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The Possibility of Using Music Therapy to Treat Depression and Anxiety Among University Students

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ABSTRACT

University students suffer from depression and anxiety the same as adults. Even though there are lots of methods to treat depression and anxiety, university students experience both stress academically and socially. They are not only in some way not mature enough but still reckon themselves as problem solvers which easily causes mental problems but also are busy with study that they have no time to visit or unwilling to see a therapist. Music therapy as a simple treatment which helps the students to solve these inconveniences during daily life. This research literally describes the possibility of using music therapy to reduce anxiety and depression of university students. This article use the method of comparing and contrasting with different articles and collecting data and information from them. It turns out that music therapy does cope with stress of students academically by relieving their heart rate physically and mentally.

Keywords: music therapy, university students, psychology, stress, depression

1. INTRODUCTION

As the trend of the number of people with psychological disorders increase rapidly, for instance, in the U.S. people over 18 express feelings of depression of 4.7% in 2019[1]. People begin to pursue simple and effective treatments.Therefore, a daily entertainment—music — came to psychologists' horizons.

Music is used as a tool of expressing feelings and communication for people and all races and all countries and whosoever presents in their daily life as a tradition all over the world[2]. Music not only becomes popular among people that most of them listen to music for relaxing and inspiring themselves but also frequently to be used in the field of psychology as a solution to relieve depression or anxiety. In order to solve this problem, music therapy developed into different types of theories and treatments, such as behavioral psychotherapeutic and psychoanalytic approaches, approaches, client- centered therapy, and transpersonal therapy[3]. This research is inferred from several different essays and compared with current situations of students in universities to find better methods to treat students with mental illness by using music. This research also collects the newest music therapy treatments and discusses its feasibility for university students.

2. THE INTRODUCTION OF ANXIETY AND DEPRESSION AND THE TREATMENTS

In order to clearly demonstrate the treatment for mental health problems, people have to know them correctly. Dr. Satvinderpal Kaur defined mental health as the course for humans to satisfy and realize their existence is success^[4]. On the contrary, some common psychological illnesses such as anxiety and depression which are well known today are neglected by people. For instance, anxiety may be thought of as a normal problem caused by work or excessive worrying and it can be solved if it can be neglected. In fact, anxiety disorders cause 12% of the population having slightly to severely impairment[5]. However, this emotion makes people feel anxious unconsciously for no reason but the symptoms and the signs spread widely[5]. Anxiety will significantly cause loss of wages, low productivity and decrease the quality of life and omission of using health care personally and socially[5]. Obviously, with this explanation, anxiety causes serious consequences to people's lives.

Except for anxiety, till today, some people still reckon that depression is "all in the head" and people with it can always "get over it" and because of the wrong understanding of these issues that many people

"may not seek for treatment" [5]. Nevertheless, psychologists know that "depression is not a weakness but something that people can't treat themselves"[5]. Depression influences a person's thoughts, moods, feelings, behaviors and physical health like anxiety, and it is a medical disorder with a biological and chemical basis[5]. There are several kinds of depression and fundamental issues include major depression, dysthymia, adjustment disorders, bipolar disorder, and seasonal affective disorder[5]. Two main symptoms are related to depression: lack of interest in normal daily living and feeling miserable[5]. Patients may also suffer from irregular sleeping patterns, concentrating, weight or eating patterns, demeanour (more irritable), selfesteem, and desire to live. Physical complaints, such as gastrointestinal problems (indigestion, constipation, or diarrhoea), headache, and backache may also be signs[5]. Therefore, health professionals try to treat people for their happiness.

There are many strategies for both anxiety and depression, and the treatments directly point out that people need to manage their stress for relaxing. Methods people familiar with include deep breathing, relaxation, guided imagery or visualization, yoga, meditation, and calming self-talk[5]. Another way is physical exercise because exercise raises the levels of certain moodenhancing neurotransmitters in the brain, boosts feelgood endorphins, release muscle tension, sleep better, and reduces levels of the stress hormone cortisol, and physically increases body temperature, which may have calming effects. Body can improve such symptoms as sadness, anxiety, irritability, stress, fatigue, anger, selfdoubt and hopelessness [5]. People should timely communicate with professionals for help or seek community support and services as well[5]. However, these traditional methods might be ineffective or might waste a lot of time and some certain groups of people can't be treated continuously due to these reasons.

