

# Psychometric properties of the Parental Stress Scale (PSS), evaluated using Item Response Theory

Wednesday, 11 September 2024 12:30 (20 minutes)

**Background:** Parental stress affects parents and negatively impacts children. Therefore, it is important to provide a valid and reliable measurement instrument. **Objective:** The aim of this study was to conduct a psychometric evaluation of the Parental Stress Scale (PSS) using item response theory analysis in parents of 2–9 year old children. **Methods:** Data from a larger European initiative to evaluate the Parenting for Lifelong Health for Young Children program were analyzed. Baseline assessments of 1658 parents in North Macedonia, Romania and the Republic of Moldova were included. IRT methodology was used to assess the psychometric properties of the PSS, including analyses of dimensionality, item characteristics, and subgroup invariance for 11 split criteria. **Results:** A good fit of the generalized partial credit model (GPCM) to the data could be demonstrated and the model held. Participants responded dichotomously and the test could measure more accurately in the higher theta range (i.e. highly stressed parents). In addition, the differential item function (DIF) analyses revealed significant results for items for the country comparison and for higher or lower overall PSS values. **Conclusion:** It is recommended to revise the items and the response format of the PSS. Moreover, items that accurately discriminate at the lower end of the PSS should be added for screening low-stress parents. Using IRT methodology, this study improved the understanding of the psychometric properties of the PSS. Evidence-based recommendations were made to improve the scale to enable accurate measurement of parental stress in the future and facilitate targeted interventions.

## Are you currently an Early Career Researcher?

Yes, I am still a student or have not yet received my Ph.D.

**Primary authors:** BUß, Katharina; FORAN, Heather (Psychologie)

**Presenter:** BUß, Katharina

**Session Classification:** Poster Session

**Track Classification:** Health Psychology