

Science Learning Motivation, Teacher Support, Learning Engagement and Academic Achievement of Junior High Students

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ABSTRACT

The main purposes of this study were to explore the relations among science learning motivation, teacher support, learning engagement and academic achievement in junior high students. The first purpose of this study was to investigate the statistical distribution among science learning motivation, teacher support, learning engagement and academic achievement of junior high students from different backgrounds. The second purpose of this study was to examine the relations among science learning motivation, teacher support, learning engagement and academic achievement in junior high students. The third purpose of this study was to examine how teacher support, science learning motivation and learning engagement to predict academic achievement. Five hundred and sixty junior high students were selected by cluster sampling in Taichung City for the pilot sample, after five hundred and sixty junior high students were applied for the official test object. The subjects were administered by Teacher Support Scale, Science Learning Motivation Scale, Learning Engagement Scale, and Academic Achievement Test. t-test, one-way ANOVA, Pearson product-moment correlation, and multiple regression were used for the data analysis. The findings of this study were summarized as follows: (a) There were significant on socioeconomic status and the number of laboratory differences in teacher support and science learning motivation. (b) There were significant on gender, socioeconomic status and the number of laboratory differences in learning engagement and academic achievement. (c) There were significantly correlations between teacher support and science learning motivation. There were significantly correlations between teacher support and learning engagement. There were significantly correlations between teacher support and academic achievement. There were significantly correlations between science learning motivation and learning engagement. There were significantly correlations between science learning motivation and academic achievement. There were significantly correlations between learning engagement and academic achievement. (d) Self-efficacy, ability factor and emotional engagement showed different patterns of prediction to academic achievement in junior high students.

Keywords : Science learning motivation、Teacher support、Learning engagement、Academic achievement

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