Title: A Quantitative Analysis of Student Cultural Background Influencing Teacher Expectations of Eighth Grade Mathematical Achievement NELS: 88

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American students' mathematical achievements are regularly compared to mathematical achievements of other students from all over the world. Due to the fact that these comparisons typically demonstrate a poor reflection on American students, reform efforts have been generated by both state and federal governments to assist in improving American students' achievement. However, real change needs to begin in the classroom. It is this level where influences on student achievement, such as teacher self-efficacy and expectations, have the most direct influence on student performance. This study examined three areas of interest: a) to what extent does teachers' self-efficacy and expectations influence students' math achievement; b) to what extent does student SES and ethnicity influence the relationship between teachers' self-efficacy, expectations, and students' math achievement; and c) to what extent do school demographics and teachers' background variables influence the relationship between teachers' self-efficacy, expectations, and students' math achievement.

Data for the study was taken from the National Educational Longitudinal Study of 1988 developed by the National Center for Educational Statistics. Variables selected for this study included school demographics, teachers' self-efficacy and expectations, teachers' background, and student math achievement. Regression analysis was employed to determine the relationship

between teachers' self-efficacy, expectations, and students' math achievement while controlling for student, teacher, and school demographic factors.

The findings suggest the relationship between teachers' self-efficacy, expectations, and students' math achievement do not differ for students from different ethnicities or levels of SES. However, teacher self-efficacy demonstrates an influence on student math performance according to the level of achievement earned by the students. Specifically, the lower level achieving math students (level 1) regardless of ethnicity or SES, are viewed by teachers as achieving to their ability but not making satisfactory math progress. Conversely, students at math level 2 and above are viewed by teachers as achieving to their ability and they are making satisfactory math progress. Finally, although teachers' backgrounds and school demographics demonstrate influence on student's math achievement at level 2 and above, the level of teacher self-efficacy continued to emerge as the most influential.