

# The Effects of Music on Anxious Autistic Patients

**Overview:** Does music help autistic young adults help lower anxiety and self esteem?

**1. Purpose of study:** The goal of this study is to see if music interventions help adolescence/young adults with Autism Spectrum Disorder relieve their anxiety and boost their self-esteem.

**2. Design:** This is a quantitative design. The design started by the participants taking a quiz before the study started and taking a quiz after the study was over. In the end, the quantitative results of both quizzes were viewed to see if the study was effective.

**3. Sample:** There were twenty-two young adults/adolescence picked ranging from the ages of thirteen to twenty-nine years of age. All these twenty-two individuals had to show proof before the study that they were 'high functioning' on the autism spectrum.

**Results:** The results were not clinically significant however, they were statistically significant. The study uses the scales such as the peer relations, the Rosenberg self-esteem scale and the state-trait anxiety inventory. The results of the study via the p-value were peer relations 0.049, Rosenberg self-esteem scale 0.015 and state-trait anxiety inventory 0.004 therefore, the findings of this study showed significantly higher self-esteem levels and substantially low anxiety levels.

**Strength of Study**

**Level of study:** 3

**Quality of study:** Medium

**Clinical Significance:** The clinical significance of this study is to show that music can reduce anxiety and increase self-esteem issues in autistic young adults.

Reference

Hillier, A., Greher, G., Poto, N., & Dougherty, M. (2012). Positive outcomes following participation in a music intervention for adolescents and young adults on the autism spectrum. *Psychology of Music*, 40(2), 201–215. <https://doi-org.ezproxy.libraries.wright.edu/10.1177/0305735610386837>

High levels of stress and low self-esteem are common in autistic individuals, especially with young adults. Various techniques have been done to help these levels even including musical interventions. Not many people know the effects music therapy has on a patient with autism. However, music can decrease the effects of anxiety and heighten self-esteem. Music therapy gives autistic patients the ability to learn how to control outbursts through music. Music therapy can allow a patient with severe autism the ability to share their emotions, and allow them to gain self-worth.

## PICOT Question

**In Autistic young adults what is the effect of music therapy on their anxiety and self esteem levels in comparison to no music intervention?**



**Overview: The Effects of Music Therapy on Young Adults with Autism**

**1. Purpose of study:** This study researched the effects of listening to preferred self-selected music, on the physiologic effect of skin conductance response, and psychologically measured by self-report of anxiety tool, among people with autism spectrum disorder (ASD) compared to a matched control group.

**2. Design:** Retrospective cohort study that relied on the patient's report.

**3. Sample:** The cohort study included twenty-three males with an ASD diagnosis and twenty-two males with no neurodevelopmental disorders. They participated in a baseline skin conductance measures which takes seven minutes to do. The participants then participated in three counterbalanced experimental conditions that each lasted seven minutes too.

**Results:** The results of the reduced anxiety while in silence, listening to preferred music, and relaxing music with the skin conductance monitor, shows that skin conductance level showed a significant main effect of condition (silence, relaxing, preferred music)  $F(2,41) = 4.20, p = .022$ , and a significant difference between groups  $F(1,42) = 7.97, p = .007$ . The differences between the controlled and the ASD groups was the preferred music condition where participants with ASD showed a higher skin conductance in the preferred music condition  $t(43) = 2.12; p = .04$ , Cohen's  $d = .75$ . There were no significant differences between the groups in the silence and relaxing conditions (silence:  $t(43) = 1.18, p = .246$ , Cohen's  $d = .44$ ; relaxing:  $t(43) = .70, p = .49$ , Cohen's  $d = .22$ ). Also, shown in figure one.

**Strength of Study**

**Level of the Study:** Level 4

**Quality of the Study:** Good

**Clinical Significance:** The clinical significance of this study has produced strong clinical evidence about the effects of music therapy on autistic young adults with anxiety. The study proves that music therapy helps young adults with autism and anxiety.

Reference

Hillier, A., Kopec, J., Poto, N., & Tivarus, M. (2016). Increased physiological responsiveness to preferred music among young adults with autism spectrum disorders. *Increased Physiological Responsiveness to Preferred Music among Young Adults with Autism Spectrum Disorders*, 44, 481–492. Retrieved from [https://journals-ohiolink-ed.ezproxy.libraries.wright.edu/pg\\_200](https://journals-ohiolink-ed.ezproxy.libraries.wright.edu/pg_200)