

# On the Reliability and Validity of a Three-Item Conscientiousness Scale

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**Kate E. Walton**

In a recent report (Walton, 2024), I examined whether shortened conscientiousness scales—three-item scales versus six- or eight-item scales—maintain acceptable levels of reliability and validity. I determined that shortening the scales had little to no negative effect on reliability or on several validity estimates and argued that brief conscientiousness scales can therefore be used in place of longer ones. In light of this, the ACT research team developed a three-item conscientiousness scale to predict ACT® test scores. Here I examine the reliability and validity of this scale.

Our research team emailed all students who took the ACT online in December 2023 several days after they finished the test, inviting them to participate in survey research. The students ( $N = 490$ ) responded to three conscientiousness items. Their demographics and high school GPA were obtained at the time of ACT registration. Results are as follows:

- There was sound reliability evidence, with Cronbach’s alpha reaching .78.
- The conscientiousness scale score correlated .26 with high school GPA and .24 with ACT Composite scores, providing evidence of test-criterion validity.
- There was evidence of incremental validity, with the conscientiousness scale score accounting for a significant amount of additional variance (2%) over gender, race, income, and high school GPA.

**There was strong reliability and validity evidence for the three-item conscientiousness measure, underscoring the potential of brief scales to predict important life outcomes.**

## Reference

Walton, K. E. (2024). *Brief Conscientiousness Scales: How Low Can You Go?* ACT.



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