Relationships between Social Support, Motivation, and Science Achievement: Structural Equation Modeling

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ABSTRACT This study investigated the relationships between the perceived social support, motivation and science achievement in a sample of 1375 (701 females, 674 males) middle school students. The study was conducted within a causal research design. Social support data were collected via the Child and Adolescent Social Support Scale (CASSS) and the data concerning motivation were collected via the Motivation Strategies for Learning Questionnaire (MSLQ). Students’ science achievement levels were determined through calculating the scores they obtained in science courses. Data were analyzed through structural equation modeling (SEM). According to the structural models obtained, the effects of social support on science achievement and motivation, as well as the effects of social support and motivation on science achievement, were found to be positive and significant. The mediating effect of motivation between social support and science achievement was not significant $p>0.05$. The findings revealed that the cooperation of the sources of support (parents, teachers, classmates, and close friends) was essential in increasing students’ science achievement and motivation levels.