

Examining Academic Pressure – The Impacts of Active Learning On a Better Student Lifestyle

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ABSTRACT

The prevalence of academic pressure among high school students is a rising issue in schools around the world. As students develop harmful study habits and negative mindsets, their lifestyles also become detrimental to their health. Being forced to decide their future at ages younger than twenty, high school students face a large number of challenges and pressures to perform well in school. Oftentimes, they prioritize maintaining their high academic performance over their well-being, feeling as if there is no option that allows them to sustain both. However, active learning strategies are a way for them to maintain balance in their day, while also effectively utilizing their efforts to study. All in all, it is an opportunity for high school students to keep academics as an aspect of their life, instead of it being the center focus. This paper will examine the current circumstances of students today, and how effective study methods can be used to improve their lifestyles using active learning.

Introduction

High school, the final years of a student's youth, is one of the most important time periods in one's life. During this time, the preparation for the future begins. Arguably the most important event it sets students up for, at least in most circumstances in the United States, is further education in college or university. On average, 73.19% of students applied for enrollment to university after high school in 2023, and as time passes, the number just continues to grow (Hanson 2024). As a result of this, high school is also considered to be a stressful experience for most teenagers. As the competition among classmates and within oneself increases to apply and get accepted into a 'good' university, the more it becomes normalized to neglect one's own health. With high-intensity schedules packed with extracurriculars, service activities, and all that is expected of a high school student, countless students resort to various strenuous activities, such as pulling all-nighters or not eating enough to save time. The concern that they need to be on par with their classmates otherwise they will fall behind becomes one of their highest priorities to avoid. Not only is this mindset detrimental to their health but also to their futures as they gradually get stuck in the never-ending cycle.

The unwritten rule that most of these students tend to follow is that as long as they maintain a perfect balance of perfect academic performance, multiple extracurricular activities, and a significant amount of volunteering – the holy trinity –, they can finally enter the university of their dreams. While this may work for some people, it is taxing to manage all three at once and is not always the most beneficial to everyone. In fact, it can create a toxic environment that could easily and quickly lead to mental and physical breakdown. In fact, 49.5% of adolescents have experienced a mental disorder (*Mental Illness*, n.d.). Though there can be various factors for these statistics, it is evident that students do face internal challenges during their teenage years that are just as important to address as external challenges.

Given this background, this paper aims to find ways to improve the lifestyles of high school students through the introduction of active learning study methods. Oftentimes, studying itself can be the biggest challenge for teenagers, as they are unaware of how to approach content in the most efficient way. Active learning is a method of learning that is the direct opposite of passive learning and focuses on the concept of memory

retention; it is considered a highly efficient way to help manage time, specifically for students. A survey taken recently mentioned that about seven out of ten high school students did not get the necessary amount of sleep required on school nights (*Sleep in Middle*, 2020). Time spent trying to study for tests through ineffective methods can be utilized to rest and separate oneself from school. This paper discusses the circumstances of high school students in the United States today, including their behavior and attitudes toward school. In addition, it will examine the effects of active learning in high school settings along with reasonings, and specific study techniques that employ active learning. The purpose of this paper is to aid students in understanding their true potential as learners and provide them with a foundation to improve their lifestyles. This is a rising issue that is essential to discuss as it is key to maintaining a proper balance between school and personal life; academics is only an aspect of one's identity, not the whole piece.

Students Today

To understand how students can improve their study habits, it is first necessary to analyze the environment and habits they follow. Based on a recent study done that examined the top three concerns of students in middle school and high school through a survey, the amount of homework is one of the highest concerns with around 70 percent of surveyed students agreeing (Akos & Galassi, 2004, p. 215). This data is just one of the examples that supports the common concern of homework in high school. In total, there are three main reasons why students face this challenge: time pressure, academic procrastination, and parental expectations. While all three are linked, they are different in the way they affect students.

