

Review of: "Influence of Motivation on Pre-service Primary Teachers' Performance in Mathematics"

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Potential competing interests: No potential competing interests to declare.

The title of the article and the objective set for the study state that the study sought to investigate the "influence" of the motivation of future mathematics teachers on their performance in mathematics, but the study is correlational in nature, and not causal as the term "influence" suggests.

The situation that justifies the study is correctly stated: the difficulty of teaching mathematics and the low performance of the students. Background information is provided on the influence of motivation on academic performance.

The theoretical framework does not present fundamental authors and sources for a concept as important as motivation. Furthermore, at a certain point motivation is erroneously defined as "an effort". For the distinction between types of motivation (intrinsic and extrinsic), an article from 2020 is cited, but the origin of that theoretical distinction is much older.

The review of previous empirical studies does not present the magnitude of the correlations between motivation and performance obtained by these authors.

The research questions are correctly posed, and the methodology is adequately described.

However, an important omission is that of the questionnaire indicators used to measure motivation and extrinsic motivation.

The conclusion of the study is erroneous, since it is not possible to affirm that motivation "influences" the academic performance of students, only that it is associated with it.

The results of the study do not provide evidence to affirm that the future teachers "were motivated", as stated. For this, the researcher should have set a minimum level of motivation and check if the students' motivation is above that minimum.

In summary, the article has weaknesses. The theoretical framework does not expose the developments of the fundamental authors in the study of motivation. The method used is presented incompletely, since it does not explain the way it was used to measure the variables "intrinsic motivation" and "extrinsic motivation." And the conclusion of the study is erroneous, since it affirms the existence of an "influence" of motivation on the academic performance of students, but the study was not causal in nature but correlational.