

The development of critical thinking: does college make a difference

[Linguistics](#), [English](#)



The purpose of Pascarella (1999) was to determine if college has a statistically significant effect on the critical thinking skills relative to a matched group of students who did not attend college during the 1-year period of the study. The author set out to rule out the hypothesis that college does not improve one's critical thinking after their first year.

In order to test the hypothesis regarding the relationship between critical skills and college attendance, the researcher recruited 47 high school seniors who completed the ACT exam in their senior year. The researcher had each participant complete the Watson-Glaser Critical Thinking Appraisal (CTA).

The CTA is broken down into five critical thinking subscales for more refined analysis. Based on McMillan (1986), Pascarella (1999) claims the CTA is effective at measuring critical thinking as "a broad and general construct" (p. 563). It seems that by citing McMillan (1986), the author here is lending outside support to his choice of instruments for conducting the study. Since the CTA measures a broad and general construct, Pascarella is suggesting that his study will have external validity.

Thirty participants went to college while seventeen did not ($n = 47$). After a period of approximately one year, both of the matched groups took the CTA again. Based on the longitudinal differences within- and between-groups, Pascarella (1999) discovered that college versus non-college status had a significant effect in three of the six analyses conducted—namely, the total CTA score, the interpretation subscale, and the evaluation of arguments subscale (p. 565). Although no one specific college experience is significant enough to definitively influence the development of critical thinking skills, according to the author, the general experience has an effect (p. 565).

Pascarella (1999) demonstrates a relatively simple experiment design that, despite its limitations, is important to share with individuals considering college as an option.

References

McMillan, J. (1986). Enhancing college students critical thinking: A review of studies. American Educational Research Association. San Francisco, CA.

Pascarella, E. (1999). The development of critical thinking: Does college make a difference? *Journal of College Student Development*, 40, 562-569.