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Success with Less Stress

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Students with high grade point averages often carry an unhealthy load of stress. How can schools help?

The headlines are alarming. Many students who feel the pressure to succeed have been cheating, pulling all nighters to study, becoming depressed, and seeking relief in drug use and self-mutilation. Multiple news reports have directed attention to what some are calling an epidemic of student stress in top U.S. schools (see, for example, Boccella, 2007; Keates, 2007; McMahon, 2007). These headlines are not just media hype; empirical data corroborate the reports.

Our study explored what students themselves said about the causes of their school-related stress and then looked at ways to reduce it. We hoped to find ways for schools to reverse this trend by developing healthier school environments that promote student engagement and well-being.

From 2006 to 2008, we gathered data from 3,645 students, attending seven high-performing high schools in the California Bay Area. These students appear to be exemplars. The vast majority (85 percent) reported a grade point average of 3.0 or higher, and most (63 percent) reported that they often or always work hard in school. They value achievement and care about learning. In addition, 89 percent participate in an extracurricular activity after school, and most aspire to attend a four-year college. By most indicators, these are the kinds of students we would like our high schools to produce.

A different story emerges, however, from our data. Many students reported feeling stressed out, overworked, and sleep deprived. They spoke of the tolls of stress on their mental and physical well-being and on their ability to learn academic material. Ultimately, their comments raise questions about whether a student's grade point average, frequently used as a marker of student success, is a good indicator of what students are actually learning and accomplishing.

Academic Stress and Its Causes

Science has long recognized that some level of stress can be adaptive and even healthy (Seyle, 1956); however, chronic student stress has been consistently associated with negative outcomes (Grant, Compas, Thurn, McMahon, & Gipson, 2004; Kaplan, Liu, & Kaplan, 2005). For the majority of students in this study, academic stress is constant. More than 70 percent of students reported that they often or always feel stressed by their schoolwork, and 56 percent reported often or always worrying about such things as grades, tests, and college acceptance.

Analyses of students' responses to the open-ended question, "Right now in your life, what causes you the most stress?" confirm that academics and schoolwork are major stressors for these youth. Other high-frequency answers included the college admissions process, large projects and assignments, and standardized tests. Students highlighted these school-related factors as causing more stress than other life stressors, such as social issues or family life. Answers such as "family pressure," "divorce," and "parent/sibling illness" did not fall into the top 10 most frequent answers at any school.

Students' responses demonstrated that many feel that schoolwork dominates their day. Certainly, a large share of their time is spent in school, but the demands do not let up after the last bell rings. On average, students in our study reported spending 3.07 hours on homework each night. This does not include time spent online on social activities, such as chatting with friends, or browsing the Internet. One student explained:

For some reason all teachers love to assign huge amounts of homework on the same nights, which keeps me awake till all hours trying to find the best possible answers because there is a lot of pressure put on us kids to do so well.

Another lamented, "It is not necessarily the difficulty of the work, but the workload itself that causes me the most stress, since the average is about 4–5 hours a night."

On average, these students also spend another two hours each weeknight on extracurricular activities, not including time spent commuting to and from these activities. More than a quarter (28 percent) reported six or more hours of after-school commitments, including homework, each night. These busy schedules leave little room for downtime and rest. In fact, 60.9 percent of the students said that schoolwork or homework frequently keeps them from other things, such as spending time with family and friends; a similar percentage (60.3 percent) reported having to drop an activity they enjoy because of schoolwork and other demands.

Effects of Academic Stress on Learning

While reflecting on their busy schedules and the sources of their stress, several students commented that the pressure is compromising their intellectual development. One student explained:

I'm stressed because I have so many pointless, mundane assignments that take up large amounts of time, without actually [resulting in] learning anything in class. I don't mind working if I'm actually learning something. I hate wasting my valuable time on assignments that don't accomplish anything for teachers and classes that don't respect me

as an intellectual.

Another student wrote,

If teachers stopped giving out busy work, I'd be able to focus more on important assignments. I always get burnt out when I have to spend a lot of time on useless work.

These students have high grade point averages, but they are frustrated by tedious assignments that hold little meaning for them. Many admitted to copying homework and cheating on tests and quizzes because of the pressure. A full 95 percent of the 11th and 12th grade students in our sample reported that they had cheated at least one time. Even when the work is meaningful, the excessive workload, combined with a busy schedule of outside activities, becomes too much for many of these kids to handle.

Effects of Academic Stress on Student Well-Being

The stress these students feel not only compromises their learning experience, but also takes a toll on their health and well-being. Given the amount of time they spend completing homework, studying, and pursuing extracurricular activities, it is no wonder that the majority of students in our study reported sleeping fewer hours per night than the 9.25 hours experts suggest they need.

On average, the respondents reported getting 6.8 hours of sleep each weeknight. Over one-third (34.6 percent) reported six or fewer hours of sleep each night. Two-thirds indicated that homework or schoolwork often or always keep them from sleeping. Fifty-four percent reported difficulty sleeping, 56 percent reported experiencing exhaustion as a result of academic stress, and quite a few students listed "not getting enough sleep" as a stressor in and of itself. These students' comments reflect the extent of their sleep deprivation:

- "There are times I do schoolwork from 3 p.m. to 3 a.m. even when I don't procrastinate."
- "I just want more time to sleep and maintain a healthy lifestyle, but school keeps inundating me with work and tests at such a fast and constant rate that I'm always tired and stressed."
- "Just this week I had three all-nighters in a row."

