

RELIABILITY

Internal consistency coefficients for both the two-subtest Verbal Ability scale and the three-subtest Crystallized-Educational scale

Internal consistency coefficients measure the extent to which item responses obtained at the same time correlate highly with each other. It shows the reliability level of test scores, in other words whether or not it is possible to draw conclusions about one's performance based on the score given by the test.

The analysis of questionnaire score reliability focuses on the estimation of the amount of error associated with score derivation. The investigation of error variance is done in such a manner that results are presented in terms of coefficients as a particular use of common correlation coefficients. To be considered of a satisfactory level of reliability, a test aimed at being used for individual diagnosis should yield scores with coefficients of about .80 or higher in magnitude. Coefficients of .90 or above are considered to be most appropriate (Aiken, 2000; Nunnally & Bernstein, 1994).

Coefficients for both the CCAT CEI and VAI fall within .95 to .97, similarly to most of the published and widely used cognitive ability scales. These reliability values are viewed as excellent. Standard errors of measurement as calculated from Spearman-Brown coefficients are 2.77 and 3.07 for the CEI and the VAI respectively. Thus, one can have a strong confidence in the relative reliability and accuracy of both CCAT indexes.

REFERENCES

Aiken, L. R. (2000). *Psychological testing and assessment (10th ed.)*. Needham Heights, MA: Allyn & Bacon.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.)*. New York: McGraw-Hill.

Method of Determining Reliability	CCAT CEI	CCAT VAI
Cronbach's α	.960	.951
KR-20	.961	.951
Spearman-Brown	.966	.958
Guttman G6	.965	

Note. $N = 470$.