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RELATIONSHIPS BETWEEN STUDENTS' VIEWS TOWARDS MATHEMATICS AND ACHIEVEMENT IN MATHEMATICS

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The mathematical knowledge influences the man's mind for simplicity, accuracy analysis, synthesis and understanding the world. Mathematics serves both, the basic skills for human resources and the foundation for further education. The assumption is that higher secondary level mathematics is the cornerstone of mathematical sciences and engineering, which stimulated the researcher to focus on the students' views towards the mathematics and learning outcomes of mathematics. This research has been undertaken in order to investigate the relationship among the grade eleven students' academic achievement in mathematics, their views towards mathematics, and academic aspiration. The population under study consists of 247 students enrolled in the academic year 2013 in a science program running Higher Secondary School of Kathmandu, Nepal. Students' changed scores of views (positive, balanced, or negative) were determined by subtracting the pre-views from the post-views. A descriptive analysis has been employed to examine the relationship between students' pre- and post-views towards mathematics based on five subscales (value, enjoyment, self-confidence, motivation and belief), academic aspiration (mathematical sciences, undecided, nonmathematical sciences), and mathematics achievement scores. This study found that the students with changes in views scored relatively low in MAT when compared to those students with balanced views. However, students with positive changes scored higher than those students with negative changes. It was also found that the achievement of students was higher for students with aspiration in mathematical sciences, or yet undecided, whenever balanced or positive changes occurred. However, when negative changes occurred, MAT scores were lower for undecided students than those with non-mathematical or mathematical sciences' aspirations.

As far as the researchers' knowledge is concerned, this study is believed to be the first one of this kind. These findings have implications for improvement of mathematics education of pre-university students.

keywords: academic aspiration, mathematics achievement test, views.