

Assessing the implementation of a critical thinking intervention in traditional and online courses

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INTRODUCTION

- Critical thinking is one of the more important skills for psychology students to develop and has been identified as vital for student success in the workforce.
- Recent patterns in education have created new curriculum challenges.

METHOD

- $N = 62$; Age ($M = 20.1$, $SD = 6.5$); Gender (Female, 73%); GPA ($M = 3.17$, $SD = .84$); Group identification (Caucasian, 88%; African American, 3%; Hispanic, 6%); Major (non-Psychology, 79%)
- The revised Psychological Critical Thinking Exam (PCTE; Lawson et al., 2015) measured critical thinking. Odd-numbered PCTE items constituted the pretest and even-numbered items the posttest. Three raters graded responses with an adapted rubric.

RESULTS

- There were no significant differences in critical thinking between the online and traditional classes in the pre-test, $F(1, 60) = 2.60$, $p = .11$, partial $\eta^2 = .04$.
- Yet there was a significant difference in critical thinking post-test assessment, $F(1, 63) = 4.60$, $p = .04$, partial $\eta^2 = .07$.



The online classes performed significantly better after the critical thinking intervention when compared to the traditional classes.



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Figure 1. Intervention results. Median PCTE scores for online and traditional groups are plotted for both pre- and post-assessment periods.

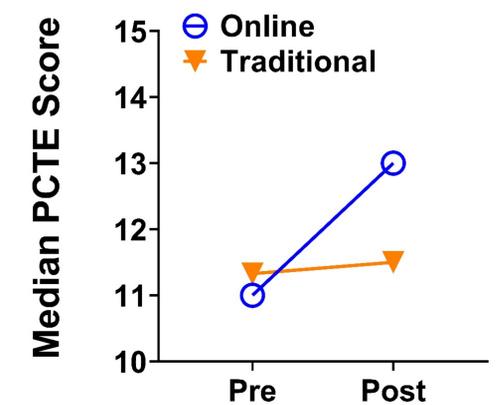
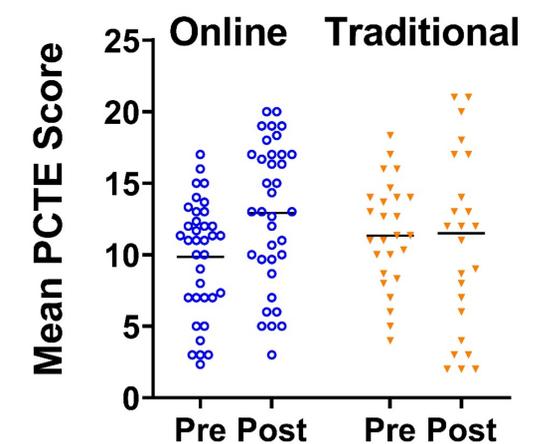


Figure 2. Intervention results: Individual data. Individual PCTE scores for online (open circles) and traditional (closed triangles) groups are plotted for both pre and post assessment periods. Horizontal bars represent group means.



DISCUSSION

- Students enrolled in online courses showed significant improvement across assessment period.
- Taken together, these data suggest similar interventions may improve critical thinking in undergraduates enrolled in online or distance-learning coursework.