

The Relationship of the Dimensions of Perceived Teaching Style with Students' Mathematics Achievement and Self-Efficacy

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ABSTRACT

The objective of the present study was to determine the relationship of the dimensions of perceived teaching style with students' mathematics achievement and self-efficacy. To this end, among 432 individuals considered as the statistical population, a corpus of 205 third grade high school students studying mathematics and physics in public high schools in Zahedan in the academic year 2014-2015 was selected based on gender using the stratified random sampling method. The Teacher as Social Context Questionnaire (Belmont et al., 1992) and the Mathematics Self-Efficacy Scale-Revised (Betz & Hackett, 1983) were completed by the subjects and the mean scores on geometry, arithmetic, and algebra were used as indicators of mathematics achievement. To analyze the obtained data, both descriptive (frequency, mean, and standard deviation) and inferential statistics (the Pearson correlation coefficient, simultaneous regression analysis, and one-sample t-test) were applied. The results indicated that the dimensions of perceived teaching style (autonomy support, structure, and involvement) were related to mathematics achievement and self-efficacy and were able to significantly predict them. Finally, the results of the t-test demonstrated a difference between the males and females with regard to self-efficacy; however, no difference was found between them in terms of mathematics achievement.

KEYWORDS

Dimensions of Teaching Style, Self-Efficacy,
Mathematics Achievement, Mathematics Self-
Efficacy, Self-Determination Theory.

ARTICLE HISTORY

Received 12 September 2016
Revised 19 November 2016
Accepted 23 February 2017

Introduction

The low efficiency of teaching and learning practices, remarkable growth of human knowledge, scientific advances achieved due to the technology, and

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