Time Pressure

Time pressure is a concept that exists not only in learning settings, but also in daily life. To clarify, it is a phenomenon that one experiences when they feel like they no longer have enough time in the day to accomplish everything they plan to. This anxiety that they need to complete every task on their list is a result of the normalization and encouragement of a frantic pace of life in society. Since the 20th century, the state of busyness and overloaded schedules "have become American cultural ideals that symbolize economic and social success" (Hoschschild 1989, 1997; Daly 1996). Beginning with industrialization in America, there has been a steady increase in "the percentage of adults who 'always' feel rushed" from 4 percent in 1965 to a peak of 38 percent in 1992" (Roxburgh, 2004, p. 115). The rising percentage of communities that experience time pressure is bound to affect teenagers who have grown up in an environment where such a lifestyle is lived by most adults, and even recommended to follow. As a direct result, time pressure has evolved into a cultural phenomenon that affects a large majority of social environments, especially high schools where the competition and rigor experienced by students among each other is intense. Due to this, the way they study and maintain grades is often impacted by the pressure of time that they experience on a day-to-day basis.

Academic Procrastination

Another important aspect of academic success is the learning mindset. When classes and extracurriculars become overwhelming to handle, students tend to underestimate the amount of work they receive, and the duration required to complete them. This is usually not because of judgement issues, but because of the panic they feel. This is otherwise known as academic procrastination, "the tendency of students to delay or postpone completing academic tasks [...] though they know they should perform these actions" (González-Brignardello et al., 2023, p. 1). Every student carries specific "expectations or beliefs towards school performance" (Balkis et al.,

2013, p. 829). From a study conducted that analyzed the relation between academic procrastination and achievement in school, there are typically two types of beliefs that one can have: rational and irrational. An example of rational belief was that the best time to begin preparing for an exam is about a month before, whereas irrational belief supported the idea of cramming the night before. When the study was completed, the results revealed that students with a “high level of academic rational beliefs have lower levels of academic procrastination and may realistically estimate the duration of time needed to complete the tasks assigned to them” and vice versa with those who had academic irrational beliefs (Balkis et al., 2013, p. 834). Based on this, procrastinators develop unrealistic goals that end up pressuring themselves when they are in a time crunch. This unproductive mindset can eventually transform into long term habits that affect a student’s ability to work under pressure, as it may completely alter their sense of time and potential for academic success; it has also been heavily associated with poor well-being, such as emotional stress and physical deterioration.

Parental Expectations

Another major factor in a student’s learning environment is the role of parents. Parents play a significant role in influencing their child’s motivation to grow intellectually and as a person. The expectations placed on a student by their parents “can function as a form of communication that conveys to students the value their parents place on achievement” (Yamamoto & Holloway, 2010, p. 201). This standard becomes a personal level that students strive to attain and, consequently, leads them to high achievement. In a similar manner, displaying shows of consistent support and trust in their child’s abilities positively impacts the student’s beliefs about their own academic efficacy (Yamamoto & Holloway, 2010, p. 203). Overall, the amount of guidance and expectations provided by a parent directly affects the engagement of a student scholastically. Without a proper support system, it is harder for a student to be mentally stable and sound while processing knowledge. Hence, when parents overestimate a student’s capabilities and impose high academic standards on them, it can be detrimental to a student’s health (Xu et al., 2022, p. 7). So, while expectations can nurture a student to achieve greater achievements, they can also oftentimes negatively impact the durability of their motivation and harm their emotions. The balance required to gain the most effective results from parental expectations is not easy to attain, as each child varies in terms of cultivation. Therefore, it is vital to understand the limits of a student, as some settings for them might be perfect in promoting deep processing strategies, and others might extend past the range of healthy growth to academic stress and anxiety.

Connecting these three reasons together, mental state is likely the most important and noticeable factor in students’ study habits; most of the battle against unhealthy study habits is internal. Even with situations where a student can’t change their environment, such as an unsupportive family or economic and physical responsibilities, if a student’s resolve for their future goals is strong, they can overcome the challenges they face. The struggle with high effort and unsatisfactory outcomes can be reversed, beginning with a transformation in the student’s mindset, and then along with proven scientific strategies, such as active learning, to learn effectively, conserving both time and dedication.

