

Music Performance Anxiety in Adolescents (MUS-A) explores the impact of performance anxiety on young musicians.

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Classical music training is highly competitive. Young musicians face unique challenges mastering complex motor and cognitive skills. The demands of pursuing a professional level of musicianship within a conservatory can significantly impact their personal and professional lives. Both professional musicians and students often experience high levels of anxiety, with Music Performance Anxiety (MPA) affecting up to half of music students aged 12 to 15 [1]. Many of these students do not recognize their limitations or have access to therapies to mitigate the harmful effects of MPA, leading some to abandon their musical aspirations. MPA affects individuals on psychological, cognitive, emotional, and behavioral levels, making it difficult to define. According to Dianna Kenny [2], MPA is the experience of marked and persistent anxious apprehension related to musical performance, arising from specific anxiety conditioning experiences. Despite the critical neurobiological basis of psychological disorders, current treatment approaches often neglect these aspects, focusing only on psychological or pharmacological treatments. This study aims to diagnose and characterize anxiety levels in a group of 430 music students aged 12 to 14 within music conservatories. It also addresses the need for comprehensive therapeutic interventions using

both traditional and innovative protocols of Cognitive Behavioral Therapy (CBT), Neurobiological feedback and Meditation. The project's goal is to assess the effects of these interventions on the participants' MPA levels, and, consequently, musical performance quality. This project brings together institutions and researchers from various fields, including Music Psychology, Music Performance, Clinical Psychology, Educational Psychology, and Neurosciences. Their common purpose is to combine knowledge from different disciplines to design, implement, and validate an innovative intervention, beneficial for music students and teachers at an early stage of music development.

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References

- [1] StGeorge, J. (2005). The Musical Dropout: a new perspective Australian Association for Research in Music Education: proceedings of the XXVIIth Annual Conference, 13-27 sep 2005, Carlton Crest [edited by Peter de Vries], pp. 01-09.
- [2] Kenny, D.T. (2009). Negative emotions in music making. Performance anxiety. In P. Juslin, & J. Sloboda, (Eds). Handbook of Music and Emotion: Theory, Research, Applications, pp. 425-451. Oxford University Press.

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FIGURE 1

Neuroscience data collection during a musician's performance.

FIGURE 2

Prefrontal cortex view of a musician during performance, captured with Aurora fNIRS.

FIGURE 3

Whole-head NirsCap with prefrontal channel layout.

