

Proven Reliability and Validity of the Torrance Tests of Creative Thinking (TTCT)

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Baer challenged the validity of the TTCT, but the evidence that Baer cited is largely irrelevant, having—at best—a tangential connection to the TTCT. The TTCT should not be criticized with evidence derived from other divergent thinking tests, but several of the articles referenced by Baer evaluated other measures of creativity: Wallach (1976) referred only to Ideational fluency tests; Simonton (2007) focused on divergent thinking tests, including the Remote Associates Test (Mednick, 1962); and Han (2003) used the Wallach-Kogan Creativity Test (Wallach & Kogan, 1965) and the Real World Divergent Thinking Test adapted from Okuda, Runco, and Berger (1991). Moreover, using only a part of any test is not reliable or valid unless reliability and validity for the specific part has been proven (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1985), but Baer (1993) used the “Unusual Uses” item of the TTCT; and Kéri (2009) used the “Just Suppose” item of the TTCT.

Baer also questioned the predictive validity of the TTCT, criticizing the outcome measures due to their basis in self-reported measures. He likened it to a group of fourth graders providing a self-report of their creativity. However, the longitudinal studies of the TTCT (Cramond, 1994; Cramond, Matthews-Morgan, Bandalos, & Zuo, 2005; Runco, Millar, Acar, & Cramond, in press; Torrance, 1980, 1981b) did not actually allow the participants to rate their creativity. They responded to a questionnaire that asked for biographical and demographic information as well as the participant’s most creative achievement, aspirations, and a checklist of creative accomplishments that included type and degree of achievement in the arts, research, work innovations, inventions, and change in life philosophy, as well as *Creative Style of Life Achievements*, which are not ordinarily publicly recognized and acknowledged, such as organizing an action-oriented group (Torrance, 1981b). From this information, qualified judges compiled indices of creative accomplishment that reflected both the number and quality of the accomplishments. For example, a lead role in a local play got fewer points for quality than a lead role in a play with a national company.

The two follow-ups of the elementary students were conducted 22 years after the initial testing (Torrance, 1980, 1981a), and again 40 years after (Cramond, Matthews-Morgan, Bandalos, & Zuo, 2005), then 50 years after the testing (Runco, Millar, Acar, & Cramond, in press). Thus, these were adults, not children, who

were asked to report what they had accomplished in various areas, much as university faculty furnish their own performance reports, which are judged for quantity and quality.

Baer made a strident argument against the reliability of the TTCT, a claim based on the possibility of raising scores with minimal training. However, neither Baer nor Plucker (1999) has provided any evidence that TTCT scores are significantly raised by minimal training, coaching, or administration issues. Evidence does exist to the contrary; however, as Kim (2006) found, experienced scorers or trainers of the TTCT routinely report that practicing effects are not significant. However, if scores are raised after significant training on creative thinking techniques, this should not imply that the test is unreliable, because it is possible that such training may have resulted in an increase in creative thinking, just as an increase on the GRE can follow training on verbal and quantitative thinking.

Finally, regarding the issue of domain generality or domain specificity, Simonton (2007) concluded: “The process of major creative insights is domain-free while the content remains domain-bound” (p. 363), which indicates the presence of domain-generality. Also, the Root-Bernsteins (1999) concluded, after interviewing individuals who excelled in science and the arts, that there are basic thinking skills that underlie creativity, whatever the domain.

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