In addition to exhaustion, students attributed other physical symptoms, including headaches and stomach problems, to academic stress. Although 19 percent reported experiencing no physical symptoms in the past month due to academic stress, 44 percent reported experiencing three or more physical symptoms in one month alone. For these youth, it becomes hard to maintain the argument that stress can be healthy.

Stress also adversely affects some students' mental health. Nearly one-quarter of the respondents (24 percent) indicated that they frequently felt depressed in the last month, and 252 students (7 percent) had cut themselves during the same time period. These statistics are similar to those in other samples (Nevius, 2005; Ross & Heath, 2002).

Some students turn to stimulants to boost their performance. Twenty-four percent of

respondents reported that they had used stimulants such as caffeine or over-the-counter alertness pills to help them stay up to study in the last month, and another 274 students (8 percent) reported using illegal stimulants or prescription drugs for the same reason. Other research indicates that these numbers rise dramatically once students enter college (Johnston, O'Malley, Bachman, & Schulenberg, 2007; McCabe, Boyd, & Teter, 2009).

Students' comments revealed the extent to which some of them are suffering:

- "I get emotionally stressed and have breakdowns, or I go the completely opposite way and stop caring. I wish the administrators would take initiative. I cry all the time!"
- "I was in therapy for anxiety issues last year . . . depression from extreme homework and expectations of my coach."
- "I am stressed to the point of developing chronic insomnia."
- "When I feel especially stressed out, I feel like intoxication is the best way out."

Clearly, these students are experiencing distress. Their grades may indicate that they are meeting or exceeding academic standards, but their words indicate that they are sacrificing their health and well-being.

Strategies for Schools

The schools that participated in this study joined a research-based intervention program known as Challenge Success. This program, based at the Stanford University School of Education, guides school teams of multiple stakeholders as they design and implement site-based policies and practices that reduce student stress and promote greater student engagement, academic integrity, health, and well-being.

Soon after joining the program, these schools administered a baseline survey to a representative sample of their student bodies to determine the extent to which their students experienced academic stress and to examine links among physical and mental health, student motivation, and achievement. The survey data help participating schools not only identify specific problem areas, but also generate community-wide understanding of these problems.

After developing this shared understanding, schools implemented a variety of strategies to reduce student stress and increase well-being. Most schools created more opportunities for students to receive support from staff, developed test and project calendars to help ease students' workload, and revised homework policies. Some also modified college counseling practices, reformed the grading system or grading policies, and created honor codes or new academic integrity policies.

These are the strategies that schools found most helpful:

- Changes to the schedule: Allowing fewer transitions and more downtime or free periods, adding more tutorial time or advisory periods, or going to a block or modified block schedule.
- Staff training and development: Conducting workshops on engagement and

alternative assessments.

- Altering exams: Reducing their weight, moving them to before winter break, increasing time between exams, and replacing exams with projects.

At a school where the daily bell schedule and the exam schedule were significantly modified, students reported experiencing less stress. The vast majority of 10th and 11th graders (86 percent and 83 percent, respectively) agreed that adding free periods to the schedule, lengthening the class periods and advisories, and reducing the number of classes each day had effectively eased their workload. More than three-quarters of these sophomores and juniors (77 percent and 76 percent respectively) agreed that rescheduling exams from after the winter break to before the break reduced their stress. Administrators attested to the positive effects of the reforms and commented that student grades, test scores, and college admissions all stayed high, but the stress decreased.

Even seemingly modest reform efforts had positive effects. At another participating school, for instance, some advanced placement (AP) teachers worked to decrease student stress and increase student engagement with learning. One AP Biology teacher cut the homework load in half, eliminated summer work, and encouraged frequent dialogue with students and parents about student well-being. For two years in a row, the AP Biology test scores in his class have gone up, and students have reported higher levels of engagement with the material and less stress. An AP Calculus teacher at another school had similar success when he reduced homework and cut back on the number of problems he had students do each night. His students did less homework than students in other high-level math classes, but they scored as well on the AP exams—with a lot less stress.

The Right Challenge

In response to the overwhelming workload at her school, one student made this plea:

Don't push students farther than their limit. All my teachers say, "I'm treating you like this because that's how you'll be treated in college." Guess what? I'm not in college; I'm 15 and in high school *for a reason*.

This student is right. The physical and mental health tolls we've depicted are not appropriate for any youth, and educators and parents need to be aware of the problem and attuned to the signs of student stress.

The Challenge Success program is not advocating that teachers water down their curriculums or eliminate homework or even abolish tests and exams. But we see the negative ramifications of a system that pushes students too far, and we know that schools can achieve positive results without the undue pressures.

To be fair, the schools are not the sole source of this problem—parents, students, federal policies, and colleges and universities all play a role. Because the problem is multifaceted, we encourage multiple stakeholders—teachers, students, parents, counselors, and administrators—to work together to formulate plans for change. When everyone recognizes the need for change and has a say in the reform process, schools can indeed foster healthier environments in which student learning and student well-being are

mutually reinforcing.

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