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Developing Adolescent Students' Creative Thinking Processes & Performance Through Training Cognitive Creativity Techniques: A Panacea or Pandora's Box

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ABSTRACT

Creativity is related to adolescents' emotional and mental wellbeing, and is the cornerstone of their future academic and professional success. Considering the significance of developing their creativity, this research investigated the impact of training cognitive creativity techniques (brainstorming, random connection, schema violation and SCAMPER) on the creative performance and thinking processes of adolescent students. 54 volunteer students, ranged in age from 16 to 17 participated in this quasi-experimental study. To assess creative performance and thinking processes, Guilford's Alternative Uses Test and Görlich's Creative Process Assessment Scale were respectively employed. Before teaching the cognitive techniques, the pre-tests of creative thinking processes and performance were conducted in both experimental and control groups. Then, the experimental group was taught cognitive creativity techniques during eight one-hour sessions (each technique in two sessions) while no intervention was made in the control group. After the accomplishment of the training course, the post-tests of creative thinking processes and creative performance were instantly taken from both groups. The results of running MANCOVAs indicated that teaching these techniques significantly improved the overall creative performance and thinking processes of students in the experimental group compared to the control one. Also, the treatment resulted in the significant enhancement of all subscales of creative performance (i.e., fluency, novelty, flexibility and elaboration) and five subscales of creative thinking processes (i.e., problem discovery, concept combination, idea generation, development of a solution approach and idea evaluation) in the experimental group. Therefore, teaching cognitive creativity techniques could be prosperous for the improvement of students' creativity.

Keywords: elaboration, flexibility, fluency, novelty, teaching