Review of: "Does a ‘Creativity Crisis’ Truly Exist Among Science Learners?"

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Potential competing interests: No potential competing interests to declare.

The study of creativity crisis and its applicability in Indian students’ population is an interesting and timely topic. However in the present research, serious methodological concerns make the study inconclusive.

Creativity crisis was initially put into evidence by Kim (2011) on the basis of performance data at a recognized test of creative thinking. Here the authors attempt to capture creativity crisis on the basis of declarative data collected from teachers, which is not prohibitive in itself, but may be particularly prone to biases. The survey design should have taken the potential biases into account. First of all, the study aim should not be disclosed in the introduction of the questionnaire survey (social desirability biais); acquiescence bias should be counteracted with inverted item (e.g., sometimes “newer students are more xxx”, sometimes “newer students are less yyy”), and so on. Moreover, it is unclear whether the items of the survey were homemade, although standardized scales exist for measuring the target dimensions. Finally, each respondent may have their own timescale for newer/older students: do we reason on a 20-year or 5-year evolution?

Regarding data analysis :

- Results of Kolmogorov-Smirnov or Shapiro-Wilks tests should be provided to conclude on normality.
- I do not understand why pairwise t-tests were performed instead of t-tests comparison to a norm.
- Although all means are <3, the authors conclude that newer students are more creative than older ones.

Minor comment: Statements such as “a descriptive survey method, which is the most suitable research method to understand any phenomenon” do not make sense and should be avoided.