3. MUSIC THERAPY

Music is an effective way for people to express feelings throughout the time, and it contributes to healing people's emotions as well. . Famous philosopher Aristotle spoke of the power of music to restore health and normalcy to those who suffer from uncontrollable emotions and compared it to a medical treatment [6].

Hence, people began to study how to treat people with music. Systematic music therapy for mental disease patients is thought to have emerged in the early 1900s as a consolatory activity of musicians in mental hospitals [6]. According to Dr. Anthony Komaroff who is a professional doctor from Harvard medical school, music seems to slow heart rate, lower blood pressure, and reduce levels of stress hormones. It can also provide some relief to heart attack and stroke victims and patients undergoing surgery. Some research points out that music may promote the brain's ability to make new connections between nerve cells as well[7].

For humans bodies have the same patterns of waves in music, such as our heartbeat or brain waves, researchers reckon that the tempo and melodies are related with people's feelings and emotions. For instance, a survey studying the difference in GPA between students who listen to different types of music while studying, though music doesn't result in huge differences, the survey does find that students who listen to hip- hop and rap while studying score significantly lower while students who listen to easy listening and classical are likely to have higher GPAs [4]. Despite the survey doesn't showing great results, music has been found to produce a relaxed mood and stress reduction, making it a plausible way to accommodate coping with pain and anxiety [6]. During these periods, people used music therapy on several different people, such as mental illness, developmentally disabled, elderly persons, and those with multiple disabilities including addicted persons[6]. In order to help different people, music therapy develops into two main branches of treatments.

The first method is Analytical Music Therapy(AMT). AMT uses free improvisation to express inner moods and emotions. The other major therapy is Guided Imagery and Music (GIM). GIM involves listening to carefully chosen recorded music and reflecting on it. Both models focus on verbal reflections after the music therapy has been performed[6]. For AMT, therapists usually let people with a little music abilities write songs or lyrics, play instruments, and sing. This is an active intervention to the patient, and apparently the passive way includes listening to music or sounds during therapy, either by recording or played by the therapist[8]. Music therapy is unsurprisingly convenient for people who have difficulty communicating and other benefits as well.

Music therapy is an important development for psychology, thus it provides the possibility for us to cure the students in the universities Specifically, music therapy resulted in positive outcomes for clients known to be ambivalent about or highly resistive to seeking treatment, or who had difficulty in expressing feelings. These conclusions suggest that music therapy may be helpful in the treatment of adults with chronic mental illness, who often demonstrate these same behaviours.

4. APPLICATION OF MUSIC THERAPY ON UNIVERSITY STUDENTS

The stress from learning at school influences the efficiency of study, concentration and sleeping quality. Students at this age face with respective environmental pressure and varied ideas, therefore most teenagers are generally inclined to be stressful and anxious [4]. Pressure from school is called academic stress, and it is usually caused by extra work [4]. Hence, inferred from this information, the school is responsible for students' mental health problems. Valeria and other researchers mention that attending school less, suspension and dropout school early are relative with mental health as well[9]. Many professionals know how to use different methods to solve this problem, for example, a program aimed at enhancing mental health and well-being by fostering social and emotional competencies and resilience skills, and schemes targeting the prevention and relief of mental health difficulties, behavioral issues, and at-risk behaviors [9]. Though this kind of program is practicable for students, the students at university have more issues than them.

College students face the questions of school works, relationship and unfamiliar situations at schools. For many students, college life is stressful, particularly for the freshmen[10]. The author, Chan Mo Ching who learns in the city university of Hong Kong from the department of applied social studies, also mentions that university students are facing the problem of adapting to the new environment both in school and society[10]. The stress from a new setting, such as coping with academic papers, which is an assignment students can hardly avoid when they first enter the university. This article argues that people benefit themselves from bringing up solutions for jeopardy and stressful situations[10]. The most obvious reason caused by coping is stress, thus music therapy has efficient treatment for relieving stress, improving mood and even help people with depression[7]. Music therapy may in some way lessens the number of students from coping and cheating others' works by reducing their stress academically.

