

**Musical training as a proxy variable of cognitive reserve:  
Translation and validation of the Argentinean Musical Training  
Questionnaire (CEMA).**

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**Background:** Participation in leisure activities has been associated with favorable late-life psychological and cognitive outcomes and is one of the main aspects of cognitive reserve. Studies carried out in recent decades have focused on analyzing how music is processed and the impact that this artistic activity has on the development of psychological functions. Several studies, in which the performance of musicians vs. non-musicians is compared, pointed out the importance that musical training has regarding the development of diverse cognitive functions such as memory, language and executive functions. In the absence of instruments in Spanish that assess musical training from a cognitive and psychosocial perspective, the aim of this study is, to present the Spanish translation and adaptation of the Musical Training Questionnaire of Gooding, Abner, Jicha, Kryscio y Schmitt, (2014) in order to be used as a proxy variable of cognitive reserve.

**Method:** 200 adults of different gender, 100 with 4 years or more of formal musical training and 100 without musical training, average socioeconomic level and residents in Buenos Aires, Argentine. The translation from English into Spanish was carried out according to the transcultural translation method. A general data questionnaire and the CEMA were administered and evidence studies of apparent validity, of content by criteria of subject-judges, of criterion, and of reliability by Test-retest were carried out.

**Results:** The Spanish version of the CEMA was attained. The instrument shows appropriate apparent validity. Content (Aiken > .80) and criterion validity (Musical training: "r" between .76 and .88), and reliability ("r" between .84 and .99) were established.

**Conclusions:** The CEMA is a useful tool, easy to apply and evaluate, adapted to the local environment and with adequate psychometric properties to be used

in cognitive and psychosocial studies that investigate, in particular, the "role" of musical training as a neuroprotective factor of cognition in throughout the life span

**Keywords:** Musical training - Transcultural Adaptation - Cognitive performance - Validation.

Topics . Prevention (Non-pharmacological) – Subtopics:Lifestyle factors

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