Active Learning

Active learning simply explained is the natural process of learning. Human brains are functionally meant to be engaged to process and retain information to learn the fastest. Learning is dependent on the learner’s mental state, and is considered an “active, constructive, and goal-oriented process” (Shuell, 1986, p. 415). It is also goal-oriented, which means that the individual needs to have an aim when going to gain knowledge. All in all, it is a process that requires multiple conditions in order to happen at peak performance. One way to accomplish the highest level of learning according to Robert J. Sternberg, an American psychologist and psychometrician, is using the three knowledge-acquisition components: selective encoding, selective combination, and selective

comparison. To start, selective encoding refers to seeking out relevant information from one's environment. Next, selective combination refers to combining the selected information to interpret what is being provided. Lastly, selective comparison refers to using the combined information to connect to previous or old information (Shuell, 1986, p. 416). This model is an example of the usual pattern of active learning followed. Learning can be classified as passive and active, and the primary reason why active learning is superior is because it requires one's brain to think, apply, connect, and problem-solve, while passive learning requires none of the above.

Understanding a Teenager's Brain

Teenagers have typically been stereotyped as impulsive or irrational. In most cases, it seems like they don't realize the consequences of their actions. However, there is a biological explanation for this difference between adolescents and adults. While everyone has an amygdala, the region of the brain that is responsible for all immediate reactions, from an early age, the frontal cortex is still developing well into adulthood. It is the area of the brain that oversees our reasoning before our actions. Thus, teenagers are proven to be guided more by their amygdala than their frontal cortex when making decisions than adults (*Teen Brain*, 2017). In short, their reactions are more emotional and sensitive. This is important to note as students in high school are at the same age to make decisions driven by emotion rather than logic, which could make them susceptible to using passive learning, the easier and more appealing form of learning.

Biological Process of Learning

The basis of learning relies on neurons in the brain, and synapses, which are the connections between them. When the dendrites of a neuron receive signals from external stimuli or neurons, an electrical signal flows through the body of the neuron; this is known as firing. The synapse then passes down the signal to other neurons with the help of neurotransmitters, which in turn can produce a behavioral response to the external stimuli. The way learning occurs is through a process called synaptic plasticity, which is "the changes in the strength and number of connections between existing neurons" (Owens & Tanner, 2017, p. 3). The most enhanced connections will exist between the most frequently used ones. The brain uses synaptic plasticity to create memories and then stores them in many connected groups of neurons. In order to retrieve these memories, the same group and connections would have to be activated. Therefore, for learning to occur, the process of synaptic plasticity must happen. To improve the ability to exhibit plasticity, there are multiple factors. One such example is the release of certain neurotransmitters during situations with motivation and attention that make it easier to learn about a topic (Owens & Tanner, 2017, p. 3). On the same note, cortisol is a stress hormone that can profoundly affect the brain's ability to learn. Mild levels can boost performance on memorization-based tests, but high levels can inhibit the ability to make and retrieve memories. For this reason, it is necessary to remain alert and involved while learning about a topic so one's brain can retain information. On the other hand, it is just as important to avoid stressful circumstances that can increase cortisol, such as cramming the night before a test, as it will only deter one's academic performance.

Study Methods

After developing a basic understanding of how active learning works, and the significance of avoiding unhealthy study habits, there are multiple techniques that can be utilized to improve academic performance. It is crucial to note that every type of study method results in different outcomes by targeting certain parts of learning. For example, methods that use active learning produce the best results for memorization and understanding concepts; that is why they are most utilized for exams. Therefore, it is essential to understand which technique

is the best fit for the task at hand. In a study conducted that showed how high school students each learned from a text, it was found that students that “use a wide variety of tactics in a purposeful way and adjust their tactics to accommodate changes in their interaction with the text” had the highest success in their strategy (Wade et al., 1990, p. 163). Keeping this in mind, active learning techniques are not the only way to help students, but they are the most efficient and applicable to most learning contexts.