At the same time, an experiment about the relationship between test scores and music is done by measuring the heart rate and blood pressure from Lilley and her partners who study in Texas state university.

The table 1 below shows the inferential results of anxiety during a math test by listening to unpleasant music or peaceful music. The experiment is also under the condition of telling the students whether the test will affect their overall grades. This graph indicates that calm music does in some degree reduce student's pressure or anxiety when their grade will be influenced and even presents a higher test scores in comparison with no grades threatened. The same results from the experiment also demonstrates a lower heart rate and blood pressure after listening to calm music. However, in reality, most of the tests will determine student's performance and grades, thus it is necessary to use music therapy as a treatment for students to reduce their stress academically. Furthermore, OSMANOĞLU and researchers from Turkey in the department of education science do a similar experiment[12] by playing classical music for the students and testing their level of anxiety, well-being and other items. The results in table 2 comparing the scores before and after hearing classical music indicate that some symptoms of anxiety decrease significantly and music affects a lot when students feel anxious. Even though it does not present a clear correlation between classical music and increasing happiness, music shows its possibility for relieving anxiety. Both experiments not only points out that the type of music will impact students' anxiety, but also the role of music is useful in helping students to relax during daily life or academically.

Table 1. Means of test performance. Error bars represent SD. [11]

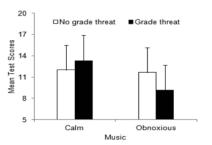


 Table 2. Experimental group students' pretest-posttest state anxiety, trait anxiety and subjective well-being scores

 [12]

	Ν	Mean	Standard deviation	Std. Error Mean	t	df	sig
Pretest State Anxiety	15	41.7333	5.10555	1.318	-1.311	14	.211
Posttest State Anxiety	15	44.4000	5.20714	1.344			
Pretest Trait Anxiety	15	49.8000	4.94542	1.276	3.451	14	.004
Posttest Trait Anxiety	15	43.8667	4.76395	1.230			
Pretest Positive Relations with Others	15	57.9333	13.98196	3.610	-2.913	14	.011
Posttest Positive Relations with Others	15	70.6000	8.32209	2.148			
Pretest Autonomy	15	56.4667	12.30486	3.177	-1.917	14	.076
Posttest Autonomy	15	63.2000	6.72097	1.735			
Pretest Environmental Mastery	15	50.8667	14.80283	3.822	-4.348	14	.001
Posttest Environmental Mastery	15	67.4000	4.77793	1.233			
Pretest Personal Growth	15	61.4667	13.06504	3.373	-2.838	14	.013
Posttest Personal Growth	15	71.8000	6.41650	1.656			
Pretest Purpose in Life	15	54.6000	10.74909	2.775	-3.167	14	.007
Posttest Purpose in Life	15	66.2667	7.90539	2.041			
Pretest Self-acceptance	15	48.4667	10.46673	2.702	-5.396	14	.000
Posttest Self-acceptance	15	65.1333	4.59606	1.186			
Pretest Subjective Well-being Total	15	329.8000	67.95818	17.546	-3.699	14	.002
Posttest Subjective Well-being Total	15	404.4000	26.76832	6.911			
Pretest Anxiety Total	15	91.5333	8.14043	2.10185	1.013	14	.328
Posttest Anxiety Total	15	88.2667	8.14570	2.10321			

5. CONCLUSION

This paper draws a conclusion that music therapy shows its great advantages for university students to cure their depression and anxiety academically and socially. Students won't worry about the embarrassment of being asked about their mental health. The treatment of psychological problems should benefit the public to use painless therapies, rather than allowing people to use drugs or frequent meetings with therapists. However, it is hard to see the precise effect of music therapy and ensure the possibility of recidivism of depression and anxiety. What's more, if students use music therapy by themselves, it will be hard to guarantee if the style of music will worsen or alleviate their state of illness. In addition, music therapy still needs to be developed in order to validate its effect on depression and anxiety, especially for the population of university students.

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