CONFIRMATORY FACTOR ANALYSIS OF THE QUEST RELIGIOUS ORIENTATION SCALE

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Batson, Schoenrade, and Ventis (1993) conceptualized their 12-item Religion as Quest Scale (Q Scale) as a multidimensional construct measured with three subscales. Flere, Edwards, and Klanjsek (2008) conducted a confirmatory factor analysis (CFA) of the scale and found support for the notion of Batson and colleagues that the Q Scale is composed of three separate dimensions or factors. But because of both inconsistencies in their results across samples and their alteration of placement of scale items across dimensions of the Q Scale, further research is needed to replicate and/or verify, and also extend their findings.

In this study two samples were used: a calibration sample of 226 students (*M* age = 20.0, *SD* = 2.5; 58% males) at a Catholic university in the Midwest, USA, used to evaluate several factor models, and a cross-validation sample of 200 students (*M* age = 19.9; *SD* = 2.3; 54% males) used to replicate the models gained from the first sample.

Consistent with the results gained by Flere et al. (2008), the one-factor solution had poor data-model fit, indicating that the Q Scale is not unidimensional and consequently making the total score on Q ambiguous (Carver, 1989). Although the fit indices of a three-factor solution showed dramatically improved fit (χ^2_{diff} [3] = 86, *p* < .001), the results were only marginally adequate in an absolute sense comparative fit index (CFI) = .89, root mean square error of approximation (RMSEA) = .08 (Byrne, 2009).

Flere et al. (2008) did not examine the results of their CFA with the Q Scale at the item level. I found that two items had very poor measurement qualities. Items 7 and 11 (see Batson et al., 1993, p. 170, for specific items in the scale) had

squared multiple correlation values of under .10, indicating that less than 10% of the item's variance was due to the underlying factor and more than 90% was due to measurement error. Thus I tested a revised three-factor, 10-item model after those two items were removed (the original three-factor, 10-item model yielded an inadmissible solution). This resulted in improved model fit based on CFI (.92) but not RMSEA (.08).

One of the most important ways to assess the adequacy of a CFA analysis lies with successful cross-validation. The two-factor, 10-item model was tested with a new sample and found to be acceptable (χ^2/df = 1.8, p = .004; CFI = .96, RMSEA = .06). The original three-factor, 12-item model was not as acceptable but was still adequate (χ^2/df = 2.0; CFI = .90; RMSEA = .07; χ^2_{diff} [17] = 42, p < .001).

In this study the finding of Flere and colleagues (2008) that a single factor is inadequate to describe the Q Scale was replicated. A three-factor model of the Q Scale was found to be superior to either a one- or two-factor model when the full, 12-item Quest Scale was used. This suggests the use of subscales, and not a total score, would maximize discriminant validity in quest research.

The 12-item Q Scale has two psychometrically weak items, and when those items were removed, the resulting two-factor model was found to be superior to the three-factor, 12-item model.

The two-factor model was successfully cross-validated with an independent sample, supporting the generalizability of the two-factor, 10-item model of the Q Scale, and its use in future research.

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