

Psychometry and estimation of cutoff points of Jefferson Scale of empathy in dental students

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Abstract

Objective: The objective of this study was to determine the psychometric properties of the 3-dimensional latent model of empathy on the Jefferson Scale of Physician Empathy instrument (version S), and to verify the existence of cutoff points capable of differentiating empathy measures classified as: “high,” “medium,” and “low” using data collected from observations of students from 11 dental faculties of 5 Central American and Caribbean countries ($n = 3082$) between 2015 and 2019. **Methods:** This is an exploratory, “a posteriori,” and non-experimental study. Factor structure and factor invariance by country and gender were analyzed. Hierarchical cluster analysis and bifactorial analysis were applied, and the data were normalized by cluster and by percentiles within them. **Results:** Confirmatory factor analysis showed that the original model was replicable and fit the data, while multigroup analysis allowed assuming an invariant factor structure by country and by gender. There is reliability in the measurement made by the scale and its dimensions. **Conclusions:** The instrument has adequate psychometric properties, and cutoff values obtained allow people with lower or higher levels of empathy and its components to be classified. Therefore, these results solve the problem of comparing the scores and observed levels of empathy between dental schools within and between countries and between genders. Such comparisons were only possible since the original data of each study were made available for traditional statistical methods.

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