# Grade Point Average

People measure success in different ways, but one common measure of success for children and teenagers is grades. Every student is held accountable for their actions at school through grades. Grades measure how well the students absorb information, how they test, and how much effort they put into completing assignments. How stressed a person is will effect their productivity level, whether at work or school. Therefore, it is fair to say one way to measure a students' success is through looking at their grades.

Research has shown that there is an "ideal" level of stress for optimum performance. This level will differ depending on the individual, but too much or too little stress will cause a decline in performance. This can be related to school by saying that students who experience too high a stress level or too low a stress level will have lower grades than those students who have a moderate amount of stress in their lives. With this idea in mind, it is easy to say that people who worry too much about their grades should do worse than those who stress less about their grades. This, however, is not necessarily true. While it is important to keep a perspective on what is important, those students who are prone to worrying are more likely to put in more time preparing and studying. This will help them when it comes time for tests. There is pressure put on students from their parents, teacher(s), and even themselves to succeed in school. "Even the most jaded child feels that he is a dummy if he has test scores lower than those of his friends." (Youngs) These pressures can adversely effect students by making them worry. If a student is stressed while taking a test, they are less likely to do well. Due to the "increase of adrenaline, the mind is not able to focus" (Goliszek) on the task that is before it. This is why stressed students tend to perform worse on tests than students who have a lower stress level. "Under stress, many people show a diminished ability to set priorities and make decisions." (Constable) These diminished skills lead to low test scores as proven during a study where a "researcher imposed high stress on subjects taking a test. Not only did it take much longer for the students to complete the test, but their error rate rose dramatically." (Constable) All of this suggests that stress should have an impact on the grades a student receives.

The data that we collected shows that there is a significant difference between the stress levels of students who do very well in school (4.0 or above) and students who do poorly (1.99 or below). This does make sense. Those students who have low grades are not succeeding at school. This could be contributed to their high stress levels. It would also make sense that their low grades could concern them and this would add stress to their lives. The students who are doing exceedingly well, however, have obviously learned to deal with stress. Although they might have more stressors in their lives, they have learned to overcome them and deal with stress. There is no way for a student to perform that well in school if they have not learned to deal with stress. Another factor could be that for most of these students learning and performing well on tests comes naturally. That is not to say that they don't try hard, but it is easier for many of them to absorb information than for most people. Therefore, it makes sense that these students have the lowest stress level. The students who performed well in school (3.0-3.99) had a higher stress level than those who didn't do as well (2.0-2.99). This could be because those students who care about their grades and work very hard to keep them up, would usually fall into the 3.0 group. For those students who don't spend as much time worrying and don't place as much importance on their grades, a 2.0 would suite them fine. The importance placed on the grades could explain the difference here. Also, those who have a higher stress level are less likely to do as well, which could mean that students with higher stress levels would be more likely to fall into the 2.0 category. Although there is no way to know how much the GPA effects the stress level or how much the stress level effects the GPA, our data shows that here is quite possibly a correlation between the two.

One-Way Analysis of Variance  
  
Analysis of Variance  
Source DF SS MS F P  
Factor 3 75.2 25.1 1.39 0.246  
Error 241 4338.5 18.0  
Total 244 4413.7  
 Individual 95% CIs For Mean  
 Based on Pooled StDev  
Level N Mean StDev ----+---------+---------+---------+--  
GPA 1.0 9 11.222 4.969 (----------\*----------)   
GPA 2.0 72 8.986 3.945 (---\*---)   
GPA 3.0 142 9.627 4.240 (--\*-)   
GPA 4.0 22 8.318 4.883 (------\*------)   
 ----+---------+---------+---------+--  
Pooled StDev = 4.243 7.5 10.0 12.5 15.0