/doc/A189874862/AONE?u=lom_oakcc&sid=bookmark-AONE&u=lom_oakcc&
- Thompson, W. F., Bullot, N. J., & Margulis, E. H. (2022). The psychological basis of music appreciation: Structure, self, source. *Psychological Review*, https://doi-org.portal.oaklandcc.edu/10.1037/rev0000364

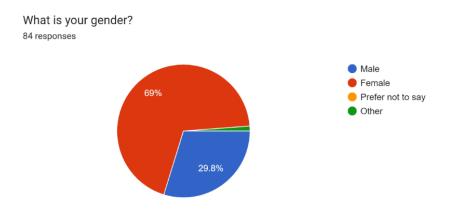


Figure 1. Participants involved in this study identified as either man, woman, or rather not say.

What is your age? 84 responses

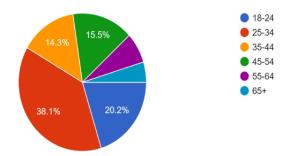
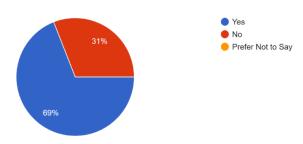


Figure 2. The range of age for participants within the mood regulation through music study spanned from 18 years of age and older.

Figure 3. Participants of the mood regulation through music survey indicated whether they had previous experience with a mental health condition, indicated using yes, no or prefer not to say multiple choice options.

Have you ever had a mental health condition? (ex. extreme stress, anxiety, depression, etc.). 84 responses



How many hours of music do you listen to per week? 84 responses

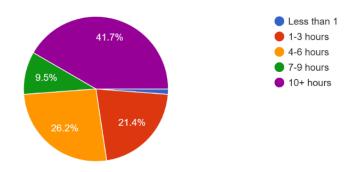


Figure 4. Participants of the mood regulation through music survey indicated how many hours of music they regularly listen to per week, five multiple choice options were provided.

Need For Greater Awareness

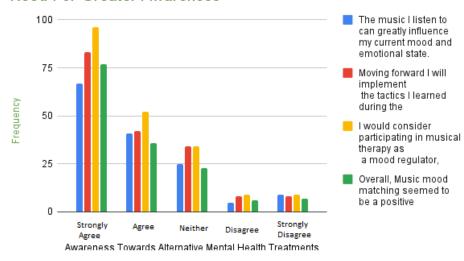


Figure 5. Correlations between the feeling of a need for greater awareness and music greatly influences

one's mood, tactics of mood regulation learned during this study will be used moving forward, one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications, and mood matching seems to be a positive experience after a single session.

Mood Matching Application Post- Survey

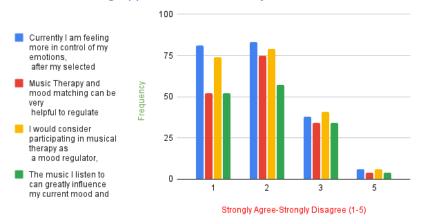


Figure 6. Correlations between the willingness of an individual to participate in mood matching music after the survey and ones feeling of being more in control of their emotions were moderately positively correlated, mood matching was helpful to regulate emotion, consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression, and participants beliefs that music deeply influences their mood and emotions.

Willingness to Try Alternative forms of Mood Regulation

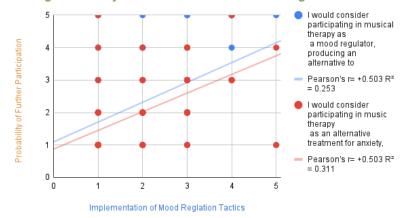
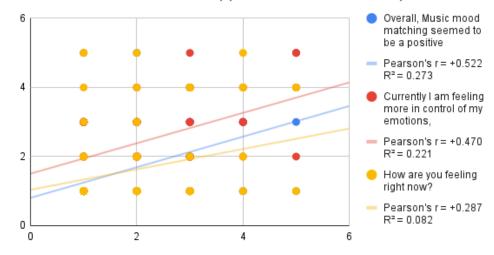


Figure 7. Relationship between Participants who claimed that they will implement the mood matching techniques they learned during the survey about the importance of

mood matching as a vital tool of regulation, one's willingness to participate in mood matching therapy as an alternative to the use of prescription medications, and the consideration to supplement other mental health tactics with mood matching therapy for irregularities such as anxiety, stress, and depression

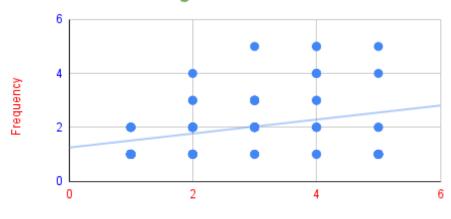
Correlations between Happiness and Positive Experiences



I Feel Happier after Listening to Music

Figure 8. Correlations between Participants responses of feeling happier after mood matching music to emotional state, and mood matching is an overall positive experience, ones feeling of being more in control, and current emotional feeling.

