Request #: 604 - HDFS - Publication/Article

Parental Microprotections: Testing Measurement Equivalence across Race/Ethnicity

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Background

Data from this project was collected from a qualtrics panel survey, with data from 395 parent-adolescent dyads. Approximately 1/3 self identified as White, 1/3 as Black/African American, and 1/3 as LatinX/Hispanic. The survey included demographic questions as well as measures of parental warmth, parental microprotections, parental outlook of positive youth development, items from the national relationship inventory, adolescent report of experienced discrimination and what the discrimination was perceived to be attributed to, and measures of well-being such as depression and risky behaviors. The microprotections framework was developed and tested by Anthony James and Aryn Dotterer in the context of Black families. The present study is designed to use confirmatory factor analyses to test the measurement invariance of the microprotections measure and the applicability to other racial/ethnic groups.

Sample

Both parents and adolescents reported on parental microprotections, however adolescents reported microprotections for both mom and dad. There were 395 dyads total in the study, but those who identified as something other than White, Black, or Latinx were removed from the analyses due to power concerns. This resulted in 125 White dyads, 119 Latinx dyads, and 109 Black dyads. The microprotections measure includes five items that load onto the latent construct of "microprotections".

Hypothesis

Research question: Can the microprotections measure be generalized to White and Latinx populations?

Hypothesis: The microprotections construct will be present for all racial/ethnic groups. The microprotections construct will function differently for majority (White) than minority (Black/Latinx) groups.

Progress

We have performed confirmatory factor analyses in R Studio for parent reports of microprotections and adolescent reports of microprotections. The parental reports supported our hypotheses as evidenced through measurement invariance levels outlined by Meredith (Meredith, 1993). The adolescent report of maternal microprotections seems to be following the pattern of parental report, however the adolescent report of paternal microprotections has resulted in some warnings of "not positive definite" in the matrix.

Request

We would like help to understand the "not positive definite" warning and approaches to take to ensure that the results are valid.

Timeline

An article submission by June 3rd is the goal, however the submission can be later.