Using micro-aggressions and micro-affirmations to measure everyday discrimination: A psychometric analysis of the Everyday Discrimination Scale among First Generation College Students

Brooke Midkiff
James Ellis
Cynthia P. Demetriou
Michelle Langer
A. T. Panter

The University of North Carolina at Chapel Hill

Microaggressions and microaffirmations are subtle actions and behaviors that accumulate over time to produce negative and positive outcomes respectively (Gonzales et al., 2015; Sue et al., 2007). As part of a 2015 Finish Line Project study on first generation college students (FGCS) we (1) examined psychometric performance of a shortened version of the Everyday Discrimination Scale (EDS) in this sample (Stucky et al., 2011; Williams, Yu, Jackson, & Anderson, 1997); and (2) created and incorporated a new strength-based item set to reflect affirmations that these students may experience. Using item response theory (IRT) and differential item functioning (DIF), we explored the performance of the microaggression and microaffirmations items as a function of student attributes.

Adequate measurement of perceived experiences of everyday discrimination among FGCS is important. FGCS status is associated with a 15-21% reduced probability of 4-year college completion (Adelman, 2006; Pike & Kuh, 2005). Relationships with peers and faculty are critical for student retention (Tinto, 1987), thus the development of a version of the EDS for specific use with FGCS populations can greatly inform research.

Participants included 452 FGCS’s who completed the revised EDS within a larger study administered using Qualtrics. There was less than 1% of missing data per item. The modified EDS uses 5 measures of microaggressions and 5 measures of microaffirmations, with higher total scores indicating greater discrimination. Extensive IRT and DIF analyses were performed using IRTPRO 3 (Cai, Thissen, & DuToit, 2011).

Taken together, the 10 items had an average item-total correlation of .35. The average item-total correlation for the five microagression items was strong (.62). Similarly, the microaffirmation items are strongly related to one another (.55). Removing one poorly performing item “People make comments that show sensitivity to my background” from the microaffirmations subscale results in an average item-total correlation of .62.

Cronbach’s coefficient alpha was .68 for all 10 items, .83 for the 5 microagression items, .77 for the 4 microaffirmation items, and 0.80 for the 4 best-performing microaffirmation items. This indicates that the items have adequate reliability for aggregate reporting when considered as separate constructs.
Two underlying factors best explained the item response data – one for each subscale. However, the microaffirmations model fit better using only the 4 best-performing items. A categorical confirmatory factor analysis model with these two factors had adequate fit, with a nonsignificant correlation between the two factors; factor loadings on the nine items ranged from .62 to .91. The graded response model was a good fit for both subscales; however, the microaffirmation item, “You hear subtle comments that imply respect and admiration” did not fit well. No local dependence was indicated, and item parameters were strong for all items.

Ordinal logistic regression models to assess DIF by gender, race/ethnicity, and transfer student status did not reveal significant bias in the microagression or microaffirmation items.

These findings suggest that the shortened EDS performs well among FGCS. Future analyses will further hone the microaffirmations subscale and will link findings to institutional data about student academic performance.

References