Tactic Of Mood Regulation



Mood Matching Musical Composure is Progressive

Figure 9. Correlations between the belief of the participants

that matching musical content to emotional state is a progressive tactic in mood regulation and mood matching music as a form of therapy can be very helpful to regulate emotions.

Productivity for the Previously Diagnosed

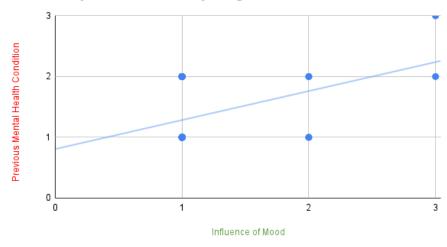
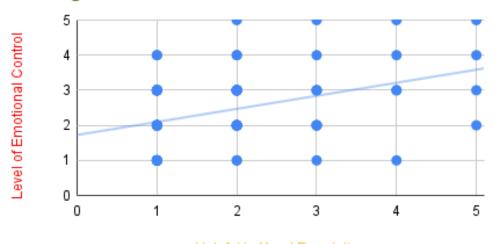


Figure 10. Correlations

between participants prior experiences with mental health issues such as extreme stress, anxiety, and depression and music has previously influenced the participants mood

Feelings of Emotional Control



Helpful in Mood Regulation

Figure 11. representative of a correlation between one's feeling of being more in control of their emotions after mood matching music to their emotional state and mood matching was helpful to regulate emotions

Appendix A

Survey Instrument

'Mood Regulation Through Music' Survey Instrument

Summer Smith

Participant Consent: Please check the box below acknowledging informed consent.

I understand that my participation in this survey is voluntary, and I am free to withdraw my data from the study at any time. My information and responses will not be shared with anyone beyond the research team. I understand that I can obtain a copy of consent at any time. I voluntarily agree to take part in this survey regarding mood regulation.

Participants shall choose only one answer per question, additionally participant are allowed to omit and skip questions that they are uncomfortable answering at this time.

PART ONE

Demographics & Musical Relationship

- 1. What is your gender?
 - Male
 - Female
 - Other
 - Prefer not to answer
- 2. What is your age?
 - 18-24
 - 25-34
 - 35-44
 - 45-54
 - 55-64
 - 65+
- 3. Have you ever had a mental health condition? (e.g... extreme stress, anxiety, depression, etc.).
 - Yes
 - No
 - Prefer not to Answer
- 4. Has music influenced your mood in the past?
 - Yes
 - No
- 5. Is listening to music an easily accessible activity for you?
 - Yes
 - No
- 6. How many hours of music do you listen to per week?

- Less than 1.
- 1-3 hours
- 4-6 hours
- 7-9 hours
- 10+ hours
- 7. When listening to music what genre do you tend to listen to most frequently?
 - Rock
 - Rap
 - Classical
 - Gospel
 - Pop
 - Country
 - Other:
- 8. Have you ever heard of 'Music' as a therapeutic technique?
 - Yes
 - No
- 9. Have you ever previously tried to use music therapy techniques in times of distress?
 - Yes
 - No
 - Unsure/ Other

PART TWO

Mood Matching

How are you feeling right now? Please choose only one.

- Content/ Calm
- Happy
- Energetic
- Sad/ Anxious
- Depressed

Please click the video link below that best describes the mood you claimed to be currently feeling during this survey within the question above. Upon completion of this short video clip you may proceed to the following questions.

https://www.youtube.com/watch?v=fOZ-MySzAac Contentment/ Calm

<u>https://www.youtube.com/watch?v=ru0K8uYEZWw</u> Happy

<u>https://www.youtube.com/watch?v=iPUmE-tne5U</u> Energetic

<u>Lee Brice - I Drive Your Truck (Official Music Video) - YouTube</u> Sad/ anxious

Coldplay - Fix You (Official Video) - YouTube Depressed

PART THREE

These questions are closely related to the musical activity within part two.

