Factor analysis of the cross-cultural adaptation of the Multidimensional Attitudes Scale towards Deaf persons in Chilean dental students

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Abstract

There are various instruments to measure attitudes toward persons with disabilities (PwD). The Multidimensional Attitudes Scale (MAS) toward PwD is a three-dimension scale with good psychometric properties; the Spanish version has been validated with a four-factor structure. Aim: To examine the factor structure of a cross-cultural adapted version of the Spanish MAS towards deaf persons in a sample of Chilean dental students. Methods: This cross-sectional study involved five Chilean public health experts that reviewed the scale for obtaining a preliminary version of a 30-item modified MAS towards deaf persons; a pilot with 15 dental students was performed, and a final sample composed of 311 students was included. For the exploratory factor analysis (EFA), maximum likelihood estimation (ML) for determining the number of factors and parallel analysis (PA) was used, with Oblimin for the rotation method. Cronbach's alpha was used to assess reliability. The root mean square error of approximation (RMSEA), comparative fit index (CFI), incremental fit index (IFI), goodness of fit index (GFI), Tucker-Lewis fit index (TLI-NNF) and root mean square of residuals (RMSR) were used to assess model fit. Results: All items had a normal distribution with the exception of items 7 and 10. The four-factor structure without item 10 in this EFA presented an adequate Cronbach's alpha (>0.83), suggesting acceptable reliability. RMSEA, TLI-NNFI, RMSR, GFI and CFI indices suggested a good fit of the model and were consistent with the literature. Conclusion: The Spanish modified version of the MAS towards deaf persons has a four-factor structure, which in consistent with a previous version of the MAS. © 2021. All Rights Reserved.