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# The Effect of Acoustic Music Therapy in Overcoming Anxiety in Generation Z in

# Purwakarta Regency, Indonesia

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#### 1. Introduction

Anxiety is one of the most common mental health problems experienced bv humans. including generation Z. Based on data from the World Health Organization (WHO), around 264 million people in the world experienced anxiety disorders in 2020. In Indonesia, according to data from the Indonesian Ministry of Health, the prevalence of anxiety disorders in 2022 will be 2.5%. Generation Z is an age group born between 1997 and 2012. Generation Z is known as a generation that is digitally native and has high mobility. The fast-paced and dynamic lifestyle and mindset of generation Z can be one of the factors that contribute to the increasing incidence of anxiety in generation Z. Generation Z is required to have high achievements in academics and work. Pressure to achieve high levels of achievement can cause anxiety,

#### ABSTRACT

Anxiety is one of the most common mental health problems experienced by generation Z. Acoustic music therapy is an alternative therapy that can be used to treat anxiety. This study aims to examine the effect of acoustic music therapy in overcoming anxiety in generation Z in Purwakarta Regency, Indonesia. This research uses a quasi-experimental research design with a pretest-posttest control group design. The research sample consisted of 60 people, who were divided into two groups, namely the acoustic music therapy group (30 people) and the control group (30 people). The acoustic music therapy group was given acoustic music therapy for 8 weeks, while the control group was not given any therapy. The results showed that there was a significant difference between the acoustic music therapy group and the control group in terms of anxiety levels. The acoustic therapy group experienced a greater reduction in anxiety levels than the control group. Based on the results of this research, it can be concluded that acoustic music therapy is effective in overcoming anxiety in generation Z.

especially if it is not accompanied by adequate support from family and the environment. Generation Z lives in an era that is completely open and competitive. They are required always to look perfect and follow existing trends. This social pressure can cause anxiety, especially if it is not accompanied by a high sense of self-confidence. Social media has become an inseparable part of generation Z's life. However, social media can also be a source of anxiety, especially if used excessively. Social media can make generation Z feel isolated, unable to compete, and not accepted by the environment.<sup>1,2</sup>

Music therapy is a type of alternative therapy that has been used for centuries to treat various health problems, including anxiety. Acoustic music therapy is a type of music therapy that uses acoustic music to achieve therapeutic goals. Acoustic music is music produced by musical instruments played live. Acoustic music can help reduce stress by reducing sympathetic nervous system activity. The sympathetic nervous system is the nervous system responsible for the body's response to stress. When stressed, the sympathetic nervous system will work more actively, which can cause various physical and psychological symptoms, such as rapid heartbeat, muscle tension, and anxiety. Acoustic music can help calm the sympathetic nervous system, thereby reducing symptoms of stress. Acoustic music can help increase relaxation by reducing brain activity. The brain has different brain waves, each with different frequencies. Slow brain waves, such as alpha and theta waves, are associated with states of relaxation and meditation. Acoustic music can help increase this slow brain wave activity, thereby increasing relaxation.<sup>3,4</sup>

Acoustic music can help improve your mood by stimulating the release of endorphins. Endorphins are hormones that have a mood-boosting effect. Acoustic music can help increase the release of endorphins, thereby improving your mood. Acoustic music therapy can be used to treat anxiety by utilizing the positive effects of acoustic music mentioned above. Acoustic music therapy can be done independently or with the help of an experienced music therapist. Independent acoustic music therapy can be done by listening to acoustic music regularly. The type of acoustic music that can be used for acoustic music therapy to treat anxiety is music that has the following characteristics: Slow tempo; Soft rhythm; Harmonious melody. Acoustic music that has characteristics like these can help reduce sympathetic nervous system activity, increase relaxation, and improve mood.<sup>5,6</sup> This study aims to examine the effect of acoustic music therapy in overcoming anxiety in generation Z in Purwakarta Regency, Indonesia.

# 2. Methods

This research uses a quasi-experimental research design with a pretest-posttest control group design. The research sample consisted of 60 people who were generation Z in Purwakarta Regency, Indonesia, who

were divided into two groups, namely the acoustic music therapy group (30 people) and the control group (30 people). The acoustic music therapy group was given acoustic music therapy for 8 weeks, while the control group was not given any therapy. Acoustic music therapy is carried out by an experienced music therapist. Music therapists use acoustic music selected based on musical characteristics that can reduce anxiety, such as music with a slow tempo, soft rhythm, and harmonious melody. Acoustic music therapy is carried out for 30 minutes every week for 8 weeks. The measuring tool used to assess anxiety levels is the State-Trait Anxiety Inventory (STAI). STAI is an anxiety measuring tool that consists of two scales, namely the state anxiety scale and the trait anxiety scale. The research data were analyzed using the t-test.

#### 3. Results and Discussion

The results showed that there was a significant difference between the acoustic music therapy group and the control group in terms of anxiety levels. The acoustic music therapy group experienced a greater reduction in anxiety levels than the control group. The results of the t-test for the state anxiety scale showed that there was a significant difference between the acoustic music therapy group and the control group (t(59) = 2.62, p = 0.01). The average state anxiety score in the acoustic music therapy group (20.20) was lower than the control group (24.00). The results of the t-test for the trait anxiety scale showed that there was a significant difference between the acoustic music therapy group and the control group (t(59) = 2.41, p =0.02). The average trait anxiety score in the acoustic music therapy group (22.10) was lower than the control group (24.60).

The results of this study show that acoustic music therapy is effective in overcoming anxiety in generation *Z* in Indonesia. The significant reduction in anxiety levels in the acoustic music therapy group could be caused by various factors, such as the relaxing effect of acoustic music, the effect of changing mood, and the effect of changing perception. Acoustic music has a relaxing effect that can help reduce anxiety. This relaxing effect is caused by various factors, including: Slow music tempo; Soft music rhythm. Acoustic music with characteristics like these can help reduce the activity of the sympathetic nervous system, which is the nervous system responsible for the body's response to stress. When the sympathetic nervous system works more actively, it can cause a variety of physical and psychological symptoms, such as rapid heartbeat, muscle tension, and anxiety. Acoustic music can also help improve mood, which can contribute to reduced anxiety. This mood-changing effect is caused by various factors, including the effect of music on increasing brain activity and stimulating the release of endorphins.<sup>7-9</sup>

Acoustic music can help increase brain activity, especially in areas of the brain related to emotions and mood. Apart from that, acoustic music can also stimulate the release of endorphins, which are hormones that have a mood-boosting effect. Acoustic music can also help change a person's perception of anxiety-provoking situations. This effect of changing perception is caused by various factors, including the effect of music on increasing focus and attention and providing a new perspective. Acoustic music can help increase focus and attention so that a person can focus more on positive things and less on negative things. Apart from that, acoustic music can also provide a new perspective so that someone can see situations that cause anxiety from a different point of view.10,11

### 4. Conclusion

Acoustic music therapy is effective in overcoming anxiety in generation Z in Purwakarta Regency, Indonesia.

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