1. After experiencing the musical clip in PART TWO, I feel my emotions to the same degree as I did before the musical exposure

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

2. I feel happier after listening to that musical selection

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

3. I feel more depressed after listening to that musical selection

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

4. Music has a significant effect on my mood.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

5. Overall, Music mood matching seemed to be a positive experience.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

6. Currently I am feeling more InControl of my emotions after my selected musical experience

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

7. How Often does your choice of music reflect your mood?

(Never, Rarely, Occasionally, Frequently, Very Frequently)

8. How often do you feel that listening to music is beneficial for our mood?

(Never, Rarely, Occasionally, Frequently, Very Frequently)

9. How frequently do you feel you will listen to music that matches your mood?

(Never, Rarely, Occasionally, Frequently, Very Frequently)

10. Matching Musical content to emotional state is a progressive tactic in mood regulation.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

Management of Mood Regulation: Moving Forward

PART FOUR

1. Music therapy and mood matching can be very helpful to regulate emotions.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

2. I would consider participating in music therapy as an alternative treatment for anxiety, stress, or depression.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

3. I would consider participating in musical therapy as a mood regulator, producing an alternative to considering the use of prescription medications.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

4. The music I listen to can greatly influence my current mood and emotional state.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

5. Do you feel that there is a need for greater awareness towards alternative mental health treatments such as music therapy, for the purpose of mood regulation.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

6. Moving forward I will implement the tactics I learned during this survey about the importance of mood regulation and the great tool that music can play within that personal endeavor.

(Strongly Agree, Agree, Neither, Disagree, Strongly Disagree).

Disclosure Statement

Thank you for participating in the above study. By selecting the answer below, you are providing final consent for us to use the information you provided for the betterment of science. If you have any questions or concerns, please feel welcome to reach out to the research team at any time. If you feel prolonged discomfort as a result of this study, please contact the MacKinnon Psychology and Counseling Clinic at GMacKinnon@rochesteru.edu to speak to someone.

• I understand (submits the form)

Appendix B

Consent Form

Consent to Participate in Research

The Research Team

The following research is being conducted by a trained research team who may be reached at the following contacts:

Primary Researcher: Faculty Sponsor:

Summer Smith Dr. Jessica J Matyas

<u>Ssmith13@rochesteru.edu</u> <u>JMatyas@rochesteru.edu</u>

Office: (248) 218 - 2157

Purpose of the study

The major goal of the current study is to determine that mood matching can be an effective therapeutic tool for those dealing with chronic stress, anxiety or lesser mental health disorders. This tactic of mood regulation by music, can reduce emotional discomfort and help to manage distress in times of emotional overload.

Procedures

This experiment is expected to take about fifteen minutes to complete, as there are four parts, of which the second part includes a YouTube Clip. Participants will be asked to answer questions pertaining to demographic background, and current relationship with music. The questions will further elaborate on current emotional standing, facing the acknowledgement of such emotions, after mood matching musical stimulation is applied. The survey will conclude with an inquiry of how each participant intends to proceed post- survey. You are welcome to contact the research team after completing your participation if you would like to learn more about the results of the experiment.

Risks Involved in Participation

Care has been taken to minimize or eliminate significant risks during the procedures of this experiment. Those who feel distressed or uncomfortable are invited to reach out to the MacKinnon Psychology and Counselling Center by emailing GMacKinnon@rochesteru.edu. Potential negative effects that you may experience during the course of this study include:

 Temporary discomfort due to a possible sensitivity of emotional triggers during the time of the survey

While the present study is collecting data such as email address, this data will remain confidential and be stored in a secure server until the completion of the study, at which time it will be destroyed. At no time will your personal information be available to anyone outside of the above research team.

Benefits of the Current Research

If successful, the results of this study could help mend a gap within the mental health field. Non-pharmaceutical remedies should not be overlooked because they are often easily available and may be used for tools of recovery. Participation in the experiment may lead the participants to feel positive emotions like satisfaction and social approval when speaking of mental health and over stimulation. As one learns to regulate their emotions, it is not important where they fall on the spectrum of emotion. Whether it be closer to depressed or happy, the importance rather lies within the person. Deeming that the individual can identify the degree to which they are expressing their emotion and if their outward actions correlate with their desired outcome. The principle of learning additional coping skills for stress management and upset moods is crucial to the livelihood of many.

Signature of Informed Consent

I have read and understood the above information, and voluntarily agree to participate. I understand that my participation in this study is entirely voluntary, and that I may withdraw my consent at any time with no penalty or consequences.

Your signature	Date:
Your name (printed)	
(initial) I would like to receive a copy of this form upon completion	

Appendix C

QR Code

