Student performance has been shown to be affected by the student’s level of anxiety. Though some anxiety may heighten motivation and attention, thus strengthening performance, high levels of anxiety are likely to compromise a student’s confidence and concentration, interfering with the student’s ability to perform. The student’s level of anxiety may depend on characteristics of the student, such as personality, background, and skill level, as well as characteristics of the course, such as the text, the professor and the structure of the course.

Many people experience high levels of anxiety when taking mathematics-based courses. For psychology majors, math anxiety is often faced in a required sophomore-level statistics course. Sophomore psychology majors served as participants in a series of three studies designed to examine mathematics anxiety in statistics students. The goals of the research were to identify factors associated with high levels of anxiety; monitor changes in self-reported anxiety levels; and evaluate the relationship between anxiety and performance.

The first study was designed to determine which aspects of course structure have the greatest effect on student anxiety level. Of all of the factors considered, students reported that class exercises put them most at ease. None of the factors led to increases in anxiety levels.

The second study compared students in a statistic course to those taking introductory psychology. At the start of the semester, statistics students reported higher levels of anxiety than did introductory psychology students. Students in both courses reported a drop in anxiety level from the beginning of the course to the third week in the semester. The statistics students, but not the introductory psychology students, showed additional decreases in anxiety when assessed in the 10th week of the semester, at which point the two groups did not differ significantly.

The third study examined the relationship between self-reported anxiety, expected grades and actual performance. While students predicted high grades, overestimating their ability, anxiety levels revealed a lack of confidence that was negatively correlated with final grades.