Utilization in School

In school, part of the responsibility falls upon teachers for creating an environment that encourages active learning. Overall, learning begins with the introduction of basic facts. While this may work during the early phase of learning, verbal and pictorial “mnemonics play a less important (or different) role” later on (Shuell, 1986, p. 428). Hence, teachers need to incorporate engaging and thought-inducing activities to help students connect thoroughly with the information being received. From a teacher that experimented with multiple activities, a few ways to achieve this are through promoting themes of “dignity, energy, self-management, community, and awareness” as described in Merrill Hamin’s book, *Strategies to Inspire Active Learning* (Boyer, 2002, p. 49). Dignity includes making students feel valuable in the classroom, and energy means to energize the space with continuous discussions and unconventional lessons. Self-management allows students to discipline themselves and assess their participation and work; it induces self-reflection about the content and their own engagement. Community and awareness run parallel with each other as they both value a strong sense of community in school and connections to personal life to build positive relationships with learning (Boyer, 2002, p. 49-50). All these aspects combined will support a student in becoming an independent thinker at school, but the student must also make efforts to learn. To properly take advantage of a nurturing setting, they must participate in group discussions, complete the tasks given in class, and actively connect with the information being taught.

Utilization at Home

Though a high schooler should pay the most attention in school when being taught the content, it is also important to know how to apply active learning when reviewing or preparing for an exam. To clarify, passive ways to study include rereading notes or going over past slides (*Active Learning*, n.d.). While this is a good first-step, active techniques help test oneself to see what information is already known and what ideas and concepts still need to be reviewed. Such methods include making concept maps, one-sheet summaries, taking self-tests, completing practice problems, and outlining the specific topics. Being able to explain the content in one’s own words to someone else is a strong indicator of having learned the information. Another method often overlooked is repetition. Repetition can strengthen one’s memorization of the topic after going through the process of reviewing and studying. Spaced repetition forces one’s brain to consistently recall the information, strengthening the connections between the neurons and their synapses, resulting in better memory. In conclusion, utilizing strategies that attract the constant attention of the brain will ensure higher learning success.

In summary, students can practice the following study cycle to effectively learn in school: prepare, attend, and review. Preparing for the class mentally and physically ensures that they will feel focused during it. When attending the class, listen actively to understand the material while taking notes that it can be reviewed later. It is also important to engage by asking questions and making meaningful comments. Lastly, when in the course of reviewing, constantly test oneself on the knowledge learned until one can confidently explain and understand the concepts. Spaced review is the easiest way to reach that level of understanding, which implies that starting to study the night before an important test is one of the worst options to consider (*Active Study*, n.d.). Studying for two hours a day rather than six to seven hours in one day reaps far better benefits both academically and for one’s health.

Conclusion

The purpose of this paper was to identify the pressures placed on high school students in an academic context and discuss how active learning can aid them in improving their hectic lifestyles. High school is one of the periods in a teenager's life that impacts them the most, both in terms of social relationships and in terms of the rest of their lives. It is a demanding experience that places the burden of their future on their shoulders at such a young age. The expectations to become a successful individual from society and themselves weigh heavily. Regardless of this, high school students are some of the most motivated and inspired to work hard. The drive they have to do well in school and participate in extracurricular activities is intense. However, they are still kids who don't have the power to make rational decisions all the time, which is biologically inevitable, so they often end up with hectic schedules that over-strain their abilities. In turn, they physically and mentally break down from the overwhelming amount of work they take upon themselves, such as through procrastination and lack of sleep. When such unhealthy habits are developed early on, they tend to stay and become harder to avoid. Though it seems hopeless to be free from the cycle, changing the way in which they think and learn can immensely help them. The two key elements to a better school lifestyle are a stable, growth mindset and knowing how to incorporate active learning and study techniques where necessary. While it is easier said than done to completely alter habits, these are methods that will certainly yield results. To conclude, this paper is meant to be of service to high school students who may be struggling with high school, and to provide them with a solution to lessen their challenges with learning. Life is more than just going to a prestigious university and having a successful career; it is just as important to take care of one's health as it is to be an academic achiever.

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