Review of: "Psychometric of the interpersonal communication skills scale: A confirmatory factor analysis"

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Potential competing interests: No potential competing interests to declare.

The research work is very interesting and necessary. For its publication, some adjustments need to be made. Below, I will indicate the items that need improvement.

Title: It is recommended to change "Psychometric Properties" of the Interpersonal Communication Skills Scale - A Confirmatory Factor Analysis may be redundant as it is implied in the term psychometric properties:

In the abstract: The authors state the idea that assessing the communication skills of healthcare professionals is necessary to improve patient outcomes. However, be cautious with this paragraph, as there are multiple aspects to consider, and improving communication skills is not the only one. Perhaps the focus should be on the importance of communication skills in the doctor-patient relationship and the need for a reliable and valid instrument to be used among healthcare professionals.

Method: The sample size is very small. It is recommended to read the article on Minimum Sample Size Recommendations for Conducting Factor Analyses (Mundfrom & Shaw, 2005).

Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum Sample Size Recommendations for Conducting Factor Analyses. International Journal of Testing, 5(2), 159–168. https://doi.org/10.1207/s15327574ijt0502_4

It would be advisable to use a sample size of more than 200 subjects and preferably larger than 400 subjects when the data exhibit skewness or non-normality. This recommendation takes into consideration the potential issues that arise when dealing with non-normal data and the need for a sufficiently large sample size to obtain reliable results.

Thank you for providing additional references. Based on Goretzko et al. (2019), it is recommended to use sample sizes larger than 400 as desirable, as smaller samples can yield invalid results under unfavorable conditions. According to Brown (2015), research has shown that maximum likelihood (ML) estimation is robust to minor deviations from normality. However, when non-normality is more pronounced (such as severe skewness or kurtosis, or very small standard deviations), it is advisable to use a non-ML estimator to obtain reliable statistical results. The consequences of using ML in conditions of severe non-normality include (1) falsely inflated model chi-square values and (2) modest underestimation of fit indices such as TLI and CFI. These detrimental effects are exacerbated as sample size decreases. The reference provided is:

Brown, T. A. (2015). Confirmatory factor analysis for applied research (2nd ed.). The Guilford Press.

In the introduction, it is necessary to include an explanation of the psychometric properties of the original scale and provide a comprehensive overview of its characteristics. Additionally, in the methodology section, the procedure should describe the two models that will be tested using confirmatory factor analysis. It is important to provide more detailed information about the original scale to ensure a complete understanding of its properties and the analytical approach being employed.

I would recommend making minor adjustments for publication. These adjustments include: