BACKGROUND

Creativity is commonly acknowledged as the ability to produce original works (Paulus & Nijstad, 2003; Runco & Jaeger, 2012). Considered as one of the most important skills for childhood development (Kaufman & Sternberg, 2010; Runco, 2004), creativity contributes to an individual’s problem-solving and innovative ability, which play a crucial role in personal growth and professional development (Besançon & Lubart, 2008). Kaufman and Sternberg (2010) define creativity as “the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context” (p. 49). This definition suggests that creativity is not a personal trait, but an ability that can be influenced by contextual or broader cultural resources, such as pedagogy and educational environment. Studies on creative ability have demonstrated the impact of educational context (Besançon & Lubart, 2008; Besançon, Lubart, & Barbot, 2013). Traits of school environment can either foster or suppress children’s creativity development, including instructions from teachers, tasks and exercises, and classroom space (Besançon & Lubart, 2008; Besançon et al., 2013).

RESEARCH QUESTION

To what extent do students in a public Montessori school differ from students in a public non-Montessori school on an assessment of creative potential?

FINDINGS

To get a sense of the differences in raw EPoC scores, researchers performed multiple bivariate, difference-in-means tests to examine the relationship between school type and students’ scores before adjusting for student demographic factors. These results are presented in Figure 1. Initial results show that Montessori students perform better on divergent-exploratory tasks and exhibit a higher final scores than non-Montessori students.

While these results are suggestive of a Montessori advantage, there are demographic differences between the two groups. Thus, a multivariate analysis was used to analyze these scores. After controlling for demographic factors, Montessori students scored 2.28 points higher on the EPoC. This is a statistically significant difference at the two-tailed, p<.05 level. To get a sense of the magnitude of this difference, researchers re-estimated the regression using standardized scores as the dependent variable. Using this approach, researchers found that Montessori students score .28 standard deviations (i.e. = 0.16) higher than non-Montessori students. This is a substantively large difference.

REFERENCES